BURBANK2035

Environmental Impact Report

Adopted February 19, 2013

This page intentionally left blank.

BURBANK2035

Environmental Impact Report

Adopted February 19, 2013

State Clearinghouse #2010021004

Prepared for:

City of Burbank, Community Development Department
Planning and Transportation Division
150 N. Third St.
Burbank, CA 91502

Prepared by:

AECOM

2020 L Street, Suite 400
Sacramento, CA 95811

P 09120101.01
60210056.000

This page intentionally left blank.

TABLE OF CONTENTS

Section		Page
1	**Introduction**	**1-1**
1.1	Project Background	1-1
1.2	Environmental Setting/Definition of the Baseline and EIR Assumptions	1-1
1.3	Purpose of the Program Environmental Impact Report	1-4
1.4	Lead, Responsible, and Trustee Agencies	1-6
1.5	Required Permits and Approvals	1-7
1.6	Public Review of Draft EIR and Lead Agency Contact	1-8
1.7	Scope of This Draft EIR	1-8
1.8	How to Use This Report	1-9
2	**Executive Summary**	**2-1**
2.1	Project Under Review	2-1
2.2	Summary of Impacts and Mitigation Measures	2-1
2.3	Alternatives to the Project	2-4
2.4	Potential Areas of Controversy	2-5
2.5	Summary Table	2-6
3	**Project Description**	**3-1**
3.1	Background	3-1
3.2	Regional Setting	3-2
3.3	Planning Area	3-2
3.4	Project Objectives	3-2
3.5	Project Characteristics	3-5
3.6	Alternatives	3-21
4	**Intro to Analysis**	
4.0	Baseline Existing Conditions Assumed in the Analysis	4.0-1
4.1	Aesthetics	4.1-1
4.2	Agricultural and Forest Resources	4.2-1
4.3	Air Quality	4.3-1
4.4	Greenhouse Gas Emissions	4.4-1
4.5	Biological Resources	4.5-1
4.6	Cultural Resources	4.6-1
4.7	Energy	4.7-1
4.8	Geology and Soils	4.8-1
4.9	Hazards and Hazardous Materials	4.9-1
4.10	Hydrology and Water Quality	4.10-1
4.11	Land Use and Planning	4.11-1
4.12	Mineral Resources	4.12-1
4.13	Noise	4.13-1
4.14	Population, Employment and Housing	4.14-1
4.15	Public Services and Utilities	4.15-1
4.16	Transportation	4.16-1

TABLE OF CONTENTS

Continued **Page**

5 Other CEQA Required Considerations 5-1
5.1 Introduction 5-1
5.2 Significant and Unavoidable Impacts 5-1
5.3 Significant Irreversible Environmental Effects 5-1
5.4 Growth Inducing Impacts 5-2
5.5 Cumulative Impacts 5-3

6 Alternatives to the Proposed Project 6-1
6.1 Introduction 6-1
6.2 Alternatives Evaluated 6-2
6.3 Comparison of the Alternatives 6-8
6.4 Summary of Comparative Effects of the Alternatives 6-20
6.5 Environmentally Superior Alternative 6-20
6.6 Comparison of Alternatives and Project Objectives 6-22

7 References 8-1

8 List of Preparers 9-1

Appendices

A Technical Background Report
B Notice of Preparation
C NOP Comment Letters
D Air Quality Data
E Noise Data
F Traffic Study

Exhibits

3-1 Regional Location 3-3
3-2 Planning Area 3-4
3-3 Proposed Land Use Diagram 3-11
3-4 Specific Plan Areas 3-14
3-5 Proposed Roadway Circulation Diagram 3-16

4.4-1 Burbank 2010 Communitywide Greenhouse Gas Inventory by Sector 4.4-3
4.4-2 Statewide Greenhouse Gas Emissions by Sector (2008) 4.4-3

4.9-1 Fire Zones 4.9-3

4.13-1 Future Year (2035) Noise Contours 4.13-15

4.16-1 Burbank Street Classifications 4.16-2
4.16-2 Analyzed Intersections 4.16-4
4.16-3 Existing (2010) Intersection Level of Service 4.16-6
4.16-4 Existing (2010) Transit Network 4.16-8
4.16-5 Existing (2010) Bicycle Network 4.16-11
4.16-6 Burbank2035 Future Level of Service (LOS) 4.16-21
4.16-7 Burbank2035 Level of Service (LOS) After Mitigation 4.16-28

TABLE OF CONTENTS

Continued **Page**

4.16-7 Burbank2035 Level of Service (LOS) After Mitigation 4.16-28

6-1 Existing (1988) Land Use Element Map 6-5
6-2 Alternative 3. Golden State Area – Increased Density 6-7
6-3 Alternative 4. Centers & Corridors – 2006 Draft Land Use Element 6-9

Tables

1-1 Summary of NOP Comments 1-2

2-1 Summary of Impacts and Mitigation Measures 2-7

3-1 Land Use Designations and Intensities 3-9
3-2 Burbank2035 Development Capacity 3-12
3-3 Recommended GGRP Measures and GHG Emission Reductions 3-22

4.3-1 Summary of Modeled Operational Emissions of Criteria Air Pollutants and Precursors 4.3-15

4.11-1 Existing Uses 4.11-2
4.11-2 Measure One Consistency 4.11-9
4.11-3 Compatibility of Burbank2035 with the 2012-2035 RTP/SCS 4.11-11
4.11-4 Compatibility of Burbank2035 with the SCAG Compass Growth Vision 4.11-13

4.7-1 Burbank Water and Power Annual Electric Supply 4.7-2
4.7-2 Annual Electricity Consumption by User Type (2009-2010) 4.7-2
4.7-3 Annual Baseline (2010) and Projected (2035) Energy Consumption 4.7-14

4.11-1 Existing Uses 4.11-2
4.11-2 Measure One Consistency 4.11-10
4.11-3 Compatibility of Burbank2035 with the 2012-2035 RTP/SCS 4.11-11
4.11-4 Compatibility of Burbank2035 with the SCAG Compass Growth Vision 4.11-13

4.13-1 Maximum Allowable Noise Exposure—Transportation Sources 4.13-10
4.13-2 Maximum Allowable Noise Exposure—Stationary Noise Sources 4.13-10
4.13-3 Construction Equipment Noise Levels 4.13-12
4.13-4 Predicted Traffic Noise Levels Future 2035 Conditions and Future Burbank2035 Buildout Conditions 4.13-16
4.13-5 Representative Vibration Source Levels for Construction Equipment 4.13-23

4.14-1 2008 RTP Forecasts 4.14-2
4.14-2 Burbank2035 Population, Employment, and Housing Forecasts 4.14-5

4.15-1 Student Generation 4.15-19
4.15-2 Estimated Wastewater Generation 4.15-23
4.15-3 Potential Environmental Impacts Associated with Alternative Water Supply Projects 4.15-23
4.15-4 Estimated Solid Waste Generation 4.15-32
4.15-5 Municipal Solid Waste Hauled to Landfills (2007) 4.15-33

4.16-1 Level of Service Definitions for Signalized Intersections 4.16-3
4.16-2 Existing Intersection Level of Service 4.16-5

TABLE OF CONTENTS

Continued **Page**

4.16-3 Existing CMP Freeway Segment Level of Service 4.16-7
4.16-4 Burbank Bus Routes 4.16-7
4.16-5 Metro Routes 4.16-9
4.16-6 Burbank Bicycle Facilities 4.16-10
4.16-7 Burbank Pedestrian Facilities 4.16-13
4.16-8 Burbank2035 Level of Service (LOS) 4.16-19
4.16-9 Burbank2035 Level of Service (LOS) After Mitigation 4.16-26
4.16-10 Future CMP Freeway Segment Level of Service 4.16-29
4.16-11 Burbank Bicycle Master Plan and Burbank2035 Consistency 4.16-33

5-1 Burbank and Regional Growth Projections 5-5

6-1 Burbank2035 Alternatives Development Capacity Comparison 6-4
6-2 Comparison of Environmental Impacts of Alternatives to *Burbank2035* 6-21

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
Accords	United Nations Urban Environmental Accords
af	acre-feet
af/day	acre-feet per day
afy	acre-feet per year
Airport Authority	Burbank-Glendale-Pasadena Airport Authority
Alquist-Priolo Act	Alquist-Priolo Earthquake Fault Zoning Act
ALS	Advanced Life Support
ALUC	Airport Land Use Commission
ALUP	*Los Angeles County Airport Land Use Plan*
ANCA	Airport Noise and Capacity Act of 1990
ANSI	American National Standards Institute
APS	Alternative Planning Strategy
AQMP	air quality management plan
ARB	California Air Resources Board
Area Plan	Hazardous Materials Area Plan
B.P.	before present
BACT	best available control technology
Basin	South Coast Air Basin
basin plans	California's water quality control plans
BAT	best available technology
BCP	*Burbank Center Plan*
BCT	best conventional pollutant control technology
BFD	Burbank Fire Department
BMP	best management practice
BOU	Burbank Operable Unit
BPD	Burbank Police Department
BSC	California Building Standards Commission
BUSD	Burbank Unified School District
BWP	Burbank Water and Power
BWRP	Burbank Water Reclamation Plant
CAA	Clean Air Act
CAAA	Clean Air Act Amendments of 1990
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire
Cal/EPA	California Environmental Protection Agency
CalEMA	California Emergency Management Agency

ACRONYMS AND ABBREVIATIONS

CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
Calveno	California Vehicle Noise
CAPs	criteria air pollutants
CBC	California Building Code
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CDE	California Department of Education
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFCs	chlorofluorocarbons
CGS	California Geological Survey
CH_4	methane
CHLs	California Historical Landmarks
CHP	California Highway Patrol
City	City of Burbank
CIWMA	California Integrated Waste Management Act
CIWMB	California Integrated Waste Management Board
CLG	Certified Local Government
CLUP	comprehensive land use plan
CMA	Critical Movement Analysis
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2-equivalency
COPS	Community Outreach and Personnel Services
CRA	Colorado River Aqueduct
CRHR	California Register of Historical Resources
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
D/C	demand-to-capacity

ACRONYMS AND ABBREVIATIONS

dB	decibel
dBA	A-weighted sound levels
Delta	Sacramento–San Joaquin Delta
DFG	Department of Fish and Game's
DPH	California Department of Public Health
DPW	Department of Public Works
DTSC	California Department of Toxic Substances Control
EAP	Energy Action Plan
EF	emission factor
EPA	U.S. Environmental Protection Agency
EQ basin	equalization basin
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FARs	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
GAC	Granular Activated Carbon
GDP	General Dewatering Permit
GGRP	Greenhouse Gas Reduction Plan
GHG	greenhouse gas
GWP	global warming potential
HAPs	hazardous air pollutants
HCD	California Department of Housing and Community Development
HCFCs	hydrochlorofluorocarbons
HFCs	hydrofluorocarbons
HR	House Resolution
Hz	hertz
I/I	inflow and infiltration
I-5	Interstate 5
I-I	Internal–Internal
inventory	communitywide GHG emissions inventory
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Plan
ISO	Insurance Services Office

ACRONYMS AND ABBREVIATIONS

I-X	Internal–External
kV	kilovolt
kW	kilowatts
kWh	kilowatt-hours
LACD	Los Angeles County Drainage Area
LACFCD	Los Angeles County Flood Control District
LACFD	Los Angeles County Fire Department
LADWP	Los Angeles Department of Water and Power
LAFCO	Los Angeles County Local Agency Formation Commission
LARWMP	Los Angeles River Watershed Monitoring Program
LD	Larson Davis
LEA	Local Enforcement Agency
Lead SIP	Lead State Implementation Plan for Los Angeles County
LOS	level of service
LTO	landing/take-off
LUSTs	leaking underground storage tanks
M	earthquake magnitude
MACT	maximum available control technology
MCLs	maximum contaminant levels
MDSP	*Burbank Media District: Specific Plan*
MEP	maximum extent practicable
Metro	Los Angeles County Metropolitan Transportation Authority
Metropolitan	Metropolitan Water District of Southern California
MMT	million metric tons
MOEs	Measures of Effectiveness
mph	miles per hour
mpn/100 ml	most probable number of colonies per 100 milliliter
MPOs	metropolitan planning organizations
MRZs	Mineral Resource Zones
MS4s	NPDES General Permit for Small Municipal Separate Storm Sewer Systems
MT CO_2e/yr	metric tons of CO_2e emissions per year
MW	megawatts
MWD	Metropolitan Water District of Southern California
MWh	megawatt-hours
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NAL	Technology-Based Numeric Action Levels
NBC	National Broadcasting Corporation

ACRONYMS AND ABBREVIATIONS

NECPA	National Energy Conservation Policy Act
NEHRP	National Earthquake Hazards Reduction Program
NEHRPA	National Earthquake Hazards Reduction Program Act
NEL	Technology-Based Numeric Effluent Limitations
NESHAP	national emissions standards for hazardous air pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966
NIMS	National Incident Management System
NO	nitric oxide
NO_2	nitrogen dioxide
NOS	North Outfall Sewer
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
NSHP	New Solar Homes Partnership
NTU	Nephelometric Turbidity Units
NWP	nationwide permit program
OD	Origin-Destination
ODSs	ozone depleting substances
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PCE	tetrachloroethylene
PeMS	Performance Measurement System
PFCs	perfluorocarbons
PLWDC	Providencia Land, Water and Development Company
PM	particulate matter
PM_{10}	particulate matter with a diameter of 10 micrometers or less
$PM_{2.5}$	particulate matter with a diameter of 2.5 micrometers or less
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
POUs	publicly owned utilities
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PRCS	Park, Recreation, and Community Services Department
PTC	Production Tax Credit
RADS	Reactive Airways Disease Syndrome
RAF	British Royal Air Force

ACRONYMS AND ABBREVIATIONS

RATP	Residential Acoustical Treatment Program
RCP	*2008 Regional Comprehensive Plan*
RCRA	Resource Conservation and Recovery Act
REMELs	Reference Energy Mean Emission Levels
RMS	root-mean-square
ROG	reactive organic gases
RPS	Renewable Portfolio Standard
RTP	regional transportation plan
RWDs	reports of waste discharge
RWQCB	Regional Water Quality Control Board
SAP	Sustainability Action Plan
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCPPA	Southern California Public Power Authority
SCS	Sustainable Communities Strategy
SDG&E	San Diego Gas and Electric
SEL	Sound Exposure Level
SEMS	Standardized Emergency Management System
SF_6	sulfur hexafluoride
SHMA	1990 Seismic Hazards Mapping Act
SIC	Standard Industrial Code
SIP	State Implementation Plan
SLIC	Spills-Leaks-Investigations-Cleanups
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SP	service population
SQMP	Stormwater Quality Management Program
SSC	California Species of Special Concern
SSMP	Sewer System Management Plan
SUSMP	*Standard Urban Storm Water Mitigation Plan*
SWP	State Water Project
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TACs	Toxic Air Contaminants

ACRONYMS AND ABBREVIATIONS

TCE	trichloroethylene
TMDL	Total Maximum Daily Load
tpy	tons per year
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEIA	U.S. Energy Information Administration
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USTs	underground storage tanks
UWMP	urban water management plan
V/C	volume-to-capacity
VdB	vibration decibels
VMT	vehicle miles traveled
VOCs	volatile organic compounds
WARM	WAste Reduction Model
WDRs	waste discharge requirements
Williamson Act	California Land Conservation Act of 1965
WSA	water supply assessment
X-I	External–Internal
X-X	External-External
ZLD	zero liquid discharge
µg/L	micrograms per liter
µg/m3	micrograms of particulate matter per cubic meter of air

This page intentionally left blank.

1 INTRODUCTION

This Program Environmental Impact Report (EIR) examines the potential effects of *Burbank2035* (proposed project). The term "proposed project," as used in this EIR, refers to *Burbank2035* (SCH # 2010021004), which includes the implementation of a citywide general plan. The proposed project also includes a greenhouse gas reduction plan (GGRP). The proposed project is described in detail in Chapter 3, "Project Description." The project background and the legal basis for preparing a Program EIR are described below.

1.1 PROJECT BACKGROUND

In 2009, the City of Burbank (City) initiated a comprehensive update of its General Plan. Burbank's existing General Plan was adopted in the 1960s. Various elements of the General Plan have been updated and amended in the intervening years, but the plan has not been comprehensively revised since that time. Much of the data, analyses, and policies in the existing plan were developed over the course of the last five decades, and do not reflect current conditions in the city. A new general plan is necessary to reflect the current vision of quality of life, priorities for resource protection, and manner of future growth within Burbank over the next 20 years.

A Preliminary Draft *Burbank2035* General Plan was prepared in June 2011, followed by a revised draft in November 2011. *Burbank2035* is a state-required policy document that provides guidance to City decision-makers on allocating resources and determining the future physical form and character of development. It is the City's official statement about the extent and types of development needed to achieve the community's physical, economic, and environmental goals. *Burbank2035* consists of individual sections, or "elements," each of which address a specific topic; however, it also embodies a comprehensive and integrated approach to planning. *Burbank2035* clarifies and articulates the City's intentions with respect to the rights and expectations of the general public, property owners, community groups, developers, and businesses to provide policy language and guidance on how the city should grow. Since the release of the Preliminary Draft of *Burbank2035*, the City has refined the policy and implementation guidance and prepared a Public Review Draft of *Burbank2035*. In addition to the General Plan document, the proposed project also includes a GGRP identifying long-term strategies to mitigate the community's greenhouse gas (GHG) emissions.

A Technical Background Report (TBR), attached to this document as Appendix A, provides a profile and analysis of existing conditions in and around the city. Existing physical, social and economic conditions were described for baseline year 2010. The TBR provides a foundation for the development of goals, policies and programs in *Burbank2035*, and a basis for the "Existing Setting" section for each environmental issue area addressed in this EIR.

Burbank2035 is available electronically on the City's website (http://www.burbank2035.com).

1.2 ENVIRONMENTAL SETTING/DEFINITION OF THE BASELINE AND EIR ASSUMPTIONS

According to Section 15125 of the CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the "baseline condition" against which project-related impacts are compared. Normally the baseline condition is the physical condition that exists when the Notice

of Preparation (NOP) is published. The NOP for the *Burbank2035* EIR was published in February 2010 (see Appendix B). Table 1-1 summarizes the NOP comment letters received (see Appendix C for full comment letters).

Table 1-1
Summary of NOP Comments

Commenting Agency	Person	Date of Comment Letter	Summary of Comments
Governor's Office of Planning and Research (OPR)	Scott Morgan, Acting Director	February 1, 2010	The letter was sent to responsible agencies and requested their comment on the NOP.
California Emergency Management Agency (Cal EMA)	Dennis Castrillo, Environmental Officer	February 9, 2010	Cal EMA recommended examination of each of the requirements in state planning law to determine if there are hazard issues within the community which the general plan should address.
California Energy Commission	Bill Pfanner, Supervisor, Local Energy & Land Use Assistance Unit	February 24, 2010	The CEC provided recommendations for how to reduce the project's energy consumption.
California Department of Transportation (Caltrans), Division of Aeronautics	Sandy Hesnard, Aviation Environmental Specialist	February 22, 2010	Caltrans suggests coordinating the *Burbank2035* planning efforts with the Los Angeles County ALUC and compliance with the California Airport Land Use Planning Handbook due to the presence of the Bob Hope Airport in the city. The letter discusses airport-related noise, safety, and regional land use planning issues, including the need for land use compatibility near the airport; reduction of the size of the airport's "noise impact area" (NIA), which is the area within the airport's 65 dB CNEL contour; limiting residential land uses near the airport; forbidding tall structures close to the airport, particularly if situated within the runway approach corridors; limitation of schools near airports; notifications to property owners within the airport influence area; and the limitation of wildlife-attracting uses such as landfills or created wetlands.
California Department of Transportation (Caltrans), District 7, Regional Planning	Alan Lin, IGR/CEQA Interim Program Manager	March 1, 2010	Caltrans recommends the City consider adoption of a regional or community-wide traffic impact program to fund regional transportation improvements to contribute to improvements on the State highway system, including impacted State Route 5 and on/off ramps or an I-5 I SR-134 interchange modification. Caltrans requests inclusion in the environmental review process of land use projects within the planning area and all projects that have the potential to

Table 1-1 Summary of NOP Comments			
Commenting Agency	**Person**	**Date of Comment Letter**	**Summary of Comments**
			significantly impact traffic conditions on State highways. Caltrans recommends that special attention be given to the jobs-and-housing balance concept.
Metropolitan Water District of Southern California (Metropolitan)	Delaine W. Shane, Manager, Environmental Planning Team	February 23, 2010	*Burbank2035* is not regionally significant to Metropolitan as Metropolitan does not own or operate any facilities or maintain real estate entitlements within the footprint of the planning area. Metropolitan encourages water conservation efforts.
Native American Heritage Commission (NAHC)	Dave Singleton, Program Analyst	February 3, 2010	The Native American Heritage Commission performed a Sacred Lands File (SLF) search in the NAHC SLF Inventory and Native American Cultural resources were not identified within the Burbank city limits. A list of names of the nearest tribes and interested Native American individuals that the NAHC recommends as "consulting parties" was provided.
California Public Utilities Commission	Rosa Muñoz, P.E., Utilities Engineer	February 25, 2010	The Commission Rail Crossings Engineering Section (RCES) recommends that the City add language to the plan so that any future planned development adjacent to or near the railroad right-of-way be planned with the safety of the rail corridor in mind.
South Coast Air Quality Management District (SCAQMD)	Ian MacMillan, Program Supervisor, CEQA Inter-Governmental Review	February 18, 2010	SCAQMD requested a copy of the Draft EIR upon its completion. Air quality impacts from both construction and operations should be calculated. Quantification of $PM_{2.5}$ emissions is requested. SCAQMD recommends all feasible mitigation be implemented to minimize or eliminate significant adverse air quality impacts.
Southern California Association of Governments (SCAG)	Jacob Lieb, Manager, Environmental Assessment Services	February 25, 2010	The letter provides SCAG population and employment forecasts and SCAG growth principles and policies. For ease of review, SCAG encourages the use a side-by-side comparison of all SCAG policies with a discussion of the consistency, inconsistency or non-applicability of proposed *Burbank2035* policies and supportive analysis in a table format.

Table 1-1 Summary of NOP Comments			
Commenting Agency	**Person**	**Date of Comment Letter**	**Summary of Comments**
Southern California Regional Rail Authority (Metrolink)	William Doran, P.E.	March 20, 2010	The letter requested additional information about how the rail corridor would be addressed in *Burbank2035* and EIR.
Source: Data compiled by AECOM in 2012			

For analytical purposes, impacts associated with implementation of *Burbank2035* are derived from the existing environmental setting in 2010. The TBR, attached to this document as Appendix A, describes 2010 conditions. This baseline year (2010) is used throughout this EIR to determine impacts. Where it was feasible to present more current information, such information is also provided and analyzed in each resource chapter of the EIR.

The level of development evaluated in this EIR is based on reasonable assumptions for development activity anticipated to occur over the next 25 years within the planning area, which consists of the existing city boundaries. To determine reasonable assumptions for the amount of new residential, commercial, and population growth, the City assumed a range of factors, including the physical capacity of the *Burbank2035* Land Use Diagram, the projected growth assumed in the city and region, specific policy direction in *Burbank2035*, and socioeconomic trends. The results of this analysis include forecasts of the number of new residences, amount of new employment, and increase in population anticipated to occur under *Burbank2035*.

This EIR presents a conservative scenario based upon the potential development from 2010 through 2035. As a practical matter, as illustrated under the current General Plan, actual development in any city or county is typically less than the theoretical limit of development. This is a result of market forces, as well as building and zoning restrictions when applied to specific sites, which often dictate the construction of less than the maximum allowable development.

1.3 PURPOSE OF THE PROGRAM ENVIRONMENTAL IMPACT REPORT

This EIR evaluates the impacts of *Burbank2035*. It is a Program EIR, as described within the California Environmental Quality Act (CEQA) and the State CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000 et seq. [14 CCR 15000 et seq.).

According to the State CEQA Guidelines (Section 15168[a]), a state or local agency should prepare a Program EIR, rather than a project EIR, when the lead agency proposes the following:

- a series of related actions that are linked geographically;
- logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or,

- individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

A Program EIR "may be prepared on a series of actions that can be characterized as one large project and are related...in connection with the issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program" (State CEQA Guidelines Section 15168[a][3]). This Program EIR considers a series of actions related to implementation of *Burbank2035*.

As a Program EIR, this document focuses on the overall effect of *Burbank2035*. The analyses in this EIR do not examine the effects of site-specific projects that may occur within the overall umbrella of this program in the future. The nature of general plans is such that many proposed policies are intended to be general, with details to be worked out during implementation. As a result, many of the impacts and mitigation measures in this EIR can be described only in general or qualitative terms. This EIR does, however, quantify impacts related to transportation, air quality, GHG emissions, noise, and other topics, making reasonable assumptions as to the amount, type, and character of land use change anticipated with implementation of *Burbank2035*.

TIERING AND STREAMLINING

The City will make use of existing streamlining provided by CEQA, emerging streamlining techniques, such as those related to implementation of the Southern California Association of Governments (SCAG) Sustainable Communities Strategy (Public Resources Code [PRC] Section 21155), and other streamlining techniques that may become available in the future. The City has invested substantial resources in *Burbank2035* and its EIR, and wishes to promote fiscally prudent use of this EIR, once it is certified, to accommodate development consistent with *Burbank2035*.

Tiering refers to a multilevel approach to preparing environmental documents set forth in PRC Section 21083.3 and State CEQA Guidelines Section 15152. The analysis in this Program EIR is considered the first tier of environmental review upon which future, project-specific CEQA documents can build. Environmental analysis for future projects consistent with *Burbank2035* can be streamlined to allow subsequent documents to focus on new or site-specific impacts (State CEQA Guidelines Section 15168[d]).

Public Resources Code Section 21083.3 allows a lead agency to narrow the focus of project level analysis to effects upon the environment which are peculiar to the parcel or project (PRC Section 21083.3(a)). The PRC also limits the effects that can be considered peculiar in project-level analysis under the Program EIR.

Section 15152 of the CEQA Guidelines provides that where a first-tier EIR has "adequately addressed" the subject of cumulative impacts, such impacts need not be revisited in second- and/or third-tier documents. According to Section 15152(f)(3), significant effects identified in a first-tier EIR are adequately addressed, for purposes of later approvals, if the lead agency determines that such effects have been either:

> "mitigated or avoided as a result of the prior [EIR] and findings adopted in connection with that prior [EIR]"; or
>
> "examined at a sufficient level of detail in the prior [EIR] to enable those effects to be mitigated or avoided by site-specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project."

The Public Resources Code provides streamlining coverage to the City of Burbank and other public agencies that have authority to implement *Burbank2035*. Public agencies can use uniformly applied policies or standards to mitigate effects of future projects, avoiding the need to analyze these effects, unless new information arises that changes the impact analysis (PRC Section 21083.3 (d)). For this reason, this EIR includes references to *Burbank2035* policy and implementation programs, where appropriate, to address environmental impacts. Future CEQA documents can reference the same *Burbank2035* policies and programs, where appropriate, to demonstrate less-than-significant impacts. The City may consider specific plans, area plans, corridor plans, downtown core area plans, or other documents to implement *Burbank2035* within a smaller geographic area of the city.

The City acknowledges and intends to make best use of the advantages to the programmatic approach to environmental analysis and reporting in this EIR. As noted in CEQA Guidelines Section 15168(b):

> "Use of a program EIR can provide the following advantages. The program EIR can:
>
> (1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;
>
> (2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis;
>
> (3) Avoid duplicative reconsideration of basic policy considerations;
>
> (4) Allow the Lead Agency to consider broad policy alternatives and programwide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts; and
>
> (5) Allow reduction in paperwork.

1.4 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

1.4.1 LEAD AGENCY

In conformance with Sections 15050 and 15367 of the State CEQA Guidelines, the City of Burbank is the "lead agency" for preparation of the *Burbank2035* environmental analysis. The City, as lead agency, is responsible for scoping the analysis, preparing the EIR, and responding to comments received on the Draft EIR.

1.4.2 RESPONSIBLE AGENCIES

Responsible agencies are other state and local public agencies that have authority to carry out or approve a project or that are required to approve a portion of the project for which a lead agency is preparing or has prepared an EIR or Initial Study/Negative Declaration. Because the proposed project is a general plan, no agencies other than the City of Burbank have approval or permitting authority for the plan's adoption.

Implementation of the proposed project would involve many additional responsible agencies depending upon the specifics of the nature of subsequent projects. The following are some of the agencies that may be required to act as responsible agencies for subsequent projects:

- California Department of Transportation (Caltrans), including the Division of Aeronautics
- California Air Resources Board
- State Department of Housing and Community Development
- State Office of Historic Preservation
- State Reclamation Board
- State Department of Fish and Game
- State Lands Commission
- State Department of Parks and Recreation
- State Water Resources Control Board
- South Coast Air Quality Management District
- Local Agency Formation Commission (LAFCo) for the County of Los Angeles
- Los Angeles Regional Water Quality Control Board

1.4.3 TRUSTEE AGENCIES

Trustee agencies under CEQA are public agencies with legal jurisdiction over natural resources that are held in trust for the people of California and that would be affected by a project, whether or not the agencies have authority to approve or implement the project. Development under *Burbank2035* would not generally affect lands under the jurisdiction of a Trustee Agency; however, the Trustee Agencies with jurisdiction that could be affected by subsequent projects include the California Department of Fish and Game, the California State Lands Commission, and the California State Department of Parks and Recreation.

1.5 REQUIRED PERMITS AND APPROVALS

Project approval requires the following actions by the City Council:

- Certification of this Program EIR
- Adoption of a Mitigation Monitoring and Reporting Program

The EIR will be used in the consideration of subsequent actions, including:

- Zoning amendments
- Subdivision maps
- Community plans
- Specific plans
- Special planning districts
- Special permits
- Historic preservation actions
- Planning actions
- Infrastructure and Public Facilities siting and project approvals
- Other related actions

1.6 PUBLIC REVIEW OF DRAFT EIR AND LEAD AGENCY CONTACT

Upon publication of this Draft EIR, the City will provide public notice of the document's availability for public review and invite comment from the general public, agencies, organizations, and other interested parties. Copies of the Draft EIR will be available on the City's website at http://www.burbank2035.com and at the following locations:

City of Burbank Community Development Department
150 N. Third Street
Burbank, CA 91502
(Open to the public Monday-Friday, 8 a.m.-12 noon and 1-4 p.m.)

The public review and comment period is 45 days from July 30, 2012 through September 13, 2012. Written public comments on the Draft EIR must be received no later than 4:00 p.m. on September 13, 2012. Written comments or questions regarding the Draft EIR should be addressed to:

Tracy Steinkruger, Senior Planner
City of Burbank Community Development Department, Planning and Transportation Division
150 N. Third Street
Burbank, CA 91502
tsteinkruger@ci.burbank.ca.us

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period. The City Council will review and consider the Final EIR prior to their decision to approve, revise, or reject the proposed project.

1.7 SCOPE OF THIS DRAFT EIR

As lead agency, the City determined that this Draft EIR will address the following technical issue areas:

- Aesthetics
- Air Quality
- Agricultural Resources
- Greenhouse Gas Emissions
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population, Employment and Housing
- Public Services and Utilities, including Police, Fire, Schools, Parks, Other Public Facilities, Water Supply, Wastewater, and Solid Waste
- Transportation

The specific topics evaluated are described in each of the resource chapters presented in Chapter 4.0.

1.8 HOW TO USE THIS REPORT

This report includes nine principal parts: Executive Summary; Project Description; Environmental Analysis (Impacts and Mitigation Measures); Other CEQA Required Considerations; Alternatives; Acronyms and Abbreviations; References; Report Preparation; and Appendices.

The **Executive Summary** (Chapter 2) presents an overview of the results and conclusions of the environmental evaluation. This chapter identifies impacts of the proposed project and available mitigation measures.

The **Project Description** (Chapter 3) describes the location of the project, existing conditions in the planning area, and the nature and location of specific elements of the proposed project.

The **Environmental Analysis** (Chapter 4) includes a topic-by-topic analysis of impacts that would or may result from implementation of the proposed project or alternatives. The analysis is organized into 16 resource chapters. Each chapter is organized into two major subsections: Environmental and Regulatory Setting (a summary of existing conditions), and Impacts and Mitigation Measures. The Impacts and Mitigation Measures subsection also describes cumulative impacts and mitigation measures. Appendix A, the *Burbank2035 Technical Background Report*, provides additional detail regarding the environmental and regulatory setting for each resource chapter.

Other CEQA Required Considerations (Chapter 5) discusses issues required by CEQA: unavoidable adverse impacts, irreversible environmental changes, growth inducement, and a summary of cumulative impacts.

Alternatives (Chapter 6) includes a description of the project alternatives. CEQA requires an EIR to provide adequate information for decision makers to make a reasonable choice between alternatives based on the environmental aspects of the proposed project and alternatives. The impacts of the alternatives are qualitatively compared to those of the proposed project. This chapter also identifies the environmentally superior alternative.

The **References** (Chapter 7) used throughout the EIR are included in this chapter.

Report Preparation (Chapter 8) includes a list of preparers of the EIR.

The **Appendices** contain a number of reference items providing support and documentation of the analyses performed for this report and are included on CD in the back cover of this document.

This page intentionally left blank.

2 EXECUTIVE SUMMARY

2.1 PROJECT UNDER REVIEW

This Program Environmental Impact Report (EIR) considers the environmental impacts likely to occur with adoption and implementation of *Burbank2035* and the Greenhouse Gas Reduction Plan (GGRP). Together, these planning documents comprise the proposed project. This EIR is designed to inform decision-makers in Burbank, other responsible and trustee agencies, and the general public of the potential environmental effects of approval and implementation of the proposed project. A detailed description of the proposed project is provided in Chapter 3, "Project Description." The City of Burbank (City) is the lead agency for environmental review of the proposed project.

Burbank2035 defines long-term community goals, decision-making policies, and implementation programs. *Burbank2035* establishes several land use designations that include residential, commercial, retail, institutional, and recreational uses. *Burbank2035* establishes policies to accommodate a total of 50,219 dwelling units, 116,516 residents, and 52,019,676 square feet of non-residential uses in 2035. The environmental impact analysis in this Program EIR is defined primarily by the change between existing conditions and those associated with future land uses proposed in *Burbank2035*.

The GGRP proposes emissions reduction measures and actions to describe how the City will assist the State in fulfilling its obligations under Assembly Bill (AB) 32. The City is adopting the GGRP as an implementing action for *Burbank2035* to meet goals and implement policies set forth in the Air Quality and Climate Change Element. The GGRP describes measures intended to reduce greenhouse gas (GHG) emissions within both City operations and the community at-large.

2.2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

As shown in Table 2-1, a number of project impacts identified in the EIR were found to be less than significant, requiring no mitigation. These impacts are found in the following sections: Aesthetics; Air Quality; Greenhouse Gas Emissions; Biological Resources; Cultural Resources; Energy; Geology and Soils; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Noise; Population, Employment and Housing; Public Services and Utilities; and Transportation. In the course of drafting the EIR for this project, it was determined that numerous other identified impacts could be reduced to a less-than-significant level with implementation of the proposed mitigation measures described in Chapter 4, "Impacts and Mitigation Measures" of the EIR.

2.2.1 ENVIRONMENTAL IMPACTS AND MITIGATION

Under CEQA, a significant effect on the environment is defined as a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (CEQA Guidelines, Section 15382). Implementation of *Burbank2035* and the GGRP would result in significant impacts to some of these resources, which are analyzed in Chapters 4.1 through 4.16 of this document and summarized in Table 2-1 (provided at the end of this chapter).

This EIR discusses mitigation measures that could be implemented by the City to reduce potential adverse impacts to a level that is considered less than significant. Such mitigation measures are noted in this document and are found in the following sections: Aesthetics, Greenhouse Gas Emissions, Cultural Resources, and Transportation. However, even with the application of feasible mitigation measures, some impacts could not be reduced to less-than-significant levels. The significant and unavoidable impacts are identified below.

2.2.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

AIR QUALITY

4.3-2 Short-term Construction Emissions. Adoption and implementation of *Burbank2035* would result in new development and redevelopment of property throughout the planning area, which would generate air quality emissions from short-term construction of planned land uses.

4.3-3 Long-term Operational Emissions. Adoption and implementation of *Burbank2035* would generate air quality emissions from long-term operation of planned land uses.

4.3-5 Toxic Air Contaminants. Adoption and implementation of *Burbank2035* would potentially generate additional diesel vehicle traffic and diesel stationary sources within the city.

4.3-7 Cumulative Construction Emissions. Adoption and implementation of *Burbank2035* in addition to anticipated growth in the Basin would increase the amount of construction-related air quality emissions occurring within the Basin, thereby affecting the region's ability attain ambient air quality standards.

4.3-8 Cumulative Operational Emissions. Adoption and implementation of *Burbank2035* in addition to anticipated growth in the Basin would increase the amount of operational air quality emissions occurring within the Basin and affect the region's ability to attain ambient air quality standards.

CULTURAL RESOURCES

4.6-1 Substantial Change in the Significance of a Historical Resource. Adoption and implementation of *Burbank2035* could result in new development and redevelopment of property throughout the planning area, which could cause a substantial change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5.

4.6-2 Substantial Change in the Significance of a Unique Archaeological Resource. Adoption and implementation of *Burbank2035* could result in new development and redevelopment of previously undisturbed land throughout the planning area, which could cause a substantial change in the significance of a unique archaeological resource as defined in CEQA Guidelines Section 15064.5.

NOISE

4.13-1 Expose Noise Sensitive Receptors to Construction Noise Levels. Short-term construction noise levels associated with implementation of *Burbank2035* could exceed applicable City of Burbank standards at nearby noise-sensitive receptors. In addition, if construction activities were to occur during more noise-sensitive hours (outside the construction hours defined in BMC Section 9-1-1-105.8), construction noise levels could also result

in annoyance and/or sleep disruption to occupants of existing and proposed noise-sensitive land uses and create a substantial temporary increase in ambient noise levels.

4.13-2 Long-Term Increase in Traffic Noise Levels at Existing Noise-Sensitive Receptors. Implementation of *Burbank2035* would result in a significant increase in traffic noise levels exceeding 3-5 dBA.

4.13-4 Exposure of Noise Sensitive Receptors to Rail Noise. Implementation of *Burbank2035* could result in increased exposure of sensitive receptors to rail-generated noise.

4.13-5 Exposure of Noise Sensitive Receptors to Aircraft Noise. *Burbank2035* implementation could result in increased exposure of sensitive receptors to aircraft generated noise.

4.13-6 Exposure of Vibration Sensitive Receptors to Construction Vibration. Sensitive receptors could be subjected to construction vibration levels in excess of established thresholds.

4.13-7 Exposure of Vibration Sensitive Receptors to Operational Vibration. Operational vibration sources, including roadway traffic and industrial and commercial operations would be unlikely to expose sensitive receptors to levels exceeding recommended thresholds of significance.

4.13-8 Cumulative Effects of Construction Noise. Adoption and implementation of *Burbank2035*, in addition to anticipated growth in the region, would result in additional construction activity throughout the city and in adjacent jurisdictions, thereby increasing overall ambient noise levels.

4.13-9 Cumulative Effects of Roadway Noise. Adoption and implementation of *Burbank2035* in addition to anticipated growth in the region would result in additional vehicle trips throughout the city and in adjacent jurisdictions, thereby increasing overall ambient noise levels.

4.13-11 Cumulative Effects of Rail Noise on Nearby Receptors. Adoption and implementation of *Burbank2035* in addition to anticipated growth in the region could result in the construction of additional residences near existing rail operations, thereby resulting in the potential exposure of those residences to elevated noise levels due to rail operations.

4.13-13 Cumulative Effects of Construction Vibration. Construction of future land uses consistent with *Burbank2035*, in conjunction with other activities within the city, would expose nearby sensitive receptors to excessive vibration levels.

POPULATION, EMPLOYMENT AND HOUSING

4.14-1 Induce Substantial Population Growth. Adoption and implementation of *Burbank2035* would increase population in the planning area compared to 2010 conditions, and would also increase employment in the planning area, thereby indirectly causing population increases.

4.14-3 Cumulative Inducement of Population Growth. Adoption and implementation of *Burbank2035* in addition to anticipated land use changes throughout the Arroyo Verdugo Cities subregion would increase population both directly and indirectly (through increased employment).

PUBLIC UTILITIES AND SERVICES

4.15-9 Demand for Water Supplies. Implementation of *Burbank2035* would result in the need for additional water supply. The increased population growth projected from implementation of *Burbank2035* would be less than that anticipated by the UWMPs of water suppliers, and no new entitlements would be needed. However, uncertainty exists surrounding future water supply to the planning area and southern California as a whole.

4.15-21 Cumulative Effects on Water Supplies. Implementation of *Burbank2035* would result in the need for additional water supply. The increased population growth projected from implementation of *Burbank2035* would be less than that anticipated by the Urban Water Management Plans of water suppliers, and no new entitlements would be needed. However, uncertainty exists surrounding future water supply to the planning area and southern California as a whole.

TRANSPORTATION

4.16-1 LOS D Performance Standard. Adoption and implementation of *Burbank2035* would increase traffic volumes within the city, resulting in 16 out of 35 signalized intersections operating below the LOS D standard.

4.16-7 Cumulative LOS D Performance Standard. Adoption and implementation of *Burbank2035* would increase traffic volumes within the city, resulting in 16 out of 35 signalized intersections operating below the LOS D standard under cumulative conditions.

2.3 ALTERNATIVES TO THE PROJECT

Chapter 6, "Alternatives", of this EIR contains a full description and analysis of four alternatives to the proposed project that are analyzed in this Draft EIR. The alternatives are:

- **Alternative 1. No Project/Existing General Plan**. This alternative assumes that *Burbank2035* would not be implemented and that future development in the planning area would proceed as indicated in the existing 1988 Land Use Element.

- **Alternative 2. Distributed Land Use**. This alternative would spread the anticipated increases in non-residential square footage anticipated under *Burbank2035* evenly across the city as a whole, rather than concentrating new growth in Downtown Burbank, the Media District, and the Golden State area.

- **Alternative 3. Golden State Area – Increased Density**. This alternative would revise the land use diagram in the Golden State area from Airport and Manufacturing designations to Regional Commercial and Corridor Commercial designations.

- **Alternative 4. Centers & Corridors – 2006 Draft Land Use Element.** This alternative assumes that commercial development is concentrated in Downtown Burbank and identified neighborhood centers located throughout the city, with more limited growth occurring in the Golden State area and Media District. In addition, this alternative assumes additional turnover from commercial to residential uses concentrated along major corridors in the city.

Based on the evaluation described in Chapter 6 of this EIR, the Centers & Corridors – 2006 Draft Land Use Element Alternative (Alternative 4) would be the environmentally superior alternative because it would reduce impacts in the greatest number of topic areas compared to the proposed project.

2.4 POTENTIAL AREAS OF CONTROVERSY

This EIR is a comprehensive document that evaluates each environmental topic that could be applicable to the proposed project. The environmental topics covered, as potential areas of controversy, include: Aesthetics; Agricultural and Forest Resources; Air Quality; Greenhouse Gas Emissions; Biological Resources; Cultural Resources; Energy; Geology and Soils; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; Population, Employment, and Housing; Public Services and Utilities; and Transportation.

The City published and circulated a Notice of Preparation (NOP) from February 1, 2010 through March 3, 2010, which was distributed to local, regional, and State agencies and posted on the City website at http://www.burbank2035.com. The NOP and written comments received on the NOP are included in Appendices B and C, respectively. Issues raised by reviewing agencies and the public during the scoping process are summarized below.

- One comment recommended examination of each of the requirements in state planning law and identification of hazard issues within the community which the general plan should address.
- Recommendations were provided for how to reduce the project's energy consumption.
- A suggestion was made to coordinate *Burbank2035* planning efforts with the Los Angeles County Airport Land Use Commission (ALUC) and ensure project compliance with the California Airport Land Use Planning Handbook due to the inclusion of the Bob Hope Airport in the city.
- A suggestion was made to consider adoption of a regional or community-wide traffic impact program to fund regional transportation improvements to contribute to improvements on the State highway system, including impacts to Interstate 5 (I-5) and on/off ramps or an I-5/State Route (SR) 134 interchange modification.
- A recommendation was made to consider the jobs-and-housing balance within the city.
- Implementation of water conservation efforts was encouraged.
- Consultation with relevant likely Native American descendants was encouraged.
- A recommendation was made to include language in the general plan to ensure that any future planned development adjacent to or near the railroad right-of-way be planned with the safety of the rail corridor in mind.
- A request was made to quantify air quality impacts from both construction and operations, including quantification of $PM_{2.5}$ emissions. Incorporation of feasible mitigation to minimize or eliminate significant adverse air quality impacts was also encouraged.

- A request was made to include a side-by-side comparison of all Southern California Association of Governments (SCAG) policies with a discussion of the consistency, inconsistency or non-applicability of proposed *Burbank2035* policies and supportive analysis in a table format.

- Additional information about how the existing rail corridor would be addressed in *Burbank2035* and EIR was requested.

2.5 SUMMARY TABLE

Information in Table 2-1 has been organized to correspond with the environmental issues discussed in Chapter 4. The table is arranged in four columns:

- environmental impacts,
- level of significance prior to mitigation,
- mitigation measures, and
- the level of significance after implementation of mitigation measures.

If an impact is determined to be significant or potentially significant after implementation of proposed *Burbank2035* policies and implementation programs, mitigation measures are identified, where appropriate and feasible. More than one mitigation measure may be required to reduce the impact to a less-than-significant level. This EIR assumes that all applicable plans, policies, and regulations would be implemented, including, but not necessarily limited to, proposed *Burbank2035* policies and implementation programs, laws, and requirements or recommendations of the City of Burbank. Applicable plans, policies, and regulations are identified and described in the Regulatory Setting of each resource chapter and within the relevant impact analysis. Further description of both the existing environmental setting and existing regulatory setting in 2010 can be found in the Technical Background Report (TBR) prepared for *Burbank2035*, which is provided as Appendix A to the EIR. A description of the organization of the environmental analysis, as well as key foundational assumptions regarding the approach to the analysis, is provided in Chapter 4.0, "Introduction to the Analysis."

For a complete description of potential impacts and recommended mitigation measures, please refer to the specific discussions in Chapter 4.

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.1 Aesthetics			
Project-Specific Impacts			
4.1-1 **Effects on Scenic Vistas.** Adoption and implementation of *Burbank2035* would include new development in the planning area, including buildings, structures, paved areas, roadways, utilities, and other improvements, potentially altering scenic vistas in the planning area.	LTS	None required.	N/A
4.1-2 **Degrade Existing Visual Character.** Adoption and implementation of *Burbank2035* would include new development in the planning area that could substantially degrade the existing visual character within or surrounding the planning area.	LTS	None required.	N/A
4.1-3 **Include Sunlight-blocking Structures.** Adoption and implementation of *Burbank2035* would include new development in the planning area that could include sunlight-blocking structures near shadow-sensitive uses.	PS	**Mitigation Measure 4.1-3:** The City of Burbank shall modify Program LU-1 by adding the following measures to address the potential for new structures to cause shadow impacts on shadow-sensitive uses: ► Require a shadow analysis for new structures proposed over 70 feet in height that would be adjacent to a shadow-sensitive public use such as, but not limited to, a park, pedestrian-oriented outdoor space, or restaurant with outdoor seating area. ► Establish standards to ensure new development over 70 feet in height does not shade shadow-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). Standards could include building spacing, building orientation, or step-backs.	LTS
4.1-4 **Create New Sources of Light or Glare.** Adoption and implementation of *Burbank2035* would include new development in the planning area that would create new sources of light and glare.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Cumulative Impacts			
4.1-5 **Cumulative Effects on Scenic Vistas.** Adoption and implementation of *Burbank2035* would not include new development that would substantially degrade scenic vistas from other nearby areas outside the planning area.	LTS	None required.	N/A
4.1-6 **Cumulative Effects Degrading Existing Visual Character.** Adoption and implementation of *Burbank2035* and anticipated regional growth would include new development that could substantially degrade existing visual character within or surrounding the planning area.	LTS	None required.	N/A
4.1-7 **Cumulative Effects of Sunlight-blocking Structures.** Adoption and implementation of *Burbank2035* would include new development in the planning area that could include sunlight-blocking structures near shadow-sensitive uses. Other nearby development in Los Angeles or Glendale could also include sunlight-blocking structures.	LTS	None required.	N/A
4.1-8 **Cumulative Effects of New Sources of Light or Glare.** Adoption and implementation of *Burbank2035* and anticipated regional growth would include new development that would create new sources of light and glare.	LTS	None required.	N/A
4.2 Agricultural and Forest Resources			
No impacts.			
4.3 Air Quality			
Project-Specific Impacts			
4.3-1 **Consistency with Air Quality Plans.** Adoption and implementation of *Burbank2035* would result in new development and redevelopment of property throughout the planning area, which could result in air quality	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
emissions associated with construction and operation of future and existing land uses that would affect how the region attains and maintains air quality standards.			
4.3-2 **Short-term Construction Emissions.** Adoption and implementation of *Burbank2035* would result in new development and redevelopment of property throughout the planning area, which would generate air quality emissions from short-term construction of planned land uses.	PS	None available.	SU
4.3-3 **Long-term Operational Emissions.** Adoption and implementation of *Burbank2035* would generate air quality emissions from long-term operation of planned land uses.	PS	None available.	SU
4.3-4 **CO Hot Spots.** Adoption and implementation of *Burbank2035* would generate and contribute vehicle traffic to existing roadways within the city as a result of proposed land uses, which could contribute to potential CO hot spots.	LTS	None required.	N/A
4.3-5 **Toxic Air Contaminants.** Adoption and implementation of *Burbank2035* would potentially generate additional diesel vehicle traffic and diesel stationary sources within the city.	PS	**Mitigation Measure 4.3-5:** The City of Burbank shall modify Burbank2035 Implementation Program AQCC-4 as follows to address the potential for TAC impacts: Program AQCC-4: Health Risk Assessments for Stationary and Mobile Sources Require project proponents to prepare health risk assessments in accordance with SCAQMD-recommended procedures as part of environmental review when projects could have associated air emissions that have been designated by the State of California as a toxic air contaminant or, similarly, by the federal government as a hazardous air pollutant. Also require health risk assessments for projects that would place sensitive land uses near Bob Hope Airport, the UPRR rail line, or major freeways or arterials. (Major freeways, for these purposes, are ~~those that carry more than 50,000 vehicles per day~~ I-5 and SR 134.) ~~In general,~~ The City will apply the ARB Air Quality and Land Use Handbook for recommendations on siting distances for sensitive or noxious uses. Site-specific analysis may include dispersion modeling	SU

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		and/or a health risk assessment, consistent with applicable guidance from SCAQMD. If required to reduce potentially significant impacts, the City shall require the applicant to identify and incorporate feasible mitigation measures. Such measures could include, but are not limited to: including tiered plantings of trees to reduce particulate matter concentrations; providing HVAC resource information; avoiding siting sensitive receptors in buildings with perchlorethylene drycleaners; and locating air intakes and windows to reduce particulate matter exposure. Agency/Department: Community Development Department Funding Source: Development fees Time Frame: Ongoing	
4.3-6 **Odors.** Adoption and implementation of *Burbank2035* would result in future land uses that could generate odors or expose existing receptors to odors.	LTS	None required.	N/A
Cumulative Impacts			
4.3-7 **Cumulative Construction Emissions.** Adoption and implementation of *Burbank2035* in addition to anticipated growth in the Basin would increase the amount of construction-related air quality emissions occurring within the Basin, thereby affecting the region's ability attain ambient air quality standards.	S	None available.	SU
4.3-8 **Cumulative Operational Emissions.** Adoption and implementation of *Burbank2035* in addition to anticipated growth in the Basin would increase the amount of operational air quality emissions occurring within the Basin and affect the region's ability to attain ambient air quality standards.	S	None available.	SU
4.3-9 **Cumulative CO Hotspots.** Adoption and implementation of *Burbank2035* in addition to anticipated growth in the Basin would contribute to traffic volumes on regional roadways, which would increase congestion and the potential for a CO hotspot.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.3-10 **Cumulative TAC Emissions.** Adoption and implementation of *Burbank2035* in addition to anticipated growth in the Basin would increase the amount of TAC emissions that sensitive receptors would be exposed to in the Basin.	LTS	None required.	N/A
4.3-11 **Cumulative Odors.** Adoption and implementation of *Burbank2035* in addition to anticipated growth in the Basin would increase the potential to generate or expose regional receptors to odors.	LTS	None required.	N/A
4.4 Greenhouse Gas Emissions			
Project-Specific and Cumulative Impacts			
4.4-1 **Generation of Short-Term Construction Greenhouse Gas Emissions.** Adoption and implementation of *Burbank2035* would result in new development and redevelopment of property throughout the planning area, which would result in GHG emissions from construction activities that would contribute to the cumulative effect of climate change.	PS	**Mitigation Measure 4.4-1a:** To reduce construction-generated GHG emissions, projects seeking discretionary approval from the City shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by the City and/or SCAQMD at the time individual portions of the site undergo construction. The project applicant(s) for any particular discretionary project may submit a report to the City that substantiates why specific measures are considered infeasible for construction of that particular discretionary project and/or at that point in time. By requiring that the list of feasible measures be established prior to the selection of a primary contractor, this measure requires that the ability of a contractor to effectively implement the selected GHG reduction measures be inherent to the selection process. The recommended measures for reducing construction-related GHG emissions at the time of writing this EIR are listed below. The list will be updated as new technologies or methods become available. The project applicant(s) shall, at a minimum, be required to implement the following: ► Improve fuel efficiency of construction equipment: • reduce unnecessary idling (modify work practices, install auxiliary power for driver comfort); • perform equipment maintenance (inspections, detect failures early, corrections); • train equipment operators in proper use of equipment; • use the proper size of equipment for the job; and	LTS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		• use equipment with new technologies (repowered engines, electric drive trains). ► Use alternative fuels for electricity generators and welders at construction sites such as propane or solar, or use electrical power. ► Use an ARB-approved low-carbon fuel, such as biodiesel or renewable diesel for construction equipment. Emissions of NOX from the use of low carbon fuel must be reviewed and increases mitigated. Additional information about low-carbon fuels is available from ARB's Low Carbon Fuel Standard Program. ► Reduce electricity use in the construction offices by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones. ► Recycle or salvage nonhazardous construction and demolition debris. ► Use locally sourced or recycled materials for construction materials (goal of at least 20 percent based on costs for building materials, and based on volume for roadway, parking lot, sidewalk, and curb materials). ► Develop a plan to efficiently use water for adequate dust control. This may consist of the use of nonpotable water from a local source. **Mitigation Measure 4.4-1b**: As a part of a contractor demolition package, require compliance with the City of Burbank Construction and Demolition Ordinance. Work with contractors to share best practices on building recycling and reuse and demolition techniques to minimize waste, dust generation, water and energy use and other impacts of construction and demolition work. ► **Mitigation Measure 4.4-1c**: Upgrade the BMC to incorporate California Green Building Standards Code requirements on a regular and timely manner as mainline construction practices develop and new materials and building products become available, with the goal of meeting the state's Net Zero Energy goals by 2020.	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.4-2 **Generation of Long-Term Operational Greenhouse Gas Emissions.** Adoption and implementation of *Burbank2035* would result in new development and redevelopment of property throughout the planning area, which would result in GHG emissions from operation of future land uses that would contribute to the cumulative effect of climate change.	LTS	None required.	N/A
4.4-3 **Consistency with Greenhouse Gas Reduction Plans.** Adoption and implementation of *Burbank2035* would result in GHG emissions associated with construction-related and operational activities. However, in order for the City of Burbank and the State of California to meet their GHG reduction goals, the efficiency and manner in which construction activities are executed, and new and modified development operate are required to become more GHG efficient.	LTS	None required.	N/A
4.5 Biological Resources			
Project-Specific Impacts			
4.5-1 **Impacts to Special-Status Species.** Adoption and implementation of *Burbank2035* would result in the loss or degradation of existing populations or suitable habitat of special-status plant and wildlife species.	LTS	None required.	N/A
4.5-2 **Impacts to Riparian Habitat or Sensitive Natural Communities.** Adoption and implementation of *Burbank2035* would result in the loss or degradation of riparian habitat or other sensitive natural communities considered sensitive habitats under CEQA.	LTS	None required.	N/A
4.5-3 **Impacts to Federally-Protected Wetlands.** Adoption and implementation of *Burbank2035* would result in the loss or degradation of federally-protected wetlands or vernal pools.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.5-4 **Impacts to Wildlife Movement.** Adoption and implementation of *Burbank2035* would impede wildlife movement within the planning area.	LTS	None required.	N/A
Cumulative Impacts			
4.5-5 **Cumulative Effects on Special-Status Species.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would result in the loss or degradation of existing populations or suitable habitat of special-status plant and wildlife species, a potentially significant cumulative impact.	LTS	None required.	N/A
4.5-6 **Cumulative Effects on Riparian Habitat or Sensitive Natural Communities.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would result in the loss or degradation of riparian habitat or other sensitive natural communities considered sensitive habitats under CEQA.	LTS	None required.	N/A
4.5-7 **Cumulative Effects on Federally-Protected Wetlands.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would result in the loss or degradation of federally-protected wetlands or vernal pools.	LTS	None required.	N/A
4.5-8 **Cumulative Effects on Wildlife Movement.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would impede wildlife movement in the Verdugo and Santa Monica Mountains.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.6 Cultural Resources			
Project-Specific Impacts			
4.6-1 **Substantial Change in the Significance of a Historical Resource.** Adoption and implementation of *Burbank2035* could result in new development and redevelopment of property throughout the planning area, which could cause a substantial change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5.	PS	**Mitigation Measure 4.6-1**: The City of Burbank shall modify *Burbank2035* Implementation Program LU-4 as follows to address the potential for substantial adverse change to historical resources: **Program LU-4: Historic Preservation ~~Plan~~** To reduce impacts to both known and as-yet-unknown historical resources within Burbank, the City shall: ► Review, revise, and maintain the Historic Preservation Plan to ensure that it is informed by current resource data and its goals and policies are consistent with the Land Use Element. ~~and revise as appropriate.~~ ► Establish a list of Eligible Historic Resources to be maintained by the Community Development Director. Update the list of Eligible Historic Resources every five (5) years to identify as-yet-unknown historical resources (as defined in State CEQA Guidelines Section 15064.5) as potential resources are identified through citywide surveys and on a project-by-project basis. ► Periodically review and revise the H~~h~~istoric R~~r~~esource M~~m~~anagement O~~o~~rdinance and preservation incentives to account for new resources as they are identified. ~~► Establish a process and criteria to locally designate historic districts identified in the City of Burbank Historic Context Report (2009).~~ ► Require evaluation by a qualified architectural historian for projects subject to CEQA involving buildings constructed more than 45 years prior to the project application. If the evaluation determines that historical resources (as defined in State CEQA Guidelines Section 15064.5) would be adversely affected, the City shall require the proposed project to comply with Section 10-1-928 of the Historic Resource Management Ordinance. ► Require assessment by a qualified archeologist for projects subject	SU

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		to CEQA involving ground-disturbing activities on previously undisturbed land to identify the potential to encounter buried historical resources (as defined in State CEQA Guidelines Section 15064.5). If the assessment determines that buried resources may be present, the City shall require preparation and implementation of a treatment plan outlining measures for monitoring, data recovery, and/or handling inadvertent discoveries. Agency/Department: Community Development Department Funding Source: Grant funds, general fund Time Frame: Ongoing; ~~identify historic districts within five (5) years of Burbank2035 adoption;~~ historic resource list updates every five (5) years	
4.6-2 **Substantial Change in the Significance of a Unique Archaeological Resource.** Adoption and implementation of *Burbank2035* could result in new development and redevelopment of previously undisturbed land throughout the planning area, which could cause a substantial change in the significance of a unique archaeological resource as defined in CEQA Guidelines Section 15064.5.	PS	**Mitigation Measure 4.6-2**: Implement Mitigation Measure 4.6-1.	SU
4.6-3 **Disturbance of Human Remains.** Adoption and implementation of *Burbank2035* could result in new development and redevelopment of previously undisturbed land throughout the planning area, which could disturb human remains.	LTS	None required.	N/A
4.6-4 **Impacts to Unique Paleontological Resources.** Earthmoving and excavation activities associated with implementation of *Burbank2035* could damage previously unknown unique paleontological resources.	PS	**Mitigation Measure 4.6-4**: The City of Burbank shall modify *Burbank2035* Implementation Program OSC-7 by adding the following bullet item: ► If paleontological resources are discovered during earthmoving activities associated with future development projects, the construction crew shall immediately cease work in the vicinity of the find and notify the City. The project applicant(s) shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate	LTS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Paleontology guidelines (1996). The recovery plan shall include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the lead agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.	
Cumulative Impacts			
4.6-5 **Cumulative Effects on Historical Resources.** Adoption and implementation of *Burbank2035* in addition to anticipated future development in Burbank, Glendale, and Universal City could cause a substantial change in the significance of historical resources as defined in CEQA Guidelines Section 15064.5.	PS	**Mitigation Measure 4.6-5**: Implement Mitigation Measure 4.6-1.	LTS
4.6-6 **Cumulative Effects on Archaeological Resources.** Adoption and implementation of *Burbank2035* in addition to anticipated future development in Burbank, Glendale, and Universal City could cause a substantial change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5.	PS	**Mitigation Measure 4.6-6**: Implement Mitigation Measure 4.6-1.	LTS
4.6-7 **Cumulative Effects on Human Remains.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would not result in cumulative impacts to human remains because these impacts are inherently site specific.	LTS	None required.	N/A
4.6-8 **Cumulative Effects on Paleontological Resources.** Ground disturbance, earthmoving and excavation activities associated with implementation of *Burbank2035* combined with construction activities in Burbank, Glendale, and Universal City could damage previously	S	**Mitigation Measure 4.6-8**: Implement Mitigation Measure 4.6-4.	LTS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
unknown unique paleontological resources.			
4.7 Energy			
Project-Specific Impacts			
4.7-1 **Result in Wasteful, Inefficient, and Unnecessary Consumption of Energy.** Adoption and implementation of *Burbank2035* would result in new development and redevelopment of property throughout the planning area, which would increase the demand and consumption of energy.	LTS	None required.	N/A
4.7-2 **Result in siting, orientation, and design that does not provide an opportunity to minimize energy consumption, including transportation energy.** Adoption and implementation of *Burbank2035* would encourage development of new land uses in a way that would increase opportunities to minimize energy consumption, including transportation energy.	LTS	None required.	N/A
4.7-3 **Include features that would increase peak energy demand.** Adoption and implementation of *Burbank2035* would result in new development and redevelopment of property throughout the planning area, which would increase peak energy demand.	LTS	None required.	N/A
4.7-4 **Not provide for alternative fuels (particularly renewable ones) or energy systems.** Adoption and implementation of *Burbank2035* would increase the amount of alternative fuels used in the planning area.	LTS	None required.	N/A
4.7-5 **Not provide for recycling of non-renewable resources.** Adoption and implementation of *Burbank2035* would continue to provide for recycling for non-renewable resources.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Cumulative Impacts			
4.7-6 **Cumulative Wasteful, Inefficient, and Unnecessary Consumption of Energy.** Adoption and implementation of *Burbank2035* in addition to growth throughout the utility service areas would result in new development and redevelopment of property, which would increase the cumulative demand and consumption of energy.	LTS	None required.	N/A
4.7-7 **Cumulative Siting, Orientation, and Design to Minimize Energy Consumption.** Adoption and implementation of *Burbank2035* in addition to planned growth in other jurisdictions would encourage development of new land uses throughout the utility service areas in a way that would increase opportunities to minimize energy consumption, including transportation energy.	LTS	None required.	N/A
4.7-8 **Cumulative Increase in Peak Energy Demand.** Adoption and implementation of *Burbank2035* in addition to regional growth would result in new development and redevelopment of property throughout utility service areas, which would increase the peak energy demand.	LTS	None required.	N/A
4.7-9 **Cumulative Alternative Fuels or Energy Systems Impacts.** Adoption and implementation of *Burbank2035* and general plans in communities throughout the region would increase the amount of alternative fuels used in the utility service areas.	LTS	None required.	N/A
4.7-10 **Cumulative Recycling of Non-Renewable Resources.** Adoption and implementation of *Burbank2035* and general plans in communities throughout the region would continue to provide for recycling for non-renewable resources.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.8 Geology and Soils			
Project-Specific Impacts			
4.8-1 **Fault Rupture.** Adoption and implementation of *Burbank2035* would result in future land uses in areas potentially subject to surface rupture of the Verdugo Fault during future earthquake events.	LTS	None required.	N/A
4.8-2 **Exposure to Seismic Ground Shaking.** Adoption and implementation of *Burbank2035* would result in new people and structures in areas prone to strong seismic ground shaking.	LTS	None required.	N/A
4.8-3 **Potential for Seismic-related Ground Failure.** Adoption and implementation of *Burbank2035* would place new people and structures in areas prone to soil liquefaction and ground failure.	LTS	None required.	N/A
4.8-4 **Potential for Landslides.** Adoption and implementation of *Burbank2035* would result in future land uses in areas susceptible to earthquake-induced landslides.	LTS	None required.	N/A
4.8-5 **Erosion Hazards.** Adoption and implementation of *Burbank2035* would result in future land uses in areas susceptible to erosion.	LTS	None required.	N/A
4.8-6 **Potential for Unstable Soils.** Implementation of *Burbank2035* would result in construction of occupied structures in areas located on a geologic unit or soil that is unstable or that would become unstable, potentially resulting in on- or off-site lateral spreading, subsidence, liquefaction, or collapse.	LTS	None required.	N/A
4.8-7 **Construction in Areas with Expansive Soils.** Implementation of *Burbank2035* would result in construction of occupied structures in areas with expansive soils.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	Cumulative Impacts			
4.8-8	**Cumulative Effects on Geology and Soils.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would not be result in cumulative geology and soils impacts because these impacts are inherently site specific.	LTS	None required.	N/A
	4.9 Hazards and Hazardous Materials			
	Project-Specific Impacts			
4.9-1	**Transport, Use, or Disposal of Hazardous Materials.** Adoption and implementation of *Burbank2035* would result in an increase in the routine transport, use, and/or disposal of hazardous materials, which could result in exposure of such materials to the public through either routine use or accidental release.	LTS	None required.	N/A
4.9-2	**Emission or Handling of Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School.** Adoption and implementation of *Burbank2035* could result in development of uses that would emit or handle hazardous waste in proximity to new or existing schools.	LTS	None required.	N/A
4.9-3	**Potential Development on a Known Hazardous Materials Site Compiled Pursuant to Government Code Section 65962.5.** Currently, only one site within the planning area is identified on the Cortese List as a known hazardous materials site. Adoption and implementation of *Burbank2035* could expose construction workers to hazardous materials from the current or future Cortese List sites, and hazardous materials could create an environmental or health hazard if left in place.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.9-4 **Safety Hazards to People Residing or Working Within two Miles of Bob Hope Airport.** Adoption and implementation of *Burbank2035* could result in an increase of people residing or working within two miles of the Bob Hope Airport, which could result in a safety hazard.	LTS	None required.	N/A
4.9-5 **Interference with an Adopted Emergency-Response Plan.** Adoption and implementation of *Burbank2035* would create additional traffic and future land uses requiring evacuation in the event of an emergency.	LTS	None required.	N/A
4.9-6 **Exposure of Structures to Urban and Wildland Fire.** Adoption and implementation of *Burbank2035* would increase population located in proximity to wildlands and the Mountain Fire Zone, which would increase the risk from potential wildland fires.	LTS	None required.	N/A
Cumulative Impacts			
4.9-7 **Cumulative Effect on Transport, Use, or Disposal of Hazardous Materials.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would result in an increase in the routine transport, use, and/or disposal of hazardous materials, which could result in exposure of such materials to the public through either routine use or accidental release.	LTS	None required.	N/A
4.9-8 **Cumulative Effect on Interference with an Adopted Emergency-Response Plan.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would create additional traffic and future land uses requiring evacuation in case of an emergency.	LTS	None required.	N/A
4.9-9 **Cumulative Safety Hazards to People Residing or Working Within Two Miles of Bob Hope Airport.** Adoption and	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
implementation of *Burbank2035* could result in an increase of people residing or working within two miles of the Bob Hope Airport, which could result in a safety hazard.			
4.10 Hydrology and Water Quality			
Project-Specific Impacts			
4.10-1 **Violate Any Water Quality Standards or Waste Discharge Requirements.** Adoption and implementation of *Burbank2035* would potentially increase the amount of impervious surface within the planning area, thereby increasing the total volume, peak discharge rate of stormwater runoff, and associated pollutants. Construction activities resulting from implementation of Burbank 2035 could also increase the amount of sediments and pollutants in stormwater runoff.	LTS	None required.	N/A
4.10-2 **Interfere with Groundwater Supply and Recharge.** Adoption and implementation of *Burbank2035* would potentially increase the amount of impervious surface within the planning area, thereby decreasing the area available to provide groundwater recharge. However, the new areas of impervious surface would be minimal, and existing areas of open space would be preserved.	LTS	None required.	N/A
4.10-3 **Alter Stormwater Drainage Systems and Patterns Resulting in Erosion.** Adoption and implementation of *Burbank2035* would increase the amount of impervious surface within the planning area, thereby increasing the total volume and peak discharge rate of stormwater runoff and potential for erosion and sedimentation.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.10-4 **Alter Stormwater Drainage Systems and Patterns Resulting in Flooding.** Adoption and implementation of *Burbank2035* could increase the amount of impervious surface within the planning area, thereby increasing the total volume and peak discharge rate of stormwater runoff and potential for flooding.	LTS	None required.	N/A
4.10-5 **Create Runoff that Could Exceed the Capacity of Drainage Systems.** Adoption and implementation of *Burbank2035* would increase the amount of impervious surface within the planning area, thereby increasing the total volume of stormwater runoff that could exceed the capacity of stormwater drainage systems or create substantial additional sources of polluted runoff.	LTS	None required.	N/A
4.10-6 **Otherwise Substantially Degrade Water Quality.** Adoption and implementation of *Burbank2035* could result in development that would increase pollutants and cause degradation of water quality during construction activities or long-term operation.	LTS	None required.	N/A
4.10-7 **Place Housing within 100-year Flood Hazard Area.** Adoption and implementation of *Burbank2035* would continue to allow for housing to be developed in areas designated as within a 100-year flood hazard area.	LTS	None required.	N/A
4.10-8 **Structures that May Impede or Redirect Flood Flows.** Adoption and implementation of *Burbank2035* would allow for continued development in locations designated as 100-year flood hazard areas.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.10-9 **Risk of Loss, Injury, or Death Involving Flooding.** Adoption and implementation of *Burbank2035* would allow for continued development in locations designated as 100-year flood hazard areas which could result in loss, injury, or death from flooding, including flooding from the failure of a dam or levee.	LTS	None required.	N/A
4.10-10 **Inundation by Seiche, Tsunami, or Mudflow.** Adoption and implementation of *Burbank2035* would allow for continued development in locations that may be subject to inundation by seiche or mudflow.	LTS	None required.	N/A
Cumulative Impacts			
4.10-11 **Cumulative Effects on Water Quality Standards Violations or Waste Discharge Requirements.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth throughout the Los Angeles River Watershed would increase the amount of impervious surface within the watershed, thereby increasing the total volume, peak discharge rate of stormwater runoff, and associated pollutants. Additionally, construction activities resulting from regional growth could increase the amount of sediments and pollutants in stormwater runoff.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.10-12 **Cumulative Effects on Groundwater Supply and Recharge.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth throughout the Los Angeles River Watershed would increase the amount of impervious surface within the watershed, thereby decreasing the area available to provide groundwater recharge. However, large portions of the watershed are protected as open space and would remain available to serve as groundwater recharge. New areas of impervious surface as a result of implementing *Burbank2035* would be minimal, and existing open space areas would be preserved.	LTS	None required.	N/A
4.10-13 **Cumulatively Alter Stormwater Drainage Systems and Patterns Resulting in Erosion.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth throughout the Los Angeles River Watershed would increase the amount of impervious surface within the watershed, thereby increasing the total volume and peak discharge rate of stormwater runoff and potential for erosion and sedimentation.	LTS	None required.	N/A
4.10-14 **Cumulative Effects on Stormwater Drainage Systems and Patterns Resulting in Flooding.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth throughout the Los Angeles River Watershed would increase the amount of impervious surface within the watershed, thereby increasing the total volume and peak discharge rate of stormwater runoff that could cause increased flooding.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.10-15 **Cumulatively Create Runoff that Could Exceed the Capacity of Drainage Systems.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would increase the amount of impervious surface within the Los Angeles River Watershed, thereby increasing the total volume of stormwater runoff that could exceed the capacity of stormwater drainage systems or create substantial additional sources of polluted runoff.	LTS	None required.	N/A
4.10-16 **Otherwise Substantially Degrade Water Quality.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth in the Los Angeles River Watershed could result in increased pollutants and cause degradation of water quality during construction activities or long-term operation.	LTS	None required.	N/A
4.10-17 **Place Housing within 100-year Flood Hazard Area.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth may allow housing to be developed in areas designated within a 100-year flood hazard area.	LTS	None required.	N/A
4.10-18 **Structures that May Impede or Redirect Flood Flows.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth throughout the Los Angeles River Watershed would allow for development in locations designated as 100-year flood hazard areas.	LTS	None required.	N/A

Table 2-1 Summary of Impacts and Mitigation Measures			
Impact	**Level of Significance Prior to Mitigation**	**Mitigation Measure(s)**	**Level of Significance After Mitigation**
4.10-19 **Risk of Loss, Injury, or Death Involving Flooding, Including Dam or Levee Failure.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth throughout the Los Angeles River Watershed would allow for development in locations designated as 100-year flood hazard areas that could result in loss, injury, or death from flooding, including flooding from the failure of a dam or levee.	LTS	None required.	N/A
4.10-20 **Inundation by Seiche, Tsunami, or Mudflow.** Adoption and implementation of *Burbank2035* in addition to regional growth throughout the Los Angeles River Watershed would allow for continued development in locations that may be subject to inundation by seiche or mudflow.	LTS	None required.	N/A
4.11 Land Use and Planning			
Project-Specific Impacts			
4.11-1 **Physically Divide an Established Community.** Adoption and implementation of *Burbank2035* would result in limited changes in land use designations and mobility improvements throughout the planning area leading to a increase in dwelling units and non-residential square footage.	LTS	None required.	N/A
4.11-2 **Conflict with an Applicable Plan, Policy or Regulation.** Adoption and implementation of *Burbank2035* in addition to anticipated local and regional growth would increase housing units, non-residential square footage and population in Burbank in combination with transportation improvements.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Cumulative Impacts			
Cumulative land use and planning impacts would be less than significant.			
4.12 Mineral Resources			
No impacts.			
4.13 Noise			
Project-Specific Impacts			
4.13-1 **Expose Noise Sensitive Receptors to Construction Noise Levels.** Short-term construction noise levels associated with implementation of *Burbank2035* could exceed applicable City of Burbank standards at nearby noise-sensitive receptors. In addition, if construction activities were to occur during more noise-sensitive hours (outside the construction hours defined in BMC Section 9-1-1-105.8), construction noise levels could also result in annoyance and/or sleep disruption to occupants of existing and proposed noise-sensitive land uses and create a substantial temporary increase in ambient noise levels.	S	None available.	SU
4.13-2 **Long-Term Increase in Traffic Noise Levels at Existing Noise-Sensitive Receptors.** Implementation of *Burbank2035* would result in a significant increase in traffic noise levels exceeding 3-5 dBA.	PS	None available.	SU

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.13-3 **Exposure of Noise Sensitive Receptors to Stationary Source Noise in Excess of Applicable Standards.** Implementation of *Burbank2035* would result in increases in on-site stationary-source noise levels associated with the proposed residential, commercial, mixed-use, office/industrial, park, and educational land uses. These stationary noise sources could exceed applicable hourly and maximum noise standards and result in a substantial increase in ambient noise levels.	LTS	None required.	N/A
4.13-4 **Exposure of Noise Sensitive Receptors to Rail Noise.** Implementation of *Burbank2035* could result in increased exposure of sensitive receptors to rail-generated noise.	PS	None available.	SU
4.13-5 **Exposure of Noise Sensitive Receptors to Aircraft Noise.** *Burbank2035* implementation could result in increased exposure of sensitive receptors to aircraft generated noise.	PS	None available.	SU
4.13-6 **Exposure of Vibration Sensitive Receptors to Construction Vibration.** Sensitive receptors could be subjected to construction vibration levels in excess of established thresholds.	S	None available.	SU
4.13-7 **Exposure of Vibration Sensitive Receptors to Operational Vibration.** Operational vibration sources, including roadway traffic and industrial and commercial operations would be unlikely to expose sensitive receptors to levels exceeding recommended thresholds of significance.	S	None available.	SU

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Cumulative Impacts			
4.13-8 **Cumulative Effects of Construction Noise.** Adoption and implementation of *Burbank2035*, in addition to anticipated growth in the region, would result in additional construction activity throughout the city and in adjacent jurisdictions, thereby increasing overall ambient noise levels.	PS	None available.	SU
4.13-9 **Cumulative Effects of Roadway Noise.** Adoption and implementation of *Burbank2035* in addition to anticipated growth in the region would result in additional vehicle trips throughout the city and in adjacent jurisdictions, thereby increasing overall ambient noise levels.	S	None available.	SU
4.13-10 **Cumulative Effects of Stationary Source Noise.** Adoption and implementation of *Burbank2035* in addition to anticipated growth in the region would result in additional stationary source noise throughout the City and in adjacent jurisdictions, thereby potentially increasing overall ambient noise levels.	LTS	None required.	N/A
4.13-11 **Cumulative Effects of Rail Noise on Nearby Receptors.** Adoption and implementation of *Burbank2035* in addition to anticipated growth in the region could result in the construction of additional residences near existing rail operations, thereby resulting in the potential exposure of those residences to elevated noise levels due to rail operations.	S	None available.	SU
4.13-12 **Cumulative Effects of Airport Noise on Nearby Receptors.** Operational vibration sources, including roadway traffic and industrial and commercial operations would be unlikely to expose sensitive receptors to levels exceeding recommended thresholds of significance.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.13-13 **Cumulative Effects of Construction Vibration.** Construction of future land uses consistent with *Burbank2035*, in conjunction with other activities within the city, would expose nearby sensitive receptors to excessive vibration levels.	PS	None available.	SU
4.13-14 **Cumulative Effects of Operational Vibration.** Operation of uses associated with implementation of *Burbank2035* in conjunction with other development could expose nearby sensitive receptors to excessive vibration levels.	LTS	None required.	N/A
4.14 Population, Employment and Housing			
Project-Specific Impacts			
4.14-1 **Induce Substantial Population Growth.** Adoption and implementation of *Burbank2035* would increase population in the planning area compared to 2010 conditions, and would also increase employment in the planning area, thereby indirectly causing population increases.	S	None available.	SU
4.14-2 **Displace People or Housing.** Adoption and implementation of *Burbank2035* would result in construction of new multifamily residential, commercial, and industrial uses, as well as infrastructure, public service, and recreation improvements.	LTS	None required.	N/A
Cumulative Impacts			
4.14-3 **Cumulative Inducement of Population Growth.** Adoption and implementation of *Burbank2035* in addition to anticipated land use changes throughout the Arroyo Verdugo Cities subregion would increase population both directly and indirectly (through increased employment).	S	None available.	SU

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.14-4 **Cumulative Effects Displacing People or Housing.** Adoption and implementation of *Burbank2035* in addition to anticipated changes throughout the Arroyo Verdugo Cities subregion could directly or indirectly displace people or housing.	LTS	None required.	N/A
4.15 Public Services and Utilities			
Project-Specific Impacts			
4.15-1 **Demand for Additional Police Facilities.** Implementation of *Burbank2035* would result in an increase in population in the planning area, which would increase demand for police protection services, resulting in the need for additional and/or expanded police protection facilities.	LTS	None required.	N/A
4.15-2 **Demand for Additional Fire Protection Facilities.** Implementation of *Burbank2035* would result in an increase in population in the planning area, which would increase demand for fire protection services, and potentially result in the need for additional and/or expanded fire protection facilities.	LTS	None required.	N/A
4.15-3 **Demand for Additional School Facilities.** Implementation of *Burbank2035* would result in an increase in population in the planning area, resulting in the need for additional and/or expanded school facilities. However, existing laws and regulations would require funding for the provision or expansion of new school facilities to offset impacts from new residential or commercial development.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.15-4 **Demand for Additional Park Facilities.** Implementation of *Burbank2035* would result in an increase in population in the planning area, which would increase demand for parks and recreation services, resulting in the need for additional and/or expanded parks and recreation facilities.	LTS	None required.	N/A
4.15-5 **Demand for Additional Library Facilities.** Implementation of *Burbank2035* would result in an increase in population in the planning area, which would increase demand for library services.	LTS	None required.	N/A
4.15-6 **Demand for Wastewater Treatment.** Implementation of *Burbank2035* would result in an increase in population in the planning area, which would increase the amount of wastewater treated by the Burbank Water Reclamation Plant.	LTS	None required.	N/A
4.15-7 **Demand for New or Expanded Water or Wastewater Treatment Facilities.** Implementation of *Burbank2035* would result in the need for additional wastewater treatment. However, the anticipated increase in wastewater generated would not exceed the capacity of the BWRP and result in the need for the construction or expansion of water or wastewater treatment facilities that would result in significant environmental effects.	LTS	None required.	N/A
4.15-8 **Demand for Stormwater Drainage Facilities.** Implementation of *Burbank2035* would result in redevelopment in the planning area, but would generally not increase the amount of impervious surface.	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.15-9 **Demand for Water Supplies.** Implementation of *Burbank2035* would result in the need for additional water supply. The increased population growth projected from implementation of *Burbank2035* would be less than that anticipated by the UWMPs of water suppliers, and no new entitlements would be needed. However, uncertainty exists surrounding future water supply to the planning area and southern California as a whole.	S	None available.	SU
4.15-10 **Capacity to Serve Wastewater Treatment.** Implementation of *Burbank2035* would result in the need for additional wastewater treatment. However, the anticipated increase in wastewater generated would not exceed the capacity of the BWRP or result in the need for the construction or expansion of water or wastewater treatment facilities.	LTS	None required.	N/A
4.15-11 **Demand for Solid Waste Disposal.** Implementation of *Burbank2035* would result in additional solid waste disposal needs. Adequate capacity exists in the landfills receiving waste generated in Burbank to accommodate these additional needs.	LTS	None required.	N/A
4.15-12 **Compliance with Solid Waste Disposal Regulations.** Implementation of *Burbank2035* would result in additional solid waste disposal needs. The City would continue current programs and policies that result in a per capita disposal rate below target amounts.	LTS	None required.	N/A
Cumulative Impacts			
4.15-13 **Cumulative Effects on Police Protection and Facilities.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would increase the population in the coverage area of the mutual aid agreement BPD participates in, thereby potentially requiring an increase in or	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
expansion of facilities for police protection to accommodate staffing needs.			
4.15-14 **Cumulative Effects on Fire Protection and Facilities.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would increase the population in the coverage area of the Verdugo Fire Communications Center of which BFD is a partner, thereby potentially requiring an increase in or expansion of facilities for fire protection to accommodate staffing needs.	LTS	None required.	N/A
4.15-15 **Cumulative Effects on School Facilities.** Adoption and implementation of *Burbank2035* would increase the population in the coverage area of the BUSD, thereby potentially requiring an increase in or expansion of school facilities. However, existing laws and regulations would require funding for the provision or expansion of new school facilities to offset impacts from new residential or commercial development.	LTS	None required.	N/A
4.15-16 **Cumulative Effects on Park Facilities.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would increase the population in the San Fernando Valley, thereby requiring an increase in or expansion of parkland and recreation facilities to meet park standards.	LTS	None required.	N/A
4.15-17 **Cumulative Effects on Library Facilities.** Implementation of *Burbank2035* would result in an increase in population in the planning area, which would increase demand for library services.	LTS	None required.	N/A
4.15-18 **Cumulative Effects on Wastewater Treatment.** Implementation of *Burbank2035* and anticipated regional growth would result in an increase in population in the jurisdiction of the Los Angeles RWCQB, which would increase the amount of wastewater that would	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
be subject to compliance with the Los Angeles RWCQB.			
4.15-19 **Cumulative Effects on Water or Wastewater Treatment Facilities.** Implementation of *Burbank2035* would result in an increase in population and increased demand for cumulative water and wastewater service in the planning area. However, the anticipated increase in wastewater generated would not exceed the capacity of the BWRP and result in the need for the construction or expansion of water or wastewater treatment facilities that would result in significant environmental effects.	LTS	None required.	N/A
4.15-20 **Cumulative Effects on Stormwater Drainage Facilities.** Implementation of *Burbank2035* and regional growth would result in new development and redevelopment throughout the Los Angeles County Drainage Area that could increase the amount of impervious surface in the area resulting in increased stormwater flows.	LTS	None required.	N/A
4.15-21 **Cumulative Effects on Water Supplies.** Implementation of *Burbank2035* would result in the need for additional water supply. The increased population growth projected from implementation of *Burbank2035* would be less than that anticipated by the Urban Water Management Plans of water suppliers, and no new entitlements would be needed.	S	None available.	SU
4.15-22 **Cumulative Effects on Wastewater Treatment.** Implementation of *Burbank2035* would result in an increase in population in the area included by the BWP in its UWMP, which would increase the use of water and wastewater. However, the anticipated increase in wastewater generated would not exceed the capacity of the BWRP and result in the need	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
for the construction or expansion of water or wastewater treatment facilities.			
4.15-23 **Cumulative Effects on Solid Waste Disposal.** Implementation of *Burbank2035* and regional growth would result in the need for additional solid waste disposal needs. However, adequate capacity exists in the various landfills that receive waste generated in Burbank to accommodate these additional needs.	LTS	None required.	N/A
4.15-24 **Cumulative Effects on Compliance with Solid Waste Regulations.** Implementation of *Burbank2035* would result in additional development and population growth, which would generate additional waste disposal needs. However, the City would continue current programs and policies that result in a per capita disposal rate below target amounts.	LTS	None required.	N/A
4.16 Transportation			
Project-Specific Impacts			
4.16-1 **LOS D Performance Standard.** Adoption and implementation of *Burbank2035* would increase traffic volumes within the city, resulting in 16 out of 35 signalized intersections operating below the LOS D standard.	S	**Mitigation Measure 4.16-1a**: The City of Burbank shall complete implementation of the Citywide Signal Control System (CSCS) and apply signal optimization at all the 35 key intersections identified in the Transportation Analysis Report. **Mitigation Measure 4.16-1b**: The City of Burbank shall implement the following intersection improvements: ► Hollywood Way and Thornton Avenue (Intersection #2). Provide one exclusive left-turn lane, two through lanes, and one shared through/right-turn lane on northbound and southbound approaches. The existing right-of-way on Hollywood Way is 100 feet; no additional right-of-way is needed and improvements comply with the goals and policies of *Burbank2035*. ► Hollywood Way and Verdugo Avenue (Intersection #6). Provide a second exclusive left-turn lane, two through lanes, and a new exclusive right-turn lane in the southbound approach. Modify signal phasing on the southbound approach from permitted to protected.	SU

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		The existing right-of-way on Hollywood Way is 100 feet; no additional right-of-way is needed and improvements comply with the goals and policies of *Burbank2035*. ► Pass Avenue and Olive Avenue (Intersection #9). Widen the eastbound approach to provide two exclusive left-turn lanes and three through lanes. The existing right-of-way on Olive Avenue is 100 feet; no additional right-of-way is needed. This improvement has been previously identified as a mitigation measure in the Warner Brothers Studio Master Plan and improvements comply with the goals and policies of *Burbank2035*. ► Buena Vista Street and San Fernando Boulevard (Intersection #16). Restripe the eastbound approach to provide two exclusive left-turn lanes, one through lane, and one shared through/right-turn lane. The existing right-of-way on San Fernando Boulevard is 70 feet; no additional right-of-way is needed and improvements comply with the goals and policies of *Burbank2035*.This mitigation should be completed concurrently with the railroad grade separation at Buena Vista Street. ► Buena Vista Street and Olive Avenue (Intersection #22). Reconfigure the eastbound approaches to provide two exclusive left-turn lanes, one through lane, and one shared through/right-turn lane. Restripe the westbound approach to provide two exclusive left-turn lanes, two through lanes, and one exclusive right-turn lane. Modify signal phasing on the eastbound and westbound approached from protected/permitted to protected. Restrict parking along the westbound approach for 100 feet. The existing right-of-way on Olive Avenue is 100 feet; no additional right-of-way is needed and improvements comply with the goals and policies of *Burbank2035*. ► Victory Boulevard and Olive Avenue (Intersection #27). Restripe the southbound, westbound and eastbound approaches to provide two exclusive left-turn lanes, two through lanes, and one exclusive right-turn lanes. Modify signal phasing on the southbound, eastbound and westbound approaches from protected/permitted to protected. The existing right-of-way approach is 100 feet; no additional right-of-way is needed and improvements comply with the goals and policies of *Burbank2035*.	
4.16-2 **Conflict with Los Angeles County Congestion Management Program.** Adoption	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
and implementation of *Burbank2035* in addition to anticipated intersection improvements and regional growth in Los Angeles County would maintain the base year (2010) LOS standards for I-5 at Burbank Boulevard and comply with CMP.			
4.16-3 **Air Traffic Patterns.** Adoption and implementation of *Burbank2035* would not modify the planning or operations of the Bob Hope Airport or introduce land use patterns that may cause substantial safety risks to or from air operations.	LTS	None required.	N/A
4.16-4 **Design Hazards.** Adoption and implementation of *Burbank2035* would not increase hazards due to design or incompatible uses.	LTS	None required.	N/A
4.16-5 **Result in Inadequate Emergency Access.** Adoption and implementation of *Burbank2035* policies would reduce emergency access program-level impacts.	LTS	None required.	N/A
4.16-6 **Public Transit, Bicycle, and Pedestrian Facilities.** Adoption and implementation of *Burbank2035* supports the maintenance and expansion of transit, bicycle and pedestrian facilities consistent with adopted local and regional plans.	LTS	None required.	N/A
Cumulative Impacts			
4.16-7 **Cumulative LOS D Performance Standard.** Adoption and implementation of *Burbank2035* would increase traffic volumes within the city, resulting in 16 out of 35 signalized intersections operating below the LOS D standard under cumulative conditions.	S	**Mitigation Measure 4.16-7**: Implement Mitigation Measures 4.16-1a and 4.16-1b.	SU
4.16-8 **Conflict with Los Angeles County Congestion Management Program.** Adoption and implementation of *Burbank2035* in addition	LTS	None required.	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
to anticipated intersection improvements and regional growth in Los Angeles County would maintain the base year (2010) LOS standards for I-5 at Burbank Boulevard and comply with CMP.			
4.16-9 **Cumulative Air Traffic Patterns.** Adoption and implementation of *Burbank2035* in addition to anticipated cumulative growth in the Bob Hope Airport influence area would not modify the planning or operations of the Bob Hope Airport or introduce land use patterns that may cause substantial safety risks to or from air operations.	LTS	None required.	N/A
4.16-10 **Design Hazards.** Adoption and implementation of *Burbank2035* in addition to anticipated regional growth would not increase hazards due to design or incompatible uses.	LTS	None required.	N/A
4.16-11 **Result in Inadequate Emergency Access.** Adoption and implementation of *Burbank2035* policies in addition to anticipated regional growth would not result in inadequate emergency access.	LTS	None required.	N/A
4.16-12 **Public Transit, Bicycle, and Pedestrian Facilities.** Adoption and implementation of *Burbank2035* supports the maintenance and expansion of transit, bicycle and pedestrian facilities consistent with adopted local and regional plans.	LTS	None required.	N/A

LTS = Less Than Significant PS = Potentially Significant S = Significant SU = Significant and Unavoidable N/A = Not Applicable

This page intentionally left blank.

3 PROJECT DESCRIPTION

3.1 BACKGROUND

This EIR considers the environmental impacts likely to occur with adoption and implementation of *Burbank2035* and the Greenhouse Gas Reduction Plan (GGRP). Together, these planning documents comprise the proposed project. The City of Burbank (City) incorporated in 1911, and recently celebrated its centennial anniversary. Burbank has enjoyed a rich and diverse history in its first 100 years. The city has grown in land area, population, employment, transportation, and opportunity. Burbank has also established a unique economic identity, first as home to the aviation industry and then to the entertainment industry. While always on the cutting edge of new economic trends, the community has met the challenge of preserving its small-town character; maintaining health, safety, and welfare; and meeting today's needs without sacrificing the ability of future generations to do the same.

3.1.1 GENERAL PLAN

State law (California Government Code [CGC], Section 65300) requires that each California city and county adopt a comprehensive, long-term general plan for the physical development of the county or city. Seven elements are required for every general plan: land use, circulation, housing, conservation, open space, noise, and safety. The City last updated the Land Use Element of its General Plan in 1988. The City has not updated its Transportation Element since 1964. The Open Space Element and Conservation Element were last adopted in 1972 and have not been updated since that time. The City last updated the Noise Element in 1992 and the Safety Element in 1997. The Housing Element is not part of the proposed project as the City adopted an updated Housing Element on October 21, 2008 (City Council Resolution No. 27298).

3.1.2 GREENHOUSE GAS REDUCTION PLAN

CEQA allows a local jurisdiction to tier environmental analysis from an adopted plan for the reduction of greenhouse gas (GHG) emissions that meets the following requirements identified in State CEQA Guidelines Section 15183.5(b)(1):

(A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;

(B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;

(C) Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;

(D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

(E) Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and

(F) Be adopted in a public process following environmental review.

The City intends to adopt the GGRP and use it as a plan for the reduction of GHG emissions. This EIR fulfills the requirements for environmental review of the GGRP, as set forth in State CEQA Guidelines Section 15183.5 (b)(1)(F).

3.2 REGIONAL SETTING

Burbank is located in the central portion of Los Angeles County, approximately 12 miles north of downtown Los Angeles. The northeastern part of the city is located along the foothills of the Verdugo Mountains and the western edge of the city is located near the eastern part of the San Fernando Valley. Burbank is bisected by Interstate 5 (I-5) and adjacent to the cities of Los Angeles and Glendale (see Exhibit 3-1). State Route (SR) 134 crosses the southern portion of Burbank, separating the city from portions of Griffith Park.

3.3 PLANNING AREA

The corporate limits of the City of Burbank encompass approximately 17.1 square miles. The planning area, shown on Exhibit 3-2, includes the entire corporate limits of Burbank.

3.4 PROJECT OBJECTIVES

As part of the *Burbank2035* public outreach process, a series of vision statements were developed through a partnership and dialogue between the City government and members of the community. The statements create a vision for Burbank in 2035 and provide guidance for policymakers as they work to improve the quality of life in Burbank. The following statements represent both the foundation for *Burbank2035* goals, policies, and programs, and the project objectives for this EIR.

- **Balanced Development** - Burbank has a desirable balance of land uses to best serve residents and protect the small-town character of the community while maintaining economic vitality.

- **Community Image and Character** - The architecture, design, and density of new development identify and characterize Burbank as a unique destination. Burbank treasures its small-town character that gives residents a sense of belonging and community.

- **Complete Streets** - Burbank prioritizes streets that are complete, safe, and efficient. All users of city streets are valued equally, and the street is considered an essential public place. Parking is planned to meet the needs of residents, workers, and visitors. Convenient public transportation and bicycle and pedestrian facilities provide choices for safe movement throughout the city and link Burbank to the regional multi-modal transportation system.

- **Economic Vitality** - Burbank has a vibrant, healthy, and diverse economy. The City supports businesses that are a vital part of Burbank's economy and seeks to capitalize on unique aspects of its economic base.

- **Environmental Equity** - Burbank ensures that the adverse and positive environmental effects of planning decisions are borne equally by the entire community, regardless of age, culture, ethnicity, religion, gender, sexual orientation, race, socioeconomic status, or geographic location.

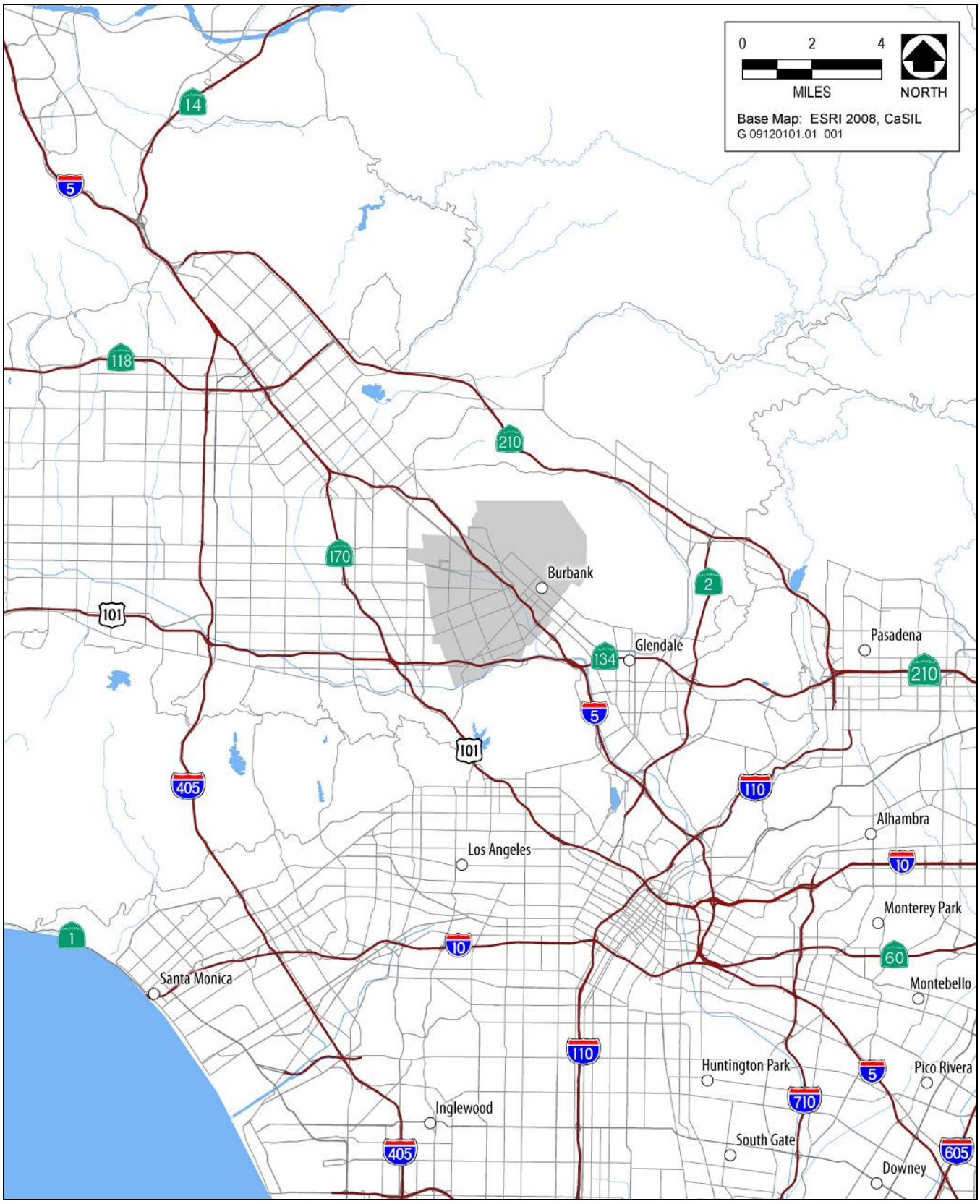
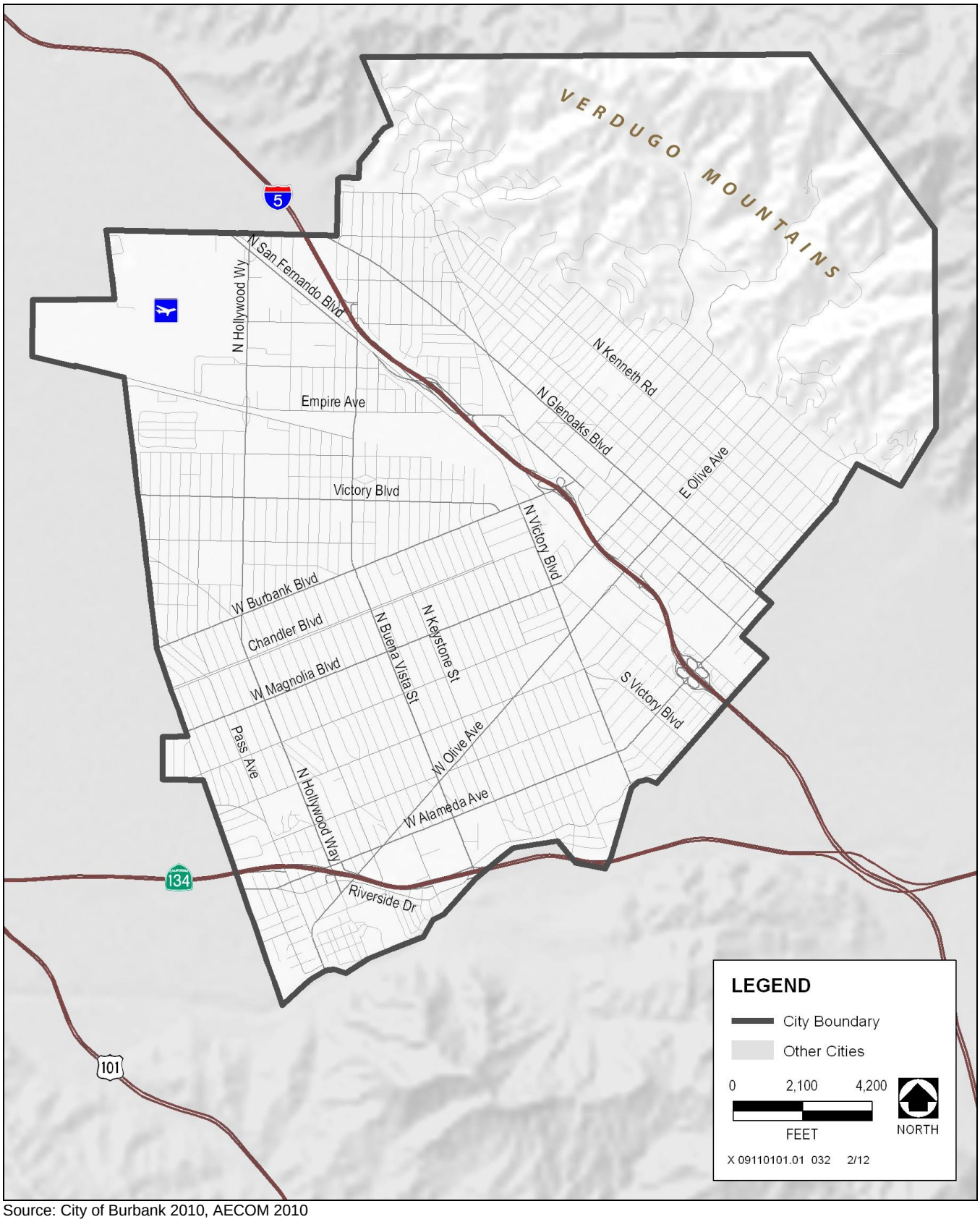


Exhibit 3-1 **Regional Location**



Source: City of Burbank 2010, AECOM 2010

Exhibit 3-2 **Planning Area**

- **Housing Variety** - Burbank offers a wide range of housing to meet the needs of all age groups, family types, and income levels, as well as those with special housing needs.

- **Open Space and Conservation** - Burbank's parks, open space and recreational facilities are valuable resources for the community and are carefully maintained, preserved, and expanded wherever possible. The Verdugo Mountains are a unique natural resource in an urban environment that Burbank is fortunate to enjoy. Preserving this asset is a priority.

- **Proactive and Responsive Government** - Burbank listens and responds to the needs and concerns of the community. The City provides services and public facilities that support safe, convenient, and attractive neighborhoods; high-quality educational, recreational, and social programs; and reliable public utilities.

- **Quality Neighborhoods and Schools** - Neighborhoods are a basic building block of Burbank's small-town atmosphere. Burbank is committed to maintaining and protecting its quality residential neighborhoods. Burbank schools are a source of pride for the community and a resource to support and protect.

- **Safety** - Burbank provides a safe and healthy environment and protects all people in the community. The City is prepared to manage and recover from emergencies.

- **Sustainability** - The City makes prudent decisions about the amount and location of growth to ensure a high quality of life for present and future generations. Environmentally sound development is required, with special attention given to water and energy conservation, recycling, and complete streets.

3.5 PROJECT CHARACTERISTICS

As discussed above, the proposed project consists of two components: *Burbank2035* and the GGRP. Both components are described below.

3.5.1 BURBANK2035

Burbank2035 is designed to lead Burbank into its second 100 years, continuing to advance a critical balance between quality of life, economic prosperity, and environmental sustainability. Based on the vision statements and project objectives presented above, *Burbank2035* defines long-term community goals, decision-making policies, and implementation programs through text and maps in each of six elements described below. The environmental impact analysis in this Program EIR is defined primarily by the change between existing conditions and those associated with future land uses proposed in *Burbank2035*. Key components of each element are described below, including a summary of the goals and policy diagrams presented in each element, and identification of proposed service standards, targets, or guidelines. The full text of *Burbank2035* is available for public review on the City's website at http://www.burbank2035.com.

Burbank2035 consists of six elements, or chapters, that together meet State requirements for a general plan. These elements are:

- Air Quality and Climate Change
- Land Use
- Mobility

- Noise
- Open Space and Conservation
- Safety

Burbank2035 also includes an Introduction chapter, and a Plan Realization Element that presents implementation programs for each element.

Burbank2035 establishes an overall development capacity for the city, and represents the City's policy for determining the appropriate physical development and character of the planning area. Any decision by the City affecting land use and development must be consistent with *Burbank2035*. An action, program, or project would be considered consistent if, considering all of its aspects, it would further the goals and policies set forth within *Burbank2035* and not obstruct their attainment.

AIR QUALITY AND CLIMATE CHANGE ELEMENT

The *Burbank2035* Air Quality and Climate Change Element is an optional general plan element. Section 65303 of the California Government Code enables a county or city to adopt "any other elements or address any other subjects, which, in the judgment of the legislative body, relate to the physical development of the county or city." An optional element must be consistent with the seven mandatory general plan elements and, once adopted, carries the same legal weight as any of the mandatory elements.

The Air Quality and Climate Change Element addresses ways to reduce air pollution, protect people and places from toxic air contaminants (TACs) and odors, comply with statewide GHG emission reduction goals, and adapt to changed environmental conditions caused by a changing climate. Air quality has been a concern in Burbank and the South Coast Air Basin (Basin) dating back to the 1940s, when smog was first recognized as a danger to human health and the environment. Efforts to eradicate smog and air pollutants have included both simple solutions (e.g., banning backyard trash burning, limiting emissions from incinerators) and major technological innovations (e.g., developing catalytic converters, reformulating gasoline). However, continued population growth and the dominance of the automobile introduce new challenges: fossil fuel combustion required to heat homes, power vehicles, and deliver water create a variety of pollutants, including carbon dioxide and other GHGs.

Burbank's climate, character, and employment opportunities continue to attract new residents each year. Reducing air pollution and GHG emissions is critical to the health and well-being of Burbank residents and businesses. Promoting cleaner air quality will also reduce negative economic effects related to air quality, climate change, and harm to the environment and human health. Because air quality and climate change are regional and global issues, resolving them requires coordinated efforts on many scales. The region must be considered when goals, plans, and policies to improve air quality are developed because polluted air circulates from one place to another throughout the Basin. However, local actions can have wide-reaching effects, and Burbank is committed to do its part. Goals presented in the Air Quality and Climate Change Element describe ideal conditions in Burbank in 2035, and include the following:

- **Reduction of Air Pollution** - The health and sustainability of the city, county, and Basin are improved by planning and programs that reduce air pollutants.

- **Sensitive Receptors** - Burbank is committed to reducing the exposure of sensitive receptors to toxic air contaminants and odors.

- **Reduction of Greenhouse Gas Emissions** - Burbank seeks a sustainable, energy-efficient future and complies with statewide greenhouse gas reduction goals.

- **Climate Change** - Prepare for and adapt to anticipated effects of climate change.

Each goal is supported by policies in the Air Quality and Climate Change Element and implementation programs in the Plan Realization Element describing how the goals will be achieved. The key implementation program for the Air Quality and Climate Change Element is development of the GGRP.

Greenhouse Gas Reduction Targets and Goals

Air Quality and Climate Change Element policies establish GHG emissions reduction targets and goals. Specifically, Policy 3.1 establishes a binding, enforceable reduction target to reduce communitywide GHG emissions within Burbank by at least 15% from current levels by 2020. Similarly, Policy 3.2 establishes a goal to reduce communitywide GHG emissions by at least 30% from current levels by 2035.

LAND USE ELEMENT

The Land Use Element is the cornerstone of *Burbank2035* and serves as a guide for future development in the city. The land use plan, policies and programs reflect the economic, social, and cultural values of the city. This element also identifies the physical opportunities and constraints for development in the city; describes the future location, type, intensity, and design of land uses; and establishes the desired mix and relationship between land uses. The Land Use Element guides future development in Burbank and designates appropriate locations for different land uses including open space, parks, residences, commercial uses, industry, schools, and other public uses. The Land Use Element establishes standards for residential density and non-residential building intensity for land located throughout the city. Appropriate planning of land uses in this element assures that sensitive uses such as homes and schools are not located near incompatible land uses that may adversely affect public health. In cases where potential land use incompatibilities may exist, the Land Use Element establishes a framework for dealing with these issues.

Land Use Element goals and policies support the concept of balance in the community – the idea that small-town character, economic prosperity, and sustainability do not have to come at the expense of one another, but rather can coexist and complement each other. Achieving this balance will properly manage future growth, strengthen and diversify the economy, and protect Burbank's neighborhoods and quality of life. Goals presented in the Land Use Element include the following:

- **Quality of Life** - Burbank maintains a high quality of life by carefully balancing the needs of residents, businesses, and visitors.

- **Sustainability** - Burbank is committed to building and maintaining a community that meets today's needs while providing a high quality of life for future generations. Development in Burbank respects the environment and conserves natural resources.

- **Community Design and Character** - Burbank's well-designed neighborhoods and buildings and enhanced streets and public spaces contribute to a strong sense of place and "small town" feeling reflective of the past.
- **Public Spaces and Complete Streets** - Burbank has attractive and inviting public spaces and complete streets that enhance the image and character of the community.
- **Housing** - Burbank provides housing options for people and families with diverse needs and resources.
- **Economic Vitality and Diversity** - Burbank has a healthy and diverse economy and provides for a full range of retail, commercial, office, and industrial uses. Businesses contribute to community character and economic vitality by supporting neighborhood, community, and regional needs and providing diverse employment options.
- **Community Participation** - Burbank encourages community engagement and provides a wide range of opportunities to participate in the planning process.

Each goal is supported by policies in the Land Use Element and implementation programs in the Plan Realization Element describing how the goals will be achieved. The key implementation program for the Land Use Element is a comprehensive revision to Burbank's Zoning Ordinance.

Land Use Designations

Burbank2035 provides a vision for how Burbank will look and function in decades to come. The Zoning Ordinance establishes requirements for how land can be developed and used today. By requiring land to be used and developed in ways that are consistent with *Burbank2035*, the Zoning Ordinance implements the plan over time. All land in Burbank has a *Burbank2035* land use designation and is located in a zone. Land use designations establish broad policy and intent for how land should be used and developed. Zones allow or prohibit specific uses and establish setbacks, minimum parking requirements, and other development requirements. One or more zones specify detailed use and development standards for each land use designation.

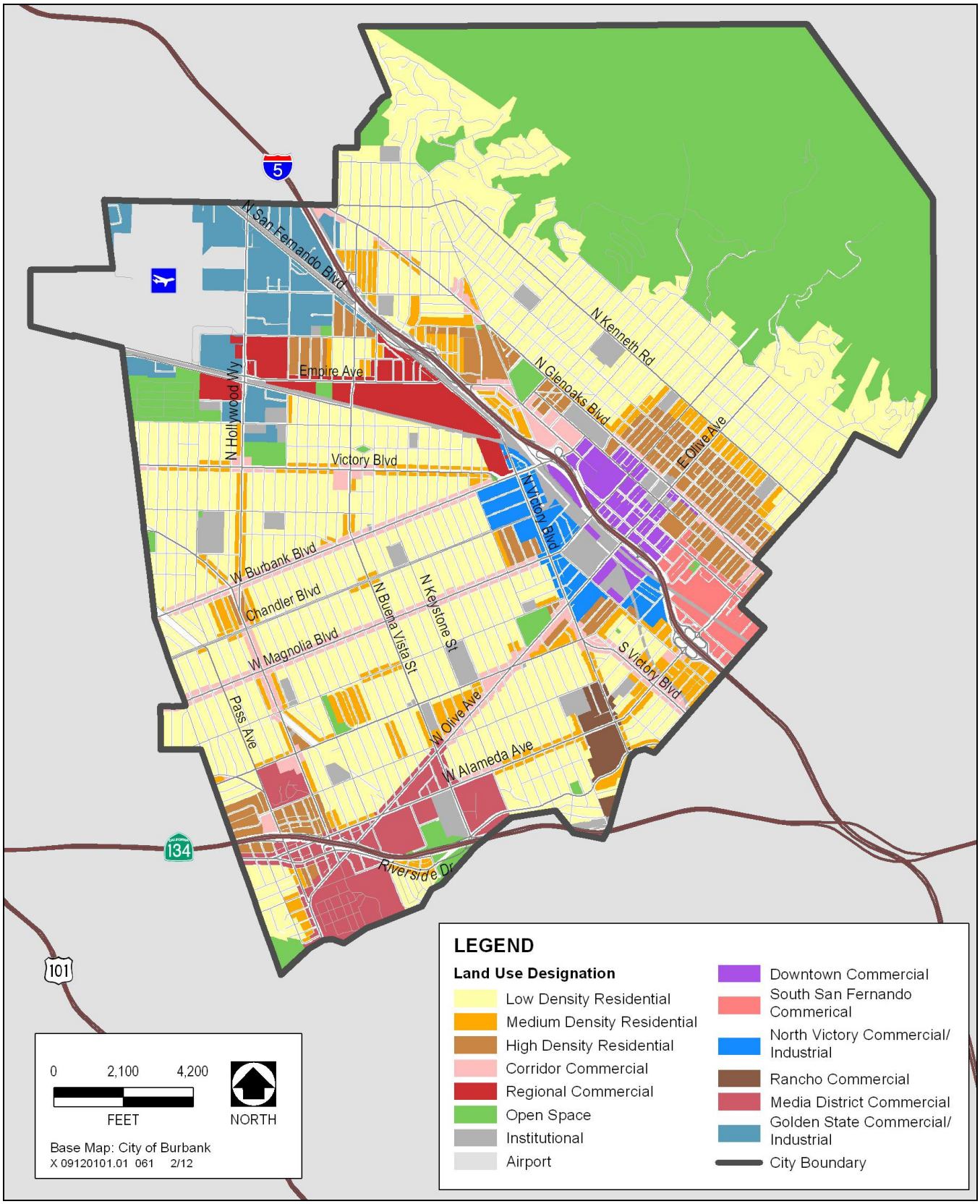
Each land use designation generally describes the intended land uses for a parcel or parcels and establishes a permitted range of density or intensity of development. The maximum allowable density or intensity at any given location may be affected by such factors as the physical characteristics of a parcel, access and infrastructure issues, and compatibility with surrounding uses. Dwelling unit per acre (du/acre) densities describe the maximum permitted intensity of residential uses, and floor-area ratios (FARs) describe the maximum permitted intensity and size of commercial and industrial uses. For most commercial and industrial designations, both densities (du/acre) and intensities (FAR) are established, although future residential uses within such designated areas would require discretionary approval. Where a range is established, the minimum value represents the least intense land use permitted within the area, while the maximum value represents the most intense land use permitted. Table 3-1 summarizes the proposed land use designations and their corresponding density ranges.

Table 3-1 Land Use Designations and Intensities		
Land Use Category	**Description**	**Max. Density/Intensity**
Residential Land Uses		
Low Density Residential Within R-1 zone Within R-2 zone	Neighborhoods consisting primarily of single-family residential dwellings and duplexes located throughout Burbank, including the hillside residential area southeast of the Verdugo Mountains.	0-7 du/ac 0-14 du/ac
Medium Density Residential	Neighborhoods consisting primarily of multi-family residential dwellings including apartments, condominiums, townhouses, row houses, live-work units, and other development types located throughout Burbank, often adjacent to single-family residential areas.	27 du/ac maximum
High Density Residential	Residential areas consisting of multi-family condominiums, townhouses, and apartments located near high-activity commercial and employment areas. Buildings vary from small-scale garden type apartments to urban mid-rise apartment buildings.	43 du/ac maximum
Commercial/Industrial Land Uses		
Corridor Commercial	Provides neighborhood-serving business districts along Burbank's major streets that allow residents to walk from nearby neighborhoods to meet some daily needs. Also provides for media-related and auto-related businesses, construction of new housing units, and adaptive reuse of vacant and underutilized commercial buildings for residential use at appropriate locations.	1.0 FAR 27 du/ac with discretionary approval
Regional Commercial	Provides employment and shopping destinations with a variety of employment opportunities and services that address regional needs for retail, service, dining, entertainment, and conventions. Supports large-scale commercial and residential projects that would otherwise be challenging to build at other locations in the city.	1.25 FAR 58 du/ac with discretionary approval
Downtown Commercial	Provides Burbank's civic, shopping, dining, and entertainment center and a major employment center with direct and convenient access to public transit. Supports higher allowable intensity of both commercial and residential development than other areas of the community.	2.5 FAR 87 du/ac with discretionary approval
South San Fernando Commercial	Provides a broad range of retail and service uses connecting to the Downtown area, with convenient access to transit and the ability to walk to shops and businesses in Downtown. Much of the development expected along the South San Fernando corridor is anticipated to include residential units.	1.25 FAR 43 du/ac with discretionary approval
North Victory Commercial/Industrial	Provides a mix of commercial and light industrial uses abutting institutional uses, such as the Burbank Water and Power (BWP) power plant, railroads, and Chandler Bikeway. The City seeks to introduce more residential uses within this area and to continue to promote economic development by encouraging community-scale commercial uses while also preserving industrial uses.	1.0 FAR 27 du/ac with discretionary approval

Table 3-1 Land Use Designations and Intensities		
Land Use Category	**Description**	**Max. Density/Intensity**
Rancho Commercial	Provides for a variety of low-intensity commercial and multi-family residential uses in the unique Rancho Neighborhood that allows for the keeping of horses on single-family residential properties. The City anticipates that some properties in this area will recycle, and that the intensity of new development will be comparable to what exists today.	0.6 FAR 20 du/ac with discretionary approval
Media District Commercial	Provides for a regional employment center comprised of a variety of media-oriented and commercial uses. While much of the existing development in the Media District exceeds a 1.1 FAR, new development is limited to 1.1 FAR to limit traffic and other impacts to adjacent residential neighborhoods.	1.1 FAR 58 du/ac with discretionary approval
Golden State Commercial/Industrial	Provides for an area located south and east of Bob Hope Airport comprised of a variety of commercial, industrial, and media-related uses complimentary to the airport. The City seeks to introduce additional commercial uses that serve the airport, protect remaining industrial spaces, and introduce niche residential uses (e.g., lofts, live-work spaces) compatible with the area's industrial character.	1.25 FAR 27 du/ac with discretionary approval
Institutional/Open Space Land Uses		
Institutional	Provides for City facilities, public schools, flood control channels, railroad tracks, and other public and private institutions.	Varies
Open Space	Provides for public parks, public and private open space areas, and cemeteries. Open space areas are meant to be preserved, with only minimal structures and improvements.	Varies
Airport	Encompasses the Bob Hope Airport and adjacent parcels owned by the Burbank-Glendale-Pasadena Airport Authority. Accommodates uses directly related to the airport and aircraft operation including landing fields; passenger and freight facilities; and facilities for fabricating, testing, and servicing aircraft.	Varies

Burbank2035 Development Capacity

The Land Use Element includes proposed land use designations and a Land Use Diagram (Exhibit 3-3) that depicts the types, locations, and intensities of current and future land uses within the planning area. Table 3-2 provides the anticipated Draft General Plan development capacity within the planning area, and compares this capacity to existing (2010) conditions.



Source: City of Burbank 2011

Exhibit 3-3 **Proposed Land Use Diagram**

Table 3-2 *Burbank2035* Development Capacity				
Land Use Designation	**Acres (Approximate)**	**Dwelling Units (2035)**	**Population (2035)**	**Non-Residential Square Feet (2035)**
Low Density Residential	3,175	18,476	42,867	210,483
Medium Density Residential	426	13,997	32,475	
High Density Residential	370	13,754	31,911	
Corridor Commercial	262	300	696	5,625,193
Regional Commercial	206	0	0	4,643,665
Downtown	126	2,091	4,851	5,929,956
South San Fernando	106	566	1,313	3,246,131
North Victory	135	483	1,121	3,549,567
Media District	301	552	1,281	16,218,091
Rancho Commercial	58	0	0	1,046,450
Golden State	334	0	0	7,530,222
Open Space	2,677	0	0	246,500
Institutional	382	0	0	3,556,417
Airport	436	0	0	217,000
Undesignated Right-of-Way	1,972	0	0	0
Total (2035)	**10,966**	**50,219**	**116,516**	**52,019,676**
Existing (2010) Totals	10,966	44,309	103,340	39,971,550
Change, 2010-2035	**0**	**+5,910**	**+13,176**	**+12,048,126**

Notes:
[1] 2010 dwelling units and population from US Census (2010)
[2] 2035 population estimate based on 2010 Census data of 2.45 persons per household and 5.3% vacancy

Specific Plans

A specific plan is a planning tool authorized by California law that implements *Burbank2035* by establishing detailed development goals and policies for a specific geographic area. In Burbank, the term "specific plan" has been applied generally to any planning document that focuses on a particular area of the city. Burbank's specific plans include the Burbank Center Plan (1997), Media District Specific Plan (1991), and Rancho Master Plan (1993).

- **Burbank Center Plan -** The Burbank Center Plan was adopted in 1997 as an economic development plan to facilitate the revitalization of Downtown Burbank, South San Fernando, and surrounding areas.

- **Media District Specific Plan** - The Media District Specific Plan was adopted in 1991 in response to the development of several high rise office buildings in the 1980s and the potential effects that similar future development could have on surrounding residential neighborhoods.

- **Rancho Master Plan** - Land use policies for the Rancho Neighborhood were adopted in 1993 in an effort to recognize and preserve the unique equestrian character of this area.

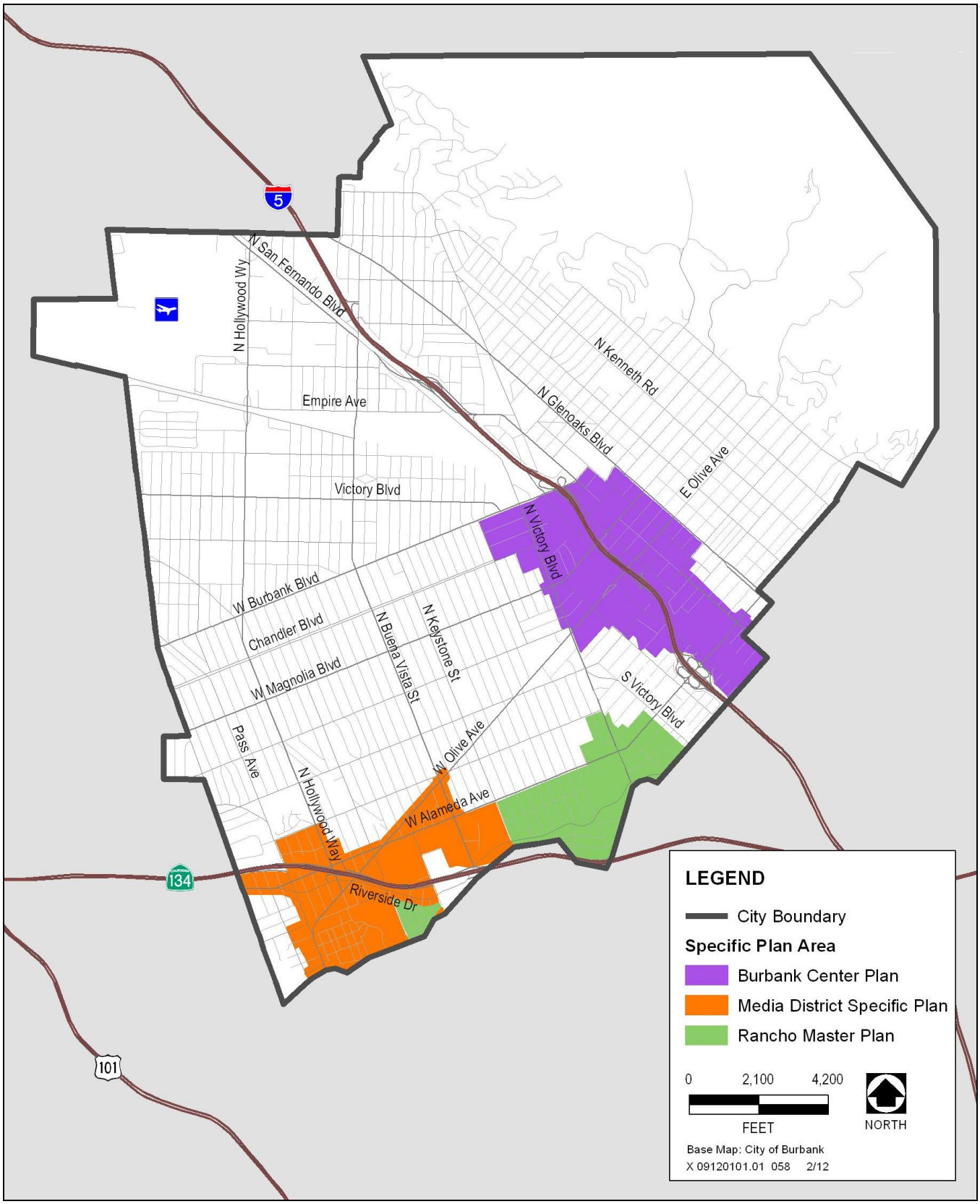
Exhibit 3-4 shows each of these plan areas.

MOBILITY ELEMENT

The Mobility Element defines Burbank's transportation network, including streets, railways, transit routes, bikeways, and sidewalks, and describes how people move throughout the city. The transportation network is a major determinant of urban form and land use. Factors such as, but not limited to, traffic patterns and congestion, access to transit, and ease and safety of walking and biking may determine where people choose to live, work, and visit. The Mobility Element focuses on public transit, bicycle, and pedestrian transportation in addition to motor vehicles. The Mobility Element describes each component of the city's transportation system and presents future enhancements to the system that advance the following Mobility Element goals:

- **Balance** - Burbank's transportation system ensures economic vitality while preserving neighborhood character.
- **Sustainability** - Burbank's transportation system will adapt to changing mobility and accessibility needs without sacrificing today's community values.
- **Complete Streets** - Burbank's complete streets will meet all mobility needs and improve community health.
- **Transit** - Burbank's convenient, efficient public transit network provides a viable alternative to the automobile.
- **Bicycle and Pedestrian Mobility** - Burbank fosters pedestrian and bicycle travel as healthy, environmentally sound methods to reduce vehicle trips and improve community character.
- **Neighborhood Protection** - Burbank's transportation infrastructure minimizes cut-through traffic in residential and commercial neighborhoods to maintain neighborhood quality of life.
- **Parking** - Burbank's public and private parking facilities are well managed and convenient.
- **Transportation Demand Management** - Burbank manages transportation resources to minimize congestion.
- **Safety, Accessibility, Equity** - Burbank's transportation network is safe, accessible, and equitable.

Each goal is supported by policies in the Mobility Element and implementation programs in the Plan Realization Element describing how the goals will be achieved. The key implementation programs for the Mobility Element include a 25-year infrastructure blueprint, establishment of multiple Transportation Management Districts, an update to the City's Bicycle Master Plan, preparation of a Pedestrian Master Plan, preparation of Complete Streets guidelines, and future establishment of a multi-modal Level of Service (LOS) standard.



Source: City of Burbank 2010

Exhibit 3-4 **Specific Plan Areas**

Street Classifications

Exhibit 3-5 presents the *Burbank2035* Roadway Circulation Diagram, including the city's street hierarchy. Streets are not equal in function or in their service of different travel modes. Major arterial streets, like Olive Avenue or Hollywood Way, must effectively balance the needs of both automobiles and mass transit vehicles in order to keep drivers from using adjacent neighborhood streets to avoid traffic. Secondary arterial streets like Magnolia Boulevard must provide a greater balance to other modes. These streets must still accommodate vehicles and transit but, due to their neighborhood character, must give a greater priority to bicycles and pedestrians. Collector streets like Clark Avenue or Kenneth Road tip the balance even further from vehicle movement and instead support other modes and uses. Finally, local streets are mixed environments where all users interact, and the street space can be used for recreation or gathering.

For each street type, the Mobility Element provides a definition and design guidelines that illustrate how the street space is divided among roadway, sidewalk, parkway, and other modes. This general description is supported by the required street dedications needed for future development of the network. The street classifications outline the rights-of-way required for each arterial and collector street to accommodate vehicle traffic, transit movement, bicycle system implementation, and pedestrian circulation needs. The classifications also provide design guidance, priorities, and requirements for each street type. These are considered *general* guidelines for street corridors. Many intersections require additional right-of-way to accommodate additional turn lanes, and specific circumstances and planning activities may be used to define a street at any given location.

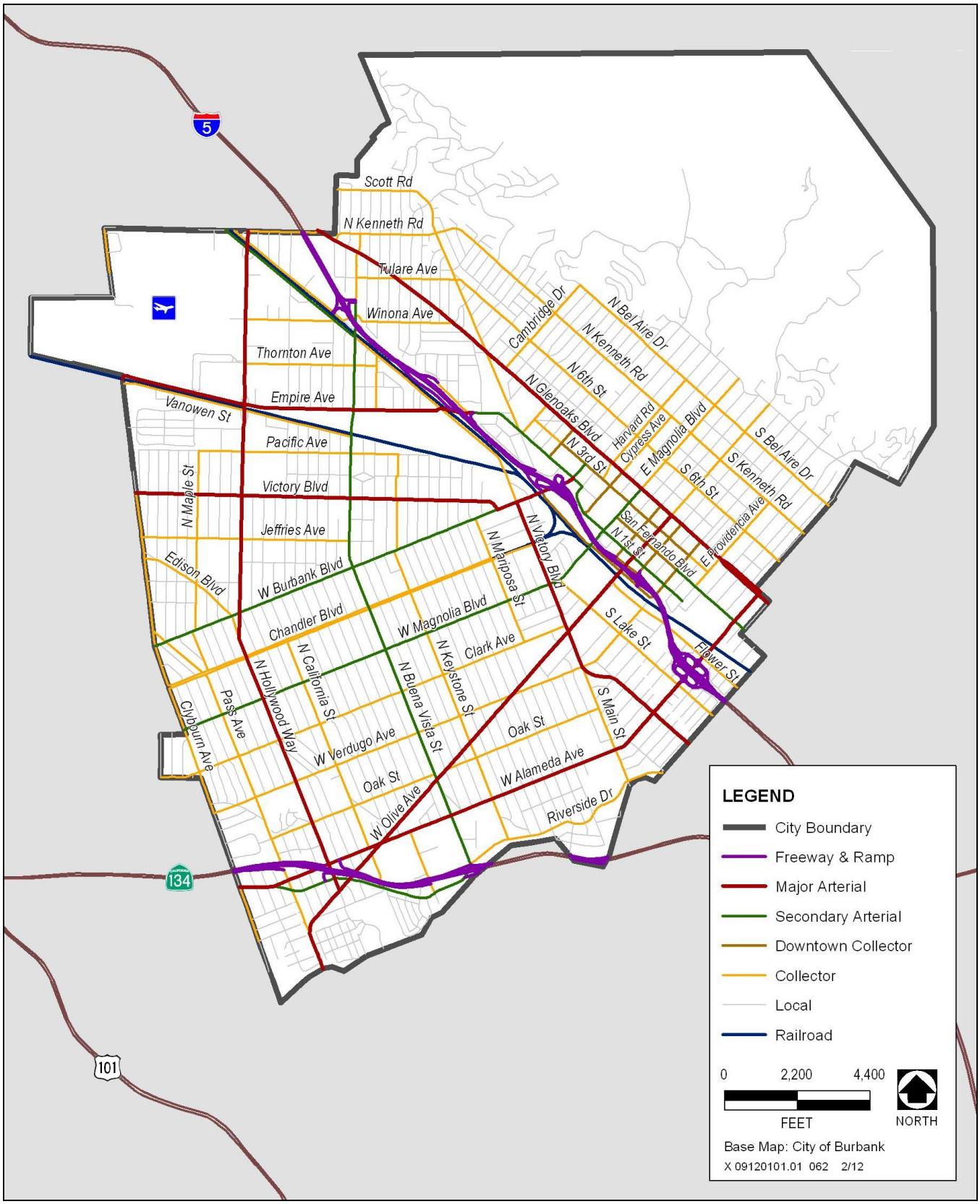
Burbank is a built-out city. As such, limited opportunities exist to expand the street network. The City must carefully plan available rights-of-way to accommodate all users. The Mobility Element proposes very little road widening for vehicles. If available, additional rights-of-way are better used to widen sidewalks or provide better transit connections than to construct additional vehicle travel lanes.

Level of Service Standards

To evaluate the ability of the circulation system to serve residents and businesses in Burbank, performance criteria are required. Level of Service (LOS) is a qualitative measure that characterizes traffic congestion on a scale of A to F, with LOS A representing a free-flow condition and LOS F representing extreme congestion. LOS standards can apply to either intersections or links (a section of street between two intersections). Generally, LOS represents the ability of a roadway or an intersection to accommodate traffic.

Various LOS policy standards have been established to evaluate observed traffic conditions, future development plans, and circulation system modifications. Generally, traffic impact mitigation focuses on intersection performance during the peak hour, because system performance is typically a function of intersection performance. At the local level, the City of Burbank has established LOS D as the lowest acceptable LOS for signalized intersection movements during the peak hour. At the regional planning level, highways and roadways

designated in Los Angeles County's Congestion Management Plan (CMP) network are required to operate at LOS E, except where existing LOS is worse than LOS E. In such cases, the existing LOS is the standard. All of the freeway segments in Burbank along I-5 and SR 134 are part of the CMP network. The City recognizes that the current LOS D performance measure accounts for vehicle mobility, and does not necessarily measure the number of people using transit or alternative travel modes.



Source: City of Burbank 2010

Exhibit 3-5 **Proposed Roadway Circulation Diagram**

NOISE ELEMENT

The Noise Element describes the existing noise environment in Burbank, identifies noise sources and problems affecting community safety and comfort, and establishes policies and programs that limit community exposure to excessive noise levels. The Noise Element sets standards for acceptable noise levels for various land uses and provides guidance for how to balance the noise created by an active and economically healthy community with the community's desire for peace and quiet.

As Burbank and surrounding communities continue to grow, transportation and stationary-source noise levels will increase. The City will continue to reduce the negative effects of noise throughout the community, while recognizing that noise is essential to Burbank's economic prosperity. The City seeks ways to safeguard the community from excessive noise as the ambient noise level in the community rises. The Noise Element describes the means to reduce the negative effects of noise in Burbank through implementation of the following goals:

- **Noise-Compatible Land Uses** - Burbank's diverse land use pattern is compatible with current and future noise levels.
- **Noise in Mixed-Use Development** - Noise from commercial activity is reduced in residential portions of mixed-use projects.
- **Vehicular Traffic Noise** - Burbank's vehicular transportation network reduces noise levels affecting sensitive land uses.
- **Train Noise** - Burbank's train service network reduces noise levels affecting residential areas and noise-sensitive land uses.
- **Aircraft Noise** - Burbank achieves compatibility between airport-generated noise and adjacent land uses and reduces aircraft noise effects on residential areas and noise-sensitive land uses.
- **Industrial Noise** - Noise generated by industrial activities is reduced in residential areas and at noise-sensitive land uses.
- **Construction, Maintenance, and Nuisance Noise** - Construction, maintenance, and nuisance noise is reduced in residential areas and at noise-sensitive land uses.

Each goal is supported by policies in the Noise Element and implementation programs in the Plan Realization Element describing how the goals will be achieved. The key implementation programs for the Noise Element include a comprehensive revision to the City's Noise Control Ordinance, and development of noise impact analysis guidelines describing thresholds for preparation of acoustical studies for future projects and the desired procedures and format for such studies.

Noise Standards

The Noise Element establishes noise and land use compatibility standards that rate compatibility using the terms normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. The City has established interior and exterior noise standards. Noise exposure limits for land use compatibility are generally

established as 60 dBA CNEL/Ldn for exterior spaces in most sensitive land use designations (e.g., nursing homes, hospitals). Higher exterior noise levels (65 dBA CNEL/Ldn) are normally acceptable for single-family and multiple-family housing and housing in mixed-use contexts. These standards also establish maximum interior noise levels for new residential development, requiring that sufficient insulation be provided to reduce interior ambient noise levels to 45 dBA CNEL/Ldn.

OPEN SPACE AND CONSERVATION ELEMENT

Burbank's natural environment and abundant open spaces are unique assets to the community that have become an essential component of quality of life for residents, businesses, and visitors. The Open Space and Conservation Element describes the conservation, development, and use of natural resources and addresses Burbank's parks and recreation opportunities. The element also addresses preservation of renewable and non-renewable natural resources; managed production of resources, such as energy and groundwater; outdoor recreation; and trail-oriented recreation.

Burbank is a place where community sustainability is embraced and implemented. City parks and open spaces will contribute to sustainability by providing areas that enhance air and stormwater quality, improve public and individual health, and sustain a high quality of life. Looking forward, there are challenges to be addressed. High land costs make it difficult to introduce parks and open space into areas that have previously been built out. The increased diversity of the community requires the provision of a variety of programs and services to meet the needs of all people. Ongoing maintenance of parks, open space, and recreation facilities and the services to be provided by the City have to be balanced with an economic climate that demands fiscal conservation. Even with these challenges, the City is moving forward not only to provide areas that improve the livability of Burbank, but also to improve the community's health and its sustainability for future generations through implementation of the following goals:

- **Resource Management** - The public is involved in preserving open space, conserving resources, and improving the natural environment.
- **Parks, Open Space, and Recreation Facilities** - Parks, open space and recreation facilities contribute to the high quality of life enjoyed by Burbank residents and the economic value of the community.
- **Parks and Recreation Facilities Maintenance** - Parks and recreation facilities are improved and maintained to ensure they meet the needs of the community.
- **Recreation Programs** – Burbank provides a variety of recreation opportunities that meet the needs of all members of the community.
- **Creation of a Comprehensive Trails Network** - Parks, trails, and open spaces are connected within the city and to regional open spaces.
- **Open Space Resources** - Burbank's open space areas and mountain ranges are protected spaces supporting important habitat, recreation, and resource conservation.
- **Visual and Aesthetic Resources** - Prominent ridgelines and slopes are protected as visual resources.

- **Biological Resources** - Burbank's high-quality natural biological communities are sustained.
- **Water Resources** - Adequate sources of high-quality water provide for various uses within Burbank.
- **Energy Resources** - Burbank conserves energy, uses alternative energy sources, and promotes sustainable energy practices that reduce pollution and fossil fuel consumption.

Each goal is supported by policies in the Open Space and Conservation Element and implementation programs in the Plan Realization Element describing how the goals will be achieved. The key implementation programs for the Open Space and Conservation Element include development of a Park, Recreation, and Community Services Master Plan and establishing standards for the provision and acquisition of parkland.

Parkland Standards

The Open Space and Conservation Element establishes a citywide parkland level of service goal of 5 acres of improved parkland per 1,000 residents. The element also establishes a requirement applicable to new development of 3 acres of new parkland per 1,000 new residents, which is intended to correct existing parkland deficiencies as new development and redevelopment occur.

SAFETY ELEMENT

The Safety Element identifies areas prone to natural hazards and potentially hazardous conditions throughout Burbank, such as: seismically induced conditions including ground shaking, surface rupture from earthquakes, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other geologic hazards; flooding; wildland and urban fires; hazardous materials; and evacuation routes. The element also identifies Burbank's plans for preparing for health and safety hazards, including police protection, fire protection, emergency response and preparedness, and airport safety. The following Safety Element goals provide Burbank with a framework for keeping residents, businesses, and visitors safe from natural and human hazards:

- **Emergency Response and Preparation** - Burbank is prepared to respond to emergency situations.
- **Police Protection** - Burbank provides high-quality police protection services to residents and visitors.
- **Crime Prevention** - Burbank is protected from the threat of civil disturbances and terrorism and is prepared to achieve and maintain a safe and secure environment to reduce the number of lives lost, injuries, and amount of property damage.
- **Fire Protection** - Burbank provides high-quality fire protection services to residents and visitors. Threats to public safety are reduced and property is protected from wildland and urban fire hazards.
- **Seismic Safety** - Injuries and loss of life are prevented, critical facilities function, and property loss and damage is minimized during seismic events.
- **Flood Safety** - Potential risks—such as injury, loss of life and property, and economic and social disruption—caused by flood and inundation are minimized.

- **Airport Hazards** - Threats to public safety, lives, and property resulting from an airport-related incident are reduced.

- **Hazardous Materials** - Hazardous materials threats to public health and safety are reduced.

In addition, the City's All-Hazard Mitigation Plan is incorporated within the Safety Element by reference. Each goal is supported by policies in the Safety Element and implementation programs in the Plan Realization Element describing how the goals will be achieved. The key implementation programs for the Safety Element include regular five-year updates to the City's All-Hazard Mitigation Plan and Multi-Hazard Functional Plan.

Response Time Standards

Safety Element policies establish response time standards for police protection and fire protection. Specifically, Policy 2.1 establishes an average police response time standard of less than four minutes to emergency calls for service. Similarly, Policy 4.1 establishes a maximum response time of five minutes for fire suppression services.

3.5.2 PLAN REALIZATION ELEMENT

The Plan Realization Element presents implementation programs that will guide the City's elected officials, commission and committee members, staff, and the public in the overall effort to put adopted *Burbank2035* goals and policies into practice. The purpose of the implementation programs is to ensure that the overall direction set forth in the General Plan is translated from general ideas to actions. Each implementation program is a procedure, program, or technique that requires City action, either alone or in collaboration with non-City organizations or with federal and state agencies. Some of the implementation programs are processes or procedures the City currently administers on a day-to-day basis (such as review of development projects). Other implementation programs require new programs or projects. Completion of each of the identified programs is subject to funding availability.

Implementation programs for each of the *Burbank2035* elements are intended for use as the basis for preparing the Annual Report to the City Council on the status of the City's progress in implementing the General Plan, as described in Section 65400 of the Government Code. Because many of the individual actions and programs also act as mitigation for environmental impacts resulting from planned development in accordance with *Burbank2035*, the Annual Report can also provide a means of monitoring application of mitigation measures specified in this EIR, as required by Public Resources Code Section 21081.6.

3.5.3 GREENHOUSE GAS REDUCTION PLAN

The GGRP proposes emissions reduction measures and actions to describe how the City will assist the State in fulfilling its obligations under Assembly Bill (AB) 32. The City is adopting the GGRP as an implementing action for *Burbank2035* to meet the goals and implement the policies set forth in the Air Quality and Climate Change Element. The GGRP describes measures intended to reduce greenhouse gas (GHG) emissions within City operations and the community at-large. The City's approach to addressing GHG emission reductions includes:

- completing a baseline GHG emissions inventory and projecting future emissions;

- identifying a communitywide GHG reduction target;

- preparing a GHG reduction plan to identify strategies and measures to meet the reduction target;
- identifying targets and reduction strategies in the Draft General Plan and evaluating the environmental impacts of the GGRP in the General Plan EIR; and
- monitoring effectiveness of reduction measures and adapting the plan to changing conditions.

The baseline inventory in the GGRP indicates that the Burbank community released 1,992,162 metric tons of carbon dioxide equivalent (MT CO_2e) emissions in 2010. As noted above, Air Quality and Climate Change Policy 3.1 establishes a binding, enforceable reduction target to reduce communitywide GHG emissions within Burbank by at least 15% from current (2010) levels by 2020. Similarly, Policy 3.2 establishes a goal to reduce communitywide GHG emissions by at least 30% from current (2010) levels by 2035. Combined with statewide reductions anticipated with implementation of statewide emission reduction measures in Burbank, communitywide strategies and measures recommended in the GGRP can collectively reduce GHG emissions by approximately 414,347 MT CO_2e emissions per year (equivalent to a 14.1% reduction below 2010 levels) by 2020, and by approximately 572,292 MT CO_2e emissions per year (equivalent to a 7.6% reduction below 2010 levels) by 2035.

GHG reduction measures in the GGRP are grouped within four action areas – energy, transportation, water, and waste. The GHG reduction measures were developed (a) by evaluating existing community conditions, (b) by identifying emissions reduction opportunities within the city, (c) by reviewing best practices from other jurisdictions and organizations, (d) through community participation in development of the plan, and (e) by incorporating state and regional laws, guidelines, and recommendations. The recommended GGRP measures are grounded in actions directly influenced by the City and rely on community participation.

The GGRP includes both primary and supporting measures. Primary measures generate directly attributable GHG reductions based on current technology, empirical studies and available data. The GGRP recommends 18 primary measures. A number of supporting measures are also included. These measures are not quantifiable at this time, but they facilitate and support the reduction potential of the primary measures. Table 3-3 presents the estimated reduction potential of the recommended GGRP strategies and statewide reductions.

3.6 ALTERNATIVES

Several alternatives to *Burbank2035* are evaluated in this Program EIR. The impacts of the alternatives are compared to the impacts of *Burbank2035* to determine whether any of the alternatives have the ability to reduce or avoid the significant impacts associated with the project, and therefore may be considered environmentally superior to *Burbank2035*. Alternatives evaluated in this EIR include:

- **Alternative 1. No Project/Existing General Plan**. This alternative assumes that *Burbank2035* would not be implemented and that future development in the planning area would proceed as indicated in the existing 1988 Land Use Element.
- **Alternative 2. Distributed Land Use**. This alternative would spread the anticipated increases in non-residential square footage anticipated under *Burbank2035* evenly across the city as a whole, rather than concentrating new growth in Downtown Burbank, the Media District, and the Golden State area.

Table 3-3 GGRP Measures and Reductions for 2020 and 2035			
Action Areas and Measures		**2020** **(MT CO_2e/yr)**	**2035** **(MT CO_2e/yr)**
Buildings and Energy		**14,358**	**28,794**
E-1.1	Energy Efficiency in New Construction	702	2,806
E-1.2	Energy Efficiency Retrofits	1,932	5,992
E-1.3	ENERGY STAR Appliances	735	1,601
E-1.4	Smart Grid Integration	1,027	2,382
E-1.5	Cool Roofs	261	852
E-1.6	BWP Energy Conservation Programs	2,291	2,291
E-1.7	Building Shade Trees	671	2,548
E-2.1	Renewable Energy Requirements	3,422	5,583
E-2.2	Solar Photovoltaic Systems	3,317	4,739
Transportation		**17,233**	**23,550**
T-1.1	Pedestrian Enhancements	191	381
T-1.4	Bicycle Infrastructure Expansion	355	1,080
T-2.1	Transportation Management Organization Expansion	16,687	22,089
Water Conservation		**198**	**198**
W-1.1	Water Conservation Programs	20	20
W-1.2	Recycled Water Use Master Plan	178	178
Waste Reduction		**13,888**	**24,806**
SW-1.1	Food Scrap and Compostable Paper Diversion Ordinance	2,032	6,773
SW-1.2	Yard Waste Diversion Ordinance	244	813
SW-1.3	Lumber Diversion Ordinance	1,012	3,372
SW-2.1	Enhanced Methane Recovery	10,600	13,848
Subtotal GGRP Measures		***45,677***	***77,348***
Subtotal Statewide Reductions		***368,670***	***494,944***
TOTAL REDUCTIONS		**414,347**	**572,292**
Emissions with Implementation of GGRP Measures and Statewide Reductions		1,445,552	1,555,208
Percent Reduction from 2010 Jurisdictional Emission Levels		**-14.1%**	**-7.6%**
Service Population		220,932	246,020
Emissions per Service Population		6.5	6.3

Notes: CO_2e = carbon dioxide equivalent; MT = metric tons; Columns may not total the sum of their parts due to rounding.
Source: Data compiled by AECOM 2012

- **Alternative 3. Golden State Area – Increased Density**. This alternative would revise the land use diagram in the Golden State area from Airport and Manufacturing designations to Regional Commercial and Corridor Commercial designations.

- **Alternative 4. Centers & Corridors – 2006 Draft Land Use Element.** This alternative assumes that commercial development is concentrated in Downtown Burbank and identified neighborhood centers located throughout the city, with more limited growth occurring in the Golden State area and Media District. In addition, this alternative assumes additional turnover from commercial to residential uses concentrated along major corridors in the city.

The EIR alternatives, including the No Project Alternative were developed in accordance with State CEQA Guidelines Section 15126.6 and considered input received at scoping meetings, through comments on the NOP, and as a result of the outcome of the environmental impact analysis.

The City also considered a range of land use alternatives during preparation of *Burbank2035*. This process touched on many environmental issues, as well as social and economic issues. The previous public discussion of *Burbank2035* alternatives is distinct from the alternatives analysis presented in the EIR, although there may be overlap with certain concepts presented earlier. Further discussion of the Alternatives is provided in Chapter 6 of this EIR.

This page intentionally left blank.

4 INTRODUCTION TO THE ANALYSIS

4.0 BASELINE EXISTING CONDITIONS ASSUMED IN THE ANALYSIS

Each resource chapter in this EIR (see Chapters 4.1 through 4.16) summarizes the environmental setting specific to that resource topic. The environmental setting summary is based on information that was prepared as part of the Technical Background Report (TBR). The TBR is included as Appendix A to this EIR.

4.0.1 SCOPE

Chapters 4.1 through 4.16 of this EIR present the environmental impact analysis for the anticipated effects of implementation of *Burbank2035*. Topics evaluated in these resource chapters are described in Chapter 1, "Introduction," and were identified in the NOP (Appendix B).

4.0.2 STRUCTURE

Each resource chapter presents an evaluation of a particular environmental topic and includes a summary of existing conditions (both physical and regulatory), potential environmental impacts, mitigation measures proposed to reduce significant environmental impacts (where necessary), and a determination of the level of significance after mitigation measures are implemented.

ENVIRONMENTAL SETTING

This subsection provides summary information about the existing physical environment related to the resource topic. In accordance with State CEQA Guidelines Section 15125, the discussion of the physical environment describes existing conditions within the planning area at the time the NOP was filed in March 2010. The basis for the Environmental Setting is information provided in the Appendix A.

REGULATORY SETTING

This subsection summarizes federal, state, regional and local plans, policies, laws, and regulations that apply to the resource. A full description of the Regulatory Setting for each resource chapter is included in Appendix A.

THRESHOLDS OF SIGNIFICANCE

The thresholds of significance that will serve as the basis for judging impact significance are identified in each resource chapter. Thresholds of Significance used for the evaluation of impacts include those thresholds currently used by the City when reviewing individual projects. The City of Burbank considers these thresholds appropriate for evaluating the significance of impacts in the city.

IMPACTS

The impacts discussion describes potential consequences to each resource that would result from implementation of *Burbank2035*. Potential environmental impacts have been classified in the following categories:

- The term "**no impact"** is used when the environmental resource being discussed would not or may not be adversely affected by implementation of *Burbank2035*. This impact level does not require mitigation.

- A **"less-than-significant impact"** would or may cause a minor, but acceptable adverse change in the physical environment. This impact level does not require mitigation, even if feasible, under CEQA.

- A **"significant impact"** would or may have a substantial adverse effect on the physical environment, but could be reduced to a less-than-significant level with mitigation. Impacts may also be considered **"potentially significant"** if the analysis cannot definitively conclude that an impact would occur with implementation of *Burbank2035*. Under CEQA, mitigation measures must be provided, where feasible, to reduce the magnitude of significant or potentially significant impacts.

- A **"significant and unavoidable impact"** would or may cause a substantial adverse effect on the environment, and no known feasible mitigation measures are available to reduce the impact to a less-than-significant level, or implementation of feasible mitigation measures would not reduce impacts to a less-than-significant level. Under CEQA, a project with significant and unavoidable impacts could proceed, but the City would be required to prepare a statement of overriding considerations in accordance with State CEQA Guidelines Section 15093, explaining why the City would proceed with the project despite potential for significant impacts.

MITIGATION MEASURES AND RESIDUAL IMPACTS

If impacts are considered significant, and it is determined that implementation of *Burbank2035* policies would not reduce impacts to a less-than-significant level, mitigation measures are proposed to reduce or avoid these impacts. This section also describes an impact's level of significance following mitigation. Impacts are then defined as either significant but mitigable, or significant and unavoidable. Significant but mitigable impacts could be reduced to a less-than-significant level with mitigation. Significant and unavoidable impacts would remain significant either because feasible mitigation to reduce impacts is unavailable, or because proposed mitigation measures would not reduce impacts to a less-than-significant level.

4.0.3 FORMAT OF IMPACTS AND MITIGATION MEASURES

Throughout the discussion, impacts are identified numerically and sequentially. For example, impacts discussed in Chapter 4.1 are identified as 4.1-1, 4.1-2, and so on. Mitigation measures, where needed, are identified numerically to correspond to the number of the impact being reduced by the measure. For example, Mitigation Measure 4.1-1 would mitigate Impact 4.1-1.

The format used to present the evaluation of impacts and mitigation measures is as follows:

IMPACT 4.0-1 **Impact Title.** *An impact summary heading appears before the impact discussion. The heading contains the impact number and title. The impact statement briefly summarizes the findings of the impact discussion below. The level of significance is included at the end of the summary heading. Levels of significance listed in this EIR (as described above) are* ***no impact****,* ***less than significant****,* ***potentially significant****, or* ***significant****.*

The impact discussion is contained in the paragraphs following the impact statement. The analysis compares implementation of *Burbank2035* to existing conditions by:

- identifying federal, state, regional, and local regulations that would reduce or mitigate the impact;
- identifying *Burbank2035* policies and implementation programs that would reduce or mitigate the impact; and,
- describing the potential impact with implementation of applicable regulations and *Burbank2035* policies and implementation programs.

Mitigation Measure

After the impact discussion, if necessary, feasible mitigation measures are identified that would reduce the impact. If no mitigation is necessary or feasible, this is stated.

This page intentionally left blank.

4.1 AESTHETICS

4.1.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to aesthetics associated with implementation of *Burbank2035* (proposed project). The analysis includes a review of scenic vistas, visual character, shadow, and light and glare in Burbank.*Burbank2035* Open Space and Conservation Element policies and *Burbank2035* implementation programs presented in the Plan Realization Element guide development and facilitate consideration of open space and aesthetic resources during the City's development review process.

NOP Comments: No comment letters in response to the NOP addressed aesthetics issues.

References and Background Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR). The TBR is attached to this document as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.1.2 ENVIRONMENTAL SETTING

Section 2 of the TBR (Appendix A) describes scenic vistas, scenic resources, the visual character, light and glare, and shade and shadow of Burbank. Following is a summary of key information presented in Appendix A that is useful to the analysis.

SCENIC VISTAS

- Scenic vistas within the Burbank planning area could include the Verdugo Mountains and Santa Monica Mountains. Orientation of the street network maximizes public access to these views, with streets east of Interstate 5 (I-5) oriented toward the Verdugo Mountains and streets south of West Burbank Boulevard oriented toward the Santa Monica Mountains.

VISUAL CHARACTER AND SCENIC RESOURCES

- Resources contributing to Burbank's visual character include downtown Burbank, single-family neighborhoods, commercial corridors, the Media District, industrial areas, and the Verdugo Mountains.

  - Downtown Burbank is characterized by multi-story office buildings and hotels, active street-level commercial and retail areas, and multifamily apartment complexes interspersed among single-family homes.

  - Burbank's single-family neighborhoods are characterized by narrow tree-lined streets with consistent front yard building setbacks. Most neighborhoods contain a variety of architectural styles, indicating periods of infill development and renovation. Many neighborhoods contain public parks and other open spaces.

  - Corridors such as Olive Avenue and Glenoaks Boulevard are lined with commercial uses and connect downtown Burbank to the neighboring cities of Los Angeles and Glendale. Buildings along these

corridors are primarily one to two stories with varying street setbacks. Sections of these corridors include pedestrian-oriented buildings, while other sections include auto-oriented uses, such as strip malls and motels.

- The Media District contains several mid- and high-rise office and medical buildings with varying architectural styles, as well as single-story or two-story residential, commercial, and industrial properties. Walls and/or fences encircle the large, windowless sound stages within the studio properties and limit views from the street and sidewalk. Large-scale media supergraphics and murals on the sound stage walls are visible from the public roadways and contribute to the unique character of this area.

- Burbank's industrial areas have low-rise businesses abutting the sidewalks, with limited landscaping and parking. Large business signs and overhead power lines are dominant visual features.

- The Verdugo Mountains are largely undeveloped within Burbank and provide a natural character that contrasts with the urban development found on the valley floor. The mountains are visible from most north- and east-oriented streets.

- Scenic resources within the planning area include public parks and open space, such as Wildwood Canyon Park, Stough Park, Johnny Carson Park, and Brace Canyon Park. The architecture of historic structures, such as Burbank City Hall and the Portal of the Folded Wings Shrine to Aviation in Valhalla Memorial Park, also make these resources scenic.

SHADE OR SHADOW

- Mid- and high-rise buildings are the primary source of prolonged shadows within the planning area. Downtown Burbank and the Media District contain most of these buildings. *The Burbank Media District Specific Plan* (MDSP) was adopted in 1991 to address the effects of shadowing on residential neighborhoods from high-rise office buildings constructed within the Media District. The MDSP establishes building intensity and height limits to protect residential uses from the aesthetic effects of high-rise buildings.

LIGHT AND GLARE

- The majority of Burbank is urbanized with the exception of the undevelopable hillside area. The city contains several existing sources of light and glare, such as streetlights along roadways and in parking lots, illuminated signs, lighted recreation facilities, landscape lighting, and light emitted from the interiors of residential, nonresidential buildings, and nighttime lighting at the Bob Hope Airport. Buildings and structures with glass, metal, and polished exterior or roofing materials contribute to localized sources of glare.

4.1.3 REGULATORY SETTING

No federal plans, policies, regulations, or laws related to visual resources apply to the planning area. State and local laws, regulations, and policies pertain to visual resources in the planning area. They provide the regulatory framework for addressing all aspects of visual resources that would be affected by implementation of *Burbank2035*. The regulatory setting for aesthetics is discussed in detail in Appendix A.

- **City of Burbank Zoning Ordinance:** Title 10 of the Burbank Municipal Code (BMC) addresses the aesthetic considerations of development. The Zoning Ordinance sets development standards for parking, building heights, setbacks, density, lot coverage, open space requirements, and signs. The BMC includes numerous references and requirements to avoid effects of light and glare on neighboring properties and uses, including Sections 10-1-607, 10-1-805, 10-1-1153, 10-1-1420, 10-1-1706, 10-1-1991, and 10-1-2449.

- **Media District Specific Plan:** The *Media District Specific Plan* was adopted in 1991 in response to the development of several high rise office buildings in the 1980s and the potential effects that similar future development could have on surrounding residential neighborhoods.

- **Burbank Center Plan:** The *Burbank Center Plan* (BCP) is an economic revitalization plan for downtown Burbank and surrounding areas. The plan is divided into three subareas (City Center, South San Fernando, and City Center West) and addresses transitioning underused industrial properties into mixed-use neighborhoods with an attractive pedestrian environment. Policies for each subarea are intended to improve the visual quality of downtown Burbank.

- **Rancho Master Plan:** Ordinance No. 3343 created the Rancho Master Plan Area, which contained zoning classifications for the East and West Rancho neighborhoods. The zoning classifications regulate land use, density, height, setbacks, parking, landscaping, and design standards. The ordinance also created a Rancho Review Board to review all projects within the Rancho Master Plan Area that are subject to development review.

4.1.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035* compared to existing conditions.

Analysis of *Burbank2035* impacts is based on an evaluation of the changes to existing visual resources that would result from implementation of the general plan. In making a determination of the extent and effects of the visual changes, the impact analysis considers the following:

- specific changes in the visual composition, character, and valued qualities of the affected environment;

- the visual context of the affected environment; and

- the extent to which the affected environment contains places or features that have been designated in plans and policies for protection or special consideration.

As in many cities, Burbank does not currently have an adopted definition for scenic vistas or a map designating local scenic views. In general, scenic vistas can be defined as viewpoints from publicly accessible areas, such as parks and roadways, that provide expansive views of a highly valued landscape for the benefit of the public. For purposes of this analysis, scenic vistas in Burbank are limited to the Verdugo Mountains and Santa Monica Mountains, as shown in the Scenic Vistas figure in the Open Space and Conservation Element (page 6-15).

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential aesthetic impacts include:

POLICIES

Land Use Element

- **Policy 1.7:** Ensure that building height and intensity near single-family residential neighborhoods is compatible with that permitted in the neighborhood. Use graduated height limits to allow increased height as distance from single-family properties increases.

- **Policy 3.5:** Ensure that architecture and site design are high quality, creative, complementary to Burbank's character, and compatible with surrounding development and public spaces.

- **Policy 8.9:** Require that new development or expansion of existing homes be subject to discretionary review when a possibility exists that the project may affect the character of the hillside area.

- **Policy 8.10:** Consider and address the preservation of scenic views in the hillside area.

Open Space and Conservation Element

- **Policy 7.1:** Identify visually prominent ridgelines and establish regulations to promote their preservation.

- **Policy 7.2:** Minimize the visual intrusion of development in the hillside area.

- **Policy 7.3:** Recognize visual resources as a key element in open space acquisition programs.

PROGRAMS

Land Use Element

- **Program LU-1: Zoning Ordinance.** The Zoning Ordinance, Title 10 of the Burbank Municipal Code (BMC), is the primary means of implementing the Land Use Element, as well as the other elements of *Burbank2035*. The Zoning Ordinance includes the Zone Map that divides the city into various zones, and the text that specifies the different land uses and types of development that are permitted within each zone. As the primary implementing tool, it is important that the Zoning Ordinance reflect and support the goals and policies of *Burbank2035*.

  The following Zoning Ordinance amendments are required to implement *Burbank2035*:

  - Implement FARs for each land use designation by establishing limitations on development intensity for each applicable zone.

  - Amend the Zone Map as needed to be consistent with land use designations specified in this Land Use Element.

- Establish criteria for exceptional projects that advance the goals and policies of Burbank2035 and develop a process to allow exceptional projects to exceed density/intensity limits established in the Land Use Element.

- Establish development and design standards for single-family residential development to ensure that neighborhood character is maintained. Review these standards periodically to determine whether further changes would be appropriate.

- Maintain special hillside development standards and discretionary review of hillside projects to ensure that the projects are compatible with the hillside environment and that scenic views are considered.

- Establish standards and design criteria that minimize the visual intrusion/impact of development in the hillside area.

- Maintain development standards for multi-family residential development, including requiring orientation to a public street. Continue to require open space in residential projects to supplement public open space. Review these standards periodically to determine whether changes would be appropriate.

- Maximize the amount of pervious surfaces in new and infill developments.

- Establish design standards applicable to pedestrian-oriented commercial corridors. Among possible guidelines, consider the following:

  – Locate patio dining or similar pedestrian-oriented activities in setback areas to encourage additional interaction between the street and businesses.

  – Locate parking areas to the rear of buildings or underground, with access taken from a side street or alley.

  – Do not locate parking areas, driveways, or other vehicle access areas between the sidewalk and the building, and promote redesign in existing areas with such features.

  – Minimize the interaction of pedestrians and automobiles by minimizing curb cuts along primary frontages.

- Consider creating a public facilities zone to allow for the efficient and orderly development of public facilities as an alternative to using traditional zoning methods. Develop criteria for balancing the community need for a proposed facility with the impacts on the surrounding neighborhood that would result. Also develop criteria for a zone change from a public facility to a non-public use to ensure that a public facility is no longer needed for public purposes before conversion to private use.

- Establish development standards that address national pollutant discharge elimination system (NPDES) requirements.

- Incorporate development standards that promote walkability into the Zoning Ordinance such as window and door size and placement, pedestrian accessibility, ground-floor uses and building orientation, setbacks and amenities within setback areas, and location of parking lots and vehicle access points.

- Revise bicycle parking requirements to facilitate citywide bicycle travel. New standards will include provisions for short-term and long-term bicycle parking and requirements to ensure bicycle parking is located conveniently for cyclists.

- Require bicycle and pedestrian amenities. (e.g., bike lockers, showers, transit stop amenities, bicycle and pedestrian connections) for new development.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on aesthetics are considered significant if adoption and implementation of *Burbank2035* would:

- have a substantial adverse effect on a scenic vista as identified in the Scenic Vistas diagram in the *Burbank2035* Open Space and Conservation Element;

- substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

- substantially degrade the existing visual character or quality of the site and its surroundings;

- cause shadow-sensitive uses to be shaded by project-related structures for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October); or

- create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

As there are no officially designated scenic highways in Burbank under the California Department of Transportation (Caltrans) Scenic Highway Program, this EIR does not evaluate the potential for substantial damage to scenic resources within a state scenic highway.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.1-1 **Effects on Scenic Vistas.** *Adoption and implementation of Burbank2035 would include new development in the planning area, including buildings, structures, paved areas, roadways, utilities, and other improvements, potentially altering scenic vistas in the planning area. However, adoption and implementation of Burbank2035 policies and programs and compliance with the BMC would result in a* ***less-than-significant*** *impact.*

Adoption and implementation of *Burbank2035* would include new development in the planning area, including buildings, structures, paved areas, roadways, utilities, and other improvements, potentially altering or obstructing scenic vistas from public spaces or along the identified vistas in the planning area. *Burbank2035* policies and programs would reduce impacts on scenic vista at the programmatic level. Land Use Element Policies 8.3 and 8.4

require the City to consider and address preservation of scenic views in the hillside area, including requiring discretionary review for new development or expansions that could affect the character of the hillside area. Open Space and Conservation Element polices would also protect these areas. Policy 7.1 in the Open Space and Conservation Element directs the City to identify visually prominent ridgelines and establish regulations to promote their preservation. Policy 7.2 in the Open Space and Conservation Element calls for the City to minimize visual intrusion in the hillside areas. Policy 7.3 in the Open Space and Conservation Element recognizes visual resources as key elements in open space acquisition. Program LU-1 states the City would maintain hillside development standards to ensure compatibility of projects scenic views.

Implementation of *Burbank2035* policies and programs would reduce potential impacts on scenic vistas within the planning area because the City would identify scenic vistas and implement development standards to protect these resources. Therefore, the impact would be **less-than-significant**.

Mitigation Measure

None required.

IMPACT 4.1-2 **Degrade Existing Visual Character.** *Adoption and implementation of Burbank2035 would include new development in the planning area that could substantially degrade the existing visual character within or surrounding the planning area. However, adoption and implementation of Burbank2035 policies and programs and compliance with the BMC would result in a* ***less-than-significant*** *impact.*

Burbank is characterized as an urban collection of residential, commercial, and industrial neighborhoods set against the backdrop of mountainous natural open space areas. Adoption and implementation of *Burbank2035* would not substantially alter any of these neighborhoods or areas of the City. As noted above in the Regulatory Setting, the City has established local plans and adopted sections of the BMC to address aesthetic considerations of development that in turn would maintain or enhance the existing visual character of an area. The City has previously focused planning efforts to indirectly consider visual character in the MDSP and the Burbank Center Plan.

Future land uses consistent with the *Burbank2035* Land Use Diagram would allow new development in similar locations to, and with character similar to, existing downtown, residential neighborhoods, commercial corridors, media, and industrial uses. Program LU-1 describes amendments to the Zoning Ordinance to implement *Burbank2035*. These amendments would maintain special hillside development standards and discretionary review of hillside projects and establish standards and design criteria that minimize the visual intrusion/impact of development in the hillside area.Implementation of *Burbank2035* policies and programs would reduce the impact associated with visual character to a less-than-significant level because City regulations would ensure consideration of visual character during review of future development projects. Therefore, the impact would be **less-than-significant**.

Mitigation Measure

None required.

IMPACT 4.1-3 **Include Sunlight-blocking Structures.** *Adoption and implementation of Burbank2035 would include new development in the planning area that could include sunlight-blocking structures near shadow-sensitive uses. This impact is considered* ***potentially significant****.*

Prolonged periods of shade and shadowing can negatively affect the character of certain land uses. Shadow-sensitive uses generally include routinely usable outdoor spaces associated with residential, recreational, or institutional land uses; commercial uses, such as pedestrian-oriented outdoor spaces or restaurants with outdoor seating areas; nurseries; and existing solar collectors/panels. Future land uses consistent with the Land Use Diagram would allow new development that could include sunlight-blocking structures near such uses. A project impact would be considered significant if shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October).

Burbank2035 Program LU-1 would amend the Zoning Ordinance to implement Land Use Element policies and programs, including citywide development standards and neighborhood-specific design standards. However, these amendments, as proposed, would not reduce the impact associated with sunlight-blocking structures. Absent mitigation, this impact would be **potentially significant**.

Mitigation Measure

Mitigation Measure 4.1-3: *The City of Burbank shall modify Program LU-1 by adding the following measures to address the potential for new structures to cause shadow impacts on shadow-sensitive uses:*

- *Require a shadow analysis for new structures proposed over 70 feet in height that would be adjacent to a shadow-sensitive public use such as, but not limited to, a park, pedestrian-oriented outdoor space, or restaurant with outdoor seating area.*

- *Establish standards to ensure new development over 70 feet in height does not shade shadow-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). Standards could include building spacing, building orientation, or step-backs.*

Significance After Mitigation

Implementation of Mitigation Measure 4.1-3 would ensure that proposed development projects with buildings greater than 70 feet in height would be subject to project-level environmental review. Within this review, the potential for new buildings to cause shadows on sensitive public uses would be disclosed, and steps would be taken to minimize shade-shadow impacts on a project-by-project basis. Therefore, with implementation of Mitigation Measure 4.1-3, this impact would be **less than significant**.

IMPACT 4.1-4 **Create New Sources of Light or Glare.** *Adoption and implementation of Burbank2035 would include new development in the planning area that would create new sources of light and glare. However, implementation of the BMC would result in a* ***less-than-significant*** *impact.*

Most of Burbank is urbanized and consists of typical sources of light and glare found in urban areas. The only area of the city with limited light and glare potential is the hillside area east of Sunset Canyon. Implementation of *Burbank2035* would result in new buildings and structures with glass, metal, and polished exterior or roofing materials that would contribute to localized sources of glare. Implementation of BMC requirements would reduce this impact, as follows:

- BMC Section 10-1-607 requires that single-family residences located in hillside areas must demonstrate that the house does not impose unnecessary or unreasonable detrimental impacts on neighboring properties or structures, including but not limited to impacts related to light and glare.
- BMC Sections 10-1-805 and 10-1-1706 require industrial operations that create glare to be located, and conducted in such a manner, that they do not exceed nuisance standards which would emit glare in such quantities or degree as to be readily detectable on any boundary line of the lot on which the use is located.
- BMC Section 10-1-1153 requires building elevations facing a residential zone with 50 percent or more of the building surface in glass be limited to a maximum of 15 percent reflectivity for those materials. Building elevations facing a residential zone with less than 50 percent of surface in glass shall be limited to a maximum of 20 percent reflectivity for those materials.
- BMC Section 10-1-1420 requires off-street parking to be arranged to prevent glare or direct illumination on adjoining properties and streets.
- If City Council wishes to add a use to a permitted list of uses, BMC Section 10-1-1991 requires that the City Council find the proposed use would not create more illumination, glare, unsightliness, or any other objectionable influence than the amount, if any, normally created by any of the permitted uses.

Existing regulations, including BMC Sections 10-1-607, 10-1-805, 10-1-1153, 10-1-1420, 10-1-1706, and 10-1-1991 require consideration of light and glare that could affect surrounding properties or land uses. Implementation of these regulations would result in **less-than-significant** light and glare impacts.

Mitigation Measure

None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

The geographic context for the analysis of cumulative aesthetics impacts is the planning area and new development in the cities of Los Angeles and Glendale with proximate and relatively distant views of the eastern Santa Monica Mountains or the Verdugo Mountains, or with the potential to contribute to shadow and light or glare impacts affecting the planning area.

IMPACT 4.1-5 **Cumulative Effects on Scenic Vistas.** *Adoption and implementation of Burbank2035 would not include new development that would substantially degrade scenic vistas from other nearby areas outside the planning area. This cumulative impact would be* ***less-than-significant****.*

As discussed above, scenic vistas in and around the City of Burbank include the Verdugo Mountains and the Santa Monica Mountains. *Burbank2035* includes policies that would prevent development of hillside areas that are important visual resources seen from viewpoints in Burbank, Los Angeles, and Glendale. Policies and implementation programs described in Impact 4.1-1 would reduce the potential for new buildings or land uses in the planning area to obstruct views of the Verdugo Mountains and Santa Monica Mountains from outside the planning area. Cumulative impacts related to scenic vistas would therefore be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.1-6 **Cumulative Effects Degrading Existing Visual Character.** *Adoption and implementation of Burbank2035 and anticipated regional growth would include new development that could substantially degrade existing visual character within or surrounding the planning area. Adoption and implementation of Burbank2035 policies and programs and compliance with the BMC would reduce these cumulative effects. Therefore, Burbank2035's contribution to this impact would not be considerable, resulting in a* ***less-than-significant*** *impact.*

Visual character in the Cities of Los Angeles and Glendale adjacent to the planning area is similar to the visual character of Burbank. Projected regional growth in adjacent jurisdictions could potentially alter the existing visual character or degrade the inherent sense of place in certain areas. However, *Burbank2035* includes measures to avoid or reduce contributions to this potential significant cumulative impact. Program LU-1 requires amendments to the Zoning Ordinance to protect the visual character of the planning area, including its edges, through citywide development standards and neighborhood-specific design standards and other requirements noted in policies and implementation programs of *Burbank2035* described in Impact 4.1-2. Therefore, *Burbank2035*'s contribution to cumulative effects would not be considerable, resulting in a **less-than-significant** impact.

Mitigation Measure

None required.

IMPACT 4.1-7 **Cumulative Effects of Sunlight-blocking Structures.** *Adoption and implementation of Burbank2035 would include new development in the planning area that could include sunlight-blocking structures near shadow-sensitive uses. Other nearby development in Los Angeles or Glendale could also include sunlight-blocking structures. However, these effects would be local in nature and would result in a* ***less-than-significant*** *impact.*

The combination of future land uses consistent with the *Burbank2035* Land Use Diagram and anticipated regional growth could allow new development with sunlight-blocking structures near shadow-sensitive uses. The cumulative effect of sunlight-blocking structures would be limited, since two or more projects would need to be built in proximity to each other to create a combined light and glare impact. These effects are inherently local, and related to the construction of specific buildings or groups of buildings. This cumulative impact, at the scale of the region, would therefore be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.1-8 **Cumulative Effects of New Sources of Light or Glare.** *Adoption and implementation of Burbank2035 and anticipated regional growth would include new development that would create new sources of light and glare. This cumulative impact would be* ***less than significant****.*

Burbank is an urbanized area with numerous sources of light and glare. The cumulative effect of light and glare would be limited, since two or more projects would need to be built in proximity to each other to create a combined light and glare impact. These effects are inherently local, and related to the construction of specific buildings or groups of buildings. This cumulative impact, at the scale of the region, would therefore be **less than significant**.

Mitigation Measure

None required.

This page intentionally left blank.

4.2 AGRICULTURAL AND FOREST RESOURCES

4.2.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to agricultural and forest resources associated with implementation of *Burbank2035*. As shown below, there are no applicable *Burbank2035* policies or implementation programs which address agricultural resources or forest lands.

NOP Comments: No comment letters in response to the NOP addressed concerns for agricultural or forest resources.

Reference Information: Information for this resource chapter is based on multiple references, including the *Burbank2035* Technical Background Report (TBR), the Farmland Mapping and Monitoring Program (FMMP), and other publicly available documents. The TBR is attached to this document as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.2.2 ENVIRONMENTAL SETTING

Section 3 of the TBR describes Burbank's definition of agricultural uses, zones within Burbank that allow for the keeping of horses and related equestrian uses, and the absence of agricultural lands or uses in the city.

4.2.3 REGULATORY SETTING

The regulatory setting for agricultural and forest resources is discussed in detail in Appendix A. Following is a summary of key regulations affecting agricultural resources in Burbank:

- **Burbank Zoning Ordinance:** Agricultural use is defined as "any use which is related to cultivating the ground or raising and harvesting crops, and includes the feeding, breeding and management of livestock as a commercial or industrial enterprise."

4.2.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

There are no *Burbank2035* policies or implementation programs that address agricultural resources.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on agricultural or forest resources are considered significant if adoption and implementation of *Burbank2035* would:

- convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- conflict with existing zoning for agricultural use or a Williamson Act contract;
- conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g));
- result in the loss of forest land or conversion of forest land to non-forest use; or
- involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

As discussed in Section 3 of Appendix A, there is no Important Farmland or forest land in the planning area or surrounding areas. There are no Williamson Act contracts in the planning area. Although the City allows for very low-density residential development with facilities for keeping horses in the Single Family Residential-Horse (R-1-H) zone, keeping horses is not considered an agricultural use. Implementation of *Burbank2035* would not result in the direct or indirect conversion of Important Farmland or forest land, nor would it conflict with an existing Williamson Act contract. Therefore, implementation of *Burbank2035* would have **no impact** on agricultural resources or forest land.

4.3 AIR QUALITY

4.3.1 INTRODUCTION

This resource chapter of the EIR evaluates potential air quality effects associated with implementation of *Burbank2035*. *Burbank2035* Air Quality and Climate Change Element policies and implementation programs presented in the Plan Realization Element guide development, infrastructure, and day-to-day operational practices to minimize air quality emissions of criteria air pollutants and ozone precursors.

NOP Comments: In response to the NOP, one comment related to air quality was received from the South Coast Air Quality Management District (SCAQMD) (see Appendices B and C). The comment was focused on ensuring the air quality analysis for *Burbank2035* uses region-specific and up-to-date air quality modeling methodologies to evaluate the project's impact on air quality. These comments and the SCAQMD's guidelines for analyzing air quality impacts have been incorporated within this analysis.

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR), traffic report, and other publicly available documents. The TBR is attached as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.3.2 ENVIRONMENTAL SETTING

Section 4 of Appendix A describes the natural factors (i.e., topography, climate, and meteorology) that affect air quality in the region; current regional air quality conditions in the project area; and the federal, State, and local air quality regulatory framework. A summary of that information is provided below.

- Burbank is located in the South Coast Air Basin (Basin), and the South Coast Air Quality Management District (SCAQMD) is the air pollution control district principally responsible for comprehensive air pollution control in the Basin.

- The Basin lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. Winds in the planning area are usually driven by the dominant land/sea breeze circulation system. Vertical dispersion of air pollutants in the Basin is hampered by the presence of persistent temperature inversions, which restrict the vertical dispersion of air pollutants released into the marine layer and, together with strong sunlight, can produce worst-case conditions for the formation of photochemical smog.

- The California Air Resources Board (ARB) and U.S. Environmental Protection Agency (EPA) currently focus on the following criteria air pollutants (CAPs) as indicators of ambient air quality: ozone, particulate matter (PM_{10} and $PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead.

- Ozone is a photochemical oxidant and the primary component of smog. It is formed through complex chemical reactions between precursor emissions of reactive organic gases (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. Burbank is located in both a federal and state non-attainment area for

ozone, as local air quality conditions exceed the federal 8-hour ozone standard and the state 1-hour and 8-hour ozone standards.

- Burbank is located in both a federal and state non-attainment area for both PM_{10} and $PM_{2.5}$.
- Burbank is located in an area that meets both federal and state CO standards. The maximum 8-hour carbon monoxide (CO) concentration monitored in Burbank from 2004 to 2010 was 3.89 parts per million (ppm) in 2004. In the more recent three years of monitoring data (2008-2010), the highest 8-hour CO concentration monitored in Burbank was 2.89 ppm.
- Burbank is located in a federal non-attainment area for $NO_{2.}$
- Burbank is located in an area that meets both federal and state SO_2 standards.
- Diesel PM emissions are estimated to be 5,163 tons/year for Los Angeles County. In the Basin, the estimated health risk from diesel PM was 720 excess cancer cases per million people in 2000. Sources of diesel PM located throughout the planning area include freeways, arterial roadways, and railways. as well as minor sources such as off-road construction equipment, portable and backup diesel generators and pumps, as well as other heavy-duty and light-duty equipment. Other Toxic Air Contaminant (TAC) sources in Burbank include fuel dispensing stations, Providence St. Joseph Medical Center, and various commercial and industrial facilities providing services such as surface coating and cleaning, petroleum production, printing and graphics, and television and motion picture related services (e.g., film processing, metal fabricating). In Burbank, the largest source of CAPs and TACs (in terms of quantities released) is the Burbank Water and Power (BWP) Magnolia Power Plant, which is located about ½ mile northeast of a sensitive receptor, Walt Disney Elementary School.
- Several major sources of odor in Burbank include the Burbank City Public Works Department Yard, Burbank Landfill Site No. 3 (1600 Lockheed View Dr.) and the BWP Reclamation Plant (EPA 2010c). Examples of minor or intermittent sources of odors in the planning area include restaurants with charbroilers, construction sites (diesel exhaust and asphalt paving), and garbage dumpsters.

4.3.3 REGULATORY SETTING

Federal, state, and local plans, policies, laws, and regulations provide a framework for addressing aspects of air quality that would be affected by implementation of *Burbank2035*. The regulatory setting for air quality is discussed in detail in Appendix A. A summary of that information as it relates to the impact analysis is provided below.

- SCAQMD requires all projects in the air basin to implement Rules 403 (Fugitive Dust), Rule 401 (Visible Dust), and Rule 1113 (Architectural Coatings) during construction activities.
- SCAQMD requires all projects to comply with Rule 402 (Nuisance) during both construction and operational activities.
- The region is nonattainment for California Ambient Air Quality Standards (CAAQS) ozone, particulate matter with aerodynamic diameter less than 10 microns (PM_{10}), particulate matter with aerodynamic diameter

less than 2.5 microns ($PM_{2.5}$), and nitrogen dioxide (NO_2). The region is nonattainment for National Ambient Air Quality Standards (NAAQS) ozone, PM_{10}, and $PM_{2.5}$.

- ARB developed the *Air Quality and Land Use Handbook: A Community Health Perspective* to guide the siting and design of new land uses in order to avoid exposing sensitive receptors to toxic air contaminant emissions (ARB 2005).

4.3.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analyses of impacts on air quality are both qualitative and quantitative, and based on available air quality information for the planning area along with review of regional information. The analysis assumes that all future and existing development within the planning area complies with applicable laws, regulations, design standards, and plans. The cumulative impact analysis uses qualitative information for the planning area and air basin. Operational emissions associated with future land uses anticipated by *Burbank2035* were modeled using the California Emissions Estimator Model (CalEEMod) Version 1.1, and ARB's on-road emissions inventory model, EMFAC2007. Model inputs such as land use types and sizes, vehicle miles traveled, and speed bins were obtained from the traffic study prepared for *Burbank2035* (Fehr & Peers 2012).

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential air quality impacts include:

POLICIES

Air Quality and Climate Change Element

- **Policy 1.1:** Coordinate air quality planning efforts with local, regional, state, and federal agencies, and evaluate the air quality effects of proposed plans and development projects.

- **Policy 1.2:** Seek to attain or exceed the more stringent of federal or state ambient air quality standards for each criteria air pollutant.

- **Policy 1.5:** Require projects that generate potentially significant levels of air pollutants, such as landfill operations or large construction projects, to incorporate best available air quality and greenhouse gas mitigation in project design.

- **Policy 1.6:** Require measures to control air pollutant emissions at construction sites and during soil-disturbing or dust-generating activities (i.e., tilling, landscaping) for projects requiring such activities.

- **Policy 1.7:** Require reduced idling, trip reduction, and efficiency routing of transportation for City departments, where appropriate.

- **Policy 1.9:** Encourage the use of zero-emission vehicles, low-emission vehicles, bicycles, and other non-motorized vehicles, and car-sharing programs. Consider requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.

- **Policy 1.10:** Give preference to qualified contractors using reduced-emission equipment for City construction projects and contracts for services, as well as businesses that practice sustainable operations.

- **Policy 2.2:** Separate sensitive uses such as residences, schools, parks, and day care facilities from sources of air pollution and toxic chemicals. Provide proper site planning and design features to buffer and protect when physical separation of these uses is not feasible.

- **Policy 2.3:** Require businesses that cause air pollution to provide pollution control measures.

- **Policy 2.5:** Require the use of recommendations from the California Air Resources Board's Air Quality and Land Use Handbook to guide decisions regarding location of sensitive land uses.

- **Policy 3.1:** Develop and adopt a binding, enforceable reduction target and mitigation measures and actions to reduce communitywide greenhouse gas emissions within Burbank by at least 15% from current levels by 2020.

Mobility Element

- **Policy 2.1:** Improve Burbank's alternative transportation access to local and regional destinations through land use decisions that support multimodal transportation.

- **Policy 3.2:** Complete city streets by providing facilities for all transportation modes.

- **Policy 3.3:** Provide attractive, safe street designs that improve transit, bicycle, pedestrian, and equestrian connections between homes and other destinations.

- **Policy 4.2:** Use best-available transit technology to better link local destinations and improve rider convenience and safety, including specialized services for youth and the elderly.

- **Policy 4.3:** Improve and expand transit centers; create a new transit center in the Media District.

- **Policy 4.4:** Advocate for improved regional bus transit, bus rapid transit, light rail, or heavy rail services linking Burbank's employment and residential centers to the rest of the region.

- **Policy 4.8:** Promote multimodal transit centers and stops to encourage seamless connections between local and regional transit systems, pedestrian and bicycle networks, and commercial and employment centers.

- **Policy 5.2:** Implement the Bicycle Master Plan by maintaining and expanding the bicycle network, providing end-of-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer.

- **Policy 5.3:** Provide bicycle connections to major employment centers, shopping districts, residential areas, and transit connections.

- **Policy 5.4:** Ensure that new commercial and residential developments integrate with Burbank's bicycle and pedestrian networks.

- **Policy 5.5:** Require new development to provide land necessary to accommodate pedestrian infrastructure, including sidewalks at the standard widths specified in Table M-2.

- **Policy 7.2:** Design commercial and residential parking standards to limit new vehicle trips, incentivize transit use, and promote non-motorized transportation.

PROGRAMS

Air Quality and Climate Change Element

- **Program AQCC-8: Smoke Reduction from Retail Food Operations.** Cooperate with SCAQMD on requiring measures to prevent smoke emissions (i.e., grease shields, top-fired broilers) for retail food grilling, smoking, barbequing, and cooking with wood-fired stoves (indoor and outdoor). Cooperate with SCAQMD on requiring such operations to implement control measures such as filtering and scrubbing, before discharging cooking fumes to the atmosphere.

- **Program AQCC-9: Preference for City Contractors and Vendors Using Reduced-Emission Equipment and Business Practices.** Give preference to qualified contractors and vendors using reduced-emission equipment and sustainable business practices for City construction projects and contracts for services, as well as businesses that practice sustainable operations.

Mobility Element

- **Program M-6: Transit System.** Implementation of the transit portion of the Mobility Plan requires close consultation with other local and regional agencies to develop feasibility plans and funding sources for regional projects. Implementation of expanded local public transit service will be driven by future funding sources identified to pay for expanded service.

  - Pursue funding opportunities to expand BurbankBus transit service.

  - Consult with Los Angeles County Metropolitan Transportation Authority (MTA) regarding relinquishment of certain local transit routes to local agencies, in exchange for sharing the funding saved by converting MTA service to local service. Pursue Burbank's designation as an Eligible Operator in order to eligible for additional regional and federal funding.

  - Develop a short-range transit plan for BurbankBus to identify future transit needs and funding opportunities.

  - Work with MTA to develop the regional transit connections outlined in the Long Range Transportation Plan:

    – investigate the feasibility of implementing regional transit service between the MTA Gold Line in Pasadena and the Red Line/Orange Line in North Hollywood via Glendale and Burbank;

  - consult with MTA regarding future MTA Rapid lines serving Burbank; and
  - support regional connections connecting Burbank throughout the region.

- Consult with Metrolink and Amtrak to improve commuter and intercity rail services between Burbank and major destinations in Southern California.

- Develop transit stop standards and guidelines. Include amenities such as seating, lighting, signage, and convenient access, as requirements of new discretionary development projects or city-initiated streetscape improvement projects.

- Improve transit and intermodal connections at the Bob Hope Airport and the Empire Corridor to encourage public transit ridership to and from major office uses in this developing area.

- Seek opportunities to implement a bus intermodal transfer facility in the Media District.

- Evaluate Intelligent Transportation System solutions to increase the efficiency of transit vehicles on arterial streets.

- Monitor the progress of the proposed high-speed rail corridor and preliminary regional high-speed transit corridor through Burbank and work closely with the California High-Speed Rail Authority (CHSRA) to ensure that negative effects on the city are minimized. In particular, the City will work to ensure that street connections near any proposed station are enhanced to serve anticipated traffic demands and that transit, pedestrian, and bicycle facilities are included in any station design.

- **Program M-7: Bicycle Master Plan and Pedestrian Master Plan.** The Bicycle and Pedestrian Master Plans guide the expansion of Burbank's bicycle and pedestrian infrastructure. The following actions define the steps the City will take to further pedestrian and bicycle travel.

  - Prepare a Pedestrian Master Plan, identifying improvements necessary to improve pedestrian access to transit, across freeways, and other barriers to walking. The plan should address streetscape improvements and ensure compliance with Americans with Disabilities Act (ADA) standards.

  - Update the Bicycle Master Plan to reflect completed bicycle projects and to identify additional bicycle improvements to ensure eligibility for the Bicycle Transportation Account and other grant funds. Continue to implement Phase I and Phase II bicycle projects identified in the Bicycle Master Plan as funding becomes available or as streets are reconstructed, resurfaced, or redesigned.

  - Revise city roadway standards to better accommodate all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.

- **Program M-10: Transportation Demand Management.** Burbank uses Transportation Demand Management (TDM) strategies to reduce peak period demand on the street network as an alternative to providing capacity. Programs may be expanded to optimize the use of available transportation resources.

- Expand the City's employer-based TDM ordinance to include the Golden State and Empire Corridor areas, and other employment centers.

- Update the citywide TDM ordinance to better encourage the use of incentives including free transit passes, parking cash out, and free shuttles.

- Revise the City's TDM reporting and participation requirements to facilitate employer participation with TDM programs.

- Use TDM to mitigate traffic impacts resulting from new development. Provide incentives and/or require mitigations to reduce trips; require reporting to ensure trip reduction targets are met.

- Integrate TDM programs and measurements in the City's traffic study review process and travel demand model.

DRAFT *BURBANK2035* GREENHOUSE GAS REDUCTION PLAN MEASURES

Energy Efficiency

Measure E-1.1: Energy Efficiency in New Construction

- **Action E-1.1A:** Adopt an ordinance requiring new commercial construction to exceed the California Green Building Standards Code energy efficiency baseline by 15% starting in 2015.

Measure E-1.2: Energy Efficiency Retrofits

- **Action E-1.2A:** Adopt an ordinance requiring HERS-certified energy performance ratings for all residential buildings sold within the City.

- **Action E-1.2B:** Adopt an ordinance requiring point-of-sale energy audits for all residential and commercial buildings sold within the City.

- **Action E-1.2C:** Develop a comprehensive energy efficiency upgrade outreach program.

Measure E-1.3: ENERGY STAR Appliances

- **Action E-1.3A:** Develop public outreach program to increase community participation in ENERGY STAR appliance installation.

RENEWABLE ENERGY

Measure E-2.1: Renewable Energy Requirements

- **Action E-2.1A**: Adopt an ordinance requiring new single-family residential construction to include 1.8 kWh solar PV systems, and new multi-family residential and commercial construction to meet 10% of its expected energy needs from on-site renewable sources.

- **Action E-2.1B:** Adopt an ordinance requiring solar water heaters to be installed in all new residential construction.
- **Action E-2.1C:** Update the building code to require pre-wiring and pre-plumbing for solar PV and solar hot water systems in all new construction.

Measure E-2.2: Solar Photovoltaic Systems

- **Action E-2.2A:** Develop an aggressive outreach campaign for the BWP Solar Photovoltaic Power program.
- **Action E-2.2B:** Reduce or remove third-party electrical review fee associated with non-residential solar PV installations through January 1, 2017.

Measure E-2.3: Solar Water Heater Systems

- **Action E-2.3A:** Develop a public outreach campaign to advertise available SWH rebates and incentives offered through BWP and the CSI-Thermal Program.
- **Action E-2.3B:** Work with non-profit organizations to identify additional financing options for SWH installations.
- **Action E-2.3C:** Remove regulatory barriers to the installation of SWH systems.

PEDESTRIAN AND BICYCLE IMPROVEMENTS

Measure T-1.1: Pedestrian Enhancements

- **Action T-1.1A:** Complete Pedestrian Master Plan.
- **Action T-1.1B:** Aggressively pursue grant funding to begin implementation of the Master Plan's priority improvements.

Measure T-1.2: Safe Routes to School

- **Action T-1.2A**: Secure funding to prepare a Safe Routes to School plan to prioritize safety improvements and investments for pedestrians and cyclists.
- **Action T-1.2B**: Identify funding sources for implementation of the Safe Routes to School plan.

Measure T-1.3: Bicycle Education Program

- **Action T-1.3A**: Partner with local bicycle advocacy groups and clubs and the Burbank Police Department to identify high-frequency accident locations.
- **Action T-1.3B**: Continue to pursue grant funding for implementation of the Bicycle Master Plan that also allows for bicycle safety components.

Measure T-1.4: Bicycle Infrastructure Expansion

- **Action T-1.4A:** Implement bicycle network expansions that have already received funding.
- **Action T-1.4B:** Adopt the draft bicycle parking ordinance by December 31, 2012.
- **Action T-1.4C:** Pursue funding to implement other Top Priority Projects identified in Table 5.2 in the 2009 Bicycle Master Plan, with a focus on implementing Class I and II facilities.
- **Action T-1.4D:** Identify north-south roads that can accommodate bicycle boulevard facilities to connect the Chandler bicycle path with Burbank and Magnolia Boulevards.
- **Action T-1.4E:** Evaluate safety on popular Class III routes and identify potential candidates for upgrades to Class II facilities.
- **Action T-1.4F:** Provide bicycles for shared use by all City employees and amenities at the BWP campus and in the Burbank Civic Center to accommodate the shared bicycles.
- **Action T-1.4G:** Consider expanding the shared bicycle program to accommodate public use in Downtown Burbank, the Media District, and the Golden State area.

Measure T-1.5: Bicycle Accommodation Ordinance

- **Action T-1.5A:** Adopt draft bicycle accommodation ordinance by June 30, 2013.
- **Action T-1.5B:** Provide technical assistance to developers seeking to comply with the ordinance.

TRANSPORTATION DEMAND MANAGEMENT

Measure T-2.1: Transportation Management Organization Expansion

- **Action T-2.1A:** Update the TMO website to provide program information to current and potential members.
- **Action T-2.1B:** Develop a TMO business outreach strategy to increase membership and active participation in TMO programs.
- **Action T-2.1C:** Expand geographic boundary of TMO into Golden State and Empire areas by 2020 and citywide by 2035.
- **Action T-2.1D:** Require all new businesses with 25 employees or more within the TMO boundary to join the TMO and fulfill required reporting procedures.
- **Action T-2.1E:** Expand the carpool/rideshare program through adoption of current technologies.
- **Action T-2.1F:** Evaluate the City's guaranteed ride home policy to ensure its applicability to small businesses.
- **Action T-2.1G:** Evaluate the City's carpool parking preference requirements.

INTELLIGENT TRANSPORTATION SYSTEM

Measure T-3.1: Traffic Signal Coordination

- **Action T-3.1A:** Continue to identify priority circulation routes within Burbank and synchronize traffic signals.
- **Action T-3.1B:** Continue to secure Measure R funding to implement traffic signal synchronization.
- Action T-3.1C: Coordinate ITS improvements with the SCAG ITS Regional Architecture.
- **Action T-3.1D:** Develop additional timing plans to cover different day-of-week and time-of-day periods.
- **Action T-3.1E:** Expand traffic signal synchronization monitoring to reduce incident delay due to accidents.
- **Action T-3.1F:** Expand communication system to improve/prevent redundancy.
- **Action T-3.1G:** Deploy adaptive control along major corridors.

4.3.5 THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on air quality are considered significant if adoption and implementation of *Burbank2035* would:

- conflict with or obstruct implementation of the regional air quality management plan;
- violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- expose sensitive receptors to substantial concentrations; or
- create objectionable odors affecting a substantial number of people.

The City of Burbank uses significance criteria established by the SCAQMD to evaluate air quality impacts. According to these criteria, implementation of *Burbank2035* would be considered significant if it would exceed any of the following:

Mass Daily Thresholds [a]		
Pollutant	**Construction [b]**	**Operation [c]**
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day

Mass Daily Thresholds [a]		
Pollutant	**Construction [b]**	**Operation [c]**
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day

Toxic Air Contaminants (TACs) and Odor Thresholds	
TACs (including carcinogens and noncarcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Hazard Index ≥ 1.0 (project increment)
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402
Ambient Air Quality for Criteria Pollutants [d]	
NO_2 1-hour average annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state)
PM_{10} 24-hour average annual average	10.4 μg/m^3 (construction)[e] & 2.5 μg/m^3 (operation) 1.0 μg/m^3
$PM_{2.5}$ 24-hour average	10.4 μg/m^3 (construction)[e] & 2.5 μg/m^3 (operation)
Sulfate 24-hour average	1 μg/m^3
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) 9.0 ppm (state/federal)

Notes:

[a] Source: SCAQMD Rev. March 2011

[b] Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea Air Basin and Mojave Desert Air Basin).

[c] For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

[d] Ambient air quality thresholds for criteria pollutants are based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

[e] Ambient air quality threshold is based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day
ppm = parts per million
μg/m^3 = micrograms per cubic meter
≥ greater than or equal to

IMPACTS AND MITIGATION MEASURES

IMPACT 4.3-1 **Consistency with Air Quality Plans.** *Adoption and implementation of Burbank2035 would result in new development and redevelopment of property throughout the planning area, which could result in air quality emissions associated with construction and operation of future and existing land uses that would affect how the region attains and maintains air quality standards. However, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *impact.*

Regional air quality plans are developed to attain and maintain ambient air quality standards. As summarized in the regulatory setting and shown in Table 4-1 of Appendix A, the region is nonattainment for the state and federal ozone, PM_{10}, and $PM_{2.5}$ standards, and is nonattainment for the state NO_2 standard. In order for the region to attain and maintain these standards, a concerted effort from all cities and counties in the air basin is required to reduce emissions from a variety of sources. Air quality plans model emissions contributions from sources within the air basin (and outside the air basin for transport of emissions) using planned land uses and reduction measure assumptions. This type of modeling demonstrates how the air quality plan can or cannot attain air quality standards by certain dates. Therefore, if a city within the air basin would not be consistent with the assumptions and emission reduction strategies contained within an air quality plan, this could conflict with or obstruct the region's ability to attain an ambient air quality standard.

By focusing planning and improvement efforts toward designing complete streets, promoting economic diversity, and enhancing communitywide mobility, *Burbank2035* will reduce vehicle miles traveled (VMT) within the city. Mobility Element Policies 2.1, 4.2, and 4.8 would provide safe and convenient multi-modal choices, which could minimize or eliminate certain mobile vehicle trips. Mobility Element Policy 5.4 would ensure that new land uses within the city are connected by bicycle and pedestrian networks to provide convenient access. Implementing these policies and programs would strengthen Burbank's efforts to reduce air quality emissions from VMT, area sources, construction, and other miscellaneous sources beyond that of the existing General Plan,[1] which is the basis for the existing regional air quality plan (i.e., 2007 Air Quality Management Plan [AQMP]).

In addition to reducing VMT compared to the AQMP, *Burbank2035* would also reduce air quality emissions from area sources and construction emissions. Air Quality and Climate Change Element Policy 1.5 would encourage projects that have a significant impact on air quality to implement best available mitigation to reduce emissions. Air Quality and Climate Change Element Policy 1.6 would require construction projects to control emissions, particularly soil disturbance, which is a large source of PM_{10} and $PM_{2.5}$ emissions. *Burbank2035* would also promote the use of sustainable companies through Program AQCC-9 and Air Quality and Climate Change Element Policy 1.10, which state a preference for the City to use sustainably operating companies for City projects. Air Quality and Climate Change Element Policy 1.1 would ensure that future projects consider impacts on regional air quality planning efforts. Lastly, Air Quality and Climate Change Element Policy 3.1 would establish a target to reduce communitywide GHG emissions by 15% by 2020, which would also affect the emissions of ozone precursors, PM_{10}, and $PM_{2.5}$ in the city.

As stated in the 2007 AQMP, the plan is "aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources and area sources." (SCAQMD2007) Therefore, the emission

[1] The existing General Plan is identified as the No Project Alternative in Appendix G to this EIR. Table 5 of Appendix G and Table 4-1 of Appendix A to this EIR identify vehicle travel as the main contributor to ozone precursors (ROG and NO_x).

reductions that could be achieved through implementation of *Burbank2035* are anticipated to exceed those currently planned for in the regional air quality plan and would be consistent with the 2007 AQMP. Although SCAQMD is currently developing a 2012 AQMP, it is anticipated that the 2012 AQMP would target the same types of emission sources and would require further reductions from all jurisdictions because of the nonattainment status of the Basin with respect to state ozone, NO_x, $PM_{2.5}$, and PM_{10} standards. Hence, *Burbank2035*would not conflict with or obstruct implementation of the regional air quality plan; therefore, the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.3-2 **Short-term Construction Emissions.** *Adoption and implementation of Burbank2035 would result in new development and redevelopment of property throughout the planning area, which would generate air quality emissions from short-term construction of planned land uses. Although adoption and implementation of Burbank2035 policies and programs and enforcement of current SCAQMD Rules and Regulations would help reduce short-term emissions; construction emissions would still result in a* ***potentially significant*** *impact.*

The SCAQMD has established quantitative daily thresholds of significance for construction emissions, as identified in the Thresholds of Significance above. Implementation of *Burbank2035* would result in construction emissions that would be evaluated using the SCAQMD thresholds of significance on a project-by-project basis. However, at the program level, it would be speculative to accurately model construction emissions associated with implementation of *Burbank2035* because it is unknown at this time what projects specifically would be constructed under *Burbank2035*, what construction equipment would be used for each project, and what construction phasing of each project would be. Therefore, construction air quality impacts are evaluated qualitatively.

Construction of *Burbank2035*'s proposed land uses would generate short-term criteria air pollutant and ozone precursor emissions from sources such as heavy-duty construction equipment, material delivery trucks, soil disturbance activities, construction worker vehicles, and architectural coatings, among other activities. The daily amounts of pollutants generated would vary depending on the intensity of the construction activities and types of construction equipment used. Smaller projects with a more compact schedule, though they may involve less overall development, could generate daily emissions that exceed those of a large project with a drawn-out schedule. Therefore, it is difficult to estimate construction emissions by simply evaluating the number of units or square feet of space to be developed. However, it is likely that construction of some future projects pursuant to *Burbank2035* would generate short-term construction emissions that would exceed the SCAQMD's thresholds of significance.

A number of *Burbank2035* policies along with required SCAQMD Rules and Regulations would help reduce short-term construction emissions. All construction projects within the city would be subject to SCAQMD's Rule 403 (Fugitive Dust) to minimize fugitive particulate matter (PM) dust emissions during construction. In addition, as discussed above, Air Quality and Climate Change Element Policy 1.6 would require future projects to control emissions from all construction-related sources. Air Quality and Climate Change Element Policy 1.10 would give preference for City projects to companies that use sustainable operations. Furthermore, Air Quality and Climate

Change Element Policy 1.5 would require potentially significant projects to incorporate best available air quality mitigation into project design.

Although SCAQMD would require compliance with Rule 403 and implementation of multiple *Burbank2035* policies would reduce construction emissions, it is still likely that a number of future projects will continue to generate emissions that exceed the SCAQMD construction thresholds of significance. Therefore, construction-related impacts would be **potentially significant**.

Mitigation Measure

None available.

Significance After Mitigation

Even with the implementation of SCAQMD Rule 403 and *Burbank2035* policies, it is still anticipated that some projects would generate daily construction emissions that exceed the SCAQMD thresholds of significance. Because the intensity and schedule of construction activities cannot be determined at the time of this program-level analysis, it would be speculative to conclude that any level of mitigation would reduce daily construction emissions below the SCAQMD thresholds of significance. In many cases, because of the amount of construction required for a project, even if all feasible mitigation is implemented, daily emissions could still exceed the significance thresholds. Therefore, this impact would be **significant and unavoidable**.

IMPACT 4.3-3 **Long-term Operational Emissions.** *Adoption and implementation of Burbank2035 would generate air quality emissions from long-term operation of planned land uses. Although adoption and implementation of Burbank2035 policies and programs and enforcement of current SCAQMD Rules and Regulations would help reduce long-term emissions, daily operational emissions from long-term operation of Burbank2035 would still result in a* ***potentially significant*** *impact.*

Following buildout of the proposed land uses, long-term operational emissions would be generated from stationary, area, and mobile sources.

The daily operational area, energy, and mobile source emissions that would occur in *Burbank2035*'s full buildout year (2035) were modeled using CalEEMod (Version 2011.1.1) computer model and EMFAC2007. Table 4.3-1 summarizes the daily long-term operational emissions of criteria air pollutants and precursors.

For most projects, people traveling in cars to and from the planning area would create most daily emissions. Heavy-commercial or industrial land uses are more likely to involve stationary sources, while retail and residential land uses would involve more area source emissions (e.g., natural gas water and space heating, consumer products, landscape maintenance). Similar to construction emissions, SCAQMD has developed daily thresholds of significance for operational activities. Project-level analysis of future projects would evaluate daily emissions against the SCAQMD operational thresholds of significance.

Burbank2035 includes numerous goals, policies, and programs that would impact future emissions associated with land use operations. Mobility Programs M-6 (Transit System), M-7 (Bicycle Master Plan and Pedestrian Master Plan), and M-10 (Transportation Demand Management) would provide new and existing land uses with higher accessibility to alternate modes of transportation and supporting amenities, some of which would be

Table 4.3-1
Summary of Modeled Operational Emissions of Criteria Air Pollutants and Precursors

	Emissions (lbs/day)[1]				
	ROG	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	8,034	293	20,799	2,679	2,678
Energy	65	566	309	45	45
Mobile Sources	816	3,312	14,423	628	434
Total Daily Operational Emissions	8,916	4,172	35,531	3,352	3,157
Project-Based SCAQMD Significance Threshold	***55***	***100***	***550***	***150***	***55***
Exceeds Project Threshold?	***Yes***	***Yes***	***Yes***	***Yes***	***Yes***

Notes:

SCAQMD = South Coast Air Quality Management District; lbs/day = pounds per day; CO = carbon monoxide; NO_X = oxides of nitrogen; PM_{10} = particulate matter less than or equal to 10 microns in diameter; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; ROG = reactive organic gases.

[1] Emissions modeled using the CalEEMod (Version 2011.1.1) computer model and EMFAC2007, based on daily vehicle miles traveled per speed bin, daily trips, and land uses obtained from the traffic analysis prepared for this project.

Note: The total emissions estimates shown are the highest values that would occur in the summer or winter season. Totals may not add up to individual values since the highest emissions for a pollutant from both area and mobile sources may not occur in the same season.

Refer to Appendix D for detailed assumptions and modeling output files.

SCAQMD's thresholds are established for individual projects, and are not readily applied to a 25-year program such as *Burbank2035*. Although the City will apply SCAQMD's thresholds to individual projects as they are brought forward, the total emissions in the City and the planning area will still exceed these project-based thresholds.

Source: Data modeled by AECOM in 2012

emissions-free (e.g., walking, biking). Therefore, implementation of *Burbank2035* would provide convenient alternatives to driving and reduce trip distances through infill development within the city. In addition, Mobility Element Policies 4.3 and 4.4 would use public transit to link employment and residential centers to provide realistic alternatives to single-occupancy vehicles for a variety of trip types (e.g., home to work, home to shopping). Mobility Element Policies 5.5 and 7.2 would require new development to add pedestrian infrastructure and limit parking to incentivize transit and alternate transit modes, respectively. Mobility Element Policies 3.2 and 3.3 would require that safe and convenient complete streets (i.e., designed for all modes of transportation) be implemented throughout the city and connect residential and amenities for feasible day-to-day use. Increasing bicycle mode share is a major goal to reduce mobile source emissions. Implementation of Mobility Element Policies 5.2 and 5.3 would strategically expand the City's bicycle infrastructure to provide practical and safe connections between land uses. Therefore, *Burbank2035* would supply alternative modes of transportation through City infrastructure as well as provide incentives to maximize the effectiveness of these developments.

Although many *Burbank2035* goals, programs, and policies would reduce operational air quality emissions, total emissions associated with daily operational activities would continue to exceed the SCAQMD thresholds of significance, as shown in Table 4.3-1. Therefore, *Burbank2035*'s operational emissions would be considered **potentially significant**.

Mitigation Measure

None available.

Significance After Mitigation

All projects must comply with *Burbank2035* policies to minimize long-term operational emissions. These measures would ensure that projects are developed to maximize the use of alternative modes of transportation and encourage the use of non-vehicular transportation. However, even with the implementation of all *Burbank2035* policies, daily operational emissions associated with *Burbank2035* would continue to exceed the SCAQMD thresholds of significance. Therefore, operational emissions would be considered **significant and unavoidable**.

IMPACT 4.3-4 **CO Hot Spots.** *Adoption and implementation of Burbank2035 would generate and contribute vehicle traffic to existing roadways within the city as a result of proposed land uses, which could contribute to potential CO hot spots. However, traffic volumes anticipated at intersections throughout the city with implementation of Burbank2035 would not be large enough to trigger a CO hot spot, resulting in a* ***less-than-significant*** *impact.*

CO concentration is a direct function of motor vehicle activity (e.g., idling time and traffic flow conditions), particularly during peak commute hours, and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels at local sensitive land uses such as residential areas, schools, and hospitals. As a result, SCAQMD recommends analyzing CO emissions at a local as well as a regional level.

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. SCAQMD requires a microscale CO hotspot analysis against the 1-hour and 8-hour ambient air quality standards for CO when a project increases the volume-to-capacity ratio by 2% for any intersection with an existing level of service (LOS) D or worse. The *Burbank2035* traffic analysis (see Chapter 4.16, "Transportation") indicates that several signalized intersections would operate at LOS E or LOS F in 2035. Therefore, further investigation of potential CO impacts is warranted.

A detailed CO analysis was conducted during the preparation of SCAQMD's 2003 AQMP. The locations selected for microscale modeling in the 2003 AQMP included high average daily traffic (ADT) intersections in the Basin, those which would be expected to experience the highest CO concentrations. The highest CO concentration observed was at the intersection of Wilshire Boulevard and Veteran Avenue on the west side of Los Angeles near the I-405 Freeway. The concentration of CO at this intersection was 4.6 ppm, which is well below the 35-ppm 1hr CO Federal standard. The Wilshire Boulevard/Veteran Avenue intersection has an ADT of approximately 100,000 vehicles per day.

The *Burbank2035* traffic analysis demonstrates that 16 of the studied intersections would operate at LOS E or F in 2035. The highest total intersection ADT for any of these intersections would be about 78,000 vehicles at the Burbank Boulevard/Victory Boulevard/Victory Place intersection, which is less than 100,000. Furthermore, due to stricter vehicle emissions standards in newer cars, new technology, and increased fuel economy, future CO emission factors under future land use conditions (year 2035) would be substantially lower than those under existing conditions. Thus, even though there would be more vehicle trips under *Burbank2035* than under existing conditions, project-generated local mobile-source CO emissions would not result in or substantially contribute to

concentrations that exceed the 1-hour or 8-hour ambient air quality standards for CO. As a result, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.3-5 **Toxic Air Contaminants.** *Adoption and implementation of Burbank2035 would potentially generate additional diesel vehicle traffic and diesel stationary sources within the city. This impact is* ***potentially significant****.*

Implementation of *Burbank2035* would generate diesel particulate matter (diesel PM) emissions as a result of construction and operational activities. Construction activities would involve diesel-fueled construction equipment and potentially diesel-fueled on-site generators. Both construction and operational activities would include diesel-fueled vehicles for construction workers, material delivery, or commutes within the city. Diesel PM has been classified as a TAC by the ARB and therefore even acute exposure could have potential health impacts. Diesel PM emissions also result from operational activities such as diesel vehicles visiting and leaving from a land use, material delivery trucks, diesel emergency generators, and material handling equipment among others.

ARB's *Air Quality and Land Use Handbook: A Community Health Perspective* and *Burbank2035* both address the need to consider TAC sources and sensitive receptors when siting new land uses. The following policies address the need to protect sensitive receptors from TAC sources. Air Quality and Climate Change Element Policy 1.5 requires that large emitting facilities design and implement best available air quality (and greenhouse gas) mitigation into project design; Air Quality and Climate Change Element Policy 2.2 requires new land uses to consider keeping sensitive receptors and TAC sources separated using site planning and design features; and Air Quality and Climate Change Element Policy 2.5 requires the use of the ARB's *Air Quality and Land Use Handbook* when siting new sensitive receptors. Pursuant to these *Burbank2035* policies, new land uses that would include sensitive receptors located within the city would be sited and designed considering the surrounding TAC sources to avoid exposing sensitive receptors to substantial TAC concentration. In addition, new sources of TAC and or other criteria air pollutants would be mitigated to the maximum extent possible. Program AQCC-4 in the Plan Realization Element requires preparation of health risk assessments for new sensitive receptors located near major freeways or arterials, but does not address sensitive receptors near the UPRR rail line or Bob Hope Airport. Furthermore, mobile sources of TACs within the city would be reduced through various *Burbank2035* Mobility Element and Land Use Element policies. In addition, the policies described above in Impact 4.3-2 to reduce mobile source emissions and construction emissions would reduce diesel PM emissions from *Burbank2035* planned land uses.

Burbank2035 policies and programs would avoid siting new sensitive receptors within the highest risk areas within the planning area, and would require siting limitations and mitigation approaches consistent with ARB guidance. Nevertheless, *Burbank2035* continues to promote the placement of higher-density housing within corridors adjacent to sources of diesel PM, including the UPRR railroad, I-5, SR-134, and the Bob Hope Airport. These areas would remain subject to elevated health risks. Program AQCC-4 requires the preparation of health risk assessments for new sensitive receptors near major freeways and arterials, but does not address either the UPRR rail line or Bob Hope Airport. For the reasons described above, implementation of *Burbank2035* policies and actions would have no practical effect on reducing TACs at these locations. Therefore, absent mitigation, this impact would be **potentially significant**.

Mitigation Measure

Mitigation Measure 4.3-5: *The City of Burbank shall modify Burbank2035 Implementation Program AQCC-4 as follows to address the potential for TAC impacts:*

Program AQCC-4: Health Risk Assessments for Stationary and Mobile Sources

Require project proponents to prepare health risk assessments in accordance with SCAQMD-recommended procedures as part of environmental review when projects could have associated air emissions that have been designated by the State of California as a toxic air contaminant or, similarly, by the federal government as a hazardous air pollutant.

Also require health risk assessments for projects that would place sensitive land uses near Bob Hope Airport, the UPRR rail line, or major freeways or arterials. (Major freeways, for these purposes, are ~~those that carry more than 50,000 vehicles per day~~ I-5 and SR 134.) ~~In general~~ The City will apply the ARB Air Quality and Land Use Handbook for recommendations on siting distances for sensitive or noxious uses. Site-specific analysis may include dispersion modeling and/or a health risk assessment, consistent with applicable guidance from SCAQMD. If required to reduce potentially significant impacts, the City shall require the applicant to identify and incorporate feasible mitigation measures. Such measures could include, but are not limited to: including tiered plantings of trees to reduce particulate matter concentrations; providing HVAC resource information; avoiding siting sensitive receptors in buildings with perchlorethylene drycleaners; and locating air intakes and windows to reduce particulate matter exposure.

Agency/Department:	*Community Development Department*
Funding Source:	*Development fees*
Time Frame:	*Ongoing*

Significance After Mitigation

Implementation of Mitigation Measure 4.3-5 would reduce exposure of sensitive uses to substantial pollutant concentrations and lessen health-related risks associated with sources of diesel PM within the planning area. However, given the range of potential project types consistent with *Burbank2035* that could place sensitive receptors near Bob Hope Airport, the UPRR rail line, or major freeways or arterials and the range of mitigation strategies available following completion of a health risk assessment, it cannot be said with certainty at this time that application of mitigation measures would reduce impacts to a less-than-significant level. *Burbank2035* continues to promote the placement of higher-density housing within corridors adjacent to sources of diesel PM. For these reasons, this impact is considered **significant and unavoidable**.

IMPACT 4.3-6 **Odors.** *Adoption and implementation of Burbank2035 would result in future land uses that could generate odors or expose existing receptors to odors. However, adoption and implementation of Burbank2035 policies and programs and compliance with SCAQMD Rules and Regulations would result in a* ***less-than-significant*** *impact.*

The occurrence and severity of odor impacts depends on numerous factors including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating complaints to local governments and regulatory agencies. Projects with the potential to frequently expose individuals to objectionable odors would be deemed to have a significant impact. Typical facilities that

generate odors include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities, among others. However, food service, retail and/or or residential land uses could also generate substantial odor sources from improper garbage disposal.

Burbank2035 Program AQCC-8 and Air Quality and Climate Change Element Policy 2.1 would require the use of industry-specific equipment to reduce the indoor and outdoor odors associated with retail food grilling and barbequing; Air Quality and Climate Change Element Policy 2.2 would require siting of sensitive receptors and site planning to minimize the exposure to odors; and Air Quality and Climate Change Element Policy 2.3 would require all business that cause air pollution to implement pollution control measures. In addition, SCAQMD Rule 402 (Nuisance) would prohibit any land use (except agricultural land uses) from generating odors that "endanger the comfort, repose, health or safety of any such persons of the public" (SCAQMD 1976). Agricultural land uses are not permitted within the incorporated city and therefore would not generate substantial odors within the city. Therefore, implementation of *Burbank2035* and compliance with SCAQMD Rules and Regulations would ensure that a substantial number of receptors are not exposed to substantial odor emissions. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Although air quality emissions associated with *Burbank2035* would be compared with SCAQMD thresholds of significance on a project-by-project basis, these emissions also cumulatively contribute to the air quality of the Basin. Therefore, the cumulative context for criteria air pollutants and ozone precursors is the Basin. Certain localized pollutants such as CO, PM_{10}, $PM_{2.5}$, and TACs have a cumulative context of the surrounding land uses and emission sources where they would be emitted. The localized cumulative effect of these localized pollutants is important to consider when evaluating impacts on sensitive receptors.

IMPACT 4.3-7 **Cumulative Construction Emissions.** *Adoption and implementation of Burbank2035 in addition to anticipated growth in the Basin would increase the amount of construction-related air quality emissions occurring within the Basin, thereby affecting the region's ability attain ambient air quality standards. Though implementation of Burbank2035 policies and programs would reduce these emissions, it is likely that construction-related air quality emissions would cause a cumulatively considerable contribution to regional air quality impacts. This would result in a* ***significant*** *cumulative impact.*

Construction activities associated with implementation of *Burbank2035* would contribute to regional emissions of ozone precursors, PM_{10}, and $PM_{2.5}$, for which the Basin is nonattainment. As discussed in Impact 4.3-2, SCAQMD has developed rules and regulations that would reduce both ozone precursor and PM emissions from construction. Implementation of *Burbank2035* policies would further reduce the generation of ozone precursors and PM emissions from construction from current business-as-usual conditions. However, even with implementation of SCAQMD Rules and Regulations and *Burbank2035* policies, it is still likely that construction emissions for numerous proposed land uses would exceed SCAQMD thresholds of significance, which are considered the allowable limits for each project's construction emissions in order achieve and maintain ambient

air quality standards. Therefore, *Burbank2035's* construction emissions would be cumulatively considerable, and this would be a **significant** cumulative impact.

Mitigation Measure

None available.

Significance After Mitigation

Implementation of SCAQMD Rules and Regulations along with *Burbank2035* Air Quality and Climate Change Element policies would reduce construction emissions associated with proposed land uses. However, even with implementation of these best management practices and mitigation measures, it is still likely that some construction emissions would exceed SCAQMD's construction thresholds of significance. Therefore, *Burbank2035's* contribution to this impact would be cumulatively considerable and the impact would be **significant and unavoidable**.

IMPACT 4.3-8 **Cumulative Operational Emissions.** *Adoption and implementation of Burbank2035 in addition to anticipated growth in the Basin would increase the amount of operational air quality emissions occurring within the Basin and affect the region's ability to attain ambient air quality standards. Though implementation of Burbank2035 policies and programs would reduce these emissions, it is likely that long-term operational air quality emissions would cause a cumulatively considerable contribution to regional air quality impacts. This would result in a* ***significant*** *cumulative impact.*

Implementation of *Burbank2035* would generate long-term operational emissions from a variety of proposed land uses. Implementation of *Burbank2035* Air Quality and Climate Change, Mobility, and Land Use Element policies and programs would reduce mobile and area source emissions associated with operation of future land uses. Because these policies and programs affect a wide range of land use and transportation factors (e.g., accessibility to transit, parking availability, bicycle and pedestrian infrastructure, and distance from residential to commercial and employment uses), mobile source emissions could be substantially reduced. However, daily operational emissions associated with the proposed land uses could still exceed SCAQMD's operational thresholds of significance. In addition, as shown in Table 4.3-1, daily operational emissions associated with *Burbank2035* land uses would exceed all SCAQMD thresholds of significance. Therefore, the proposed project's operational emissions would be cumulatively considerable, and this would be a **significant** cumulative impact.

Mitigation Measure

None available.

Significance After Mitigation

Implementation of SCAQMD Rules and Regulations along with *Burbank2035* Air Quality and Climate Change policies would reduce operational emissions associated with proposed land uses. However, even with implementation of these policies, it is likely that some future projects could generate daily emissions that exceed the SCAQMD operational thresholds of significance. Therefore, *Burbank2035*'s contribution to this impact would be cumulatively considerable and the impact would be **significant and unavoidable**.

IMPACT 4.3-9 **Cumulative CO Hotspots.** *Adoption and implementation of Burbank2035 in addition to anticipated growth in the Basin would contribute to traffic volumes on regional roadways, which would increase congestion and the potential for a CO hotspot. Implementation of Burbank2035 policies and programs that would mitigate congestion and vehicle dependency, along with the air quality trends in the air basin would ensure that Burbank2035 does not cause a cumulatively considerable contribution to CO hotspots. This would result in a* ***less-than-significant*** *impact.*

Implementation of *Burbank2035* would contribute vehicle traffic to the existing traffic network of the city and the region. As discussed in Impact 4.3-4, The *Burbank2035* traffic analysis (see Chapter 4.16, "Transportation") indicates that several signalized intersections in the city would operate at LOS E or LOS F in 2035, and similar conditions would be expected at other intersections throughout the region. CO concentrations within the city have continually decreased over the last 10 years. Furthermore, emissions in the future would decrease due to the turnover in vehicle fleets and emissions technology, which is documented in the ARB mobile source emissions model EMFAC2011. Considering this information, it is not anticipated that implementation of *Burbank2035* would cause a cumulatively considerable contribution to potential CO hotspots within the city or region. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.3-10 **Cumulative TAC Emissions.** *Adoption and implementation of Burbank2035 in addition to anticipated growth in the Basin would increase the amount of TAC emissions that sensitive receptors would be exposed to in the Basin. Implementation of Burbank2035 policies and programs would reduce these emissions and guide development to avoid exposing sensitive receptors to cumulatively considerable concentrations of TACs emissions. This would result in a* ***less-than-significant*** *impact.*

Implementation of *Burbank2035* would contribute TAC emissions in the city from mobile, area, and stationary sources associated with proposed land uses. *Burbank2035* focuses on infill projects and siting residential and commercial land use in proximity to each other to allow non-motorized trips for shopping, work, and recreational trips. As discussed in Impact 4.3-5, *Burbank2035* requires the implementation of ARB's *Land Use Handbook*, which identifies acceptable distances to place sensitive receptors from TAC sources. Implementation of *Burbank2035* Air Quality and Climate Change Element Policies 1.5 and 2.2 would ensure that site design and mitigation strategies are considered before sensitive receptors are located near TAC sources. Therefore, implementation of *Burbank2035* would increase the sensitivity of land use decisions with respect to TACs to avoid siting sensitive receptors to substantial TAC sources. For these reasons, it is not anticipated that *Burbank2035* would cause a cumulatively considerable contribution to the exposure of sensitive receptors to TAC emissions. Therefore, this would be a **less-than-significant** impact.

Mitigation Measure

None required.

IMPACT 4.3-11 **Cumulative Odors.** *Adoption and implementation of Burbank2035 in addition to anticipated growth in the Basin would increase the potential to generate or expose regional receptors to odors. Implementation of Burbank2035 policies and programs and compliance with SCAQMD Rules and Regulations would reduce potential cumulatively considerable contributions to odors. This would result in a* ***less-than-significant*** *impact.*

As discussed in Impact 4.3-6, *Burbank2035* proposes a variety of land uses, some of which may expose individuals in other nearby communities within the Basin to objectionable odors. Implementation of *Burbank2035* Program AQCC-8 and Air Quality and Climate Change Element Policy 2.1 would require the use of industry-specific equipment to reduce the indoor and outdoor odors associated with retail food grilling and barbequing; Air Quality and Climate Change Element Policy 2.2 would require siting of sensitive receptors and site planning to minimize the exposure to odors; and Air Quality and Climate Change Element Policy 2.3 would require all business that cause air pollution to implement pollution control measures. In addition, SCAQMD Rule 402 (Nuisance) would prohibit any land use (except agricultural land uses) from generating odors that "endanger the comfort, repose, health or safety of any such persons of the public" (SCAQMD 1976). In addition to Burbank, other cities in the Basin would comply with the same SCAQMD rules and regulations. For this reason, *Burbank2035* would not cause a cumulatively considerable contribution to odor impacts. Therefore, this would be a **less-than-significant** impact.

Mitigation Measure

None required.

4.4 GREENHOUSE GAS EMISSIONS

4.4.1 INTRODUCTION

This resource chapter of the EIR evaluates potential greenhouse gas (GHG) emissions effects associated with implementation of *Burbank2035*. *Burbank2035* Air Quality and Climate Change Element policies and implementation programs presented in the Plan Realization Element guide development, infrastructure, and day-to-day operational practices to minimize GHG emissions. The GHG emissions associated implementation of *Burbank2035* are quantified and analyzed. The results of the GHG emission calculations and estimates are provided in Appendices A and B of the Greenhouse Gas Reduction Plan (GGRP).

GHG emissions have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. Therefore, the proper context for addressing this issue in an EIR is within an assessment of cumulative impacts, because although it is unlikely that a single project will contribute significantly to climate change, cumulative emissions from many projects could impact global GHG concentrations and the climate system. Unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of localized or regional concern, the location where GHG emissions are generated is of relatively little importance. Rather, it is the total amount and type of GHG emissions that ultimately result in climate change effects.

NOP Comments: No comments on the NOP related to GHG emissions were received.

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR) (Appendix A), the GGRP and appendices, *Burbank2035* Traffic Analysis Report (Appendix F), and other publicly available documents. This EIR, including the TBR, the GGRP, and the Traffic Analysis Report are also available electronically on the City's website (http://www.burbank2035.com).

4.4.2 ENVIRONMENTAL SETTING

Section 8.4 of Appendix A describes the natural factors (i.e., topography, climate, and meteorology) and scientific background for climate change and GHG emissions; current GHG emissions and sources in the planning area. The following components of the TBR provide useful background information to support environmental impact analysis:

- Carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) are the three main GHG pollutants with respect to land use development projects. These three GHG pollutants will be the focus of the GHG impact analysis.

- Burbank's 2010 communitywide baseline GHG emissions (1,992,162 metric tons of carbon dioxide equivalent [MT CO_2e] emissions) are summarized in Table 4.4-1. The percent contribution of each of Burbank's emissions sectors are shown in Exhibit 4.4-1. Consistent with emissions at the statewide level (shown in Exhibit 4.4-2), Burbank's two largest emission sectors are transportation and energy consumption.

Table 4.4-1 Burbank 2010 Communitywide Greenhouse Gas Emissions		
	2010 Inventory Emissions	
Community Sector	MT CO_2e	Percent
Residential Electricity Use	137,581	7%
Commercial Electricity Use	160,612	8%
Industrial/Other Electricity Use[1]	266,526	13%
Subtotal Electricity Use	**564,719**	**28%**
Residential Natural Gas Use	88,690	4%
Nonresidential Natural Gas Use	74,147	4%
Other Natural Gas Use[1,2]	1,308	0%
Subtotal Natural Gas	**164,146**	**8%**
Airport (LTO only)	**309,668**	**16%**
Mobile (Transportation) Sources	**896,421**	**45%**
Waste	**24,021**	**1%**
Wastewater	**13,307**	**1%**
Water	**19,880**	**1%**
TOTAL	**1,992,162**	**100%**
Population (2010)	103,340	
Employment (2010)	94,932	
Per Capita (MT CO_2e/person)	19.3	
Per Service Population (MT CO_2e/SP)	10.1	

Notes: MT CO_2e = metric tons of carbon dioxide equivalency; LTO= landing and takeoff;
SP = service population (population + employment).

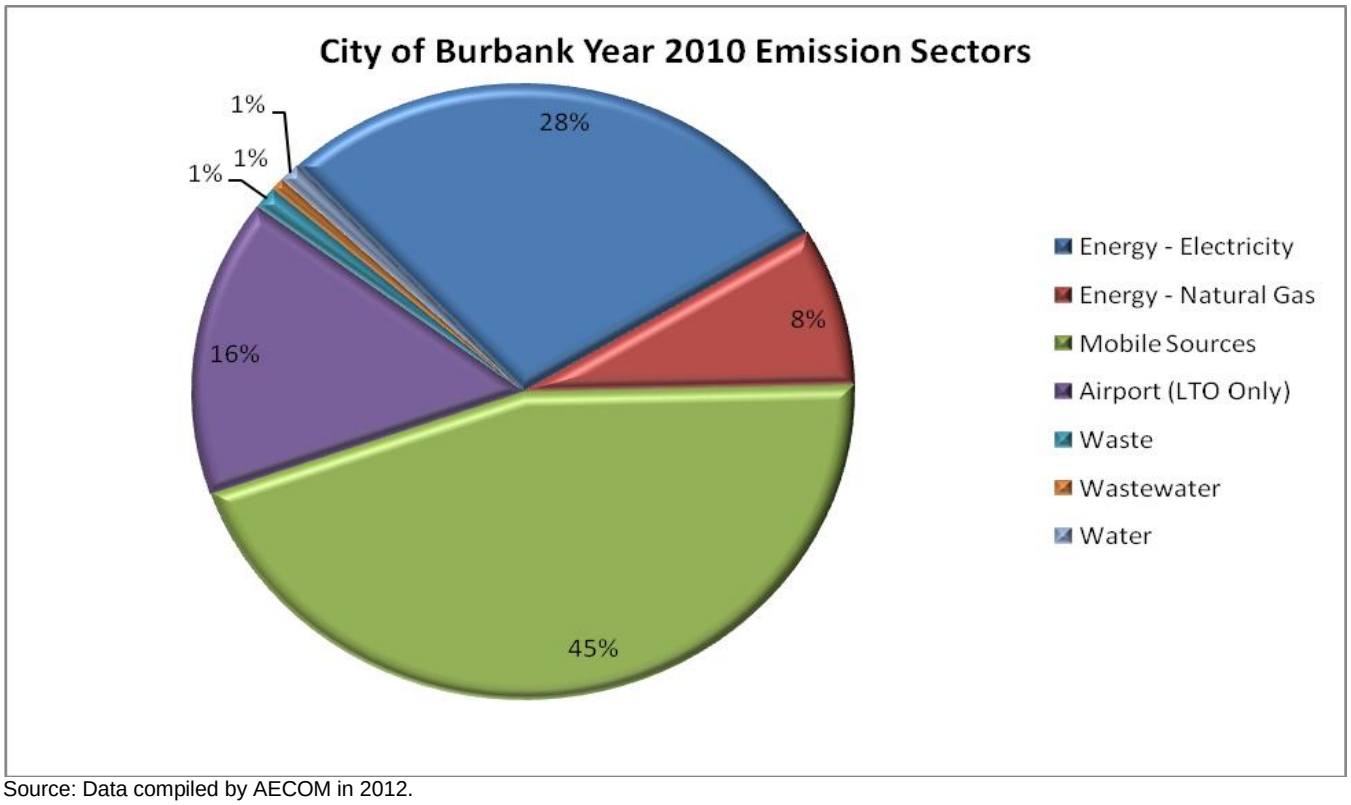
[1] Electricity and natural gas usage labeled as "other" is municipal usage plus miscellaneous usage as reported by Burbank Water and Power.

[2] To avoid double counting, natural gas consumption by Burbank Water and Power for *electricity production* is excluded in the natural gas GHG emissions reporting because it is covered by *electricity consumption* ("electricity" category).

Source: Data compiled by AECOM in 2012

- The Bob Hope Airport contributed 309,688 MT CO_2e in 2010 through aircraft landing and takeoff (LTO) operations, representing 16% of total communitywide emissions. However, the City has no authority to enforce GHG emission reduction measures within the airport's jurisdiction. For this reason, the GGRP removes emissions associated with airport LTO from the 2010 baseline inventory and all subsequent calculations related to the City's emissions reduction target and goal. A 2010 jurisdictional baseline of 1,682,494 MT CO_2e is used throughout the GGRP to more accurately reflect communitywide emissions the City can control.

Resource areas other than air quality could be indirectly affected by the accumulation of GHG emissions. Some quantity of climate change impacts can be considered foreseeable and part of the baseline. Anticipated effects include increased global average temperatures, reduced snowpack in the Sierra Nevada, sea level rise, and a shift or reduction in the range of various plant and wildlife species.



Source: Data compiled by AECOM in 2012.

Exhibit 4.4-1 **Burbank 2010 Communitywide Greenhouse Gas Inventory by Sector**

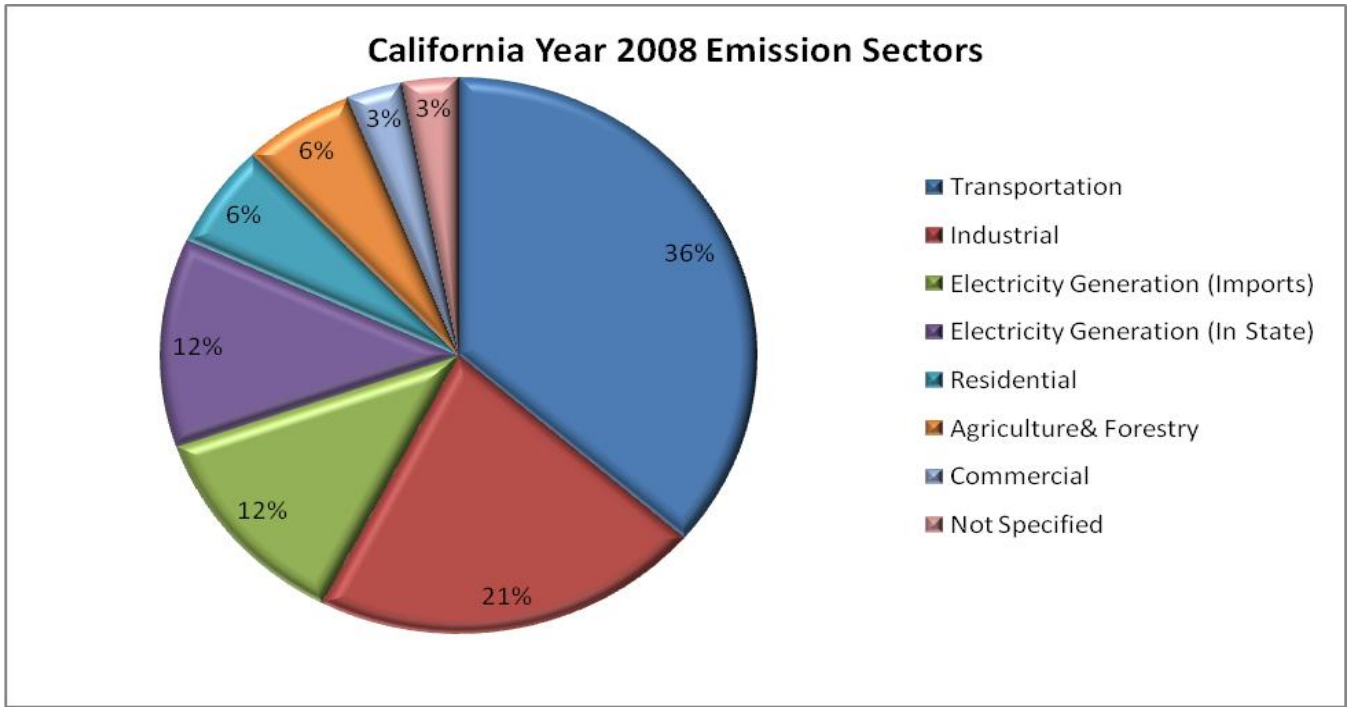


Exhibit 4.4-2 **Statewide Greenhouse Gas Emissions by Sector (2008)**

4.4.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies provide a regulatory framework for addressing GHG emissions under *Burbank2035*. The regulatory setting for GHG emissions is discussed in detail in Appendix A. Key laws, regulations, and policies influencing *Burbank2035* and the GGRP are summarized below:

- **Executive Order (EO) S-3-05:** EO S-3-05 recognizes California's vulnerability to reduced snowpack, exacerbation of air quality problems, and potential sea-level rise due to a changing climate. To address these concerns, the governor established targets to reduce statewide GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

- **Assembly Bill (AB) 32:** AB 32 mandates that the State reduce GHG emissions to 1990 levels by year 2020. The *Climate Change Scoping Plan* is a statewide planning document and GHG reduction plan that outlines actions and measures to achieve the statewide GHG emission reduction target.

- **Senate Bill (SB) 375:** SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires metropolitan planning organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO's regional transportation plan (RTP).

- **Sustainability Action Plan:** The City of Burbank has developed a sustainability action plan with a target to reduce GHG emissions by 25% by year 2030.

4.4.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035* and the GGRP, compared to existing conditions. The following analyses of GHG emissions impacts are both qualitative and quantitative. The analysis assumes that all future and existing development within the planning area complies with all applicable laws, regulations, design standards, and plans. Qualitative analysis is based on information from the existing regulatory framework, *Burbank2035,* and the GGRP. Quantitative analysis was performed by modeling *Burbank2035*'s operational emissions using methods similar to those described in Chapter 4.3, "Air Quality." As discussed in the Introduction, all analyses for GHG emissions are inherently cumulative due to the nature of GHG emissions and climate change.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

POLICIES

Air Quality and Climate Change Element

- **Policy 1.5:** Require projects that generate potentially significant levels of air pollutants, such as landfill operations or large construction projects, to incorporate best available air quality and greenhouse gas mitigation in project design.

- **Policy 1.7:** Require reduced idling, trip reduction, and efficiency routing of transportation for City departments, where appropriate.

- **Policy 1.9:** Encourage the use of zero-emission vehicles, low-emission vehicles, bicycles, and other non-motorized vehicles, and car-sharing programs. Consider requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.

- **Policy 1.10:** Give preference to qualified contractors using reduced-emission equipment for City construction projects and contracts for services, as well as businesses that practice sustainable operations.

- **Policy 3.1:** Develop and adopt a binding, enforceable reduction target and mitigation measures and actions to reduce communitywide greenhouse gas emissions within Burbank by at least 15% from current levels by 2020.

- **Policy 3.2:** Establish a goal and strategies to reduce communitywide greenhouse gas emissions by at least 30% from current levels by 2035.

- **Policy 3.4:** Reduce greenhouse gas emissions from new development by promoting water conservation and recycling; promoting development that is compact, mixed-use, pedestrian-friendly, and transit-oriented; promoting energy-efficient building design and site planning; and improving the jobs/housing ratio.

- **Policy 3.8:** Transition all economic sectors, new development, and existing infrastructure and development to low- or zero-carbon energy sources. Encourage implementation and provide incentives for low- or zero-carbon energy sources.

Land Use Element

- **Policy 2.6:** Require the use of sustainable materials and construction practices in new construction and substantial remodels of existing buildings.

- **Policy 4.2:** Maintain complete streets that create functional places meeting the needs of pedestrian, bicyclists, wheelchair users, equestrians, and motorist.

Mobility Element

- **Policy 2.4:** Require new projects to contribute to the city's transit and/or non-motorized transportation network in proportion to its expected traffic generation.

- **Policy 3.2:** Complete city streets by providing facilities for all transportation modes.

- **Policy 3.3:** Provide attractive, safe street designs that improve transit, bicycle, pedestrian, and equestrian connections between homes and other destinations.

- **Policy 4.1:** Ensure that local transit service is reliable, safe, and provides high-quality service to major employment centers, shopping districts, regional transit centers, and residential areas

- **Policy 4.2:** Use best-available transit technology to better link local destinations and improve rider convenience and safety, including specialized services for youth and the elderly.
- **Policy 4.3:** Improve and expand transit centers; create a new transit center in the Media District.
- **Policy 4.4:** Advocate for improved regional bus transit, bus rapid transit, light rail, or heavy rail services linking Burbank's employment and residential centers to the rest of the region.
- **Policy 4.8:** Promote multimodal transit centers and stops to encourage seamless connections between local and regional transit systems, pedestrian and bicycle networks, and commercial and employment centers.
- **Policy 4.9:** Support efforts to create a seamless fare-transfer system among different transportation modes and operators.
- **Policy 5.2:** Implement the Bicycle Master Plan by maintaining and expanding the bicycle network, providing end-of-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer.
- **Policy 5.3:** Provide bicycle connections to major employment centers, shopping districts, residential areas, and transit connections.
- **Policy 5.4:** Ensure that new commercial and residential developments integrate with Burbank's bicycle and pedestrian networks.
- **Policy 5.5:** Require new development to provide land necessary to accommodate pedestrian infrastructure, including sidewalks at the standard widths specified in Table M-2.
- **Policy 7.2:** Design commercial and residential parking standards to limit new vehicle trips, incentivize transit use, and promote non-motorized transportation.
- **Policy 9.3:** Provide access to transportation alternatives for all users, including senior, disabled, youth, and other transit-dependent residents.

PROGRAMS

Air Quality and Climate Change Element

- **Program AQCC-1: Greenhouse Gas Reduction Plan.** Prepare and adopt a Greenhouse Gas Reduction Plan (GGRP) addressing communitywide and municipal sources of greenhouse gas (GHG) emissions identified in the emissions inventory and projections for 2010, 2020, and 2035. The GGRP shall describe binding, enforceable measures and actions designed to reduce communitywide GHG emissions. Upon adoption, future projects consistent with *Burbank2035* may tier from the cumulative GHG analysis provided within the GGRP, pursuant to Section 15183.5(b) of the State CEQA Guidelines. The GGRP shall include all of the recommended plan elements identified in this section including:

- quantification of existing and projected GHG emissions for the city through 2035;
- identification of a 2020 mandatory target (15% below current emissions) for GHG emissions that is consistent with AB 32 and will achieve emissions levels below existing conditions, as well as a goal for emissions levels in 2035 (30% below current emissions);
- identification and analysis of GHG emissions associated with implementation of Burbank2035 based on calculation of the emissions resulting from types of projects that could develop within each land use designation, as assigned geographically, based on the Land Use Element;
- substantial evidence, provided in the form of a substantiated analysis using best practices, that demonstrates that implementing specific measures (including performance standards) on a project-by-project basis will collectively achieve the adopted emission target;
- a monitoring program to track progress toward achieving the GHG emission target (amendment of the plan is required if the GHG emissions target is not achieved); and
- environmental analysis of the GGRP within the *Burbank2035* Program EIR.

► **Program LU-6: Building and Other Municipal Codes.** The California Building Code regulates the manner in which buildings are constructed and ensures that buildings are built to withstand earthquakes, fires, and other hazards. Other sections of the BMC also affect development in the city. The City will complete the following actions related to codes and regulations to implement Burbank2035:

- Review and revise policies and codes related to green building practices. Provide incentives for the construction of green buildings with reduced environmental impacts and resource consumption beyond what is otherwise required.
- Update building and fire codes to incorporate increased energy efficiency and green building and sustainable development strategies.
- Develop a new code providing regulations for public streets and sidewalks. The code should emphasize a complete streets perspective, specifying required sidewalk widths and configurations, requiring adequate space for trees and street furniture, identifying required dedications citywide, and controlling other aspects of street and sidewalk design to ensure that the public right-of-way complements private development and helps define a sense of place.

► **Program M-6: Transit System.** Implementation of the transit portion of the Mobility Plan requires close consultation with other local and regional agencies to develop feasibility plans and funding sources for regional projects. Implementation of expanded local public transit service will be driven by future funding sources identified to pay for expanded service.

- Pursue funding opportunities to expand BurbankBus transit service.

- Consult with Metropolitan Transportation Agency (MTA) regarding relinquishment of certain local transit routes to local agencies, in exchange for sharing the funding saved by converting MTA service to local service. Pursue Burbank's designation as an Eligible Operator in order to eligible for additional regional and federal funding.

- Develop a short-range transit plan for BurbankBus to identify future transit needs and funding opportunities

- Work with MTA to develop the regional transit connections outlined in the Long Range Transportation Plan:

  – investigate the feasibility of implementing regional transit service between the MTA Gold Line in Pasadena and the Red Line/Orange Line in North Hollywood via Glendale and Burbank;

  – consult with MTA regarding future MTA Rapid lines serving Burbank; and

  – support regional connections connecting Burbank throughout the region.

- Consult with Metrolink and Amtrak to improve commuter and intercity rail services between Burbank and major destinations in Southern California.

- Develop transit stop standards and guidelines. Include amenities such as seating, lighting, signage, and convenient access, as requirements of new discretionary development projects or city-initiated streetscape improvement projects.

- Improve transit and intermodal connections at the Bob Hope Airport and the Empire Corridor to encourage public transit ridership to and from major office uses in this developing area.

- Seek opportunities to implement a bus intermodal transfer facility in the Media District.

- Evaluate Intelligent Transportation System solutions to increase the efficiency of transit vehicles on arterial streets.

- Monitor the progress of the proposed high-speed rail corridor and preliminary regional high-speed transit corridor through Burbank and work closely with CHSRA to ensure that negative effects on the city are minimized. In particular, the City will work to ensure that street connections near any proposed station are enhanced to serve anticipated traffic demands and that transit, pedestrian, and bicycle facilities are included in any station design.

► **Program M-7: Bicycle Master Plan Pedestrian Master Plan.** The Bicycle and Pedestrian Master Plans guide the expansion of Burbank's bicycle and pedestrian infrastructure. The following actions define the steps the City will take to further pedestrian and bicycle travel.

- Prepare a Pedestrian Master Plan, identifying improvements necessary to improve pedestrian access to transit, across freeways, and other barriers to walking. The plan should address streetscape improvements and ensure compliance with Americans with Disabilities Act (ADA) standards.

- Update the Bicycle Master Plan to reflect completed bicycle projects and to identify additional bicycle improvements to ensure eligibility for the Bicycle Transportation Account and other grant funds. Continue to implement Phase I and Phase II bicycle projects identified in the Bicycle Master Plan as funding becomes available or as streets are reconstructed, resurfaced, or redesigned.

- Revise city roadway standards to better accommodate all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.

- **Program M-10: Transportation Demand Management**. Burbank uses Transportation Demand Management (TDM) strategies to reduce peak period demand on the street network as an alternative to providing capacity. Programs may be expanded to optimize the use of available transportation resources.

  - Expand the City's employer-based TDM ordinance to include the Golden State and Empire Corridor areas, and other employment centers.

  - Update the citywide TDM ordinance to better encourage the use of incentives including free transit passes, parking cash out, and free shuttles.

  - Revise the City's TDM reporting and participation requirements to facilitate employer participation with TDM programs.

  - Use TDM to mitigate traffic impacts resulting from new development. Provide incentives and/or require mitigations to reduce trips; require reporting to ensure trip reduction targets are met.

  - Integrate TDM programs and measurements in the City's traffic study review process and travel demand model.

DRAFT *BURBANK2035* GREENHOUSE GAS REDUCTION PLAN MEASURES AND ACTIONS

The City has prepared a GGRP that outlines a plan for the Burbank to work toward GHG reductions of 15% below 2010 levels by 2020, and 30% below 2010 levels by 2035. Implementing the GGRP would reduce communitywide GHG emissions over the planning horizon of *Burbank2035*. Furthermore, the GGRP is the primary tool the City will use to achieve GHG reduction goals and demonstrate consistency with AB 32 and the ARB *Climate Change Scoping Plan*. The following GGRP measures and actions will reduce GHG emissions associated with *Burbank2035*:

Energy Efficiency

Measure E-1.1: Energy Efficiency in New Construction

- **Action E-1.1A:** Adopt an ordinance requiring new commercial construction to meet Tier 1 California Green Building Standards Code standards.

Measure E-1.2: Energy Efficiency Retrofits

- **Action E-1.2A:** Adopt an ordinance requiring HERS-certified energy performance ratings for all residential buildings sold within the city.

- **Action E-1.2B:** Adopt an ordinance requiring point-of-sale energy audits for all residential and commercial buildings sold within the city.
- **Action E-1.2C:** Develop a comprehensive energy efficiency upgrade outreach program.

Measure E-1.3: ENERGY STAR Appliances

- **Action E-1.3A:** Develop a public outreach program to increase community participation in ENERGY STAR appliance installation.

Measure E-1.4: Smart Grid Integration

- **Action E-1.4A:** Develop an outreach campaign for smart grid integration
- **Action E-1.4B:** Expand the City's thermal energy storage system demonstration project.
- **Action E-1.4C:** Promote the demonstration project to familiarize local businesses with smart grid technology.

Measure E-1.5: Cool Roofs

- **Action E-1.5A:** Secure funding to extend the City's Cool Roof Pilot Program.
- **Action E-1.5B:** Provide information about BWP's cool roof incentives to non-residential building owners.

Measure E-1.6: BWP Energy Conservation Programs

- **Action E-1.6A:** Maintain funding sources for energy conservation programs.
- **Action E-1.6B:** Provide information to Community Development Department staff regarding progress toward annual conservation goals for incorporation into future GGRP updates.

Measure E-1.7: Building Shade Trees

- **Action E-1.7A:** Amend the Zoning Ordinance to require installation of two on-site shade trees for each new single-family residential unit.
- **Action E-1.7B:** Continue the BWP Made in the Shade Program.
- **Action E-1.7C:** Update the Street Tree Plan and Urban Forestry program.

RENEWABLE ENERGY

Measure E-2.1: Renewable Energy Requirements

- **Action E-2.1A**: Adopt an ordinance requiring new single-family residential construction to include 1.8 kWh solar PV systems, and new multi-family residential and commercial construction to meet 10% of its expected energy needs from on-site renewable sources.

- **Action E-2.1B:** Adopt an ordinance requiring solar water heaters to be installed in all new residential construction.
- **Action E-2.1C:** Update the building code to require pre-wiring and pre-plumbing for solar PV and solar hot water systems in all new construction.

Measure E-2.2: Solar Photovoltaic Systems

- **Action E-2.2A:** Develop an aggressive outreach campaign for the BWP Solar Photovoltaic Power program.
- **Action E-2.2B:** Reduce or remove third-party electrical review fee associated with non-residential solar PV installations through January 1, 2017.

Measure E-2.3: Solar Water Heater Systems

- **Action E-2.3A**: Develop a public outreach campaign to advertise available solar water heater (SWH) rebates and incentives offered through BWP and the CSI-Thermal Program.
- **Action E-2.3B:** Work with non-profit organizations to identify additional financing options for SWH installations.
- **Action E-2.3C:** Remove regulatory barriers to the installation of SWH systems.

Street and Area Lighting

Measure E-3.1: Light-Emitting Diode Street Lights

- **Action E-3.1A**: Expand efficient lighting technology throughout the city.
- **Action E-3.1B:** Update the Street Light Master Plan.

Pedestrian and Bicycle Improvements

Measure T-1.1: Pedestrian Enhancements

- **Action T-1.1A**: Complete Pedestrian Master Plan.
- **Action T-1.1B:** Aggressively pursue grant funding to begin implementation of the Master Plan's priority improvements.

Measure T-1.2: Safe Routes to School

- **Action T-1.2A**: Secure funding to prepare a Safe Routes to School plan to prioritize safety improvements and investments for pedestrians and cyclists.
- **Action T-1.2B**: Identify funding sources for implementation of the Safe Routes to School plan.

Measure T-1.3: Bicycle Education Program

- **Action T-1.3A**: Partner with local bicycle advocacy groups and clubs and the Burbank Police Department to identify high-frequency accident locations.
- **Action T-1.3B**: Continue to pursue grant funding for implementation of the Bicycle Master Plan that also allows for bicycle safety components.

Measure T-1.4: Bicycle Infrastructure Expansion

- **Action T-1.4A:** Implement bicycle network expansions that have already received funding.
- **Action T-1.4B:** Adopt the draft bicycle parking ordinance by December 31, 2012.
- **Action T-1.4C:** Pursue funding to implement other Top Priority Projects identified in Table 5.2 in the 2009 Bicycle Master Plan, with a focus on implementing Class I and II facilities.
- **Action T-1.4D:** Identify north-south roads that can accommodate bicycle boulevard facilities to connect the Chandler bicycle path with Burbank and Magnolia Boulevards.
- **Action T-1.4E:** Evaluate safety on popular Class III routes and identify potential candidates for upgrades to Class II facilities.
- **Action T-1.4F:** Provide bicycles for shared use by all City employees and amenities at the BWP campus and in the Burbank Civic Center to accommodate the shared bicycles.
- **Action T-1.4G:** Consider expanding the shared bicycle program to accommodate public use in Downtown Burbank, the Media District, and the Golden State area.

Measure T-1.5: Bicycle Accommodation Ordinance

- **Action T-1.5A:** Adopt the draft bicycle accommodation ordinance by June 30, 2013.
- **Action T-1.5B:** Provide technical assistance to developers seeking to comply with the ordinance.

TRANSPORTATION DEMAND MANAGEMENT

Measure T-2.1: Transportation Management Organization Expansion

- **Action T-2.1A:** Update the TMO website to provide program information to current and potential members.
- **Action T-2.1B:** Develop a TMO business outreach strategy to increase membership and active participation in TMO programs.
- **Action T-2.1C:** Expand the geographic boundary of the TMO into the Golden State and Empire areas by 2020 and citywide by 2035.

- **Action T-2.1D:** Require all new businesses with 25 employees or more within the TMO boundary to join the TMO and fulfill required reporting procedures.
- **Action T-2.1E:** Expand the carpool/rideshare program through adoption of current technologies.
- **Action T-2.1F:** Evaluate the City's guaranteed ride home policy to ensure its applicability to small businesses.
- **Action T-2.1G:** Evaluate the City's carpool parking preference requirements.

INTELLIGENT TRANSPORTATION SYSTEM

Measure T-3.1: Traffic Signal Coordination

- **Action T-3.1A:** Continue to identify priority circulation routes within Burbank and synchronize traffic signals.
- **Action T-3.1B:** Continue to secure Measure R funding to implement traffic signal synchronization.
- **Action T-3.1C:** Coordinate ITS improvements with the SCAG ITS Regional Architecture.
- **Action T-3.1D:** Develop additional timing plans to cover different day-of-week and time-of-day periods.
- **Action T-3.1E:** Expand traffic signal synchronization monitoring to reduce incident delay due to accidents.
- **Action T-3.1F:** Expand communication system to improve/prevent redundancy.
- **Action T-3.1G:** Deploy adaptive control along major corridors.

WATER EFFICIENCY

Measure W-1.1: Water Conservation Programs

- **Action W-1.1A:** Implement UWMP water conservation improvements.

Measure W-1.2: Recycled Water Use Master Plan

- **Action W-1.2A:** Expand recycled water system.
- **Action W-1.2B:** Increase the number of targeted large irrigation customers required to use recycled water.

Measure W-1.3: Stormwater Management Plan

- **Action W-1.3A:** Prepare and adopt a Stormwater Management Plan.

ORGANIC WASTE DIVERSION

Measure SW-1.1: Food Scrap and Compostable Paper Diversion Ordinance

- **Action SW-1.1A:** Adopt a food scrap and compostable paper diversion ordinance.
- **Action SW-1.1B:** Revise the yard waste collection program to allow co-mingling of yard waste, food scraps, and compostable paper.

Measure SW-1.2: Yard Waste Diversion Ordinance

- **Action SW-1.2A:** Adopt a yard waste diversion ordinance banning the disposal of yard waste in trash bins or dumpsters.

Measure SW-1.3: Lumber Diversion Ordinance

- **Action SW-1.3A:** Modify Construction and Debris Diversion Ordinance to include requirements for 75% diversion.

Measure SW-1.4: Reusable Bags

- **Action SW-1.4A:** Promote the environmental benefits of reusable shopping bags on the City website.

Measure SW-1.5: Recycling Ordinance

- **Action SW-1.5A:** Adopt an ordinance requiring recycling bins or recycling areas in all buildings.

LANDFILL METHANE RECOVERY

Measure SW-2.1: Enhanced Methane Recovery

- **Action SW-2.1A:** Ensure that methane capture systems at Burbank Landfill meet ARB requirements.

CITY GOVERNMENT ACTIONS

Measure CG-1.1: Sustainability Coordinator

- **Action CG-1.1A:** Identify funding sources to support a full-time sustainability coordinator position.

Measure CG-1.2: Sustainability Element

- **Action CG-1.2A:** Prepare a Sustainability Element for *Burbank2035*.

4.4.5 THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on GHG emissions are considered significant if adoption and implementation of *Burbank2035* would:

- generate greenhouse gas emissions, either directly indirectly, that may have a significant impact on the environment; or

- conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases.

The City of Burbank uses significance criteria established by the South Coast Air Quality Management District (SCAQMD) to evaluate air quality impacts. At the time of this writing, no federal, state, regional, or local air quality regulatory agency has adopted a quantitative threshold of significance for construction-related GHG emissions. Neither SCAQMD nor the City of Burbank has adopted a significance threshold for analyzing GHG emissions from plans or development projects or a methodology for analyzing GHG emissions impacts as of the writing of this document.

The legislation dealing with climate change in California identifies goals for the desired rate of GHG reductions, relative to specific benchmark years. AB 32 requires 1990 GHG emission levels to be achieved by the year 2020, representing about a 16% reduction from business-as-usual 2020 emissions levels. Neither state legislation nor executive order suggests that California intends to limit population growth to reduce the state's GHG emission levels. Therefore, the intent is to accommodate population growth in California, but achieve a lower rate of GHGs despite this larger population. In other words, California jurisdictions must become more GHG efficient. One commonly accepted way to account for GHG efficiency employed by numerous California air districts and jurisdictions is the concept of Service Population (SP), wherein employees and population are summed together as a basis to explain per capita emissions. Using SP to demonstrate GHG efficiency accentuates the benefits of well-designed projects and plans.

SCAQMD is currently in the process of updating its *Air Quality CEQA Guidelines.* In 2005, SCAQMD developed an air quality guidance document for addressing air quality issues in general plans. SCAQMD is in the process of developing significance thresholds for criteria air pollutants and GHGs relative to general plans (SCAQMD 2005). A SCAQMD Working Group has proposed several possible thresholds, including thresholds for analysis of general plan impacts (see Table 4.4-2). The first threshold corresponds to a 2020 service population metric of 6.6 MT CO_2e/SP/yr (SCAQMD 2009), which is consistent with the significance threshold for general plans adopted by the Bay Area Air Quality Management District (BAAQMD) (BAAQMD 2010). The second proposed threshold is a 2035 service population (SP) metric of 4.1 MT CO_2e/SP/yr. This latter threshold lacks substantial evidence at this time. These efficiency thresholds were developed based on the statewide GHG inventory and statewide emission reduction goals of AB 32.

To date, SCAQMD has only recommended and adopted an Interim CEQA GHG Significance Threshold for stationary sources (10,000 MT CO_2e). The proposed thresholds have not been updated to reflect recent revisions by ARB that account for adjustments in future emissions due to recessed economic conditions and current state-level legislation.

For the purposes of this EIR, the proposed SCAQMD general plan threshold of 6.6 MT CO_2e/SP/yr is compared to the anticipated 2020 emissions associated with implementation of *Burbank2035* to determine whether the project would cause a significant increase in GHG emissions. This threshold was established using statewide

Table 4.4-2 SCAQMD Proposed Greenhouse Gas Significance Thresholds (MT CO_2e/yr)	
Category	**Significance Threshold**
Construction	30-yr amortization applied to operational ST
Operation—Stationary Sources	10,000
Operation—Project-level Land Uses	R = 3,500; C = 1,400; M = 3,000 Or, RCM = 3,000
Operation—Plan-level Performance Standards	
Compliance Option #1, % Reduction	28%
Compliance Option #3, GHGs/unit	Project Level: 4.6/SP/yr General Plans, etc., 6.6/SP/yr
Maximum Emission Limit	25,000

Notes: SCAQMD = South Coast Air Quality Management District; GHG = greenhouse gas; STs = significance thresholds; MT = metric tons; CO_2e = CO_2-equivalency; R = residential land use; C = commercial land use; M = mixed land use; RCM = all land uses
Source: SCAQMD 2009

emissions, population, and employment data. Substantial evidence supporting use of this threshold is provided by the June 2010 version of the BAAQMD *CEQA Air Quality Guidelines* (BAAQMD 2010)[1].

While climate change will continue to be an issue after 2020, and while SCAQMD has considered a per-SP threshold for 2035, defining the 2035 level of reductions necessary for local governments to achieve to be considered less than cumulatively considerable is considered speculative at this time.

4.4.6 IMPACTS AND MITIGATION MEASURES

IMPACT 4.4-1 **Generation of Short-Term Construction Greenhouse Gas Emissions.** *Adoption and implementation of Burbank2035 would result in new development and redevelopment of property throughout the planning area, which would result in GHG emissions from construction activities that would contribute to the cumulative effect of climate change. Although implementation of Burbank2035 and the GGRP would reduce construction-related GHG emissions, construction emissions of any individual project pursuant to Burbank2035 could potentially exceed SCAQMD's proposed operational thresholds. Burbank2035's contribution is cumulatively considerable, and the impact is considered* ***potentially significant.***

[1] BAAQMD's June 2010 adopted thresholds of significance were challenged in a lawsuit. On March 5, 2012 the Alameda County Superior Court issued a judgment finding that the Air District had failed to comply with CEQA when it adopted the thresholds. The court found that the adoption of the thresholds was a project under CEQA and ordered the Air District to examine whether the thresholds would have a significant impact on the environment under CEQA before recommending their use. **The court did not determine whether the thresholds are or are not based on substantial evidence and thus valid on the merits.** The court issued a writ of mandate ordering the District to set aside the thresholds and cease dissemination of them until the Air District had complied with CEQA. As the court did not determine whether the thresholds are or are not based on substantial evidence and thus valid on the merits, the City continues to rely on the substantial evidence based on statewide data and analysis relative to AB 32 that underlies the June 2010 BAAQMD thresholds in making an independent determination of significance of plan-level GHG impacts pursuant to State CEQA Guidelines Section 15064.7(c).

Construction-related GHG emissions would be generated primarily from off-road heavy-duty equipment, material delivery trucks, and construction vehicles. Although these emissions would be temporary and cease following completion of each future project pursuant to *Burbank2035*, construction emissions could generate a substantial amount of GHG emissions. At the program level, it would be speculative to accurately model construction emissions associated with implementation of *Burbank2035* because it is unknown at this time what projects specifically would be constructed under *Burbank2035*, what construction equipment would be used for each project, and what construction phasing of each project would be. Therefore, construction emissions are evaluated qualitatively.

Following construction of each future project pursuant to *Burbank2035*, long-term operational GHG emissions would be generated from a variety of sources. Area sources are relatively small (e.g., natural gas for space and water heating, landscape maintenance equipment, consumer products) and are not necessarily physically fixed in one location. These sources occur frequently in land use development projects and therefore can constitute a large source when considered cumulatively. Stationary sources occur at a fixed location. These sources include emergency generators, manufacturing machinery, or industrial processes. For development projects, mobile sources, including motor vehicles fueled by gasoline, diesel, or other alternative fuels are typically the largest source of GHG emissions.

Burbank2035 and the GGRP would implement policies and measures that reduce future construction GHG emissions associated with land use development. Air Quality and Climate Change Element Policy 1.10 would incentivize new development to hire contractors that use reduced-emissions equipment and practice sustainable business operations. Therefore, in addition to SCAQMD-required construction best management practices, development within the City would favor the use of low-emissions construction practices. In addition, Land Use Element Policy 2.6 requires that sustainable building practices be used in both new construction and substantial remodels of existing buildings. The policy defines "sustainable building practices" to include both structural systems and building designs that support alternative modes of transportation (e.g., pedestrian, bicycle, public transit) and effectively manage other on-site resources (e.g., water, biological resources). Therefore, implementation of *Burbank2035* and the GGRP would reduce construction-related GHG emissions and would also influence construction and design to reduce long-term operational emissions. Nevertheless, construction emissions of any individual project could potentially exceed SCAQMD's proposed operational thresholds (see Table 4.4-2). Therefore, construction emissions at this program level analysis impacts would be considered **potentially significant**.

Mitigation Measures

Mitigation Measure 4.4-1a: *To reduce construction-generated GHG emissions, projects seeking discretionary approval from the City shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by the City and/or SCAQMD at the time individual portions of the site undergo construction.*

The project applicant(s) for any particular discretionary project may submit a report to the City that substantiates why specific measures are considered infeasible for construction of that particular discretionary project and/or at that point in time. By requiring that the list of feasible measures be established prior to the selection of a primary contractor, this measure requires that the ability of a contractor to effectively implement the selected GHG reduction measures be inherent to the selection process.

The recommended measures for reducing construction-related GHG emissions at the time of writing this EIR are listed below. The list will be updated as new technologies or methods become available. The project applicant(s) shall, at a minimum, be required to implement the following:

- *Improve fuel efficiency of construction equipment:*
  - *reduce unnecessary idling (modify work practices, install auxiliary power for driver comfort);*
  - *perform equipment maintenance (inspections, detect failures early, corrections);*
  - *train equipment operators in proper use of equipment;*
  - *use the proper size of equipment for the job; and*
  - *use equipment with new technologies (repowered engines, electric drive trains).*
- *Use alternative fuels for electricity generators and welders at construction sites such as propane or solar, or use electrical power.*
- *Use an ARB-approved low-carbon fuel for construction equipment. Emissions of NOX from the use of low carbon fuel must be reviewed and increases mitigated. Additional information about low-carbon fuels is available from ARB's Low Carbon Fuel Standard Program.*
- *Reduce electricity use in the construction offices by using best-available technology and replacing heating and cooling units with more efficient ones.*
- *Recycle or salvage nonhazardous construction and demolition debris.*
- *Use locally sourced or recycled materials for construction materials (goal of at least 20 percent based on costs for building materials, and based on volume for roadway, parking lot, sidewalk, and curb materials).*
- *Develop a plan to efficiently use water for adequate dust control. This may consist of the use of nonpotable water from a local source.*

Mitigation Measure 4.4-1b: *As a part of a contractor demolition package, require compliance with the City of Burbank Construction and Demolition Ordinance. Work with contractors to share best practices on building recycling and reuse and demolition techniques to minimize waste, dust generation, water and energy use and other impacts of construction and demolition work.*

Mitigation Measure 4.4-1c: *Upgrade the BMC to incorporate California Green Building Standards Code requirements on a regular and timely manner as mainline construction practices develop and new materials and building products become available, with the goal of meeting the state's Net Zero Energy goals by 2020.*

Significance After Mitigation

Mitigation Measures 4.4-1a, 4.4-1b, and 4.4-1c are proposed to address impacts associated with GHG emissions generated by construction. Mitigation Measure 4.4-1a requires discretionary projects to employ project-specific measures to be employed to reduce construction-generated GHG emissions. Mitigation Measure 4.4-1b states contractor demolition packages will recycle or salvage a portion of non-hazardous debris. Mitigation Measure 4.4-1c states the City will upgrade its local building code to incorporate California Green Building Standards

Code requirements on a regular basis to include new practices that will bring new and existing development toward the state's Net Zero Energy goals by 2020. Many of these measures are standard practices required of construction companies in order to comply with existing SCAQMD or BMC requirements. Implementation of Mitigation Measures 4.4-1a, 4.4-1b, and 4.4-1c would reduce construction impacts to a **less-than-significant** level.

IMPACT 4.4-2 **Generation of Long-Term Operational Greenhouse Gas Emissions.** *Adoption and implementation of Burbank2035 would result in new development and redevelopment of property throughout the planning area, which would result in GHG emissions from operation of future land uses that would contribute to the cumulative effect of climate change. Burbank2035 policies and programs and GGRP measures and actions would manage and minimize these emissions, such that annual GHG emissions would not exceed the emissions efficiency target proposed by SCAQMD in 2020. Therefore, in 2020, Burbank2035's contribution would not be cumulatively considerable, and the impact would be considered* ***less-than-significant****.*

Burbank2035 and the GGRP have established policies and measures that address a broad range of GHG emission sources (i.e., transportation, energy, solid waste, and water). For long-term operational emissions, *Burbank2035* encourages the adoption of overarching GHG reduction goals for the city through Air Quality and Climate Change Element Policies 3.1 and 3.2. The GGRP has fulfilled these policies by proposing GHG reduction measures and actions to reduce communitywide emissions. For the purposes of this EIR, the proposed SCAQMD general plan threshold of 6.6 MT CO_2e/SP/yr is compared to the anticipated 2020 emissions associated with implementation of *Burbank2035* to determine whether the project would cause a significant increase in GHG emissions. This threshold was established using statewide emissions, population, and employment data. Substantial evidence supporting use of this threshold is provided by the June 2010 version of the BAAQMD *CEQA Air Quality Guidelines* (BAAQMD 2010).

Table 4.4-3 presents communitywide projected 2020 and 2035 business-as-usual emissions assuming implementation of *Burbank2035*, but without implementation of the GGRP.

Several *Burbank2035* policies would reduce mobile source GHG emissions, which are the largest GHG emission source under current baseline conditions and projected 2020 and 2035 conditions. Air Quality and Climate Change Element Policy 1.7 requires City departments to maximize efficiency of motor vehicle operations by reducing idling, vehicle trips, and increasing efficiency of routing where possible. Air Quality and Climate Change Element Policy 1.9, Land Use Element Policy 4.2, and Mobility Element Policies 3.2, 3.3, 5.2, 5.3, 5.4, 5.5, and 7.2 would promote alternative modes of transportation (e.g., zero-emissions vehicles, bicycles, car-sharing, etc) by providing convenient and safe infrastructure to support a range of transportation modes in residential areas, employment centers, streets, and recreational paths. Public transportation service, access, and convenience would be improved through Mobility Element Policies 4.1, 4.2, 4.3, 4.4, 4.8, 4.9, and 9.3. By improving these aspects of public transit throughout the City, residents and employees would more readily be able to use public transit for working, shopping, and recreational purposes, which would reduce vehicle trips and mobile-source GHG emissions. In addition, GGRP Measures T-1.1 and T-1.4 would also enhance pedestrian and bicycle infrastructure to make alternative modes more convenient and feasible.

Although new development under *Burbank2035* could add additional traffic and congestion to existing roadways, Mobility Element Policy 2.4 would require new development to contribute to the City's transit and non-motorized network proportionally to its traffic generation. Therefore, growth within the City would be accompanied with

Table 4.4-3 Burbank Jurisdictional Business-as-Usual 2020 and 2035 Communitywide Greenhouse Gas Emissions				
Community Sector	2020 Emissions		2035 Emissions	
	MT CO_2e	Percent Change from 2010	MT CO_2e	Percent Change from 2010
Residential Electricity Use	151,090	10%	173,270	26%
Commercial Electricity Use	176,181	10%	202,043	26%
Industrial/Other Electricity Use[1]	292,364	10%	335,279	26%
Subtotal Electricity Use	**619,634**	**10%**	**710,592**	**26%**
Residential Natural Gas Use	98,827	11%	110,049	244%
Nonresidential Natural Gas Use	82,621	11%	92,003	244%
Other Natural Gas Use[1,2]	1,405	7%	1,509	15%
Subtotal Natural Gas	**182,853**	**11%**	**203,561**	**24%**
Mobile (Transportation) Sources	**995,517**	**11%**	**1,143,229**	**28%**
Waste	**26,766**	**11%**	**29,806**	**24%**
Wastewater	**14,853**	**12%**	**17,859**	**34%**
Water	**20,275**	**2%**	**22,453**	**13%**
TOTAL[3]	**1,859,899**	**11%**	**2,127,500**	**100%**

Notes: MT CO_2e = metric tons of carbon dioxide equivalency;
SP = service population (population + employment).
1 Electricity and natural gas usage labeled as "other" is municipal usage plus miscellaneous usage as reported by Burbank Water and Power.
2 To avoid double counting, natural gas consumption by Burbank Water and Power for *electricity production* is excluded in the natural gas GHG emissions reporting because it is covered by *electricity consumption* ("electricity" category).
3 Total emissions does not include 352,993 MT CO2e in 2020 and 417,980 MT CO2e in 2035 associated with landing and takeoff operations at Bob Hope Airport, as the City has no jurisdiction over these projected emissions.
Source: Data compiled by AECOM in 2012

proportional management of roads and expansion of non-motorized transportation infrastructure. GGRP Measure T-2.1 would promote and incentivize alternative modes of transportation, integrate new traffic control technologies, and provide public information describing options and benefits of non-motorized transit. Implementation of the GGRP transportation measures and actions would achieve an annual GHG reduction of 17,233 MT CO_2e and 23,550 MT CO_2e in 2020 and 2035, respectively.

Burbank2035 and the GGRP also establish polices and measures to address the energy sector. Air Quality and Climate Change Policy 3.8 would transition all economic sectors to low- or zero-carbon energy sources. The wide reach of this policy is important to reach residential, commercial, and industrial sectors, which together represent approximately 33% of the City's energy consumption. In addition, GGRP measures address energy efficiency and conservation, passive energy conservation, and renewable energy. Implementing GGRP Measures E-1.1, E-1.2, E-1.3, E-1.4, and E-1.6 would improve citywide energy efficiency. GGRP Measures E-1.5 and E-1.7 would focus on energy reduction through passive energy conservation, which reduces energy consumption through building design (e.g., shade trees or external shades). Implementation of renewable energy systems to transition the City

toward Air Quality and Climate Change Element Policy 3.8's low- or zero-carbon energy goals would be accomplished through GGRP Measures E-2.1 and E-2.2. Implementation of the GGRP energy measures and actions would achieve an annual GHG reduction of 14,358 MT CO_2e and 28,794 MT CO_2e in 2020 and 2035, respectively.

Other GHG emission sectors (i.e., water, solid waste, wastewater), excluding airport landing and takeoffs (LTO), comprise approximately 5% of total communitywide emissions. Air Quality and Climate Change Element Policy 3.4 would reduce GHG emissions associated with water consumption and solid waste disposal through educational programs and conservation incentives in new development. GGRP water and solid waste measures and actions would also reduce GHG emissions. GGRP water measures and actions to promote water conservation and recycled water planning would achieve an annual GHG emission reduction of 198 MT CO_2e in both 2020 and 2035. GGRP solid waste measures would divert food scraps, yard waste, and lumber through waste collection/management systems and enhance methane recovery at landfills. These solid waste measures collectively would achieve an annual GHG reduction of 13,888 MT CO_2e and 24,806 MT CO_2e in 2020 and 2035, respectively.

In formulating the GGRP, the City has considered a wide range of emission reduction measures from a variety of reputable sources, including the Attorney General's office recommendations, General Plan policy recommendations published by the California Air Pollution Control Officers Association, and best practices employed by other California local jurisdictions preparing General Plan updates and Climate Action Plans. The City has charted an emissions reduction strategy that focuses on maximizing the local benefits of statewide reduction strategies advocated in the Scoping Plan, combined with targeted, but largely voluntary, local emission reduction measures and actions. In preparing the GGRP, the City has selected those measures and actions it considers feasible, in light of the built-out character of development in Burbank.

Table 4.4-4 presents *Burbank2035*'s anticipated 2020 and 2035 business-as-usual GHG emissions, along with anticipated reductions from the GGRP and statewide renewable energy, lighting efficiency, fuel efficiency, fuel carbon standard, tire inflation, and heavy-duty vehicle efficiency programs. Additional description of these programs is provided in the TBR and GGRP.

Considering the information presented in Table 4.4-4, *Burbank2035* and the GGRP would implement numerous policies to reduce GHG emissions from a variety of sources. Implementing the GGRP would achieve annual GHG reductions of approximately 45,677 MT CO_2e and 77,348 MT CO_2e in 2020 and 2030, respectively. When considering statewide reductions, the GGRP would achieve annual GHG reductions of approximately 414,347 MT CO_2e and 572,292 MT CO_2e in 2020 and 2035, respectively. Therefore, long-term communitywide GHG emissions would be reduced by approximately 14.1% from baseline 2010 emissions in year 2020, and approximately 7.6% from baseline 2010 emissions in year 2035. To address the gap between these levels of mass emission reduction and the target and goal established by *Burbank2035* Air Quality and Climate Change Element Policies 3.1 and 3.2, the GGRP outlines a Community Challenge, illustrating the enhanced levels of resident and business participation necessary to achieve the mass emission reduction target and goal.

In terms of GHG efficiency, implementation of *Burbank2035* and the GGRP would result in an efficiency metric of 6.5 MT CO_2e/SP/yr in 2020, and 6.3 MT CO_2e/SP/yr in 2035. The 2020 GHG efficiency anticipated with implementation of *Burbank2035* and the GGRP would fulfill the plan-level GHG efficiency threshold of 6.6 MT CO_2e/yr/SP proposed by SCAQMD and substantiated by BAAQMD. *Burbank2035*'s 2020 level of GHG

Table 4.4-4 Burbank Business-as-Usual 2020 and 2035 Emissions with Emission Reductions		
Emissions Category	2020 Emissions	2035 Emissions
	MT CO_2e	MT CO_2e
BAU Communitywide Emissions [1]	1,859,899	2,127,500
Statewide Reductions	**-368,670**	**-494,944**
Renewable Portfolio Standard	-142,291	-163,178
Lighting Efficiency	-22,996	-23,599
Pavley I	-115,769	-220,605
Pavley II	-19,507	-20,564
Low Carbon Fuel Standard	-59,963	-58,412
Tire Inflation Regulation	-3,609	-3,804
Heavy-Duty Vehicle Efficiency Program	-4,535	-4,781
GGRP Strategies and Measures	**-45,677**	**-77,348**
Energy	-14,358	-28,794
Transportation	-17,233	-23,550
Water	-198	-198
Solid Waste	-13,888	-24,806
Total Reductions	**-414,347**	**-572,292**
Communitywide Emissions with Reductions	1,445,552	1,555,208
Reduction from Baseline 2010 Emissions	-14.1%	-7.6%
Service Population	220,932	246,020
Communitywide GHG Efficiency (MT CO_2e/SP/yr)	**6.5**	**6.3**

Notes: MT CO_2e = metric tons of carbon dioxide equivalency; BAU = business as usual;
SP = service population (population + employment).
[1] For purposes of evaluating the GGRP's achievement of its emission reduction target, airport (landing and takeoffs) are omitted. Though these emissions make up the baseline conditions, these activities are not considered under the operational control of the City.
Source: Data compiled by AECOM in 2012.

emissions would fulfill AB 32 emission reduction goals and would not be considered a cumulatively considerable contribution to GHG emissions. This impact is considered **less than significant**.

For 2035, implementation of *Burbank2035* and the GGRP would result in an efficiency metric of 6.3 MT CO_2e/SP/yr. This exceeds and would not meet the proposed 2035 SCAQMD threshold of 4.1 MT CO_2e/SP/yr. However, as 2035 approaches, additional statewide programs aimed at increasing energy and transportation efficiencies are expected to help bridge this reductions gap. New technologies and additional legislation will likely be developed between now and 2035 to assist the City in filling this gap, and the precise nature of these reductions cannot be anticipated at this time. Because of the uncertainty surrounding the type and quantity of reductions that will occur due to outside effects between now and 2035, defining the 2035 level of reductions necessary for Burbank to achieve to be considered less than cumulatively considerable is considered speculative

at this time. Future updates to the GGRP should assess new state legislation and regulations, and quantify estimated reductions where possible.

Mitigation Measures

None required.

IMPACT 4.4-3 **Consistency with Greenhouse Gas Reduction Plans.** *Adoption and implementation of Burbank2035 would result in GHG emissions associated with construction-related and operational activities. However, in order for the City of Burbank and the State of California to meet their GHG reduction goals, the efficiency and manner in which construction activities are executed, and new and modified development operate are required to become more GHG efficient. Implementation of Burbank2035 policies and programs along with the Burbank GGRP would affect the major GHG-producing sectors in the City, which will help the City progress toward its GHG emission reduction target and consistency with the Climate Change Scoping Plan and SCAG Sustainable Communities Strategy. Therefore, the proposed project would be consistent with applicable GHG reduction plans and this impact would be* ***less than significant****.*

Burbank2035's consistency with the SCAG Sustainable Communities Strategy is discussed in Chapter 4.11, "Land Use and Planning."

Burbank2035 and its GGRP have been developed to reduce GHG emissions pursuant to AB 32 GHG reduction goals. As discussed above in Impact 4.4-2, *Burbank2035* would implement numerous policies that reduce GHG emissions from transportation, energy, water, and solid waste emission sources. Implementation of these policies supports *Climate Change Scoping Plan* goals to achieve emission reductions from land use development emission sources and create more GHG-efficient development without impeding population and economic growth. The GGRP implements *Burbank2035* Air Quality and Climate Change Element Policies 3.1 and 3.2 by establishing emission reduction measures and actions for the community. *Burbank2035* policies and GGRP emission reduction measures and actions described above in Impact 4.4-2 will reduce GHG emissions in all sectors described in the *Climate Change Scoping Plan*, and would not preclude or obstruct its implementation. Therefore, the policies, programs, measures, and actions of *Burbank2035* and the GGRP are consistent with the *Climate Change Scoping Plan*, which is the statewide plan to achieve the goals of AB 32. Therefore, this impact is considered **less than significant**.

Mitigation Measures

None required.

4.4.7 ANTICIPATED CLIMATE CHANGE EFFECTS ON THE PLANNING AREA

This discussion considers the potential impacts of anticipated climate change effects on the planning area. As discussed previously in this section, human-induced increases in GHG concentrations in the atmosphere have led to increased global average temperatures (global warming) through the intensification of the greenhouse effect and resulted in associated changes in local, regional, and global average climatic conditions. Although there is a strong scientific consensus that global climate change is occurring and is influenced by human activity, there is less certainty as to the timing, severity, and potential consequences of climate change. Scientists have identified

several ways in which global climate change could alter the physical environment in California (IPCC 2007, CEC 2006a, DWR 2006).

Although uncertainty exists as to the precise levels of these impacts, there is consensus regarding the range that can be expected. This analysis focuses on the effects of global climate change that might have a direct, reasonably foreseeable effect on physical conditions in the planning area. Therefore, this analysis gives greatest consideration to climate change data with more consistency anticipating future conditions, and thus a probability for a greater likelihood of occurring within a reasonable time frame (i.e., approximately 100 years).

TEMPERATURE

An increase in average annual temperatures, by itself, would have little effect on the planning area, other than adjustments to new development anticipated under *Burbank2035* in response to warmer temperatures. For example, increased evapotranspiration rates would affect detention basins and landscaped areas, resulting in increased irrigation demand, and potentially greater overall energy consumption to meet space cooling needs.

PRECIPITATION AND FIRE RISK

Although global climate change models generally predict an increase in overall precipitation on a worldwide scale, there is no such consistency among the results of regional models applied to California. Given the uncertainty associated with projecting the amount of annual precipitation, any conclusion regarding significance of potential effects of climate change on precipitation volumes as they relate to reasonably foreseeable direct effects on physical conditions in the planning area would be speculative.

Based on the results of a variety of regional climate models and literature, it is reasonably foreseeable that snowpack would melt more rapidly. Given the magnitude and timing of the increase in winter runoff and the associated changes in reservoir use that may occur, determining the exact impact on the planning area would be speculative.
In addition to potential effects on runoff and water supply, reduced precipitation could increase the frequency and/or severity of wildfires in the Verdugo Mountains and Santa Monica Mountains.

Although various climate change models predict some increase in variability of weather patterns and an increasing incidence of extreme weather events, there is no consistency among the model results, with some predicting increased incidents of droughts and others predicting increased frequency of severe storm events.

SEA LEVEL

A consistent rise in sea level has been recorded worldwide over the last 100 years. Recorded rises in sea level along the California coast correlate well with the worldwide data. Based on the results of various global climate change models, sea level rise is expected to continue. Based on the consistency in past trends and future projections, and the correlation between data collected globally and data specific to California, it is reasonably foreseeable that some amount of sea level rise will occur along the California coast over the next 100 years. While sea level rise induced by climate change is reasonably certain, the planning area is not located in an area that would be affected by sea level rise.

WATER SUPPLY

Several recent studies have shown that existing water supply systems are sensitive to climate change. Potential impacts of climate change on water supply and availability could directly and indirectly affect a wide range of institutional, economic, and societal factors. Residential, industrial, and agricultural land uses all are affected by the cost and security of water supply. Much uncertainty remains, however, with respect to the overall impact of global climate change on future water supplies.

Little work has been performed on the effects of climate change on specific groundwater basins or groundwater recharge characteristics (Kiparsky and Gleick 2005). Changes in rainfall and changes in the timing of the groundwater recharge season would result in changes in recharge. Warmer temperatures could increase the period where water is on the ground by reducing soil freeze. Conversely, warmer temperatures could lead to higher evaporation or shorter rainfall seasons, which could mean longer droughts than in past years. The specific extent to which various meteorological conditions will change and the impact of that change on groundwater are both unknown. A reduced snowpack, coupled with changes in precipitation, could require a change in the operating procedures for California's existing dams and conveyance facilities (Kiparsky and Gleick 2005).

In 2003, CEC's Public Interest Energy Research (PIER) program established the California Climate Change Center (CCCC) to conduct climate change research relevant to the state. Executive Order S-3-05 called for the California Environmental Protection Agency (CalEPA) to prepare biennial science reports on the potential impact of continued climate change on certain sectors of California's economy. CalEPA entrusted PIER and its CCCC to lead this effort. The climate change analysis contained in its first biennial science report concluded that major changes in water management and allocation systems could be required in order to adapt to the change. As less winter precipitation falls as snow, and more as rain, water managers would have to balance the need to construct reservoirs for water supply with the need to maintain reservoir storage for winter flood control. Additional storage could be developed, but at high environmental and economic costs.

Climate change is expected to have a greater effect in Southern California and on agricultural users in the Central Valley. Based on the conclusions of current literature regarding California's ability to adapt to global climate change, it is reasonably expected that over time, the state's water system will be modified to be able to address the projected climate changes, e.g., under dry and/or warm climate scenarios (DWR 2006). Although coping with climate change effects on California's water supply could come at a considerable cost, based on a thorough investigation of the issue, it is reasonably expected that statewide implementation of adaptation measures will likely enable California's water system to reliably meet future water demands. Given known projections, it is not useful to scale regional and state trends down to predict specific impacts in the planning area.

WATER QUALITY

Although there are various ways in which climate change could affect water quality, effects could be positive or negative depending on a variety of conditions. In addition, current water quality conditions in regional surface waters depend in large part on human activities, and this would continue into the future. The effects of climate change on water quality could be alleviated by, exacerbated by, or overwhelmed by effects directly related to localized human actions.

SUMMARY

Potential climate change effects would have environmental consequences throughout the planning area, although prediction of particular direct effects on physical conditions would be speculative. Implementation of *Burbank2035* goals and policies and GGRP measures and actions would reduce the extent and severity of climate change–associated impacts in the planning area by proactively planning for changes in climate and conditions, creating a policy framework to coordinate with State agencies planning for climate change, and providing methods to adapt to anticipated changes.

4.4.8 CUMULATIVE IMPACTS AND MITIGATION MEASURES

As discussed in the Introduction, the topic of GHG emissions is inherently a cumulative impact. Though significance thresholds can be developed by air districts, state regulatory agencies, or federal regulatory agencies, these thresholds and their related goals are ultimately design to effect change at a global level. While the evaluation presented above is focused on the proposed project, and is specific to the project, it is also considered cumulative because it is only as a contribution to a cumulative effect that the project-specific emissions have environmental consequences. Therefore, the analysis provided above includes the analysis of both the project and cumulative impacts.

4.5 BIOLOGICAL RESOURCES

4.5.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to biological resources associated with implementation of *Burbank2035*. The analysis includes a review of special-status species, sensitive habitats, wetlands, wildlife movement, and planning efforts associated with biological resources. *Burbank2035* Open Space and Conservation Element policies and *Burbank2035* implementation programs presented in the Plan Realization Element guide development and infrastructure practices to protect habitat and biological resources.

NOP Comments: In response to the NOP, no comments were received related to the biological resources analysis (see Appendices B and C).

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR), and other publicly available documents. The TBR is attached as Appendix A This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.5.2 ENVIRONMENTAL SETTING

Section 6.1 of Appendix A describes the vegetation, habitat, and wildlife in the planning area, including special-status species, sensitive habitats, and wetlands. A summary of that information is presented below.

VEGETATION AND WILDLIFE

- **Vegetative Communities:** The vegetative communities occurring in the planning area include Annual Grasses and Forbs Alliance, Coast Live Oak Alliance, Coastal Mixed Hardwood Alliance, California Sagebrush Alliance, Lower Montane Mixed Chaparral Alliance, Soft Scrub–Mixed Chaparral Alliance, Sumac Shrub Alliance, and four nonnative vegetative communities for grasses and trees. The Southern Sycamore Alder Riparian Woodland is a sensitive natural community that occurs within the planning area. The Southern Cottonwood Willow Riparian Forest was mapped in 1935 on the Los Angeles River near the present site of the Ventura Freeway and Walt Disney and Burbank studios; however, this sensitive natural community is no longer present within the planning area.

- **Special-Status Plants:** Based on the results of California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) database searches of sensitive natural resources within the planning area and the surrounding two-mile buffer, habitats present in the planning area have the potential to support 11 special-status plant species. Three of these species are federally listed as endangered and two are state-listed as endangered; additionally, all 11 species are tracked by CNPS, which lists 10 of them as CNPS List 1B species and one as a CNPS List 2 species. Table 6-2 in Appendix A provides details on special-status plants with the potential to occur in the planning area.

- **Special-Status Wildlife:** Based on the results of CNDDB database searches within the planning area and the surrounding two-mile buffer area, habitats in the planning area have potential to support nine special-status wildlife species. One of these species is federally listed as threatened and all are state-listed as endangered,

fully protected, or as California Species of Special Concern (SSC). Table 6-3 in Appendix A provides details on special-status wildlife species with the potential to occur in the planning area.

4.5.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to biological resources, including special status species and habitat, in the planning area. They provide the regulatory framework for addressing all aspects of biological resources that would be affected by implementation of *Burbank2035*. The regulatory setting for biological resources is discussed in detail in Appendix A.

- **Federal Endangered Species Act:** The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over projects that may result in take of a species listed as threatened or endangered under the Endangered Species Act (ESA). If implementation of a project is likely to result in take of a federally listed species, then the project applicant must either obtain an incidental-take permit under ESA Section 10(a) or complete a federal interagency consultation process under ESA Section 7 before the take occurs. An incidental-take permit typically requires various types of mitigation to compensate for or minimize the take.

- **Migratory Bird Treaty Act:** The Migratory Bird Treaty Act (16 USC 703–711) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the U.S. Secretary of the Interior. Most native bird species fall under the jurisdiction of this act.

- **Clean Water Act:** Section 404 of the Clean Water Act (CWA) (33 USC 1252–1376) requires a project applicant to obtain a permit from the U.S. Army Corps of Engineers (USACE) before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Under Section 401 of the CWA, an applicant for a Section 404 permit must obtain a certificate from the appropriate state agency affirming that the intended dredging or filling activity is consistent with the state's water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board.

- **California Endangered Species Act:** The California Endangered Species Act (CESA) mandates that state agencies should not approve projects that would jeopardize the continued existence of endangered or threatened species if reasonable and prudent alternatives are available. Take authorizations from the Department of Fish and Game (DFG) are required for any unavoidable impact on state-listed species resulting from proposed projects.

- **Lake and Streambed Alteration:** Pursuant to provisions included in Sections 1600–1603 of the California Fish and Game Code, DFG is empowered to issue streambed alteration agreements for projects that would "divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake."

- **Porter-Cologne Water Quality Act:** This legislation requires the Regional Water Quality Control Board (RWQCB) to prepare and periodically update water quality control basin plans. Each basin plan establishes water quality standards for surface water and groundwater, as well as actions to control point and nonpoint sources of pollution to achieve and maintain these standards. Waters of the state within the planning area fall

under the jurisdiction of the Los Angeles RWQCB. Projects that discharge waste to wetlands or waters of the state must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA. More recently, the applicable RWQCB has also generally taken jurisdiction over waters of the state that are not subject to USACE jurisdiction under the CWA, in cases where USACE has determined that certain features do not fall under its jurisdiction. Mitigation requiring no net loss of wetlands and waters of the state is typically required.

- **Protection of Bird Nests and Raptors:** Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., hawks, owls, eagles, falcons), including their nests or eggs.

- **Burbank Municipal Code:** Section 7-4-108 of the Burbank Municipal Code (BMC) requires the Park, Recreation, and Community Services Director to develop and maintain a restricted list of trees, including landmark trees, trees of outstanding size and beauty, and dedicated trees. These trees must be identified, mapped and recorded, and given special treatment to retain and protect them.

4.5.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analyses of impacts on biological resources is qualitative and based on available habitat and species occurrence information for the planning area along with review of regional information. The analysis assumes that all future and existing development within the planning area complies with all applicable laws, regulations, design standards, and plans. An analysis of cumulative impacts uses qualitative information for the planning area and the region.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential biological resources impacts include:

POLICIES

Open Space and Conservation Element

- **Policy 6.2:** Protect the ecological integrity of open spaces and maintain and restore natural habitats and native plant communities.

- **Policy 6.3:** Prohibit incompatible recreation activities that may damage open spaces or expose people to hazards.

- **Policy 6.4:** Promote the acquisition, conservation, and preservation of land in the Verdugo Mountains.

- **Policy 8.1:** Prohibit development that jeopardizes or diminishes the integrity of sensitive or protected plant and animal communities.

- **Policy 8.2:** Improve ecological and biological conditions in urban and natural environments when reviewing proposals for site development, as well as when making public improvements.
- **Policy 8.3:** Support public acquisition of parcels key to the integrity of ecosystems.
- **Policy 8.4:** Naturalize disturbed areas and prevent the invasion of exotic plants.
- **Policy 8.5:** Encourage landscaping that incorporates native plant species.

PROGRAMS

Open Space and Conservation Element

- **Program OSC-6: Open Space Management.** Proactively manage open space resources by implementing the following actions:
  - Establish a management program for open space that provides appropriate public access for all segments of the population while recognizing preservation goals.
  - Develop a program for the ongoing monitoring of natural resources identified by the California Department of Fish and Game Natural Diversity Data Base and sensitive habitats identified in the City.
  - Evaluate and monitor the impact of public access on habitat.
- **Program OSC-7: Development Review.** Implement the following actions during development review and the CEQA process to achieve Open Space and Conservation Element goals and policies:
  - Require parkland dedication and improvement as part of large residential developments. The required dedication shall be 3 acres for every 1,000 residents expected in the development. Allow an in-lieu fee to be paid if the applicant is not able to dedicate land or the land is considered unsuitable for park or recreation use.
  - Encourage applicants to use native plants and low-water landscaping methods.
  - Promote the use of native plant species in landscaping areas adjacent to open space.
  - Evaluate change to the total mountain area for any proposed development in the Verdugo Mountains.
  - Require applicants to comply with NPDES permit requirements and the Stormwater Master Plan and demonstrate that their development will:
    - incorporate structural and nonstructural best management practices to mitigate projected increases in pollutant loads and flows;
    - control the velocity of pollutant loading flows during and after construction;
    - limit areas of impervious surfaces and preserve natural areas;

  - limit directly connected areas of impervious surfaces;
  - use natural treatment systems such as wetlands and bioswales to treat stormwater runoff where technically and economically feasible;
  - provide areas for on-site infiltration and/or temporary retention areas;
  - limit disturbance of natural water bodies, natural drainage systems, and highly erodable areas;
  - use pollution prevention methods, source controls, and treatment with small collection strategies located at or as close as possible to the source; and
  - implement erosion protection during construction.
- Require developers to pay the cost of providing new and/or improved water services to project sites.
- Require project applicants to satisfy the criteria set forth in Sections 10910–10915 of the California Water Code and Section 66473.7 of the Government Code to prepare a water supply assessment or water supply verification demonstrating available water supplies exist to support development.
- Require compliance with state Title 24 building construction standards and Energy Star standards for all development projects.

► **Program OSC-10: Open Space Preservation Organizations and Agencies.** Continue to work with adjacent jurisdictions, the Santa Monica Mountains Conservancy, and federal and state agencies to identify, conserve, and protect urban open space, hillside areas, and lands accessible for public use. Pursue grants and other resources to plan for open space preservation and, as appropriate, purchase properties to be included in the open space system. Use conservation easements where feasible as part of the City's open space acquisition program.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on biological resources are considered significant if adoption and implementation of *Burbank2035* would:

► have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service;

► have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service;

► have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with local policies or ordinances protecting biological resources, including but not limited to Section 7-4-108 of the BMC protecting certain trees; or
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

There are no habitat conservation plans, natural community conservation plans, or other related plans for lands within the planning area. Therefore, there would be **no impact** related to conflict with provisions of such a plan.

Implementation of *Burbank2035* would require compliance with existing City regulations, including BMC Section 7-4-108. BMC Section 7-4-108 requires the City to develop and maintain a restricted list of trees in the city, including landmark trees, trees of outstanding size and beauty, and dedicated trees. These trees must be identified, mapped and recorded, and given special treatment to retain and protect them. Implementation of *Burbank2035* would include implementation of existing or updated city regulations, including BMC Section 7-4-108. Implementation of *Burbank2035* would not result in a conflict with local policies or ordinances protecting biological resources, including but not limited to BMC Section 7-4-108 protecting certain trees, and there would be **no impact**.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.5-1 **Impacts to Special-Status Species.** *Adoption and implementation of Burbank2035 would result in the loss or degradation of existing populations or suitable habitat of special-status plant and wildlife species. However, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *impact.*

The planning area supports suitable habitat for 11 special-status plant species, as shown in Table 6-2 in Appendix A. Native vegetation communities are concentrated within open space areas in the Verdugo Mountains. Vegetation communities occurring within the planning area include shrub and chaparral, grassland, woodland hardwood, and areas of nonnative vegetation.

In addition, nine special-status wildlife species occur within the planning area, as shown in Table 6-3 in Appendix A. Plant or wildlife populations that occur in the planning area could be affected by:

- land use changes either directly or indirectly through modification of suitable habitat caused by pollutants transported by urban runoff and other means;
- changes in vegetation as a result of land use change and management practices;
- altered hydrology or land forms from grading, excavation, and construction of adjacent residential development and roadways;
- habitat fragmentation; and
- the introduction of invasive species or noxious weeds from surrounding development.

Native plants are protected by the California Fish and Game Code (NPPA, Chapter 10, Sections 1900-1913). In addition, DFG generally requires a CESA Section 2081(b) permit for incidental take of listed threatened and endangered plants from development activities. CEQA protects rare and endangered plants under Section 15380 and DFG maintains the CRPR list of rare plants; CRPR list 1B and 2 plants are generally considered rare under CEQA Guidelines Section 15380. According to the thresholds of significance listed above, a significant impact would occur if a substantial degradation in the quality of the environment or reduction of habitat would occur that would eliminate or reduce the population of a sensitive species within the planning area.

Burbank2035 does not propose land use changes that would convert existing open space areas containing native vegetation or habitat to developed uses. However, future development, including infrastructure improvements, could potentially result in loss or degradation of suitable habitat or populations of special-status species. *Burbank2035's* Open Space and Conservation Element includes several policies that would protect special-status plant species and habitat for special-status wildlife. Open Space and Conservation Element Policies 6.2, 6.3, 8.1, 8.2, 8.4, and 8.5 would require open space protection, including protection of ecological integrity, maintaining and restoring natural habitats, providing buffers between open spaces and developed areas, and prohibiting incompatible recreation activities. Development that would diminish the integrity of sensitive or protective plant and animal communities would be prohibited. The City would also promote naturalization of disturbed areas and use of native plant species in landscaping. Open Space and Conservation Element Policies 6.4 and 8.3 would also support acquisition of land for conservation, including land in the Verdugo Mountains and parcels key to maintaining the integrity of ecosystems.

Open Space and Conservation Programs in *Burbank2035* would address management of open space (Program OSC-6), including ongoing monitoring of CNDDB- and City-identified resources, and monitoring impact of public access on habitat. During development review (Program OSC-7), the City would evaluate change to the total mountain area for any proposal in the Verdugo Mountains. Under Program OSC-10, the City would continue to work with regional groups on open space conservation.

Implementation of *Burbank2035* policies and programs discussed above would reduce potential direct and indirect impacts on special-status species within the planning area. Therefore, the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.5-2 **Impacts to Riparian Habitat or Sensitive Natural Communities.** *Adoption and implementation of Burbank2035 would result in the loss or degradation of riparian habitat or other sensitive natural communities considered sensitive habitats under CEQA. However, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *impact.*

The CNDDB includes documented occurrences of Southern Sycamore Alder Riparian Woodland in Sunset Canyon, Stough Canyon, and Wildwood Canyon, and in a fourth unnamed canyon to the northwest of Wildwood Canyon. Southern Sycamore Alder Riparian Woodland is considered a sensitive habitat under CEQA. Protocol-level surveys have not been conducted for all suitable habitat within the planning area.

This habitat could be affected either directly or indirectly through:

- modification of habitat caused by pollutants transported by urban runoff and other means;
- changes in vegetation as a result of land use change and management practices, altered hydrology or landforms from grading, excavation, and construction of adjacent residential development and roadways;
- habitat fragmentation; and
- the introduction of invasive species or noxious weeds from surrounding development..

Burbank2035 does not propose land use changes that would convert existing open space areas containing native vegetation or habitat to developed uses. However, future development, including infrastructure improvements, could potentially result in loss or degradation of riparian habitat or sensitive natural communities. *Burbank2035's* Open Space and Conservation Element includes several policies that would protect sensitive habitats. Open Space and Conservation Element Policies 6.2, 6.3, 8.1, 8.2, 8.4, and 8.5 would require open space protection, including protection of ecological integrity, maintaining and restoring natural habitats, providing buffers between open spaces and developed areas, and prohibiting incompatible recreation activities. Development that would diminish the integrity of sensitive or protective plant and animal communities would be prohibited. The City would also promote naturalization of disturbed areas and use of native plant species in landscaping. Open Space and Conservation Element Policies 6.4 and 8.3 would also support acquisition of land for conservation, including land in the Verdugo Mountains and parcels key to maintaining the integrity of ecosystems.

Open Space and Conservation Programs in *Burbank2035* would address management of open space (Program OSC-6), including ongoing monitoring of CNDDB- and City-identified resources, and monitoring impact of public access on habitat. During development review (Program OSC-7), the City would evaluate change to the total mountain area for any proposal in the Verdugo Mountains. Under Program OSC-10, the City would continue to work with regional groups on open space conservation.

Implementation of *Burbank2035* policies and programs discussed above would reduce potential direct and indirect impacts on riparian habitat and sensitive natural communities. Therefore, the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.5-3 **Impacts to Federally-Protected Wetlands.** *Adoption and implementation of Burbank2035 would result in the loss or degradation of federally-protected wetlands or vernal pools. However, adoption and implementation of Burbank2035 policies and programs and enforcement of state and federal regulations would result in a* ***less-than-significant*** *impact.*

The planning area supports riparian and wetland plant communities that likely qualify for protection under state and/or federal regulations. Water bodies within the planning area include the Los Angeles River and the Burbank Western Channel. Habitats in these water bodies include patches of riparian and wetland habitats found along the Los Angeles River. Delineation of wetland and aquatic habitats that would be considered jurisdictional waters of

the United States under Section 404 of the CWA or waters of the state under the Porter-Cologne Water Quality Control Act has not been conducted for the entire planning area. There are no documented vernal pools in the planning area.

Federally-protected wetlands could be affected by proposed land use changes either directly or indirectly through:

- modification of suitable habitat caused by pollutants transported by urban runoff and other means;
- changes in vegetation as a result of land use change and management practices;
- altered hydrology or landforms from grading, excavation, and construction of adjacent residential development and roadways;
- habitat fragmentation; and
- the introduction of invasive species or noxious weeds from surrounding development.

Burbank2035 does not propose land use changes that would convert existing open space areas containing native vegetation or habitat to developed uses. However, future development, including infrastructure improvements, could potentially result in loss or degradation of wetlands. *Burbank2035's* Open Space and Conservation Element includes several policies that would protect wetlands. Open Space and Conservation Element Policies 6.2, 6.3, 8.1, 8.2, 8.4, and 8.5 would require open space protection, including protection of ecological integrity, maintaining and restoring natural habitats, providing buffers between open spaces and developed areas, and prohibiting incompatible recreation activities. Development that would diminish the integrity of sensitive or protective plant and animal communities, including wetlands, would be prohibited. Open Space and Conservation Element Policies 6.4 and 8.3 would also support acquisition of land for conservation, including land in the Verdugo Mountains and parcels key to maintaining the integrity of ecosystems.

Open Space and Conservation Programs in *Burbank2035* would address open space management (Program OSC-6), including ongoing monitoring of CNDDB- and City- identified resources, and monitoring impact of public access on habitat.

Therefore, implementation of *Burbank2035* is unlikely to result in substantial adverse effects to federally and state protected wetlands, vernal pools, and/or state protected riparian vegetation. This impact is considered **less than significant**.

Mitigation Measure

None required.

IMPACT 4.5-4 **Impacts to Wildlife Movement.** *Adoption and implementation of Burbank2035 would impede wildlife movement within the planning area. However, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *impact.*

Within the planning area, connections between permanently-designated open space areas (e.g., parks and forests) have generally been constrained and reduced to the point of creating, or necessitating, movement corridors.

Remaining open space areas, primarily in the Verdugo Mountains, allow for wildlife movement in the absence of defined corridors or protected open space. In addition, canyons and natural drainages can connect open space areas, creating wildlife linkages. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer periods of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized animals. These open space areas are currently large enough to support a variety of resident wildlife species and populations.

Wildlife movement is affected when physical constraints impede the ability of wildlife to search for food, water, shelter, and mates. In addition, when urban development fragments open space or creates obstacles or distractions, it compromises the quality of wildlife corridors and further hinders wildlife movement.

Implementation of *Burbank2035* would result in further protection for existing open spaces and wildlife corridors. *Burbank2035* does not propose land use changes that would convert existing open space areas containing native vegetation or habitat to developed uses. However, future development, including infrastructure improvements, could potentially result in loss or degradation of wildlife corridors. *Burbank2035's* Open Space and Conservation Element includes several policies that would protect habitats and wildlife movement corridors. Open Space and Conservation Element Policies 6.2, 6.3, 8.1, 8.2, 8.4, and 8.5 would require open space protection, including protection of ecological integrity, maintaining and restoring natural habitats, providing buffers between open spaces and developed areas, and prohibiting incompatible recreation activities. Development that would diminish the integrity of sensitive or protective plant and animal communities would be prohibited. The City would also promote naturalization of disturbed areas and use of native plant species in landscaping. Open Space and Conservation Element Policies 6.4 and 8.3 would also support acquisition of land for conservation, including land in the Verdugo Mountains and parcels key to maintaining the integrity of ecosystems.

Open Space and Conservation Programs in *Burbank2035* would address management of open space (Program OSC-6), including ongoing monitoring of CNDDB- and City- identified resources, and monitoring impact of public access on habitat. During development review (Program OSC-7), the City would evaluate change to the total mountain area for any proposal in the Verdugo Mountains. Under Program OSC-10, the City would continue to work with regional groups on open space conservation.

Implementation of *Burbank2035* policies and programs would ensure that wildlife corridors would be preserved. Therefore, impacts to wildlife corridors and wildlife movement would be minimized, and the impact would be **less than significant**.

Mitigation Measure

None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

The cumulative context for biological resources extends beyond the planning area to include the surrounding undeveloped areas of the Verdugo Mountains and the Santa Monica Mountains, which provide high quality habitat in the region and thus have the greatest potential to support sensitive biological resources.

IMPACT 4.5-5 **Cumulative Effects on Special-Status Species.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would result in the loss or degradation of existing populations or suitable habitat of special-status plant and wildlife species, a potentially significant cumulative impact. However, adoption and implementation of Burbank2035 land use plan, policies and programs would reduce effects on special-status species. Burbank 2035's contribution to this impact would not be considerable, and the impact would be* ***less than significant****.*

Plant or wildlife populations that occur in the Verdugo and Santa Monica Mountains could be affected by cumulative land use changes either directly or indirectly through modification of suitable habitat caused by pollutants transported by urban runoff and other means, changes in vegetation as a result of land use change and management practices, altered hydrology or land forms from grading, excavation, and construction of adjacent residential development and roadways, habitat fragmentation, and the introduction of invasive species or noxious weeds from surrounding development.

Burbank2035 does not propose land use changes that would convert existing open space areas containing native vegetation or habitat to developed uses. Furthermore, the same policies and programs described in Impact 4.5-1 for program-level impacts would reduce *Burbank2035's* contribution to cumulative effects. Because *Burbank2035* would not convert existing open space areas to developed uses and would implement these policies and programs, the project's contribution to cumulative effects would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.5-6 **Cumulative Effects on Riparian Habitat or Sensitive Natural Communities.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would result in the loss or degradation of riparian habitat or other sensitive natural communities considered sensitive habitats under CEQA. However, adoption and implementation of Burbank2035 land use plan, policies and programs would reduce effects on riparian habitat and sensitive natural communities. Burbank 2035's contribution to would not be considerable, and the impact would be* ***less than significant****.*

Sensitive habitats, including riparian habitat in canyons and drainages, in the Verdugo Mountains and Santa Monica Mountains could be affected by cumulative land use changes either directly or indirectly through modification of suitable habitat caused by pollutants transported by urban runoff and other means, changes in vegetation as a result of land use change and management practices, altered hydrology or land forms from grading, excavation, and construction of adjacent residential development and roadways, habitat fragmentation, and the introduction of invasive species or noxious weeds from surrounding development.

Burbank2035 does not propose land use changes that would convert existing open space areas of sensitive or riparian habitat to developed uses. Furthermore, the same policies and programs described in Impact 4.5-2 for program-level impacts would reduce *Burbank2035's* contribution to cumulative effects. Because *Burbank2035* would not convert existing open space areas to developed uses and would implement these policies and programs, the project's contribution to cumulative effects would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.5-7 **Cumulative Effects on Federally-Protected Wetlands.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would result in the loss or degradation of federally-protected wetlands or vernal pools. However, adoption and implementation of Burbank2035 land use plan, policies and programs would reduce effects on wetlands. Burbank 2035's contribution to this impact would not be considerable, and the impact would be* ***less than significant****.*

Sensitive habitats, including wetlands, in the Verdugo Mountains and Santa Monica Mountains could be affected by cumulative land use changes either directly or indirectly through modification of suitable habitat caused by pollutants transported by urban runoff and other means, changes in vegetation as a result of land use change and management practices, altered hydrology or land forms from grading, excavation, and construction of adjacent residential development and roadways, habitat fragmentation, and the introduction of invasive species or noxious weeds from surrounding development.

Burbank2035 does not propose land use changes that would convert existing open space areas of wetland habitat to developed uses. Furthermore, the same policies and programs described in Impact 4.5-3 for program-level impacts would reduce *Burbank2035's* contribution to cumulative effects. Because *Burbank2035* would not convert existing open space areas to developed uses and would implement these policies and programs, the project's contribution to cumulative effects would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.5-8 **Cumulative Effects on Wildlife Movement.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would impede wildlife movement in the Verdugo and Santa Monica Mountains. However, adoption and implementation of Burbank2035 land use plan, policies and programs would reduce effects on wetlands. Burbank 2035's contribution to this impact would not be considerable, and the impact would be* ***less than significant****.*

The Verdugo Mountains and Santa Monica Mountains provide corridors allowing movement of wildlife. Although *Burbank 2035* does not propose land use changes that would affect open space in these mountain ranges, cumulative changes, including land use changes, could affect wildlife movement either directly or indirectly due to factors listed in Impact 4.5-4 above. *Burbank2035* does not propose land use changes that would convert existing open space areas to developed uses. Furthermore, the policies and programs described in Impact 4.5-4 would reduce *Burbank2035's* contribution to cumulative effects. Because *Burbank2035* would not convert existing open space areas to developed uses and would implement these policies and programs, the project's contribution to cumulative effects would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None require.

4.6 CULTURAL RESOURCES

4.6.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to cultural resources associated with implementation of *Burbank2035*. The analysis includes an overview of cultural resources in Burbank, a discussion of federal, state, and local regulations pertaining to the management of cultural resources, and a discussion of the type of cultural resources likely to be encountered in the planning area. *Burbank2035* Land Use Element and Open Space and Conservation Element policies and implementation programs presented in the Plan Realization Element promote the identification, protection, and maintenance of historic and cultural resources.

NOP Comments: In response to the NOP released for this project (see Appendix B), the City received a comment letter from the Native American Heritage Commission. The letter stated that no Native American cultural resources were identified in the planning area (see Appendix C).

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR) and other publicly available documents. The TBR is attached to this document as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.6.2 ENVIRONMENTAL SETTING

Section 7.0 of Appendix A provides a prehistoric and historic overview of Burbank and surrounding areas, describes methods of identifying known cultural resources in the planning area, and discusses themes and property types located within the city. It also includes a regulatory setting pertaining to cultural resources located within the planning area. Key findings from the environmental setting are summarized below.

- There are listed or eligible properties within the city that are listed on the California Points of Historical Interest, the California Register of Historical Resources (CRHR), and the National Register of Historic Places (NRHP). These are further described in the TBR.

- Two archaeological sites and 17 additional historic resources were identified in a records search conducted at the South Central Coastal Information Center (SCCIC) within the city. The additional historic resources consisted of historic adobe complexes, multi-family residences, structures associated with the airport, commercial buildings, and the Little White Chapel Christian Church.

4.6.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to cultural resources in the planning area. They provide the regulatory framework for addressing all aspects of cultural resources that would be affected by implementation of *Burbank2035*. The regulatory setting for cultural resources is discussed in detail in Appendix A. Key regulations used to reduce environmental impacts are summarized below.

- **Section 106 of the National Historic Preservation Act (NHPA):** Section 106 of the NHPA requires federal agencies, or those they fund or permit, to consider the effects of their actions on properties that may be eligible for listing in the National Register of Historic Places (NRHP).

- **California Environmental Quality Act (CEQA):** CEQA specifically defines a "historical resource" and explicitly defines when an action would have a substantial adverse change in the significance of an historical resource. CEQA includes provisions that specifically address the protection of cultural resources by requiring consideration of impacts of a project on unique archaeological resources and historical resources.

- **California Health and Safety Code Section 7050:** This act states that if human remains are uncovered during ground-disturbing activities, the contractor or the project proponent shall immediately halt potentially damaging excavation in the area of the burial and notify the County Coroner to determine the nature of the remains.

- **Senate Bill 18:** Senate Bill 18 requires that cities and counties contact, and consult with, California Native American tribes before adopting or amending general plans, specific plans, or when designating land as open space.

- **California Register of Historical Resources (CRHR):** The CRHR includes resources that are listed in or are formally determined eligible for listing on the NRHP, as well as some California State Landmarks and Points of Historical Interest. The eligibility criteria for listing in the CRHR are similar to those for NRHP listing but focus on the importance of the resources to California history and heritage.

- **California State Historical Landmarks:** California Historical Landmarks (CHLs) are buildings, structures, sites, or places that have been determined to have statewide historical significance and meet specific criteria. The resource must also be approved for designation by the county or local jurisdiction, be recommended by the State Historical Resources Commission, and be officially designated by California State Parks. CHLs are automatically listed in the CRHR.

- **California Points of Historical Interest:** California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific, technical, religious, experimental, or other value.

- **Certified Local Government:** The City of Burbank is a Certified Local Government (CLG). The CLG program was established under the NHPA for cities throughout the United States and provides a percentage of funding as competitive grants to local governments participating in the program for use in the designation and protection of historic resources. CLGs also participate in Section 106 project reviews as consulting parties.

- **City of Burbank Historic Preservation Plan:** The purpose of this plan is to create guidelines and policies for historic preservation in the city, as well as to establish goals and direction for the City Heritage Commission concerning historic properties.

- **City of Burbank Historic Resource Management Ordinance:** The Ordinance, adopted by the Burbank City Council, provides guidance for designating Historic Resources within the city and also discusses the process

to alter or remove Historic Resources. Resources listed in the NRHP or the CRHR are automatically designated as Historic Resources and are considered listed on the local register.

- **Mills Act:** The Mills Act provides for a property tax reduction for owners of qualifying historic properties who agree to comply with certain preservation restrictions and use the property tax savings to help offset the costs to restore, rehabilitate and maintain their historic resource according to the Secretary of the Interior's Standards and the California Historical Building Code.

4.6.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analyses of impacts on cultural resources is qualitative and based on available cultural resources information for the planning area. The analysis assumes that all future and existing development within the planning area complies with applicable laws, regulations, design standards, and plans. An analysis of cumulative impacts uses qualitative information for the planning area.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential cultural resources impacts include:

POLICIES

Land Use Element

- **Policy 3.10:** Preserve historic resources, buildings, and sites, including those owned by private parties and government agencies, including the City of Burbank. Alter such resources only as necessary to meet contemporary needs and in a manner that does not affect the historic integrity of the resource.

- **Policy 3.11:** Carefully consider the evolution of community character over time. Evaluate projects with regard to their impact on historic character, their role in shaping the desired future community character, and how future generations will view today's Burbank.

- **Policy 3.12:** Require that new development tie into the city's grid street pattern.

Open Space and Conservation Element

- **Policy 1.2:** Involve community groups in the identification, acquisition, and management of natural resource areas, recreation facilities, historical and cultural sites, and aesthetic and beautification programs.

- **Policy 6.1:** Recognize and maintain cultural, historical, archeological, and paleontological structures and sites essential for community life and identity.

PROGRAMS

Land Use Element

- **Program LU-4 Historic Preservation Plan**

  - Review the Historic Preservation Plan to ensure that its goals and policies are consistent with the Land Use Element and revise as appropriate.

  - Periodically review the historic resource management ordinance and preservation incentives.

  - Establish a process and criteria to locally designate historic districts identified in the City of Burbank Historic Context Report (2009).

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on cultural resources are considered significant if adoption and implementation of *Burbank2035* would:

- cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5;

- cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5;

- directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

- disturb any human remains, including those interred outside of formal cemeteries.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.6-1 **Substantial Change in the Significance of a Historical Resource.** *Adoption and implementation of Burbank2035 could result in new development and redevelopment of property throughout the planning area, which could cause a substantial change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5. Although implementation of Burbank2035 policies and programs would protect historical resources, this is considered a* ***potentially significant*** *impact.*

A variety of federal, state, and locally recognized historic resources are located in Burbank. These resources date from as early as 1798 (Rancho San Rafael), and are mostly centered in Downtown Burbank where early development of the city occurred. Resource types include residences and commercial and industrial buildings, pre-historic and historic period archaeological sites, as well as linear features such as roads and planned water systems. Various resources are listed in or are eligible for listing in the NRHP and/or the CRHR or as a California Point of Historical Interest. Some parts of the city have not been surveyed, except on a project-by-project basis. Thus, only a portion of the historical resources in the planning area are currently known. Anticipated development would occur through new infill development on vacant property, and redevelopment or revitalization of underutilized properties, which could lead to the demolition of historic or potentially historic buildings and

structures and/or damage to subsurface historic-period resources. Additionally, infrastructure or other public works improvements could result in damage to or demolition of other historical resources.

The City of Burbank Historic Preservation Plan provides guidelines and methods for identifying and managing cultural resources within the city. Instructive in nature, the Plan provides the framework for the creation and adoption of the City's preservation ordinance.

The City of Burbank's Historic Resource Management Ordinance further identifies two types of historic resources, Eligible Historic Resources and Designated Historic Resources. The Ordinance generally affords protections and a formal review process to properties that are formally elevated to the status of Designated Historic Resource. Designation under the Ordinance does not result in a determination of historic significance under CEQA, and vice versa. The City does not have a complete record of potentially historic properties that may exist within the city but have not yet been identified. Likewise, there is not a comprehensive list of properties in the city that have reached sufficient age to determine historical importance (generally considered 45 years in age), as the City's records of historical resources are updated, in part, based on research completed in support of CEQA and NHPA Section 106 analyses on proposed projects.

The Burbank Historic Resource Management Ordinance affords protections to formally Designated Historic Resources through project review by the Heritage Commission and establishment of protective covenants. However, these policies by themselves would not ultimately prevent the demolition or impairment of a historic building or structure that is not a formally Designated Historic Resource under the City's Historic Resource Management Ordinance but meets the definition of historical resource for the purpose of CEQA. Demolition of such a historical resource would be a significant impact under CEQA. Furthermore, it is possible that some structures that have not yet been surveyed could be identified as historical resources during the *Burbank2035* planning horizon. It is also possible that the owner of a Designated Historic Resource may request to be exempted from the requirements of the Historic Resource Management Ordinance and carry out work that may adversely affect the value or significance of a Designated Historic Resource on the basis of extreme financial hardship or adversity.

Several adopted federal, state, and local regulations guide the process of identifying and preserving historic resources in Burbank. State regulations provide incentives to preserve historic and cultural resources, while local policies provide guidance for the identification and protection of resources. Implementation of *Burbank2035* Open Space and Conservation Element Policies 3.10, 3.11, and 3.12 would protect historical resources and reduce the likelihood of demolishing historic buildings and structures by allowing alterations to designated historic structures only as necessary to meet contemporary needs, and in a manner that does not affect the historic integrity of the resource; by evaluating future development projects with regard to their impact on the historic character of designated resources; and by requiring that future development tie into the city's grid street pattern. Open Space and Conservation Element Policy 6.1 would require the City to recognize and maintain cultural historical, archeological, and paleontological structures and sites essential for community life and identity.

Implementation of *Burbank2035* policies to identify and protect historic resources, along with adherence to existing federal, state, and City regulations would preserve locally-designated historical resources. However, implementation of *Burbank2035* would not prevent the demolition or substantial adverse change of historic buildings and structures that qualify as CEQA historical resources, but have not yet been formally designated under the City's Historic Resource Management Ordinance. Furthermore, permitted exemptions from the

requirements of the Historic Resource Management Ordinance may occur on the basis of extreme financial hardship or adversity. Therefore, absent mitigation, this impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 4.6-1: *The City of Burbank shall modify* Burbank2035 *Implementation Program LU-4 as follows to address the potential for substantial adverse change to historical resources:*

Program LU-4: Historic Preservation ~~Plan~~

To reduce impacts to both known and as-yet-unknown historical resources within Burbank, the City shall:

- *Review, revise, and maintain the Historic Preservation Plan to ensure that it is informed by current resource data and its goals and policies are consistent with the Land Use Element. ~~and revise as appropriate.~~*
- *Establish a list of Eligible Historic Resources to be maintained by the Community Development Director. Update the list of Eligible Historic Resources every five (5) years to identify as-yet-unknown historical resources (as defined in State CEQA Guidelines Section 15064.5) as potential resources are identified through citywide surveys and on a project-by-project basis.*
- *Periodically review and revise the H~~h~~istoric R~~r~~esource M~~m~~anagement O~~o~~rdinance and preservation incentives to account for new resources as they are identified.*
- ~~*Establish a process and criteria to locally designate historic districts identified in the City of Burbank Historic Context Report (2009).*~~
- *Require evaluation by a qualified architectural historian for projects subject to CEQA involving buildings constructed more than 45 years prior to the project application. If the evaluation determines that historical resources (as defined in State CEQA Guidelines Section 15064.5) would be adversely affected, the City shall require the proposed project to comply with Section 10-1-928 of the Historic Resource Management Ordinance.*
- *Require assessment by a qualified archeologist for projects subject to CEQA involving ground-disturbing activities on previously undisturbed land to identify the potential to encounter buried historical resources (as defined in State CEQA Guidelines Section 15064.5). If the assessment determines that buried resources may be present, the City shall require preparation and implementation of a treatment plan outlining measures for monitoring, data recovery, and/or handling inadvertent discoveries.*

Agency/Department:	*Community Development Department*
Funding Source:	*Grant funds, general fund*
Time Frame:	*Ongoing~~; identify historic districts within five (5) years of Burbank2035 adoption;~~ historic resource list updates every five (5) years*

Significance After Mitigation

Implementation of Mitigation Measure 4.6-1 above would reduce impacts to historical resources based on identification of resources that have not been formally designated under the City's Historic Resource Management Ordinance by requiring the City to establish a local list of Eligible Historic Resources and to update

this list every five (5) years to identify as-yet-unknown historical resources. Furthermore, Mitigation Measure 4.6-1 would require evaluation by a qualified architectural historian for projects subject to CEQA involving buildings constructed more than 45 years prior to the project application, and would require compliance with the Historic Resource Management Ordinance for as-yet-unknown historical resources that would be adversely affected by a proposed project. However, because it is uncertain that such measures will be feasible, and because permitted exemptions from the requirements of the Historic Resource Management Ordinance may occur on the basis of extreme financial hardship or adversity, this mitigation measure would not reduce the impact to a less-than-significant level. Therefore, this impact is considered **significant and unavoidable**.

IMPACT 4.6-2 **Substantial Change in the Significance of a Unique Archaeological Resource.** *Adoption and implementation of Burbank2035 could result in new development and redevelopment of previously undisturbed land throughout the planning area, which could cause a substantial change in the significance of a unique archaeological resource as defined in CEQA Guidelines Section 15064.5. This impact is considered* ***potentially significant****.*

Anticipated development in Burbank would occur through infill development on vacant property, and redevelopment or revitalization of underutilized properties, which could result in damage to prehistoric- and historic-period archaeological resources located at or near previously undisturbed ground surfaces. In addition, infrastructure and other improvements requiring ground disturbance could result in damage to or destruction of archaeological resources buried below the ground surface. Archaeological sites have the potential to contain intact deposits of artifacts, associated features, and dietary remains that could contribute to the regional prehistoric or historic record. Historical resources, as defined in CEQA Guidelines Section 15064.5(a)(3)(D) include resources which "have yielded, or may be likely to yield, information important in history or prehistory." Archaeological sites may also be a "unique archaeological resource," (as defined in Public Resources Code (PRC) Section 21083.2(g)(1)-(3)) or may be of cultural or religious importance to Native American groups, particularly if the resource includes human and/or animal burials.

Burbank2035 Open Space and Conservation Element Policy 6.1 directs the City to recognize and maintain archaeological resources. The direction to recognize archaeological resources would typically be accomplished through, as appropriate, research, surveys, and testing prior to construction, as well as monitoring during ground disturbing activities. The proper handling of discovered resources and enforcement of applicable state and federal laws and regulations would qualify as the directed maintaining of archaeological resources. Much of the planning area is built-out, and most new development pursuant to *Burbank2035* will therefore take place above ground on previously disturbed land, thereby minimizing the potential to disturb archeological resources. However, ground-disturbing activities on previously undisturbed land could affect the integrity of an as-yet-unknown archaeological site, thereby causing a substantial change in the significance of the resource. Although efforts will be made to identify and mitigate impacts to potential archaeological resources prior to ground disturbance, there is no way to know if significant archaeological resources occur below undisturbed ground surfaces. Therefore, absent mitigation, this impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 4.6-2: *Implement Mitigation Measure 4.6-1.*

Significance After Mitigation

Implementation of Mitigation Measure 4.6-1 above would require assessment by a qualified archeologist for projects subject to CEQA involving ground-disturbing activities on previously undisturbed land, and would require preparation and implementation of a treatment plan if buried resources would be affected by a proposed project. However, because it is uncertain that such measures will be feasible, this mitigation measure would not reduce the impact to a less-than-significant level. Therefore, this impact is considered **significant and unavoidable**.

IMPACT 4.6-3 **Disturbance of Human Remains.** *Adoption and implementation of Burbank2035 could result in new development and redevelopment of previously undisturbed land throughout the planning area, which could disturb human remains. This impact is considered* ***less than significant****.*

Anticipated development in Burbank would occur through new infill development on vacant property, and redevelopment or revitalization of underutilized properties, which could disturb human remains located under previously undisturbed ground surfaces. In addition, infrastructure and other improvements requiring ground disturbance could disturb human remains below the ground surface.

As described in Appendix A and the regulatory setting, procedures for the treatment of discovered human remains are contained in California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097. If human remains are uncovered during ground-disturbing activities, all such activities within a 100-foot radius of the find shall be halted immediately and the project applicants' designated representative shall be notified. The project applicants shall immediately notify the county coroner and a qualified professional archaeologist. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The project applicants' responsibilities for acting upon notification of a discovery of Native American human remains are identified in detail in the California Public Resources Code Section 5097.9. The City of Burbank or its appointed representative and the professional archaeologist are then required to contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the property owner and the lead agencies would then determine the ultimate disposition of the remains. Therefore, compliance with California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097 would result in a **less-than-significant** impact to human remains.

Mitigation Measures

None required.

IMPACT 4.6-4 **Impacts to Unique Paleontological Resources.** *Earthmoving and excavation activities associated with implementation of Burbank2035 could damage previously unknown unique paleontological resources. This impact would be* ***potentially significant****.*

The planning area includes areas of non-fossil-bearing granitic rocks in the Verdugo Mountains. However, the portions of the planning area that lie within the San Fernando Valley are underlain by potentially fossil-bearing Pleistocene nonmarine sediment and Holocene alluvium. Fossils, including fossilized bones and teeth from small continental vertebrates (fish, lizards, frogs, snakes, birds, and rodents), fresh-water snail and clam shells, and fossilized wood and pollen, have been recovered at fossil sites in the alluvium at the Metro Red Line Universal City and North Hollywood Stations at depths at least 16 feet below grade (Lander 2000). Identifiable remains recovered in the planning area would be scientifically important if they represented a new or rare species, geologic (temporal) and/or geographic range extension, age-diagnostic or environmentally sensitive species, and/or a more complete specimen than those now available for their respective species.

Implementation of *Burbank2035* could result in ground disturbance, earthmoving and excavation activities associated with new infill development on vacant property, extension of infrastructure, and redevelopment or revitalization of underutilized properties. Because of the large number of fossils that have been recovered from alluvial deposits similar to those that underlie the planning area, there is a potential for uncovering additional as-yet unknown fossil remains during ground-disturbing activities on previously undisturbed land. Absent mitigation, this would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 4.6-4: *The City of Burbank shall modify* Burbank2035 *Implementation Program OSC-7 by adding the following bullet item:*

- *If paleontological resources are discovered during earthmoving activities associated with future development projects, the construction crew shall immediately cease work in the vicinity of the find and notify the City. The project applicant(s) shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate Paleontology guidelines (1996). The recovery plan shall include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the lead agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.*

Significance After Mitigation

Implementation of Mitigation Measure 4.6-4 would reduce paleontological resources impacts by requiring that fossil specimens be recovered and recorded and undergo appropriate curation, in the event that resources are encountered. Therefore, with implementation of Mitigation Measure 4.6-4, impacts to unique paleontological resources would be **less than significant**.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

The geographic context for cumulative impacts on historical resources, archeological resources, and paleontological resources is future development within Burbank, Glendale, and Universal City. These locations

are adjacent to the planning area and share common historic, archeological, and geologic characteristics. The geographic context for cumulative impacts to human remains is individual development sites.

IMPACT 4.6-5 **Cumulative Effects on Historical Resources.** *Adoption and implementation of Burbank2035 in addition to anticipated future development in Burbank, Glendale, and Universal City could cause a substantial change in the significance of historical resources as defined in CEQA Guidelines Section 15064.5. The loss of some historical resources may be prevented through implementation of Burbank2035 policies, the City of Burbanks's Historic Resource Management Ordinance, and preservation policies in other communities. However, this would not ensure that these resources can be protected and preserved. This impact is considered* ***potentially significant****.*

Historical resources within Burbank, Glendale, and Universal City include various types of buildings and/or structures, some of which share historical associations or similar attributes of architectural character. Potential future development in the planning area and surrounding region could include demolition or destruction of historical resources. Although some historic resources may be listed in the NRHP, the CRHR, or local listings, listing itself does not ensure protection of the resource. Future discretionary development in Burbank, Glendale, and Universal City would be subject to the requirements of CEQA. Not all municipalities have a formal review process that applies to all properties defined by CEQA as historical resources; thus, it is reasonable to presume that some historical resources could be substantially changed or demolished. The cumulative effect of future development would be the continued loss of these resources. Absent mitigation, this would be a **potentially significant** cumulative impact.

Mitigation Measures

Mitigation Measure 4.6-5: *Implement Mitigation Measure 4.6-1.*

Significance After Mitigation

As discussed above, the Burbank Historic Resource Management Ordinance affords protections to formally Designated Historic Resources through project review by the Heritage Commission and establishment of protective covenants. Implementation of Mitigation Measure 4.6-1 above would reduce impacts to historical resources to a less-than-significant level by requiring the City to establish a local list of Eligible Historic Resources and to update this list every five (5) years to identify as-yet-unknown historical resources. Furthermore, Mitigation Measure 4.6-1 would require evaluation by a qualified architectural historian for discretionary projects involving buildings constructed more than 45 years prior to the project application, and would require compliance with the Historic Resource Management Ordinance for as-yet-unknown historical resources that would be adversely affected by a proposed project. With implementation of Mitigation Measure 4.6-1, *Burbank2035*'s contribution would not be considerable, and the impact would be **less than significant**.

IMPACT 4.6-6 **Cumulative Effects on Archaeological Resources.** *Adoption and implementation of Burbank2035 in addition to anticipated future development in Burbank, Glendale, and Universal City could cause a substantial change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5. The loss of some archaeological resources may be prevented through implementation of Burbank2035 policies and similar policies in other communities. However, this would not ensure that these resources can be protected and preserved. This impact is considered* ***potentially significant****.*

Future development in the planning area and surrounding region pursuant to *Burbank2035* could include ground-disturbing activities on previously undisturbed land that could potentially affect archaeological resources. The cumulative effect of this future development is the continued loss of prehistoric cultural resources. Potential future development increases the likelihood that archaeological resources could be discovered. It is therefore possible that cumulative development could result in the demolition or destruction of unique archaeological resources, which could contribute to the erosion of the prehistoric record of the planning area and region. Absent mitigation, this would be a **potentially significant** impact.

Mitigation Measure

Mitigation Measure 4.6-6: *Implement Mitigation Measure 4.6-1.*

Significance After Mitigation

Though archaeological resources can sometimes be protected when discovered during excavation, there is no way to ensure that all such resources can be protected and preserved. Implementation of Mitigation Measure 4.6-1 above would require assessment by a qualified archeologist for discretionary projects in the City of Burbank involving ground-disturbing activities on previously undisturbed land, and would require preparation and implementation of a treatment plan if buried resources would be affected by a proposed project in the city. Impacts to as-yet-unknown archeological resources discovered in the city would be mitigated. Therefore, with implementation of Mitigation Measure 4.6-1, *Burbank2035*'s contribution would not be considerable, and the impact would be **less than significant**.

IMPACT 4.6-7 **Cumulative Effects on Human Remains.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would not result in cumulative impacts to human remains because these impacts are inherently site specific. This impact would be* ***less than significant****.*

Impacts to human remains are related to conditions and circumstances that are considered site specific. Therefore, the geographic context for the analysis of potential cumulative impacts to human remains consists of individual development sites. Although cumulative development in the region may include numerous projects with impacts to human remains, these impacts would affect each individual project, rather than resulting in an additive cumulative effect. Therefore, cumulative development would result in a **less-than-significant** cumulative impact to human remains.

Mitigation Measure

None required.

IMPACT 4.6-8 **Cumulative Effects on Paleontological Resources.** *Ground disturbance, earthmoving and excavation activities associated with implementation of Burbank2035 combined with construction activities in Burbank, Glendale, and Universal City could damage previously unknown unique paleontological resources. This impact is considered* ***significant****.*

Portions of the planning area that lie within the San Fernando Valley are underlain by potentially fossil-bearing Pleistocene nonmarine sediment and Holocene alluvium. Significant fossils, including unique specimens and vertebrate remains, have been discovered in Pleistocene and Holocene sediments throughout the Los Angeles

area, ranging from finds at the La Brea Tar Pits to mastodon and other fossils discovered in Western Riverside County during the construction of Diamond Valley Lake. Excavations and ground-disturbing activities on these sediments throughout the region have the potential to disturb significant paleontological resources. Absent mitigation, this cumulative impact would be **significant**.

Mitigation Measure

Mitigation Measure 4.6-8: *Implement Mitigation Measure 4.6-4.*

Significance After Mitigation

Ground disturbance, earthmoving and excavation activities associated with new infill development on vacant property, extension of infrastructure, and redevelopment or revitalization of underutilized properties are anticipated with implementation of *Burbank2035*. As discussed above, Mitigation Measure 4.6-4 would reduce paleontological resources impacts by requiring that fossil specimens be recovered and recorded and undergo appropriate curation, in the event that resources are encountered during construction activities in the City of Burbank. With implementation of Mitigation Measure 4.6-4, *Burbank2035's* contribution to significant cumulative paleontological resources impacts would not be considerable, and the impact would be **less than significant**.

4.7 ENERGY

4.7.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to energy conservation associated with implementation of *Burbank2035*. The analysis includes a review of energy consumption, including transportation energy, peak energy demand, alternative fuels, and non-renewable resources. The *Burbank2035* Air Quality and Climate Change Element, Land Use Element, Mobility Element, and Open Space and Conservation Element policies and implementation programs presented in the Plan Realization Element guide development and infrastructure practices to prevent the wasteful consumption of energy.

NOP Comments: In response to the NOP, one comment relevant to energy conservation was received from the California Energy Commission (CEC) (see Appendices B and C). The comment was focused on how to reduce energy use associated with the proposed project. The issue is further discussed in this section.

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR) and other publicly available documents. The TBR is attached as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.7.2 ENVIRONMENTAL SETTING

Section 8 of Appendix A describes the existing energy use, energy sources, and energy service providers for Burbank. The following components of the TBR provide useful background information to support environmental impact analysis:

- Burbank Water and Power (BWP) power plants generate approximately 40-50% of their electricity from natural gas obtained from Southern California Gas Company (SoCalGas). The remaining 50-60% is imported from remote facilities that use a mix of coal, nuclear, hydroelectric, and wind-based resources. Imported electricity is distributed into the city by the Los Angeles Department of Water and Power (LADWP) and City of Glendale power systems.
- BWP currently operates 11 turbines with a 550-kilowatt potential using landfill gas.

Table 4.7-1 describes BWP's electricity portfolio with respect to energy source and amount of electricity generated from each source. Table 4.7-2 presents annual consumption of BWP electricity by customer type.

4.7.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies provide a regulatory framework for addressing aspects of energy use that would be affected by implementation of *Burbank2035*. The regulatory setting for energy use is discussed in detail in Appendix A of this EIR. Key laws, regulations, and policies influencing *Burbank2035* are summarized below.

Table 4.7-1 Burbank Water and Power Annual Electric Supply		
Resource	**MWh**	**% of BWP Supply**
Intermountain Power Project (coal)	541,600	44.3
Hoover Uprating (hydro)	19,600	1.6
Palo Verde Nuclear	78,400	6.4
Magnolia Power Project (natural gas)	473,600	38.7
Firm and Non-Firm Contracts	38,900	3.2
On-Site Generation (natural gas)	16,500	1.3
Renewable Sources	53,800	4.4
Total	**1,222,400**	**100**

Note: BWP = Burbank Water and Power; MWh = megawatt-hours.

Source: BWP 2010

Table 4.7-2 Annual Electricity Consumption by User Type (2009-2010)		
Land Use/User Type	**mWh (in thousands)**	**% of Total Consumption**
Residential	277	24.4
Commercial/Other[1]	323	28.4
Industrial	536	47.2
Total	**1,136**	**100**

Notes: mWh = megawatt-hours

[1] Other includes schools, streetlighting, and miscellaneous uses

Source: BWP 2010

- National Energy Conservation Policy Act (NECPA): NECPA requires utilities to provide residential consumers with energy conservation audits and other services to encourage slower growth of electricity demand.

- Federal Energy Management Program: The Department of Energy's Federal Energy Management Program works to reduce the cost and environmental impact of the federal government by advancing energy efficiency and water conservation, promoting the use of distributed and renewable energy, and improving utility management decisions at federal sites.

- California Energy Commission (CEC): The CEC has five major responsibilities: (1) forecasting future energy needs and keeping historical energy data, (2) licensing thermal power plants 50 megawatts or larger, (3) promoting energy efficiency through appliance and building standards, (4) developing energy technologies

and supporting renewable energy, and (5) planning for and directing the state response to an energy emergency. Senate Bill (SB) 1037(2005) mandates that all publicly owned utilities (POUs), including BWP, report to the CEC on cost-effective and feasible energy efficiency programs. Assembly Bill (AB) 2021(2006) built upon SB 1037, further requiring POUs to develop energy efficiency targets on a triennial basis.

- California Public Utilities Commission (CPUC): The CPUC has authority to set electric rates, regulate natural gas utility service, protect consumers, promote energy efficiency, and ensure electric system reliability.

- Renewable Portfolio Standard (RPS): The RPS was established by SB 1078 (2002), requiring retail electricity providers to procure at least 1% of their electricity supplies from renewable resources to achieve a 20% renewable mix by no later than 2017. Since then, the CEC, the CPUC, and the California Power Authority approved the first Energy Action Plan (EAP) in 2003, which accelerated the 20% target date to 2010. A second EAP was adopted in 2005, which provided updates in energy policy. SB 1078 adopted the revised 2010 target date into law. A third EAP update was adopted in 2008, which "examines the state's ongoing actions in the context of global climate change" (CEC 2009). Executive Order S-14-08 expands the state's Renewable Energy Standard to 33% renewable power by 2020. In April 2011, SB X1-2 codified the goal of 33% by 2020 goal.

- Burbank Water and Power Renewable Portfolio Standard: BWP adopted a renewable portfolio standard on June 5, 2007 with the goal of increasing procurement of electricity from eligible renewable resources to achieve a portfolio level of 33% by 2020.

- 2006 Integrated Resource Plan Electric System: BWP prepared an updated Integrated Resource Plan (IRP) to provide safe, reliable, and low-cost energy services to its customers. The IRP addresses BWP's responses to future changes in loads, its approach to maintaining competitive power rates, and its efforts to support energy conservation and increase the portion of renewable energy in its energy portfolio (BWP 2006).

4.7.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035* compared to existing conditions. *Burbank2035* allows for future residential, commercial, office, and other land uses. This analysis estimates the energy consumption of implementing *Burbank2035* based on the types and intensity of anticipated land uses. Energy consumption estimates identified in this resource chapter are based on standard factors and do not reflect the individual characteristics of future projects that are not known today. This analysis also discusses whether energy efficiency regulations and strategies would prevent wasteful energy consumption associated with implementation of *Burbank2035*, and anticipated needs for physical expansion of electricity and natural gas infrastructure that would be required to support additional growth envisioned by *Burbank2035*.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential energy impacts include:

POLICIES

Air Quality and Climate Change Element

- **Policy 1.7:** Require reduced idling, trip reduction, and efficiency routing of transportation for City departments, where appropriate.
- **Policy 1.8:** Continue to acquire alternative fuel vehicles like hybrid, natural gas, electric, or hydrogen-powered vehicles when adding to the City's vehicle fleet.
- **Policy 1.9:** Encourage the use of zero-emission vehicles, low-emission vehicles, bicycles, and other non-motorized vehicles, and car-sharing programs. Consider requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.
- **Policy 1.10:** Give preference to qualified contractors using reduced-emission equipment for City construction projects and contracts for services, as well as businesses that practice sustainable operations.
- **Policy 1.11:** Offer incentives for all City employees to use means other than a single-occupant vehicle for their daily work commute. Require large employers, defined with the City's Transportation Demand Management program to offer similar incentives to reduce employee vehicle trips.
- **Policy 3.4:** Reduce greenhouse gas emissions from new development by promoting water conservation and recycling; promoting development that is compact, mixed-use, pedestrian-friendly, and transit-oriented; promoting energy-efficient building design and site planning; and improving the jobs/housing ratio.
- **Policy 3.5:** Submit an annual report on implementation of the Greenhouse Gas Reduction Plan, in conjunction with the annual report to the City Council regarding implementation of *Burbank2035*.
- **Policy 3.6:** Reduce greenhouse gas emissions by encouraging the retrofit of older, energy inefficient buildings.
- **Policy 3.7:** Update Burbank's communitywide greenhouse gas emissions inventory every 3–5 years.
- **Policy 3.8:** Transition all economic sectors, new development, and existing infrastructure and development to low- or zero-carbon energy sources. Encourage implementation and provide incentives for low- or zero-carbon energy sources.
- **Policy 3.9:** Continue efforts to diversify Burbank Water and Power's energy portfolio beyond 2020.

Land Use Element

- **Policy 1.1:** Accommodate a mix of residential and non-residential land uses in appropriate locations that support the diverse needs of Burbank residents, businesses, and visitors. Provide opportunities for living, commerce, employment, recreation, education, culture, entertainment, civic engagement, and socializing.

- **Policy 1.2:** With discretionary approval, allow for the density and intensity limits specified in *Burbank2035* to be exceeded for transit-oriented development projects within transit centers as identified in the Mobility Element. The density and intensity limits may be exceeded by no more than 25%.

- **Policy 1.3:** Maintain and protect Burbank's residential neighborhoods by avoiding encroachment of incompatible land uses and public facilities.

- P**olicy 1.4:** With discretionary approval, allow for the density and intensity limits to be exceeded, by no more than 25%, for exceptional projects that advance the goals and policies of *Burbank2035*.

- **Policy 2.1:** Consider sustainability when making discretionary land use and transportation decisions, policies, regulations, and projects.

- **Policy 2.2:** Preserve the undeveloped portion of the Verdugo Mountains as open space. Guide new development to infill locations in other parts of the city.

- **Policy 2.3:** Require that new development pay its fair share for infrastructure improvements. Ensure that needed infrastructure and services are available prior to or at project completion.

- **Policy 2.4:** Provide public facilities and services in the most equitable and efficient manner possible.

- **Policy 2.5:** Require the use of sustainable construction practices, building infrastructure, and materials in new construction and substantial remodels of existing buildings.

- **Policy 2.6:** Design new buildings to minimize the consumption of energy, water, and other natural resources. Develop incentives to retrofit existing buildings for a net reduction in energy consumption, water consumption, and stormwater runoff.

- **Policy 3.12:** Require that new development tie into the city's grid street pattern.

- **Policy 10.1:** Ensure that buildings and businesses are of a size and scale appropriate for a pedestrian-friendly environment. Require that ground-floor uses along street frontages are pedestrian-oriented.

- **Policy 10.2:** Ensure that ground-floor facades along primary frontages are attractive and facilitate pedestrian traffic through the use of windows, doors, and other design features.

Mobility Element

- **Policy 3.5:** Design street improvements so they preserve opportunities to maintain or expand bicycle, pedestrian, and transit systems.

Open Space and Conservation Element

- **Policy 9.4:** Pursue infrastructure improvements that would expand communitywide use of recycled water.
- **Policy 10.1:** Incorporate energy conservation strategies in City projects.
- **Policy 10.2:** Promote energy-efficient design features to reduce fuel consumption for heating and cooling.
- **Policy 10.3:** Continue to acquire alternative fuel vehicles like hybrid, natural gas, electric, or hydrogen-powered vehicles when adding to the City's vehicle fleet.
- **Policy 10.4:** Encourage residents and businesses to reduce vehicle use or to purchase alternative fuel vehicles.
- **Policy 10.5:** Promote technologies that reduce use of non-renewable energy resources.
- **Policy 10.6:** Support private sources of sustainable, environmentally friendly energy supplies.
- **Policy 10.7:** Encourage the use of solar energy systems in homes and commercial businesses as a form of renewable energy.

PROGRAMS

Mobility Element

- **Program M-6: Transit System.** Implementation of the transit portion of the Mobility Plan requires close consultation with other local and regional agencies to develop feasibility plans and funding sources for regional projects. Implementation of expanded local public transit service will be driven by future funding sources identified to pay for expanded service.
    - Pursue funding opportunities to expand BurbankBus transit service.
    - Consult with Los Angeles County Metropolitan Transportation Authority (MTA) regarding relinquishment of certain local transit routes to local agencies, in exchange for sharing the funding saved by converting MTA service to local service. Pursue Burbank's designation as an Eligible Operator in order to eligible for additional regional and federal funding.
    - Develop a short-range transit plan for BurbankBus to identify future transit needs and funding opportunities.
    - Work with MTA to develop the regional transit connections outlined in the Long Range Transportation Plan:
        - investigate the feasibility of implementing regional transit service between the MTA Gold Line in Pasadena and the Red Line/Orange Line in North Hollywood via Glendale and Burbank;
        - consult with MTA regarding future MTA Rapid lines serving Burbank; and
        - support regional connections connecting Burbank throughout the region.

- Consult with Metrolink and Amtrak to improve commuter and intercity rail services between Burbank and major destinations in Southern California.

- Improve transit and intermodal connections at the Bob Hope Airport and the Empire Corridor to encourage public transit ridership to and from major office uses in this developing area.

- Develop transit stop standards and guidelines. Include amenities such as seating, lighting, signage, and convenient access, as requirements of new discretionary development projects or city-initiated streetscape improvement projects.

- Improve transit and intermodal connections at the Bob Hope Airport and the Empire Corridor to encourage public transit ridership to and from major office uses in this developing area.

- Seek opportunities to implement a bus intermodal transfer facility in the Media District.

- Evaluate Intelligent Transportation System solutions to increase the efficiency of transit vehicles on arterial streets.

- Monitor the progress of the proposed high-speed rail corridor and preliminary regional high-speed transit corridor through Burbank and work closely with the California High-Speed Rail Authority (CHSRA) to ensure that negative effects on the city are minimized. In particular, the City will work to ensure that street connections near any proposed station are enhanced to serve anticipated traffic demands and that transit, pedestrian, and bicycle facilities are included in any station design.

► **Program M-7: Bicycle Master Plan Pedestrian Master Plan.** The Bicycle and Pedestrian Master Plans guide the expansion of Burbank's bicycle and pedestrian infrastructure. The following actions define the steps the City will take to further pedestrian and bicycle travel.

- Prepare a Pedestrian Master Plan, identifying improvements necessary to improve pedestrian access to transit, across freeways, and other barriers to walking. The plan should address streetscape improvements and ensure compliance with Americans with Disabilities Act (ADA) standards.

- Update the Bicycle Master Plan to reflect completed bicycle projects and to identify additional bicycle improvements to ensure eligibility for the Bicycle Transportation Account and other grant funds. Continue to implement Phase I and Phase II bicycle projects identified in the Bicycle Master Plan as funding becomes available or as streets are reconstructed, resurfaced, or redesigned.

- Revise city roadway standards to better accommodate all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.

► **Program M-10: Transportation Demand Management.** Burbank uses Transportation Demand Management (TDM) strategies to reduce peak period demand on the street network as an alternative to providing capacity. Programs may be expanded to optimize the use of available transportation resources.

- Expand the City's employer-based TDM ordinance to include the Golden State and Empire Corridor areas, and other employment centers.

- Update the citywide TDM ordinance to better encourage the use of incentives including free transit passes, parking cash out, and free shuttles.
- Revise the City's TDM reporting and participation requirements to facilitate employer participation with TDM programs.
- Use TDM to mitigate traffic impacts resulting from new development. Provide incentives and/or require mitigations to reduce trips; require reporting to ensure trip reduction targets are met.
- Integrate TDM programs and measurements in the City's traffic study review process and travel demand model.

Open Space and Conservation Element

- **Program OSC-9: Regional Water Consultation.** Consult with Metropolitan Water District of Southern California (Metropolitan) and the Los Angeles Regional Water Quality Control Board (RWQCB) to achieve the following water supply, distribution, and conservation objectives:
  - Maintain groundwater recharge areas to protect water quality and ensure continued recharge of local groundwater basins.
  - Reduce the amount of water used for landscaping and increase use of native and drought tolerant plants.
  - Encourage the production, distribution, and use of recycled water for landscaping projects.
  - Maintain water quality objectives for urban runoff.
  - Comply with all provisions of the NPDES permit, and support regional efforts by the Los Angeles RWQCB to improve and protect surface water quality.
- **Program OSC-11: Burbank Urban Water Management Plan and Recycled Water Master Plan.** Continue to update the Burbank Urban Water Management Plan and Recycled Water Master Plan every five years to serve as foundational documents and source of information for Water Supply Assessments and Written Verifications of Water Supply. Include estimates for population, water demand, and water supply with projections in five-year increments to 2035. Use the Recycled Water Master Plan to ensure the use of recycled water wherever allowed and feasible.

DRAFT *BURBANK2035* GREENHOUSE GAS REDUCTION PLAN MEASURES AND ACTIONS

Energy Efficiency

- **Measure E-1.1: Energy Efficiency in New Construction**
  - **Action E-1.1A:** Adopt an ordinance requiring new commercial construction to exceed the California Green Building Standards Code energy efficiency baseline by 15% starting in 2015.

- **Measure E-1.2: Energy Efficiency Retrofits**
  - **Action E-1.2A:** Adopt an ordinance requiring HERS-certified energy performance ratings for all residential buildings sold within the City.
  - **Action E-1.2B:** Adopt an ordinance requiring point-of-sale energy audits for all residential and commercial properties sold within the City.
  - **Action E-1.2C:** Develop a comprehensive energy efficiency upgrade outreach program.
- **Measure E-1.3: ENERGY STAR Appliances**
  - **Action E-1.3A:** Develop a public outreach program to increase community participation in ENERGY STAR appliance installation.
- **Measure E-1.4: Smart Grid Integration**
  - **Action E-1.4A:** Develop an outreach campaign for smart grid integration.
  - **Action E-1.4B:** Expand the City's thermal energy storage system demonstration project.
  - **Action E-1.4C:** Promote the demonstration project to familiarize local businesses with smart grid technology.
- **Measure E-1.5: Cool Roofs**
  - **Action E-1.5A:** Secure funding to extend the City's Cool Roof Pilot Program.
  - **Action E-1.5B:** Provide information about BWP's cool roof incentives to non-residential building owners.
- **Measure E-1.6: BWP Energy Conservation Programs**
  - **Action E-1.6A:** Maintain funding sources for energy conservation programs.
  - **Action E-1.6B:** Provide information to Community Development Department staff regarding progress toward annual conservation goals for incorporation into future GGRP updates.
- **Measure E-1.7: Building Shade Trees**
  - **Action E-1.7A:** Amend the Zoning Ordinance to require installation of two on-site shade trees for each new single-family residential unit.
  - **Action E-1.7B:** Continue the BWP Made in the Shade Program.
  - **Action E-1.7C:** Update the Street Tree Plan and Urban Forestry program.

Renewable Energy

- **Measure E-2.1: Renewable Energy Requirements**
  - **Action E-2.1A**: Adopt an ordinance requiring new single-family residential construction to include 1.8 kWh solar PV systems, and new multi-family residential and commercial construction to meet 10% of its expected energy needs from on-site renewable sources.
  - **Action E-2.1B:** Adopt an ordinance requiring solar water heaters to be installed in all new residential construction.
  - **Action E-2.1C:** Update the building code to require pre-wiring and pre-plumbing for solar PV and solar hot water systems in all new construction.
- **Measure E-2.2: Solar Photovoltaic Systems**
  - **Action E-2.2A:** Develop an aggressive outreach campaign for the BWP Solar Photovoltaic Power program.
  - **Action E-2.2B:** Reduce or remove third-party electrical review fee associated with non-residential solar PV installations through January 1, 2017.
- **Measure E-2.3: Solar Water Heater Systems**
  - **Action E-2.3A**: Develop a public outreach campaign to advertise available SWH rebates and incentives offered through BWP and the CSI-Thermal Program.
  - **Action E-2.3B:** Work with non-profit organizations to identify additional financing options for SWH installations.
  - **Action E-2.3C:** Remove regulatory barriers to the installation of SWH systems.

Street and Area Lighting

- **Measure E-3.1: Light-Emitting Diode (LED) Street Lights**
  - **Action E-3.1A:** Expand efficient lighting technology throughout the city.
  - **Action E-3.1B:** Update the Street Light Master Plan

Pedestrian and Bicycle Improvements

- **Measure T-1.1: Pedestrian Enhancements**
  - **Action T-1.1A:** Complete Pedestrian Master Plan.
  - **Action T-1.1B:** Aggressively pursue grant funding to begin implementation of the Master Plan's priority improvements.

- **Measure T-1.3: Bicycle Education Program**
  - **Action T-1.3A**: Partner with local bicycle advocacy groups and clubs and the Burbank Police Department to identify high-frequency accident locations.
  - **Action T-1.3B**: Continue to pursue grant funding for implementation of the Bicycle Master Plan that also allows for bicycle safety components.
- **Measure T-1.4: Bicycle Infrastructure Expansion**
  - **Action T-1.4A:** Implement bicycle network expansions that have already received funding.
  - **Action T-1.4B:** Adopt the draft bicycle parking ordinance by December 31, 2012.
  - **Action T-1.4C:** Pursue funding to implement other Top Priority Projects identified in Table 5.2 in the 2009 Bicycle Master Plan, with a focus on implementing Class I and II facilities.
  - **Action T-1.4D:** Identify north-south roads that can accommodate bicycle boulevard facilities to connect the Chandler bicycle path with Burbank and Magnolia Boulevards.
  - **Action T-1.4E:** Evaluate safety on popular Class III routes and identify potential candidates for upgrades to Class II facilities.
  - **Action T-1.4F:** Provide bicycles for shared use by all City employees and amenities at the BWP campus and in the Burbank Civic Center to accommodate the shared bicycles
  - **Action T-1.4G:** Consider expanding the shared bicycle program to accommodate public use in Downtown Burbank, the Media District, and the Golden State area.

Transportation Demand Management

- **Measure T-2.1: Transportation Management Organization Expansion**
  - **Action T-2.1A:** Update the TMO website to provide program information to current and potential members.
  - **Action T-2.1B:** Develop a TMO business outreach strategy to increase membership and active participation in TMO programs.
  - **Action T-2.1C:** Expand geographic boundary of TMO into Golden State and Empire areas by 2020 and citywide by 2035.
  - **Action T-2.1D:** Require all new businesses with 25 employees or more within the TMO boundary to join the TMO and fulfill required reporting procedures.
  - **Action T-2.1E:** Expand the carpool/rideshare program through adoption of current technologies.

- **Action T-2.1F:** Evaluate the City's guaranteed ride home policy to ensure its applicability to small businesses.

- **Action T-2.1G:** Evaluate the City's carpool parking preference requirements.

Water Efficiency

- **Measure W-1.1: Water Conservation Programs**

  - **Action W-1.1A:** Implement BWP Urban Water Management Plan (UWMP) water conservation programs.

- **Measure W-1.2: Recycled Water Use Master Plan**

  - **Action W-1.2A:** Expand recycled water system.

  - **Action W-1.2B:** Increase number of targeted large irrigation customers required to use recycled water.

Organic Waste Diversion

- **Measure SW-1.1: Food Scrap and Compostable Paper Diversion Ordinance**

  - **Action SW-1.1A**: Adopt a food scrap and compostable paper diversion ordinance.

  - **Action SW-1.1B:** Revise yard waste collection program to allow co-mingling of yard waste, food scraps, and compostable paper.

- **Measure SW-1.2: Yard Waste Diversion Ordinance**

  - **Action SW-1.2A**: Adopt a yard waste diversion ordinance banning the disposal of yard waste in trash bins or dumpsters.

- **Measure SW-1.3: Lumber Diversion Ordinance**

  - **Action SW-1.3A**: Modify the Construction and Debris Diversion Ordinance to include requirements for 75% diversion.

- **Measure SW-1.4: Reusable Bags**

  - **Action SW-1.4A:** Promote the environmental benefits of reusable shopping bags on the City website.

- **Measure SW-1.5: Recycling Ordinance**

  - **Action SW-1.5A:** Adopt an ordinance requiring recycling bins or recycling areas in all buildings.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, energy consumption impacts are considered significant if adoption and implementation of *Burbank2035* would:

- result in wasteful, inefficient, and unnecessary consumption of energy during construction, operation, and maintenance of the project;
- result in siting, orientation, and design that does not provide an opportunity to minimize energy consumption, including transportation energy;
- include features that would increase peak energy demand;
- not provide for alternative fuels (particularly renewable ones) or energy systems; or
- not provide for recycling of non-renewable resources.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.7-1 **Result in Wasteful, Inefficient, and Unnecessary Consumption of Energy.** *Adoption and implementation of Burbank2035 would result in new development and redevelopment of property throughout the planning area, which would increase the demand and consumption of energy. However, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *impact.*

Future land uses consistent with *Burbank2035* would increase energy consumption in the planning area, requiring that additional energy resources be delivered to residents and businesses.

Construction Phase

During construction, future projects would consume fuel energy consumed by construction vehicles and equipment. Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, paving, and building construction. Fuel energy consumed during construction would be temporary in nature, but would occur throughout the lifetime of *Burbank2035*. Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. Also, given the high cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. Therefore, it is not anticipated that the construction phase of future projects consistent with *Burbank2035* would result in wasteful, inefficient, and unnecessary consumption of energy. This impact would be **less than significant**.

Operational Phase

The operational phase of future land uses consistent with *Burbank2035* would consume energy for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, electronics, office equipment, and commercial equipment. Energy would also be consumed during each vehicle trip associated with proposed uses.

As shown in Table 4.7-3, future land uses consistent with *Burbank2035* would result in an estimated increase of up to 293,043 MWh of electricity and 7.4 million therms of natural gas each year, in addition to the City's existing demand. These generation rates are based on California-specific data and are averaged based on size of the residential unit and different types of non-residential uses. The estimates are based on generalized demand rates because more specific estimates are not possible at a general plan level.

Table 4.7-3
Annual Baseline (2010) and Projected (2035) Energy Consumption

	2010	2035	Net Change
Electricity – Residential (Mwh)	277,000	348,456	71,456
Electricity – Commercial (Mwh)	323,000	406,321	83,321
Electricity – Industrial (Mwh)	536,000	674,266	138,266
Electricity – Total (Mwh)	**1,136,000**	**1,429,043**	**293,043**
Natural Gas – Residential (Therms)	16,669,699	20,684,107	4,014,408
Natural Gas – Non-Residential (Therms)	13,936,235	17,292,369	3,356,134
Natural Gas – Municipal (Therms)	245,866	283,626	37,760
Natural Gas – Total (Therms)	**30,851,800**	**38,260,102**	**7,408,302**

Source: Estimated by AECOM 2012

Future development would be required to comply with current California Green Building Standards Code Title 24, Part 11 (Cal Green) energy performance standards as well as *Burbank2035* and GGRP policies and actions that address energy conservation.

Through *Burbank2035* policies, energy conservation would have a major presence in the development of new structures within the planning area. Standards and incentives related to energy-efficiency proposed by Land Use Element Policies 2.1, 2.6, 2.7, 3.4, 3.12, 10.1, and 10.2 would have a lasting positive effect on energy efficiency in the planning area by incrementally adding land uses that are more energy, water and waste efficient (which would all reduce energy consumption) as well as establishing a more connected and pedestrian/bicycle-friendly community to reduce transportation energy consumption. Implementation of Air Quality and Climate Change Element Policies 3.8 and 3.9 and Open Space and Conservation Element Policies 10.5, 10.6 and 10.7 would promote increased use of renewable resources, which would help reduce impacts associated with non-renewable energy sources. Investment in renewable resources would help reduce the City's long-term energy consumption and reliance on energy imports.

Proposed GGRP measures and actions would also improve energy efficiency and minimize wasteful, inefficient energy consumption in the planning area. Specifically, Measures E-1.1, E-1.2, E-1.3, E-1.4, E-1.5, E-1.6 and E-3.2 would increase energy efficiency in existing and new residential and commercial buildings. While the demand for energy within the planning area would add considerably to the impacts on energy resources, implementation of these policies and measures in conjunction with compliance with the RPS and continued efforts on behalf of BWP, LADWP, and SoCalGas would promote energy efficiency and increased use of renewable energy.

Implementation of *Burbank2035* would result in the consumption of energy, but such consumption would not be expected to be wasteful or inefficient. As identified in Table 4.7-1, future land uses consistent with *Burbank2035* would increase the demand for energy resources above current consumption demands. However, despite the overall increase in demand for energy, *Burbank2035* and GGRP programs, policies, measures, and actions emphasize energy efficient design of future land uses and communitywide energy efficiency, thereby minimizing wasteful, inefficient energy consumption. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.7-2 **Result in siting, orientation, and design that does not provide an opportunity to minimize energy consumption, including transportation energy.** *Adoption and implementation of Burbank2035 would encourage development of new land uses in a way that would increase opportunities to minimize energy consumption, including transportation energy, resulting in a* ***less-than-significant*** *impact.*

As discussed in Section 4.11, "Land Use and Planning" of this EIR, Burbank is primarily built-out with a limited inventory of vacant and underutilized land. *Burbank2035* assumes existing land use development patterns as a basis for future development and redevelopment, with an incremental intensification of existing land uses. *Burbank2035* was designed to focus on redevelopment of existing urbanized areas and to revitalize underutilized portions of the planning area to their highest-and-best use. *Burbank2035* Land Use Element and Mobility Element policies emphasize increasing connectivity and maintaining the integrity of the built environment. Mobility Element Policy 3.5 supports the integrity and connectivity of existing communities by improving streets to maintain or expand bicycle, pedestrian, and transit system opportunities. Land Use Element Policy 2.2 prevents development from encroaching on open space by directing future development to more appropriate infill locations. Such locations provide for more efficient energy use, since infill development requires less construction, fuel use, and materials to extend roadways, sewers, water lines, and other infrastructure to reach each new consumer.

In addition, conformance with *Burbank2035* policies and the GGRP would reduce impacts by establishing energy efficient standards for new residential and non-residential buildings. These standards and measures would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings, thereby promoting additional energy conservation.

The City also provides for development that reduces transportation energy use by continuing and increasing the use of alternative transportation. Burbank has a comprehensive public transportation system, comprised of local shuttle services, regional bus routes, and commuter rail. The City currently includes 18 designated bikeways that total 22 bikeway miles (City of Burbank 2009). Most arterials and local streets include a developed pedestrian network, connected to one another by a variety of paved sidewalks and painted crosswalks. Specific corridors, including Magnolia Boulevard, Burbank Boulevard, Victory Boulevard, Glenoaks Boulevard, and portions of Downtown Burbank, generally provide wide sidewalks to accommodate high levels of pedestrian activity.

Fuel consumption rates are expected to decline as older, less fuel-efficient vehicles are retired, and as the new federal vehicle fuel-efficiency standards work to increase gas mileage through the vehicle fleet over time. The transit, pedestrian, and bicycle facilities provided in the city would help provide some reduction in overall

vehicles miles traveled (VMT) as compared to 2035 conditions under the existing General Plan, thereby reducing consumption of transportation fuel.

Numerous GGRP measures also focus on guiding development to reduce overall fuel use and energy consumption. Specifically, Measures T-1.1, T-1.2, and T-1.4 focus on removing regulatory barriers to the creation of compact, walkable neighborhoods. Measure T-2.1 would expand participation in the Transportation Management Organization (TMO) and require new businesses with 25 or more employees become TMO members and fulfill reporting requirements.

Based on the factors identified above, planned development under *Burbank2035* would result in siting, orientation, and design that would provide opportunities to minimize energy consumption, including transportation energy. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.7-3 **Include features that would increase peak energy demand.** *Adoption and implementation of Burbank2035 would result in new development and redevelopment of property throughout the planning area, which would increase peak energy demand. However, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *impact.*

As shown in Table 4.7-3, future land uses consistent with *Burbank2035* would result in an estimated increase in consumption of up to 293,043 MWh of electricity and 7.4 million therms of natural gas each year, in addition to existing demands. BWP, LADWP, and SoCalGas would need to consider the future generation of electricity and natural gas with careful consideration of the anticipated peak usage within their service areas.

In addition, future development would be required to comply with current Title 24, Part 11 energy performance standards as well as *Burbank2035* policies and actions that address energy conservation. The Title 24, Part 11 Building Standards Code is referred to as the California Green Building Standards Code. The purpose of the California Green Building Standards Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental air quality." Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the California Green Building Standards Code.

The CEC and CPUC have initiated a number of programs to increase supplies and reduce demand for electricity. The CEC and CPUC strongly encourage reductions in electricity demand through energy-efficiency measures, particularly those that provide peak-demand savings. SB 1307 requires all electric utilities to meet their unmet resource demands first through energy efficiency and demand reduction. The CEC's Energy Action Plan II, adopted in 2005, identifies a number of initiatives for increasing supply and reducing demand. One example involves the reduction of peak energy demand for the state's water supply infrastructure, which comprises almost 20% of the state's electricity consumption.

Through *Burbank2035* policies, energy conservation requirements would affect development of new structures within the planning area. Standards and incentives related to energy-efficiency proposed by Land Use Element Policies 2.1, 2.6, and 2.7, Air Quality and Climate Change Element Policies 3.4 and 3.6, and Open Space and Conservation Element Policies 10.1 and 10.2 would have a lasting positive effect on energy conservation in the planning area by requiring resource-efficient (i.e., energy, water, waste) design for both City and private development projects, as well as retrofits of existing structures. These policies would ensure that as Burbank continues to grow and replace and/or update older buildings, overall energy and resource efficiency also continues to increase, thereby reducing energy demands associated with electricity, natural gas, transportation, water, and solid waste resources.

Numerous GGRP measures and actions would also improve energy efficiency and reduce peak energy demand in the planning area. Specifically, Measures E-1.1, E-1.2, E-1.3, E-1.4, and E-3.2 would increase energy efficiency in existing and new residential and commercial buildings.

Implementation of *Burbank2035* would increase peak energy demand for land uses within the planning area. Although *Burbank2035* does not include specific features that would result in increased peak energy demand, adoption and implementation of *Burbank2035* policies and programs, combined with State and local energy efficiency programs, would reduce peak energy demand from those land uses. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.7-4 **Not provide for alternative fuels (particularly renewable ones) or energy systems.** *Adoption and implementation of Burbank2035 would increase the amount of alternative fuels used in the planning area. Therefore, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *impact.*

California's RPS was initially established in 2002 by SB 1078, which originally required retail electricity providers to procure at least 1% of their electricity supplies from renewable resources to achieve a 20% renewable mix by no later than 2017. Since then, the RPS has been updated to meet more aggressive goals for renewable energy. Executive Order S-14-08 expanded the state's RPS to 33% renewable power by 2020.

In April 2011, SB X1-2 was signed by the Governor and codified the goal of 33% renewable power supply by 2020. SB X1-2 expresses the intent that the amount of electricity generated per year from eligible renewable energy resources be increased to an amount that equals at least 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020.

In order to help attain the California RPS goal, the CEC has developed and currently administers renewable energy incentive programs. The goal of these programs is to establish a competitive, self-sustaining renewable energy supply for California while increasing the near-term quantity of renewable energy generated in the state.

Through *Burbank2035* policies, energy conservation would have a major presence in the development of new structures within the planning area. Air Quality and Climate Change Element Policy 3.9 would continue efforts to diversify Burbank Water and Power's energy portfolio beyond 2020, which would further efforts consistent with

the state RPS goals. Open Space and Conservation Element Policies 10.3 and 10.4 focus on continuing to purchase alternative fuel vehicles for the City fleet and would encourage residents and businesses to reduce vehicle use or to purchase alternative fuel vehicles. Open Space and Conservation Element Policies 10.5, 10.6 and 10.7 promote the use of renewable resources, which would help reduce the cumulative impacts associated with non-renewable energy sources. In addition, GGRP Measures E-2.1, E-2.2, and E-2.3 would increase development and use of renewable energy sources within the community.

Implementation of these policies and measures in conjunction with continued efforts by BWP, LADWP, and SoCalGas to meet the state RPS requirements would continue to provide for alternative fuels and energy systems. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.7-5 **Not provide for recycling of non-renewable resources.** *Adoption and implementation of Burbank2035 would continue to provide for recycling for non-renewable resources. Therefore, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *impact.*

As discussed in Section 16, "Public Services, Utilities and Recreation" in the TBR, the City Public Works Department provides solid waste collection, recycling, and green waste services for single-family residences and multi-family residences with four or fewer units. Overall, the City provides solid waste collection services to 50% of the multi-family residences and 10% of businesses located within the city. AB 939 was designed to increase landfill life by diverting solid waste from landfills within the state and conserving other resources through increasing recycling programs and incentives. AB 939 requires that California cities implement plans to divert the total solid waste generated within each jurisdiction by 50% based on a base year of 2000. The City also owns the Burbank Recycle Center, which houses a materials recovery facility and buyback/dropoff center. The facility also provides a used oil center, composting information, and a learning center.

Consumption of water would also result in electricity consumption from conveyance, water treatment, water distribution, and wastewater treatment. Recycled water use, in addition to increasing water efficiency, would reduce overall energy consumption, particularly consumption related to supply and conveyance. BWP provides recycled water for landscape irrigation and industrial use, which would reduce the need to purchase potable water and consume energy for irrigation. Demand for recycled water is currently forecast to be at least 2.5 million gallons per day in the year 2030, which would represent conservation of approximately 880 million gallons per year of potable water (City of Burbank 2011).

Burbank2035 Open Space and Conservation Element Policy 9.4 would continue to pursue infrastructure improvements that would expand communitywide use of recycled water. In addition, GGRP Measures SW-1.1, SW-2.1, SW-1.3, SW-1.4, and SW-1.5 would increase recycling and community waste diversion, including green waste, from landfills. Implementation of GGRP Measures W-1.1 and W-1.2 would increase water efficiency related to residential and commercial use, municipal operations and landscaping.

Based on the continued availability of solid waste recycling facilities and providing for the use of recycled water, *Burbank2035* would provide for recycling of nonrenewable resources. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Energy consumption impacts would occur throughout the planning area, affecting numerous service providers, (e.g., BWP, LADWP, SoCalGas). Therefore, the cumulative impact area for energy facilities is the boundary of the service areas of BWP, LADWP, and SoCalGas, collectively referred to as the utility service areas.

IMPACT 4.7-6 **Cumulative Wasteful, Inefficient, and Unnecessary Consumption of Energy.** *Adoption and implementation of Burbank2035 in addition to growth throughout the utility service areas would result in new development and redevelopment of property, which would increase the cumulative demand and consumption of energy. Compliance with existing energy conservation regulations and established land use plans in the utility service areas would result in a* ***less-than-significant*** *cumulative impact.*

Construction Phase

As discussed in Impact 4.7-1, limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings both in the planning area and throughout the utility service areas. Also, given the high cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. Therefore, it is not anticipated that the construction phase would result in wasteful, inefficient, and unnecessary consumption of energy within the utility service areas. This cumulative impact would be **less than significant**.

Operational Phase

The operational phase of future land uses consistent with *Burbank2035* and those of similar general plans in other jurisdictions throughout the utility service areas would consume energy for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, electronics, office equipment, and commercial equipment. Energy would also be consumed during each vehicle trip associated with proposed uses in these plans.

Burbank2035 and other general plans throughout the utility service areas would increase demand for energy. Future development would be required to comply with the current Title 24, Part 11 energy performance standards. Therefore, this cumulative impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.7-7 **Cumulative Siting, Orientation, and Design to Minimize Energy Consumption.** *Adoption and implementation of Burbank2035 in addition to planned growth in other jurisdictions would encourage*

*development of new land uses throughout the utility service areas in a way that would increase opportunities to minimize energy consumption, including transportation energy, resulting in a **less-than-significant** cumulative impact.*

As discussed in Impact 4.7-2, *Burbank2035* assumes existing land use development patterns as a basis for future development and redevelopment, with an incremental intensification of existing land uses. *Burbank2035* and general plans in other jurisdictions throughout the utility service areas are designed to focus on redevelopment of existing urbanized areas and providing for revitalization to the highest-and-best use for underutilized areas. Therefore, planned development throughout the utility service areas would result in siting, orientation, and design that provide opportunities to minimize energy consumption, including transportation energy. Therefore, this cumulative impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.7-8 **Cumulative Increase in Peak Energy Demand.** *Adoption and implementation of Burbank2035 in addition to regional growth would result in new development and redevelopment of property throughout utility service areas, which would increase the peak energy demand. However, adoption and implementation of Burbank2035 policies and programs would result in a **less-than-significant** cumulative impact.*

As discussed in Impact 4.7-3, implementation of *Burbank2035* would increase peak energy demand for land uses within the planning area. Neither *Burbank2035* nor similar general plans in other jurisdictions would include features that would specifically result in increased peak energy demand without also providing for the conservation of energy; Adoption and implementation of *Burbank2035* policies and programs, combined with State and local energy efficiency programs, would reduce cumulative peak energy demand from planned land uses. Therefore, this cumulative impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.7-9 **Cumulative Alternative Fuels or Energy Systems Impacts**. *Adoption and implementation of Burbank2035 and general plans in communities throughout the region would increase the amount of alternative fuels used in the utility service areas. Therefore, adoption and implementation of Burbank2035 policies and programs would result in a **less-than-significant** impact.*

As discussed in Impact 4.7-4, *Burbank2035* policies would promote energy conservation in the development of new structures within the planning area. Similar energy conservation measures are also in effect in other jurisdictions in the utility service areas, as well as mandatory compliance with Title 24, Part 11 requirements. Implementation of *Burbank 2035* policies and similar general plan policies in other jurisdictions, in conjunction with continued efforts on behalf of BWP, LADWP, and SoCalGas to meet the state RPS requirements, would continue to provide for cumulative alternative fuels and energy systems. Therefore, this cumulative impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.7-10 **Cumulative Recycling of Non-Renewable Resources.** *Adoption and implementation of Burbank2035 and general plans in communities throughout the region would continue to provide for recycling for non-renewable resources. Therefore, adoption and implementation of Burbank2035 policies and programs would result in a cumulatively* ***less-than-significant*** *impact.*

As discussed in Impact 4.7-5, the Public Works Department provides solid waste collection, recycling, and green waste services. AB 939 requires all California cities, including all cities and counties within the utility service areas, to implement plans to divert the total solid waste generated within each jurisdiction by 50% based on a base year of 2000. BWP and other service providers throughout the utility service areas also provide recycled water for landscape irrigation and industrial use, which will reduce the need to purchase potable water and reduce the associated energy. Based on the continued availability of solid waste recycling facilities and providing for the use of recycled water, *Burbank2035* and similar general plans in other communities would provide for recycling of nonrenewable resources. Therefore, this cumulative impact would be **less than significant**.

Mitigation Measure

None required.

This page intentionally left blank.

4.8 GEOLOGY AND SOILS

4.8.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to geology and soils associated with implementation of *Burbank2035*. The analysis includes a review of regional geology, seismicity and faulting, and soils. Issues regarding water quality impacts of soil erosion are discussed in Chapter 4.10, Hydrology and Water Quality. *Burbank2035* Safety Element policies and implementation programs presented in the Plan Realization Element guide future development and infrastructure practices to protect residents and structures against seismic related hazards by requiring enforcement of safety standards and site-specific design and construction methods.

NOP Comments: In response to the NOP, one comment letter related to geology and soils was received from the California Emergency Management Agency (see Appendices B and C). The comment letter was focused on requirements of state planning law related to hazards issues in a general plan and the EIR for the general plan. These issues are addressed below.

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR) and other publicly available documents. The TBR prepared for the project is attached to this document as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.8.2 ENVIRONMENTAL SETTING

Section 9.0 of Appendix A describes the regional and local conditions related to geology and soils. Key findings of the environmental setting are presented below.

- Potential seismic hazards resulting from a nearby moderate to major earthquake can generally be classified as primary and secondary. The primary hazard is fault ground rupture, also called surface faulting. Common secondary seismic hazards include ground shaking, liquefaction, and subsidence. Ground shaking (i.e., motion that occurs as a result of energy released during faulting) could potentially result in the damage or collapse of buildings and other structures, depending on the magnitude (amount of energy released) of the earthquake, the location of the epicenter, and the character and duration of the ground motion. Surface rupture is an actual cracking or breaking of the ground along a fault during an earthquake. Structures built over an active fault can be torn apart if the ground ruptures. Surface ground rupture along faults is generally limited to a linear zone a few yards wide.

- An earthquake on the San Andreas Fault affecting Burbank has the greatest probability of occurring within the next 100 years. Studies of this fault indicate that the effect of a magnitude 7.5 earthquake on most cities in the Los Angeles region would not be catastrophic; however, major damage would occur in isolated areas depending on many factors.

- While the San Andreas Fault is one of the most widely known faults in the region, other faults closer to the planning area are capable of generating an earthquake with greater potential effects. The major known faults in the region with potential to cause damage in the planning area are discussed in Section 9.1 of Appendix A

and are shown on Figure 9-2. The Verdugo Fault Zone is the only major fault that crosses through the planning area.

- The California Geological Survey (CGS) Seismic Hazard Zones maps delineate areas within the state that are susceptible to liquefaction. Liquefaction occurs primarily in saturated and loose, fine-to-medium-grained soils, in areas where the groundwater table is 50 feet or less below the surface. Liquefaction can cause structural distress or failure due to excessive settlement, a loss of bearing capacity in the foundation soils, and the potential buoyancy effects on buried structures, such as pipelines or vaults.

- Within the planning area, hazards from landslides and mudslides are limited to properties at the base of undeveloped or unimproved slopes in the Verdugo Mountains, north of Sunset Canyon Drive. In Section 9.1 of Appendix A, Figure 9-4 illustrates areas at risk of earthquake-induced landsliding.

- Within the planning area, opportunities for accelerated erosion include the steepening of slopes in the hillside areas near the Verdugo Mountains, removing groundcover, and other human-induced activities associated with construction and landscaping.

4.8.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to geology and soils in the planning area. They provide the regulatory framework for addressing aspects of geology and soils that would be affected by implementation of *Burbank2035*. The regulatory setting for geology and soils is discussed in detail in Appendix A of this EIR. The following summarizes key regulations used to reduce potential environmental impacts of implementing *Burbank2035*.

- **Earthquake Hazards Reduction Act:** U.S. Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program (NEHRP). This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act (NEHRPA), which refined the description of agency responsibilities, program goals, and objectives.

- **Alquist-Priolo Act:** The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was created to prohibit the location of structures designed for human occupancy across the traces of active faults (lines of surface rupture), thereby reducing the loss of life and property from an earthquake. The planning area does not contain Alquist-Priolo Earthquake Fault Zones (CGS 2010).

- **Seismic Hazards Mapping Act:** The 1990 Seismic Hazards Mapping Act (SHMA) (Public Resources Code Sections 2690–2699.6) addresses hazards such as strong ground shaking, earthquake-induced landslides, and, in some areas, zones of amplified shaking. The act established a mapping program for areas that have the potential for liquefaction, landslide, strong ground shaking, or other earthquake and geologic hazards. CGS is the primary state agency charged with implementing the SHMA and provides local jurisdictions with the seismic hazard zone maps that identify areas susceptible to liquefaction, earthquake-induced landslides, and amplified shaking.

- **California Building Code (CBC):** The California Building Standards Commission (BSC) is responsible for coordinating, managing, adopting, and approving building codes in California. The 2010 CBC became effective on January 1, 2011, and updated all the subsequent codes under the California Code of Regulations (CCR) Title 24 (24 CCR), which provides minimum standards for building design. The State requires local governments to adopt Title 24 on a triennial basis. Where no other building codes apply, Chapters 16, 17, 18, 20, and 21 of the 2010 CBC regulate excavation, foundations, and retaining walls.

4.8.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analysis of geology and soils impacts is qualitative and based on available information for the planning area along with review of regional information. The analysis assumes that all future and existing development within the planning area complies with all applicable laws, regulations, and plans. An analysis of cumulative impacts uses regional information for the planning area.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential geology and soils impacts include the following.

POLICIES

Land Use Element

- **Policy 8.7:** In general, limit new development to previously subdivided lots in existing neighborhoods. Any new subdivisions or development in previously undeveloped natural areas is not desired and will be carefully reviewed in light of possible impacts on the natural hillside environment.

- **Policy 8.8:** Ensure that new development is compatible with the topography and geology of the hillside area and is incorporated into the natural setting.

Safety Element

- **Policy 5.1:** Require geotechnical reports for development within a fault area that may be subject to risks associated with surface rupture.

- **Policy 5.2:** Require geotechnical reports for new development projects in areas with the potential for liquefaction or landslide.

- **Policy 5.3:** Enforce seismic design provisions of the current California Building Standards Code related to geologic, seismic, and slope hazards.

- **Policy 5.4:** Encourage and facilitate retrofits of seismically high-risk buildings to reduce risks from seismic ground shaking.

- **Policy 5.5:** Facilitate the retrofitting of bridges and highway structures in the city to reduce risks associated with seismic ground shaking.

PROGRAMS

Safety Element

- **Program S-4: Evaluate Liquefaction Potential** Evaluate the liquefaction potential of a site when, during the course of a geotechnical investigation, shallow groundwater (50 feet or less) and unconsolidated sandy alluvium soils are found. Fault investigations in the Verdugo Fault zone should be encouraged where feasible. The state geologist should be informed of any findings pertinent to the activity designation of the fault.

- **Program S-6: Compliance with California Building Standards Code and Burbank Municipal Code** Verify that new development complies with the California Building Standards Code's seismic design standards and the BMC. Verify that structural and architectural features, such as irregular building shapes, soft stories, undefined structural systems, architectural elements, and equipment attachments are designed in accordance with the seismic provisions of the California Building Standards Code.

- **Program S-7: Manage Safety Information with GIS Technology** Use the City's Geographic Information System (GIS) to manage safety information, such as the following:

  - Existing and future geotechnical and seismic data contained in public, private, and City archives.

  - The locations and details of hazardous structures, critical lifelines and critical facilities. Data about these facilities should include the building's age, function, occupancy, and structural risk.

  - A listing of disaster response plans and resources available so these can be implemented immediately in case of emergency.

  - An overlay of seismic constraints to assist in emergency response planning.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on geology and soils are considered significant if adoption and implementation of *Burbank2035* would:

- expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

  i) rupture of the Verdugo Fault or other known earthquake fault based on substantial evidence;
  ii) strong seismic ground shaking;
  iii) seismic-related ground failure, including liquefaction; or
  iv) landslides;

- result in substantial soil erosion or the loss of topsoil;

- be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2010), creating substantial risks to life or property; or
- have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.8-1 **Fault Rupture.** *Adoption and implementation of Burbank2035 would result in future land uses in areas potentially subject to surface rupture of the Verdugo Fault during future earthquake events. However, implementation of Burbank2035 policies and implementation programs requires compliance with existing state and local regulations, which would result in a* ***less-than-significant*** *impact.*

Surface fault rupture is a serious threat to structures and infrastructure that span active faults and to people residing and working in those areas. Burbank contains one active fault, the Verdugo Fault, located just south of the Verdugo Mountains. Other active faults exist in the region, but they are not located within the planning area, so those faults do not pose surface fault rupture risk in the city. While the Verdugo Fault Zone is considered a surface rupture hazard by the CGS and the U.S. Geological Survey (USGS), this fault has not been recognized as an active fault under the Alquist-Priolo Act (ESCI EnviroServices 2007:2–17).

Future land uses consistent with the *Burbank2035* Land Use Diagram could expose people or new structures to hazards associated with fault rupture of the Verdugo Fault. However, *Burbank2035* includes policies and programs to protect people and structures from fault rupture. Program S-7 would help identify parcels within the Verdugo Fault zone through the City's Geographic Information System (GIS), which would include fault and seismic data. Safety Element Policy 5.1 requires a site-specific geotechnical report for development within a fault area that may be subject to surface rupture risk. Implementation of this policy requires site-specific geotechnical information and compliance with existing state and local laws and regulations concerning fault rupture. Therefore, program-level impacts related to fault rupture would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.8-2 **Exposure to Seismic Ground Shaking.** *Adoption and implementation of Burbank2035 would result in new people and structures in areas prone to strong seismic ground shaking. However, Burbank2035 policies and implementation programs require compliance with existing state and local regulations and require structural assessments and mitigation to reduce the potential for substantial adverse effects due to exposure to seismic ground shaking. This impact would be* ***less than significant.***

The Verdugo Fault system and a number of other regional faults (including the San Fernando, Sierra Madre, Raymond, and Hollywood Faults) are the main contributors to the seismic exposure of the Burbank planning area and the surrounding region. The effect of an earthquake originating on any given fault would depend primarily on

the earthquake magnitude and the distance of the planning area from the earthquake source. In general, the more distant the source fault is from the affected area and the smaller the magnitude of the potential earthquake, the smaller the expected ground shaking effect.

Future land uses consistent with the *Burbank2035* Land Use Diagram would expose additional people and structures to hazards related to seismic ground shaking. However, *Burbank2035* policies and programs include a variety of actions to protect people and structures from ground shaking. Safety Element Policy 5.3 requires enforcement of the current CBC related to geologic and seismic hazards. The state earthquake protection law (California Health and Safety Code Section 19100 et seq.) requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Program S-6 ensures compliance with the current CBC and the Burbank Municipal Code (BMC) related to seismic design standards, requiring all structures be designed and built to withstand earthquakes. Chapter 16 of the CBC specifies how each seismic design category is to be determined through site-specific soil characteristics and proximity to potential seismic hazards. Safety Element Policy 5.4 encourages and facilitates retrofits of seismically high-risk buildings. Furthermore, Safety Element Policy 5.5 facilitates the retrofitting of bridges and highway structures in the city to reduce risks associated with seismic ground shaking.

Implementation of Burbank2035 policies and programs requires compliance with existing state and local laws and regulations concerning seismic ground shaking, including site-specific investigations and measures to reduce hazards. Therefore, program-level impacts related to seismic ground shaking would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.8-3 **Potential for Seismic-related Ground Failure.** *Adoption and implementation of Burbank2035 would place new people and structures in areas prone to soil liquefaction and ground failure. However, implementation of Burbank2035 policies and implementation programs require compliance with existing state and local regulations, which would reduce the potential for substantial adverse effects due to exposure to soil liquefaction. This impact would be* ***less than significant****.*

Liquefaction occurs most often where groundwater is within 30 feet of the surface, but it may also occur in areas where groundwater is located up to 50 feet beneath the surface. High pore pressures that build up in sediments during repeated seismic vibrations cause the soil to behave as a liquid. The excess pore pressures are often pushed upward through fissures and soil cracks, which causes water-soil slurry to bubble onto the ground surface. In the last 50 years, regional groundwater table levels have dropped in response to the increased volume of water extracted from wells. As such, a 1993 map of groundwater contours for the upper Los Angeles River area shows that in most of Burbank the water table is more than 100 feet deep (City of Burbank 1997:56). The only exception is along the southwestern portion of the city, near the SR 134 Freeway, where the groundwater was measured at about 50 to 60 feet below the ground surface. Therefore, as long as existing groundwater conditions are maintained (i.e., groundwater continues to be extracted in the upper Los Angeles River area and the area does not experience a series of unusually high rainfall years), groundwater levels in Burbank can be expected to remain at or deeper than 50 feet, resulting in low to very low liquefaction risk in most of the planning area. However, as noted above, CGS has delineated areas within the planning area and adjacent areas that are susceptible to liquefaction, as shown in Figure 9-3 in Appendix A. In general, all of the planning area located west of I-5 is

underlain by recently deposited sediments that may include potentially liquefiable layers. If groundwater levels in this area rise to within 50 feet of the ground surface, the sediments would have a moderate to high susceptibility to liquefy.

Future land uses consistent with the *Burbank2035* Land Use Diagram would expose additional people and structures to hazards related to liquefaction and ground failure. However, *Burbank2035* policies and programs include a variety of actions to protect people and structures from soil liquefaction and ground failure. Safety Element Policy 5.2 requires geotechnical reports for new development projects in areas with the potential for liquefaction. Program S-4 ensures the evaluation of the liquefaction potential of a site when, during the course of a geotechnical investigation, shallow groundwater (50 feet or less) and unconsolidated sandy alluvium soils are found. Safety Element Policy 5.3 requires enforcement of the current CBC related to geologic and seismic hazards. Chapter 18 of the CBC requires addressing mitigation measures to be considered in structural design as related to potential liquefaction hazards.

Adherence to and implementation of *Burbank2035* policies and programs requires implementation of existing state, and local laws and regulations concerning soil liquefaction and ground failure, including site-specific investigation and actions to reduce hazards, where warranted. Therefore, program-level impacts related to liquefaction and ground failure would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.8-4 **Potential for Landslides.** *Adoption and implementation of Burbank2035would result in future land uses in areas susceptible to earthquake-induced landslides. However, implementation of Burbank2035 policies and implementation programs require compliance with existing state and local regulations, which would reduce the potential for substantial adverse effects due to exposure to earthquake-induced landslides. This impact would be* ***less than significant****.*

The areas considered most susceptible to earthquake-induced landslides and mudslides in the planning area include properties at the base of undeveloped or unimproved slopes in the Verdugo Mountains, north of Sunset Canyon Drive. These areas are located on or near moderately to steeply inclined slopes and on or adjacent to existing landslide deposits, especially if the underlying materials consist of loose soil or weak, fractured bedrock.

Future land uses consistent with the *Burbank2035* Land Use Diagram could expose additional people and structures to hazards related to landslides. However, *Burbank2035* policies include a variety of actions to protect people and structures from landslides. Safety Element Policy 5.2 requires geotechnical reports for new development projects in areas with the potential for landslide. Safety Element Policy 5.3 requires enforcement of seismic design provisions of the current CBC related to geologic, seismic, and slope hazards. Land Use Element Policy 8,7 limits new development to previously subdivided lots in existing neighborhoods and is directed toward the hillside area of the city. Additionally, Policy 8.7 states that new subdivisions or development in previously undeveloped natural areas are not desirable and would be carefully reviewed in light of possible impacts on the natural hillside environment. Land Use Policy 8.8 ensures that new development would be compatible with the topography and geology of the hillside area and would be incorporated into the natural setting.

In addition to the policies above, site-specific hazard investigations are required by the SHMA when a development project is located within one of the Seismic Hazard Mapping Zones defined as a zone of required investigation, which includes areas prone to earthquake-induced landslides. The SHMA also specifies that the lead agency for a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils and slopes. Earthquake-Induced Landslide Zones in the planning area are illustrated in Figure 9-4 in Appendix A, and include areas in the Verdugo Mountains on the northeastern side of the planning area.

Adherence to and implementation of *Burbank2035* policies would require compliance with state and local regulations, state-licensed surveys of soil and geologic conditions in areas subject to landslide hazards, and mitigation for any potential hazards. Therefore, program-level impacts related to landsliding and slope failure would be **less than significant**.

IMPACT 4.8-5 **Erosion Hazards.** *Adoption and implementation of Burbank2035 would result in future land uses in areas susceptible to erosion. However, implementation of Burbank2035 policies and implementation programs require compliance with existing state and local regulations, which would reduce the potential for substantial adverse effects due to erosion or soil loss. This impact would be* ***less than significant****.*

Erosion is an impact caused by human activity and disturbance of surface soil, and can naturally occur by wind and water. Increased soil erosion could occur as a result of ground disturbance, including construction activity and loss of vegetative cover from new development with implementation of *Burbank2035*. Accelerated erosion within an urban area could cause damage by undermining structures; blocking storm sewers; and depositing silt, sand, or mud in roads and tunnels, and result in degradation of water quality.

Future land uses consistent with *Burbank2035* would result in ground disturbance. Title 1, Chapter 1, Section 9-1-9-907 of the BMC describes the requirements for sediment and erosion control Best Management Practices (BMPs). In addition, *Burbank2035* policies and programs include a variety of actions to avoid or minimize erosion. Safety Element Policy 5.3 requires enforcement of the current CBC related to geologic and seismic hazards. Program S-6 would ensure that new developments comply with the current CBC and the BMC, including erosion control provisions. Appendix Chapter J of the CBC regulates grading activities, including drainage and erosion control.

Adherence to and implementation of *Burbank2035* policies and programs would require compliance with state and local regulations, including implementation of BMPs to address potential erosion hazards. Therefore, program-level impacts related to erosion would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.8-6 **Potential for Unstable Soils.** *Implementation of Burbank2035 would result in construction of occupied structures in areas located on a geologic unit or soil that is unstable or that would become unstable, potentially resulting in on- or off-site lateral spreading, subsidence, liquefaction, or collapse. However, implementation of Burbank2035 policies and implementation programs requires compliance with existing state and local regulations, which would reduce the potential for substantial adverse effects due to unstable soils. This impact would be* ***less than significant****.*

In addition to earthquake-induced landslides, slope instability or landsliding can occur under static (non-earthquake) conditions due to moisture influx, erosion, loss of toe support, or other factors. The potential for landslides, debris flows, and shallow mudslides is a potential geologic hazard in the hilly portions of the planning area, including areas located at the base of the Verdugo Mountains north of Sunset Canyon Drive.

Collapsible soils are typically young, loose deposits that have the potential for significant abrupt volumetric change when wetted. An increase in surface water infiltration such as from heavy irrigation or prolonged rainfall or from a rise in the groundwater, combined with the weight of a structure, can initiate settlement. These materials typically affect foundations, slabs, and exterior improvements to properties. Current provisions required by Chapter 18 of the CBC would reduce hazards at sites with collapsible expansive soils.

Ground subsidence is typically associated with regional changes in ground surface elevation associated with seismic warping, lowering of groundwater through pumping, and removal of oil and natural gas through pumping. Ground subsidence may be occurring beneath the planning area, primarily due to groundwater withdrawal. However, these movements are distributed over large areas, therefore, rarely produce damage.

The liquefaction of soils could cause lateral movement or spreading of the ground outward from under buildings, roads, railroad tracks, other structures such as bridges, and infrastructure in the planning area. Damage is usually greatest to large or heavy structures on shallow foundations and takes the form of cracking, tilting, and differential settlement. Where gentle slopes and an unstable geologic unit or soil exist, liquefaction may cause lateral-spreading landslides. Buildings could be moved downslope by this type of ground failure. Where these conditions are known to exist, a geotechnical investigation would be required by Safety Element Policies 5.1 and 5.2, and compliance with state and city regulations, and structural and foundation design would be required to minimize or eliminate liquefaction, lateral spreading, and subsidence hazards to new development in the planning area. In addition, Program S-6 ensures new developments comply with the current CBC and the BMC.

Adherence to and implementation of *Burbank2035* policies and programs and compliance with state and local regulations would reduce potential impacts from new development on an unstable geologic unit or soil to a **less-than-significant** level by requiring site-specific investigation, including mitigation where warranted.

Mitigation Measure

None required.

IMPACT 4.8-7 **Construction in Areas with Expansive Soils.** *Implementation of Burbank2035 would result in construction of occupied structures in areas with expansive soils. However, Burbank2035 policies and implementation programs require compliance with existing state and local regulations, which would reduce the potential for substantial adverse effects due to expansive soils. This impact would be* ***less than significant****.*

Expansive or shrink-swell soils contain significant amounts of clay minerals that swell when wet and shrink when dry. These clays tend to swell despite the heavy loads imposed by large structures. Damage (e.g., cracking of foundations) results from differential movement and from the repetition of the shrink-swell cycle. The potential for soil to undergo shrink and swell is greatly enhanced by the presence of a fluctuating, shallow groundwater table. Changes in the volume of expansive soils can result in the consolidation of soft clays after the lowering of the water table or the placement of fill.

Future land uses consistent with the *Burbank2035* Land Use Diagram could expose additional people and structures to hazards associated with expansive soils. However, Safety Element Policy 5.3 requires enforcement of the current CBC, which addresses structural and foundation design for expansive soils. Furthermore, Program S-6 ensures that new developments comply with the current CBC and the BMC. Chapter 18 of the CBC regulates the excavation of foundations and retaining walls by requiring preparation of a preliminary soil report, engineering geologic report, geotechnical report, and supplemental ground-response report on a project-by-project basis. Chapter 18 also regulates analysis of expansive soils and the determination of depth to the groundwater table.

Adherence to and implementation of *Burbank2035* policies and programs would require compliance with state and local regulations, including the CBC, which mitigates for expansive soils. Therefore, program-level impacts related to expansive soils would be **less than significant**.

Mitigation Measure

None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

IMPACT 4.8-8 **Cumulative Effects on Geology and Soils.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would not be result in cumulative geology and soils impacts because these impacts are inherently site specific. This impact would be* ***less than significant****.*

Geology and soil hazards are related to conditions and circumstances that are considered site specific. Therefore, the geographic context for the analysis of potential cumulative geology and soils impacts consists of individual development sites. Although cumulative development in the region may include numerous projects with geologic and soil impacts, these impacts would affect each individual project, rather than resulting in an additive cumulative effect. Therefore, cumulative development would result in a less-than-significant cumulative impact related to geology and soil hazards.

Mitigation Measure

None required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to hazards and hazardous materials associated with implementation of *Burbank2035*. The analysis includes a review of state hazardous materials databases, hazards related to schools and the Bob Hope Airport, emergency response procedures related to hazardous materials, and wildland fires. *Burbank2035* Safety Element policies and *Burbank2035* implementation programs presented in the Plan Realization Element ensure new development, businesses, the airport, and public safety are prepared for emergencies and potential release of hazards or hazardous materials in the planning area.

NOP Comments: In response to the NOP, one comment letter related to hazards and hazardous materials was received from the California Emergency Management Agency (see Appendix B). The comment letter was focused on requirements of state planning law related to hazards and hazardous materials issues in a general plan (Safety Element) and the EIR for the general plan.

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR), the Burbank All-Hazard Mitigation Plan (updated in March 2010 and incorporated by reference in the Safety Element), and other publicly available documents. The TBR prepared for the project is attached to this EIR as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.9.2 ENVIRONMENTAL SETTING

Section 10.1 of Appendix A describes local hazards and hazardous materials conditions in Burbank. Key findings from the TBR are summarized below:

- In Burbank, hazardous materials were used historically in the construction of existing older non-residential buildings. Hazardous wastes on properties in the planning area are associated with the historical uses of those properties. Hazards and hazardous materials in the planning area are also generated by manufacturing and service industries; commercial uses; media studio activities; hospitals; schools; households; aircraft, auto, and rail accidents; industrial operations; and cleanup of hazardous waste sites. Hazardous materials are also transported within and through Burbank on roadways, freeways, railways, the Bob Hope Airport, and pipelines.

- The State Water Resources Control Board (SWRCB) maintains the GeoTracker database, which provides information in graphic form to easily identify the location of a hazardous waste site and also maintains information about specific sites, including the current status of the site, chemicals of concern on the site, potential media affected, regulatory activities, and any data submitted to the oversight agency (e.g., Los Angeles Regional Water Quality Control Board [RWQCB], California Department of Toxic Substances Control [DTSC]), such as contaminant concentrations in monitoring wells. Tables 10-1 and 10-2 in Section 10.1 of Appendix A provides a list of Leaking Underground Storage Tank (LUST) sites and active GeoTracker cleanup sites in Burbank, respectively.

- The Bob Hope Airport has a Federal Aviation Administration approved Airport Emergency Plan. The Airport Emergency Plan sets forth emergency plans for prompt response to all emergencies by all responsible agencies to minimize the possibility and extent of personal injury and property damage around the airport. The Airport Fire Department is the first responder to all airport emergencies, but the Burbank Fire Department (BFD) has the ultimate responsibility for all incidents in the city.

- Hazardous materials are transported through the planning area via four modes of transportation: roadways (highways and city streets), rail, pipeline, and air. Types of hazardous cargo regularly transported into, out of, and through the planning area include flammable liquids, corrosive materials, compressed and/or poisonous gases, explosives, flammable solids, and irritating materials.

- Two portions of the planning area are mapped by the BFD as a Mountain Fire Zones and approved by CAL FIRE (see Exhibit 4.9-1). These areas are vulnerable to wildland fires. One zone is located along the foothills of the Verdugo Mountains in the northeastern portion of the planning area. This area is characterized by mountainous terrain, dense vegetation, narrow streets and comprises about 3,000 acres of private and public land. The other zone occurs in the southwestern planning area and overlaps with Warner Bros. Studio and residential development adjacent to undeveloped hillsides to the east.

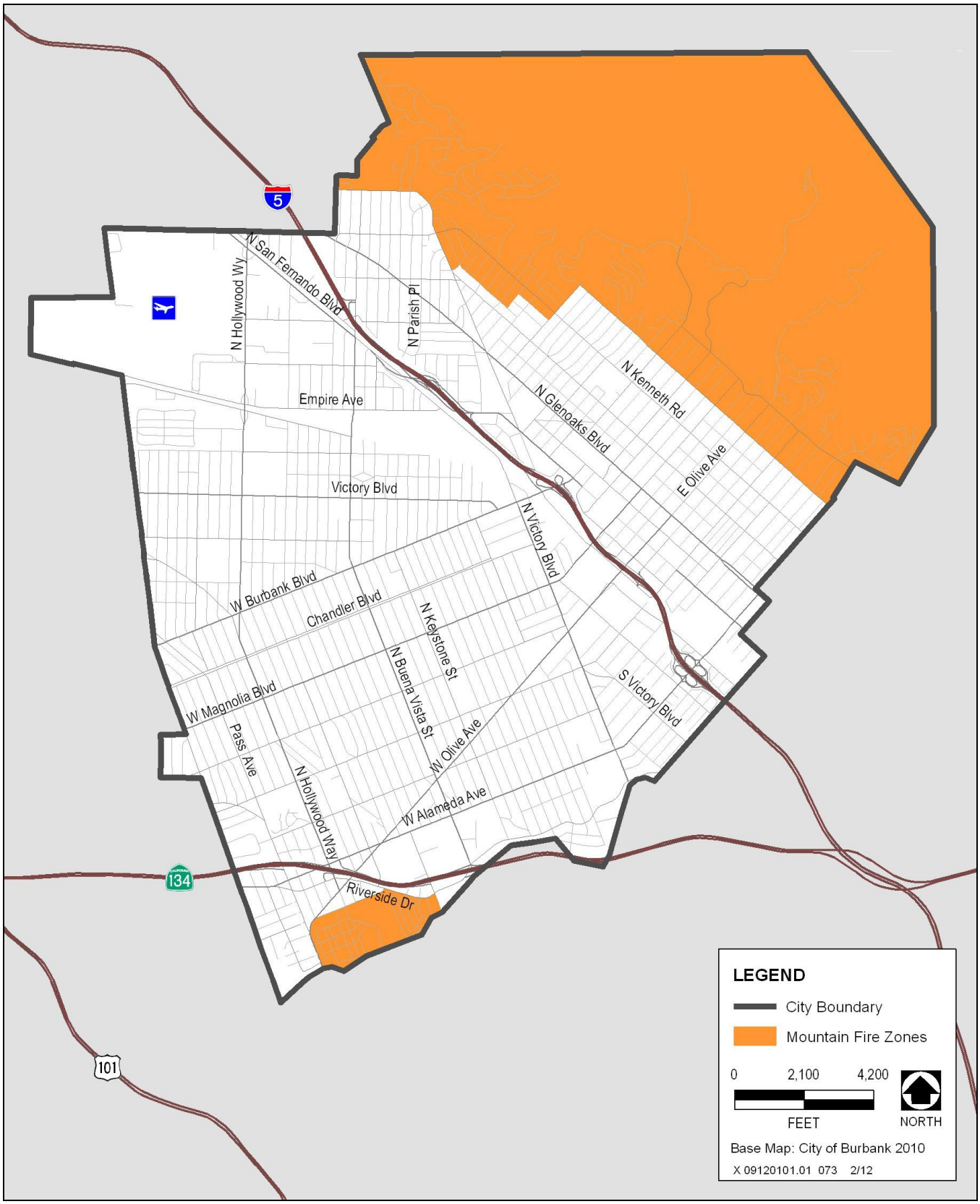
4.9.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to hazards and hazardous materials in the planning area. They provide the regulatory framework for addressing all aspects of hazards and hazardous materials that would be affected by implementation of *Burbank2035*. The regulatory setting for hazards and hazardous materials is discussed in detail in Appendix A. Key regulations used to reduce potential impacts of the proposed project are summarized below.

- **Resource Conservation and Recovery Act:** At the federal level, the principal agency regulating the generation, transport, and disposal of hazardous substances is the U.S. Environmental Protection Agency (EPA), under the authority of the Resource Conservation and Recovery Act (RCRA). RCRA established an all-encompassing federal regulatory program for hazardous substances that is administered by EPA. Under RCRA, EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances.

- **Hazardous Materials Transport Regulations:** The U.S. Department of Transportation (USDOT) regulates transportation of hazardous materials between states. The USDOT Federal Railroad Administration (FRA) enforces the Hazardous Materials Regulations, which are promulgated by the Pipeline and Hazardous Materials Safety Administration for rail transportation. These regulations include requirements that railroads and other transporters of hazardous materials, as well as shippers, have and adhere to security plans and also train employees involved in offering, accepting, or transporting hazardous materials on both safety and security matters.

- **Comprehensive Environmental Response, Compensation, and Liability Act:** The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress in 1980. CERCLA established prohibitions and requirements concerning closed and



Source: City of Burbank 2010, CASIL 1990

Exhibit 4.9-1 **Fire Zones**

abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified.

- **California Hazardous Materials Release Response Plans and Inventory Law:** The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires hazardous materials business plans to be prepared and inventories of hazardous materials to be disclosed. A business plan includes an inventory of the hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee safety and emergency response training (California Health and Safety Code, Division 20, Chapter 6.95, Article 1).

- **Hazardous Waste Control Act:** The Hazardous Waste Control Act is codified in California Code of Regulations Title 26, which describes requirements for the proper management of hazardous wastes. The act created the State's hazardous waste management program, which is similar to but more stringent than the federal RCRA program.

- **Government Code Section 65962.5 (Cortese List):** The provisions of Government Code Section 65962.5 are commonly referred to as the Cortese List. The Cortese List is a planning document used by the state and local agencies to provide information about hazardous materials release sites. Government Code Section 65962.5 requires California Environmental Protection Agency (Cal/EPA) to develop an updated Cortese List annually, at minimum. DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

- **California Emergency Response Plan:** California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the California Emergency Management Agency, which coordinates the responses of other agencies, including Cal/EPA, California Highway Patrol (CHP), RWQCB, and the Los Angeles County Emergency Services Program.

- **City of Burbank All Hazard Mitigation Plan:** The City's *All-Hazard Mitigation Plan*, adopted in March 2005 (updated in March 2010), meets the requirements of the Disaster Mitigation Act of 2000. The Disaster Mitigation Act of 2000 requires local governments to prepare plans that identify hazards and risks within a community, and create appropriate mitigation. The purpose of the *All-Hazard Mitigation Plan* is to integrate hazard mitigation strategies into the daily activities and programs of the City. After acceptance by the California Emergency Management Agency (CalEMA) the Federal Emergency Management Agency, selected mitigation strategies are further developed for funding and implementation by the appropriate City agencies and departments. Pursuant to federal and state requirements, the *All-Hazard Mitigation Plan* is incorporated by reference within the *Burbank2035* Safety Element.

- **City of Burbank Multi Hazard Functional Plan:** The City's *Multi Hazard Functional Plan* addresses Burbank's planned response to emergencies associated with natural disasters and technological incidents including both peacetime and wartime nuclear defense operations. It provides an overview of operational concepts, identifies components of the City of Burbank's emergency management organization within the Standardized Emergency Management System (SEMS) and National Incident Management System (NIMS),

and describes the overall responsibilities of the federal, state, and county entities and the City of Burbank for protecting life and property and assuring the overall well-being of the population.

4.9.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analyses of impacts on hazards and hazardous materials is qualitative and based on available hazards and hazardous materials information for the planning area. The analysis assumes that all future and existing development within the planning area complies with applicable laws, regulations, design standards, and plans. An analysis of cumulative impacts uses qualitative information for the planning area.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential hazards and hazardous materials impacts include:

POLICIES

Safety Element

- **Policy 1.1:** Regularly update all disaster preparedness and emergency response plans.
- **Policy 1.2:** Coordinate disaster preparedness and emergency response with appropriate agencies, including the Burbank Police Department, Burbank Fire Department, and Burbank-Glendale-Pasadena Airport Authority, and neighboring cities.
- **Policy 1.3:** Sponsor and support public education programs for emergency preparedness and disaster response.
- **Policy 1.4:** Promote the development of community or neighborhood disaster relief groups and workplace self-help groups to improve the effectiveness of local emergency response teams.
- **Policy 1.5:** Establish designated emergency response and evacuation routes throughout the city.
- **Policy 7.1:** Maintain consistency with the Los Angeles County Airport Land Use Plan as it pertains to Bob Hope Airport.
- **Policy 7.2:** Ensure that land uses, densities, and building heights within Airport Land Use Compatibility Zones are compatible with safe operation of Bob Hope Airport.
- **Policy 7.3:** Review and update City procedures for responding to airport and aircraft-related emergencies.
- **Policy 7.4:** Coordinate disaster response with the Bob Hope Airport Fire Department.

- **Policy 8.1:** Review proposed projects involving the use or storage of hazardous materials.
- **Policy 8.2:** Encourage businesses and organizations that store and use hazardous materials to improve planning and management procedures.
- **Policy 8.3:** Distribute information and use incentives and disincentives to reduce or eliminate the use of hazardous materials where feasible.
- **Policy 8.4:** Maintain a hazardous materials response capability that will adequately handle Burbank's hazardous materials safety needs.
- **Policy 8.5:** Consult with appropriate agencies regarding hazardous materials regulations.
- **Policy 8.6:** Provide the residents of Burbank with information on the proper storage and disposal of hazardous materials and e-waste and encourage the use of City disposal facilities.
- **Policy 8.7:** Include information on soil contamination and storage of hazardous materials in the City's Geographic Information System.
- **Policy 8.8:** Advocate the continued review and mitigation of the effects of operation of natural gas and petroleum pipelines, and other pipelines used to transport hazardous substances.

PROGRAMS

Safety Element

- **Program S-1: Review and Update Safety Plans on a Regular Basis.** Regularly review and update the City's safety plans every five years. Plans to be updated include, but are not limited to the:
  - All-Hazard Mitigation Plan,
  - Multi-Hazard Functional Plan,
  - Police Strategic Plan,
  - Fire Strategic Plan, and
  - Hazardous Materials Area Plan.
- **Program S-2: Review Critical Facilities.** Review critical facilities proposed for development or expansion to ensure that hazardous conditions are mitigated or hazard reduction features are incorporated to the satisfaction of the responsible agencies. Critical facilities include power and water utilities, roads, hospitals, fire and police stations, emergency operation centers, communication centers, high-risk or high-occupancy facilities, and dependent care facilities with special evacuation considerations.
- **Program S-3: Fire Protection Requirements.** Regularly update fire protection requirements, especially in transition areas between developed and undeveloped land. Enforce stringent construction and design standards, and work to preserve open space where wildfire hazards exist.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on hazards and hazardous materials are considered significant if adoption and implementation of *Burbank2035* would:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- for a project located within two miles of Bob Hope Airport, would the project result in a safety hazard for people residing or working in the project area;
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- expose people or structures within a Mountain Fire Zone (shown in Exhibit S-1 of the City of Burbank General Plan Safety Element) to a significant risk of loss, injury, or death involving wildland fires.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.9-1 **Transport, Use, or Disposal of Hazardous Materials.** *Adoption and implementation of Burbank2035 would result in an increase in the routine transport, use, and/or disposal of hazardous materials, which could result in exposure of such materials to the public through either routine use or accidental release. Compliance with existing federal and state regulations would reduce risks of accidents associated with the routine transport, use, or disposal of hazardous materials to a* ***less-than-significant*** *level.*

Adoption and implementation of *Burbank2035* would enable development of new residential, commercial, industrial, institutional, and airport uses. New development would result in increased transport, use, storage, and disposal of hazardous materials in the planning area. Of particular concern are facilities with LUSTs or other methods of storage that could accidentally leak or be released into soil, groundwater, surface water, or air. Examples of these facilities include new gas stations, automotive repair shops, dry cleaners, industrial, or residential uses in the planning area that routinely use hazardous materials.

The current regulatory environment provides a high level of protection from hazards and hazardous materials manufactured within, transported to, and stored in industrial and educational facilities. The City will continue to enforce disclosure laws that require users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport, and to notify the appropriate city, county, state, and federal agencies in the event of a violation. By recognizing these hazards and ensuring that an educated public can work

with City officials to minimize risks associated with hazardous materials in the urban environment, the City can maintain safe conditions throughout the planning area. Facilities developed consistent with *Burbank2035* that would use hazardous materials on-site would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases and protect public health.

The amount of hazardous materials transported through the planning area on rails and roadways, local routes, I-5, and SR 134 would likely increase as a result of new development consistent with *Burbank2035*, as well as projected regional growth. As such, a greater number of people in the future could be potentially exposed to hazardous materials during accidental releases.

Transportation of hazardous materials on area roadways is regulated by CHP and Caltrans, and use of these materials is regulated by DTSC, as outlined in Title 22 of the California Code of Regulations. USDOT (through the Hazardous Materials Transportation Act), and other regulatory agencies (including the California Public Utilities Commission for natural gas transmission lines) provide standards designed to avoid releases including provisions regarding securing materials and container design.

Burbank2035 Safety Element policies recognize and account for potential risks associated with hazardous materials and support compliance with and enforcement of state and federal hazardous materials regulations. Policy 8.1 requires the review of proposed projects involving the use or storage of hazardous materials. Policy 8.2 encourages users of hazardous materials to improve planning and management procedures. Policy 8.3 provides incentives and disincentives to reduce or eliminate the use of hazardous materials where feasible. Policy 8.4 requires the City to maintain a hazardous materials response capability to meet the safety needs of the City. Policy 8.5 directs the City to consult with agencies regarding hazardous materials regulations. Policy 8.6 directs the City to provide residents information on the proper storage and disposal of hazardous materials. Implementation of Policy 8.7 would provide information on soil contamination and storage of hazardous materials in the City's Geographic Information System. Policy8.8 would advocate continued review and mitigation of natural gas and petroleum pipelines. Program S-2 requires the review of the expansion or development of critical facilities, such as power and water utilities, roads, hospitals, fire and police stations, and emergency operation centers to ensure that hazardous conditions are mitigated or hazard reduction features are incorporated.

Compliance with and enforcement of existing federal, state, and local laws and regulations concerning the routine transport, use, or disposal of hazardous materials, supported by implementation of Burbank2035 policies would reduce program-level impacts to a **less-than-significant** level.

Mitigation Measure

None required.

IMPACT 4.9-2 ***Emission or Handling of Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School****. Adoption and implementation of Burbank2035 could result in development of uses that would emit or handle hazardous waste in proximity to new or existing schools. Compliance with existing regulations would reduce the risk of emission or the handling of hazardous materials near schools to a* ***less-than-significant*** *level.*

Future land uses consistent with *Burbank2035* could include commercial uses within one-quarter mile of existing and new schools. However, the California Department of Education enforces school siting requirements through its School Site Selection and Approval Guide, and based on these requirements, new facilities would not be constructed within one-quarter mile of facilities emitting or handling materials. State CEQA Guidelines Section 15186, School Facilities, requires that school projects, as well as projects proposed to be located near schools, examine potential health impacts resulting from exposure to hazardous materials, wastes, and substances. Furthermore, permitting requirements for individual hazardous material handlers or emitters, including enforcement of Public Resources Code Section 21151.4, would require evaluation and notification where potential hazardous materials handling and emissions could occur in proximity to existing schools. Compliance with these existing regulations would result in a **less-than-significant** impact.

Mitigation Measure

None required.

IMPACT 4.9-3 **Potential Development on a Known Hazardous Materials Site Compiled Pursuant to Government Code Section 65962.5.** *Currently, only one site within the planning area is identified on the Cortese List as a known hazardous materials site. Adoption and implementation of Burbank2035 could expose construction workers to hazardous materials from the current or future Cortese List sites, and hazardous materials could create an environmental or health hazard if left in place. However, compliance with existing regulations, supported by implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *impact.*

Review of Cal/EPA databases indicates that one property in the planning area is included on DTSC's Cortese List. The former Dynamic Plating Inc. site appears on both the Cortese and Superfund lists and past activities at this location have resulted in contamination of soil and groundwater. During construction and demolition, workers could come into contact with, and be exposed to, hazardous materials present in soil or groundwater. Further, the presence of contamination in soils or groundwater could create an environmental or health hazard if left in place.

Existing programs and regulations govern the investigation and cleanup of sites on the Cortese List. Furthermore, the Burbank2035 Safety Element includes policies to protect residents from exposure to hazardous materials. Policy 8.4 requires the City to maintain a hazardous materials response capability to meet the safety needs of the city. Policy 8.5 directs the City to consult with appropriate agencies regarding hazardous materials regulations.

Compliance with existing regulations supported by implementation of Burbank2035 policies would require compliance with existing federal, state, and local laws and regulations. At the program-level, hazardous materials exposure impacts would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.9-4 ***Safety Hazards to People Residing or Working Within two Miles of Bob Hope Airport.*** *Adoption and implementation of Burbank2035 could result in an increase of people residing or working within two miles of the Bob Hope Airport, which could result in a safety hazard. However, implementation of Burbank2035 policies and programs and existing regulations would result in* ***a less-than-significant*** *impact.*

The Bob Hope Airport is located in the northwestern portion of the planning area. Safety hazards associated with airport are generally related to construction of tall structures that could interfere with airplane flight paths, or with increasing the number of people working or residing in areas subject to crash hazards. The Bob Hope Airport Emergency Plan establishes actions that responsible agencies should take to respond promptly to emergencies, minimizing the possibility and extent of personal injury and property damage around the airport. The Los Angeles County Airport Land Use Commission has adopted an Airport Influence Area for Bob Hope Airport. The Airport Influence Area is the area in which noise, overflight, safety, or airspace protection factors may affect land uses or necessitate restrictions on those uses. The Los Angeles County Airport Land Use Plan identifies two safety zones within the planning boundaries of the airport: the Approach Surface and the Runway Protection Zone.

Implementation of Burbank2035 could result in construction of residential, commercial, and industrial uses in proximity to the Bob Hope Airport. However, implementation of *Burbank2035* Safety Element policies would ensure safety of people working or residing within two miles of the Bob Hope Airport. Policy 7.1 requires the City to maintain consistency with the Los Angeles County Airport Land Use Plan as it pertains to Bob Hope Airport. Policy 7.2 ensures that land uses, densities, and building heights within Airport Land Use Compatibility Zones are compatible with safe operation of Bob Hope Airport. Policy 7.3 requires review and update of City procedures for responding to airport and aircraft-related emergencies. Policy 7.4 requires coordination with the City and disaster response with the Bob Hope Airport Fire Department.

Therefore, compliance with existing regulations, supported by implementation of Burbank2035 policies, would reduce programmatic airport safety impacts to a **less-than-significant** level.

Mitigation Measure

None required.

IMPACT 4.9-5 **Interference with an Adopted Emergency-Response Plan.** *Adoption and implementation of Burbank2035 would create additional traffic and future land uses requiring evacuation in the event of an emergency. However, implementation of Burbank2035 policies and programs would ensure conformance with countywide emergency-response programs and continued cooperation with emergency-response service providers. This impact would be* ***less than significant****.*

The Los Angeles County Fire Department (LACFD) Health Hazardous Materials Division is the Certified Unified Program Agency (CUPA) for the City of Burbank, with the BFD authorized as a participating agency. The LACFD and the BFD work together to implement the City’s Multi Hazard Functional Plan that addresses Burbank's planned response to emergencies.

An efficient roadway and circulation system is vital for the evacuation of residents and the mobility of fire suppression, emergency response, and law enforcement vehicles. Future land uses consistent with *Burbank2035* would create additional traffic and result in new residences requiring evacuation in the event of an emergency.

Burbank2035 Safety Element policies and programs support implementation of the City's Multi Hazard Functional Plan and the All-Hazard Mitigation Plan. Policy 1.1 would require regular updates of all disaster preparedness and emergency response plans. Policy 1.2 would require coordination of disaster preparedness and emergency response with appropriate agencies, including the Burbank Police Department, BFD, and Burbank-Glendale-Pasadena Airport Authority. Policy 1.3 directs the City to sponsor and support public education programs for emergency preparedness and disaster response. Policy 1.4 directs the City to promote the development of local disaster relief groups to improve the effectiveness of local emergency response teams. Policy 1.5 requires the City to establish designated emergency response and evacuation routes throughout the city. Program S-1 requires the City to review and update its safety plans every five years.

Therefore, implementation of *Burbank2035* policies and programs and compliance with existing federal, state, and local laws and regulations would result in program-level impacts that would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.9-6 **Exposure of Structures to Urban and Wildland Fire.** *Adoption and implementation of Burbank2035 would increase population located in proximity to wildlands and the Mountain Fire Zone, which would increase the risk from potential wildland fires. However, implementation of Burbank2035 programs would reduce the potential for exposure of people or structures to wildland fires. This impact would be* ***less than significant****.*

Areas at risk for extreme wildfires are designated by CAL FIRE and include lands where dense vegetation with severe burning potential is present. Two portions of the planning area are mapped by the BFD as a Mountain Fire Zone and accepted by CAL FIRE. One is an approximately 3,000-acre area along the foothills of the Verdugo Mountains. The other overlaps with Warner Bros. Studio and residential development adjacent to undeveloped hillsides.

Hazards to life and property are affected by fire and by road access for evacuation, the number of available firefighters, vegetation clearance around property, availability of water and water pressure and the effectiveness of building and fire codes and inspection of developments in areas of higher fire hazard. The BFD would increase involvement in the planning process to minimize impacts in urbanized areas most at-risk for structural fires, as well as hillside areas where fire has a greater potential to spread.

Two *Burbank2035* programs would protect people and property from wildland fire hazards. Program S-1 requires the City to review and update the City's safety plans every five years, including the Fire Strategic Plan. Program S-3 requires the City to regularly update fire protection requirements, especially in transition areas between developed and undeveloped land. Furthermore, Program S-3 enforces stringent construction and design standards, and work to preserve open space where wildfire hazards exist.

Implementation of *Burbank2035* programs and compliance with existing federal, state, and local laws and regulations related to wildland fire hazards would result in program-level impacts that would be **less than significant**.

Mitigation Measure

None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

The cumulative context for hazards and hazardous materials is generally site-specific rather than regional. Because *Burbank2035* considers all projected growth and development in the planning area, the project-level impacts related to hazards and hazardous materials that are discussed in Impacts 4.9-2, 4.9-3, and 4.9-6 also are considered cumulative impacts as well, since these cumulative impacts are site-specific and would be limited to the planning area.

The cumulative context for other impacts discussed below includes projected regional growth in surrounding cities and Los Angeles County, as hazards and hazardous materials may travel beyond the planning area.

IMPACT 4.9-7 **Cumulative Effect on Transport, Use, or Disposal of Hazardous Materials.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would result in an increase in the routine transport, use, and/or disposal of hazardous materials, which could result in exposure of such materials to the public through either routine use or accidental release. Compliance with existing federal and state regulations would reduce risks of accidents associated with the transport, use, or disposal of hazardous materials. This would be a* ***less-than-significant*** *impact.*

Adoption and implementation of *Burbank2035* would allow development of new residential, commercial, industrial, institutional, and airport uses. New development consistent with *Burbank2035* and projected regional growth outside of the planning area would result in increased transport, use, storage, and disposal of hazardous materials in the planning area on rails and roadways, local routes, I-5, and SR 134.

Existing federal, state, and local regulations regarding the storage and handling of hazardous wastes, the use and removal of leaking underground storage tanks, and the cleanup and remediation of leaking contaminants, hazardous wastes, and hazardous substances limit the public health and safety impacts from the accidental release of and exposure to hazardous substances. Future projects in all jurisdictions would be subject to these regulations. Therefore, this cumulative impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.9-8 **Cumulative Effect on Interference with an Adopted Emergency-Response Plan.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would create additional traffic and future land uses requiring evacuation in case of an emergency. Implementation of Burbank2035 policies and programs would ensure conformance with countywide emergency-response programs and continued cooperation with emergency-response service providers. This would be a* ***less-than-significant*** *impact.*

LACFD is the CUPA for the City of Burbank. The Glendale Fire Department is the CUPA for the City of Glendale. The Los Angeles Fire Department is the CUPA for the City of Los Angeles (including areas near

Burbank). These agencies would work with the LACFD Health Hazardous Materials Division and the BFD to implement the City's Multi-Hazard Functional Plan to respond to emergencies near the border of the planning area. *Burbank2035* policies and programs support implementation of the City's Multi-Hazard Functional Plan and the All-Hazard Mitigation Plan, which also consider emergencies near the boundaries of the City of Burbank and emergency access and routes that would travel outside of the city. Policy 1.1 would require regular updates of all disaster preparedness and emergency response plans. Policy 1.5 requires the City to establish designated emergency response and evacuation routes throughout the city. Program S-1 requires the City to review and update its safety plans every five years. Furthermore, the same additional policies and programs described in Impact 4.9-5 for program-level impacts would reduce this cumulative impact to a **less-than-significant** level.

Mitigation Measure

None required.

IMPACT 4.9-9 **Cumulative Safety Hazards to People Residing or Working Within Two Miles of Bob Hope Airport.** *Adoption and implementation of Burbank2035 could result in an increase of people residing or working within two miles of the Bob Hope Airport, which could result in a safety hazard. Implementation of Burbank2035 policies and programs and existing regulations would reduce the safety impact within the planning area. This would be a* ***less-than-significant*** *impact.*

The Bob Hope Airport is located in the northwestern corner of the planning area. Future growth in the City of Los Angeles to the north and west of Bob Hope Airport could result in the construction of residential, commercial, and industrial uses within two miles of the airport. The Los Angeles County Airport Land Use Plan identifies two safety zones within the planning boundaries of the airport: the Approach Surface and the Runway Protection Zone, which apply to cumulative growth in the City of Los Angeles, due to the orientation of the runways. The same policies and programs described in Impact 4.9-4 for program-level impacts would reduce this cumulative impact to a **less-than-significant** level.

Mitigation Measure

None required.

This page intentionally left blank.

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to hydrology and water quality associated with implementation of *Burbank2035*. The analysis includes a review of surface water, groundwater, flooding, stormwater, and water quality. Water supply and wastewater treatment are discussed in Section 4.16, Public Services and Utilities. Topics including erosion and sedimentation are discussed in Section 4.8, Geology and Soils. Issues regarding wetlands and waters of the U.S. are discussed in Section 4.4, Biological Resources, and contamination from hazardous materials is discussed in Section 4.9, Hazardous Materials. *Burbank2035* Land Use Element, Open Space and Conservation Element, and Safety Element policies and implementation programs presented in the Plan Realization Element guide development and infrastructure practices to protect surface water and groundwater from the degradation of runoff and pollution, reduce water consumption, and protect against flooding hazards.

NOP Comments: No NOP comments related to hydrology and water quality were received.

Reference Information: Information for this resource chapter is based on numerous references, including the Burbank2035 Technical Background Report (TBR), Federal Emergency Management Agency (FEMA) maps, and other publicly available documents. The TBR is attached to this document as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.10.2 ENVIRONMENTAL SETTING

Section 11.1 of Appendix A describes in detail the regional and local hydrology as well as the groundwater hydrology of Burbank. FEMA Flood Zones are described and mapped. Surface and groundwater quality are also discussed. Key findings from the TBR are summarized below.

HYDROLOGY

- **Watersheds:** The planning area is located in the San Fernando Valley within the Los Angeles River Watershed, which covers 834 square miles and is one of 19 major watersheds in the South Coast Hydrologic Region as shown in Exhibit 11-1 of the TBR (Appendix A). The Los Angeles River and its tributaries drain the San Fernando Valley. The Los Angeles River, which flows from its headwaters in the Santa Monica Mountains, through the San Fernando Valley, south through the Glendale Narrows, and across the coastal plain into San Pedro Bay, defines a portion of the southern boundary of the city and serves as a major flood control channel.

- **Surface Water:** Two naturally occurring, though highly modified, waterways flow through Burbank: the Burbank Western Channel and the Los Angeles River, as shown on Exhibit 11-1 of the TBR (Appendix A). The Los Angeles River defines a portion of the southern boundary of the city. Over 90% of the Los Angeles River is lined with concrete. The Burbank Western Channel travels southeast through the western part of the city, generally paralleling I-5, before converging with the Los Angeles River south of the city boundary. The channel is lined with concrete through the city to the Los Angeles River confluence. One additional channel, Lockheed Channel is located within the city and travels southeast, generally paralleling Vanowen Street

before joining the Burbank Western Channel near the center of the city. In addition, several seasonal streams are located in the Verdugo Mountain canyons and drainage courses in the hillside area of the northeastern portion of the planning area. They are formed by steep terrain with ridgelines and deep "V" canyons, and normally flow during the winter and early spring rainy seasons.

- **Groundwater:** The city sits atop the San Fernando Basin, which is an unconfined aquifer (i.e., an aquifer with a relatively permeable upper boundary that readily transmits water toward the surface) contained by the Santa Monica Mountains on the south, the Simi Hills to the west, the Santa Susana Mountains to the northwest, and the San Gabriel Mountains and Verdugo Hills to the northeast. The depth to groundwater in the San Fernando Basin ranges between 24 and 400 feet. The primary inflows to the basin are imported water (i.e., surface or groundwater coming into the basin that is not from local watersheds) and natural precipitation and runoff during the rainy season. The seasonal streams in the Vedugo Mountains are unlined and serve to recharge the underground aquifers in the area.

- **Floodplains:** FEMA's 100-year flood zone areas for Burbank (FEMA FIRM Number 06037C) are shown on Exhibit 11-2 of the Appendix A. The flood zone areas that are not contained by the flood control channels occur along areas of the Lockheed Drain Channel, North Overflow, Sunset Canyon, and Lake Street Overflow and an area of the Burbank Western Channel along Victory Boulevard.

- **Dam Inundation:** Three reservoirs upstream from Burbank (Reservoirs #1, #4, and #5) are classified as dams by the California Department of Water Resources (DWR 2012). Though small, these reservoirs impound more than 50 acre-feet of water.

WATER QUALITY

- **Surface Water Pollutants:** Los Angeles River segments near and within the planning area are identified as impaired under Section 303(d) of the federal Clean Water Act for the following pollutants: ammonia, copper, lead, nutrients, coliform bacteria, and trash. The Burbank Western Channel is identified as impaired for pollutants including copper, cyanide, indicator bacteria, lead, selenium, and trash. Impairment is measured by Total Maximum Daily Load (TMDL), the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards.

- **Groundwater Pollutants:** The San Fernando Basin has numerous groundwater contamination problems. Domestic groundwater from wells in Burbank is treated to remove trichloroethylene, tetrachloroethylene, and other volatile organic compounds. The City's domestic wells are monitored for general mineral, physical, and inorganic chemical parameters. Elevated levels of nitrate in the groundwater require blending it with Metropolitan Water District water to meet drinking water quality standards.

4.10.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to surface water and groundwater in the planning area. They provide the regulatory framework for addressing all aspects of hydrology and water quality that would be affected by implementation of *Burbank2035*. The regulatory setting for hydrology and water quality is discussed in detail in Appendix A and summarized below.

- **Clean Water Act:** The 1972 Clean Water Act (CWA) is the primary federal law that governs and authorizes the Environmental Protection Agency (EPA) and the states to implement activities to control water quality. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the CWA, water quality standards consist of the designated beneficial uses of the water body in question and criteria that protect the designated uses.

- **National Pollutant Discharge Elimination System:** The National Pollutant Discharge Elimination System (NPDES) permit program was established in the CWA to regulate municipal and industrial discharges to surface waters of the United States. NPDES permit regulations have been established for broad categories of discharges: point-source municipal waste discharges, nonpoint-source stormwater runoff, and industrial and construction discharges. The planning area is subject to the requirements of Phase 2 of the NPDES stormwater permit regulations that requires NPDES permits be issued for construction activity for projects that disturb one acre or more. California's RWQCBs are responsible for implementing the NPDES permit system. The planning area is within the jurisdiction of the Los Angeles RWQCB.

- **National Flood Insurance Program:** FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations that limit development in floodplains. FEMA also issues Flood Insurance Rate Maps (FIRMs) that identify land areas subject to flooding. These maps provide flood information and identify flood hazard zones in the community. FEMA established the design standard for flood protection in areas covered by the FIRMs, with the minimum level of flood protection for new development determined to be a 1-in-100 probability of annual exceedance (i.e., the 100-year flood event).

- **Porter-Cologne Water Quality Control Act:** This act requires the state to adopt water quality policies, plans, and objectives that protect the state's waters for the use and enjoyment of the people. The act sets forth the obligations of the State Water Resources Control Board (SWRCB) and RWQCBs to adopt and periodically update basin plans in which beneficial uses, water quality objectives, and implementation programs are established. The act also requires waste dischargers to notify the RWQCBs of their activities through the filing of reports of waste discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, Section 401 water quality certifications, or other approvals.

- **Los Angeles Regional Water Quality Control Board Basin Plan:** The City of Burbank is within the jurisdiction of the Los Angeles RWQCB, which is responsible for the preparation and implementation of the water quality control plan for the Los Angeles Region (Los Angeles RWQCB 1995). The basin plan defines the beneficial uses, water quality objectives, implementation programs, and surveillance and monitoring programs for waters of the coastal drainages in the Los Angeles region. The basin plan contains specific numeric water quality objectives that apply to certain water bodies or portions of water bodies. Objectives have been established for bacteria, dissolved oxygen, pH, pesticides, electrical conductivity, total dissolved solids, temperature, turbidity, and trace elements.

- **NPDES Permit System and Waste Discharge Requirements for Construction:** The SWRCB and Los Angeles RWQCB have adopted specific NPDES permits for a variety of activities that have potential to discharge wastes to waters of the state. The SWRCB General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 99-08-Division of Water Quality [DWQ]) applies

to all land-disturbing construction activities that would affect one acre or more. Construction activities subject to the general construction activity permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-storm-water discharges to storm sewer systems and other waters and consider the use of post-construction permanent best management practices (BMPs). Activities subject to the NPDES general permit for construction activity must develop and implement a storm water pollution prevention plan (SWPPP). The SWPPP identifies the BMPs that will be employed to prevent soil erosion and discharge of other construction related pollutants. A monitoring program is generally required to ensure that BMPs are implemented according to the SWPPP and are effective at controlling discharges of pollutants that are related to storm water.

- **California Building Code (CBC):** The CBC contains requirements for constructing structures in flood hazard zones. These requirements are consistent with FEMA requirements for non-residential development in a 100-year flood plain. Section 3106 of the CBC outlines the requirements of new or replacement mechanical and electrical systems proposed within flood hazard zones. Section 3106 only allows the placement of mechanical and electrical systems below the base flood elevation if properly protected to prevent water from entering or accumulating within the system components. Section 3107 of the CBC outlines the building requirements of structures within the FEMA-designated A Zones. Such requirements are that all floors below the base flood elevation must be constructed and engineered to be flood-resistant, or the floor must only be used for storage, parking, access, or foyers.

- **Standard Urban Stormwater Mitigation Plan (SUSMP):** The SUSMP (LACDPW 2002) was developed as required in Part D.2 of the Los Angeles County MS4 permit to address stormwater pollution from new construction and redevelopment. The SUSMP contains a list of minimum BMPs that must be employed to infiltrate or treat stormwater runoff, control peak flow discharge, and reduce the post-project discharge of pollutants from stormwater conveyance systems. The SUSMP defines the types of practices that must be included and issues that must be addressed as appropriate to the development type and size based on land use type.

- **Burbank Municipal Code:** Title 1, Chapter 1, Section 9-1-9-907 of the Burbank Municipal Code (BMC) describes the requirements for sediment and erosion control BMPs and SWPPPs. Title 9, Chapter 1 establishes flood hazard areas, defines the duties and responsibilities of the floodplain administrator, and sets requirements and performance standards for construction within flood zones. Title 8, Chapter 2, Article 3 contains the City's Sustainable Water Use Ordinance. The Water Conserving Fixtures and Fittings Ordinance amended BMC Title 9, Chapter 1 to require new water conserving fixtures and fittings standards for all new construction, additions, and certain remodels (City of Burbank 2008).

4.10.4 Impacts and Mitigation Measures

Analysis Approach

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analyses of impacts on hydrology and water quality is qualitative and based on available hydrologic and water quality information for the planning area along with review of regional information. The analysis assumes that all future and existing development within the planning area

complies with applicable laws, regulations, and plans. An analysis of cumulative impacts uses qualitative information for the planning area and the Los Angeles River Watershed.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential hydrology and water quality impacts include:

POLICIES

Land Use Element

- **Policy 2.2:** Preserve the undeveloped portion of the Verdugo Mountains as open space. Guide new development to infill locations in other parts of the city.
- **Policy 2.6:** Design new buildings to minimize the consumption of energy, water, and other natural resources. Develop incentives to retrofit existing buildings for a net reduction in energy, water consumption, and stormwater runoff.
- **Policy 4.9:** Improve parking lot aesthetics and reduce the urban heat island effect by providing ample shade, low-water landscaping, and trees.
- **Policy 4.10:** Require new development projects to provide adequate low-water landscaping.

Open Space and Conservation Element

- **Policy 9.1:** Meet the goal of a 20% reduction in municipal water use by 2020.
- **Policy 9.2:** Provide public information regarding the importance of water conservation and avoiding wasteful water habits.
- **Policy 9.3:** Offer incentives for water conservation and explore other water conservation programs.
- **Policy 9.4:** Pursue infrastructure improvements that would expand communitywide use of recycled water.
- **Policy 9.5:** Require on-site drainage improvements using native vegetation to capture and clean stormwater runoff.

Safety Element

- **Policy 6.1:** Inform applicants of flood risks and development requirements within the 100-year, 200-year, or 500-year floodplains or in other high-risk inundation areas. Recommend hazard mitigation where possible.
- **Policy 6.3:** Continue to maintain and upgrade the City-operated flood control system to ensure the system is capable of protecting existing and planned development.
- **Policy 6.4:** Consult with Los Angeles County and other agencies to maintain and improve capacity of local and regional flood control systems.

- **Policy 6.5:** Enforce regulations prohibiting the draining of rainwater into the sewer system.
- **Policy 6.7:** Prepare and update a storm drain master plan to ensure proper maintenance and improvements to storm drainage facilities.
- **Policy 6.8:** Protect critical public and private facilities located within areas subject to flooding.
- **Policy 6.9:** Employ strategies and design features to reduce the area of impervious surface in new development projects.

PROGRAMS

Land Use Element

- **Program LU-1: Zoning Ordinance.** The following Zoning Ordinance amendments are required to implement the updated General Plan:
  - Establish development standards that address national pollutant discharge elimination system (NPDES) requirements.
- **Program LU-6: Building and Other Municipal Codes.** The California Building Code regulates the manner in which buildings are constructed and ensures that buildings are built to withstand earthquakes, fires, and other hazards. Other sections of the BMC also affect development in the city. The City will complete the following actions related to codes and regulations to implement the General Plan:
  - Review and revise policies and codes related to green building practices. Provide incentives for the construction of green buildings with reduced environmental impacts and resource consumption beyond what is otherwise required.

Open Space and Conservation Element

- **Program OSC-7: Development Review.** Implement the following actions during development review and the CEQA process to achieve Open Space and Conservation Element goals and policies:
  - Encourage applicants to use native plants and low-water landscaping methods.
  - Require applicants to comply with NPDES permit requirements and demonstrate that their development will:
    - incorporate structural and nonstructural best management practices to mitigate projected increases in pollutant loads and flows;
    - control the velocity of pollutant loading flows during and after construction;
    - limit areas of impervious surfaces and preserve natural areas;
    - limit directly connected areas of impervious surfaces;

- use natural treatment systems such as wetlands and bioswales to treat storm runoff where technically and economically feasible;
- provide areas for on-site infiltration and/or temporary retention areas;
- limit disturbance of natural water bodies, natural drainage systems, and highly erodable areas;
- use pollution prevention methods, source controls, and treatment with small collection strategies located at or as close as possible to the source; and
- implement erosion protection during construction.

- **Program OSC-9: Regional Water Consultation.** Encourage applicants to use native plants and low-water landscaping methods. Consult with Metropolitan Water District of Southern California (Metropolitan) and the Los Angeles Regional Water Quality Control Board (RWQCB) to achieve the following water supply, distribution, and conservation objectives:
  - Maintain groundwater recharge areas to protect water quality and ensure continued recharge of local groundwater basins.
  - Reduce the amount of water used for landscaping and increase use of native and drought tolerant plants.
  - Encourage the production, distribution, and use of recycled water for landscaping projects.
  - Maintain water quality objectives for urban runoff.
  - Comply with all provisions of the NPDES permit, and support regional efforts by the Los Angeles RWQCB to improve and protect surface water quality.

Safety Element

- **Program S-5: Review Floodplain Mapping.** Annually review floodplain mapping provided by the Federal Emergency Management Agency, the California Department of Water Resources, and others. Update the General Plan as necessary to incorporate any changes to floodplain or flood hazard areas.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on hydrology and water quality are considered significant if adoption and implementation of *Burbank2035* would:

- violate any water quality standards or waste discharge requirements;
- substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted);

- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation;
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding;
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- otherwise substantially degrade water quality;
- place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- place within a 100-year flood hazard area structures that would impede or redirect flood flows;
- expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- result in inundation by seiche, tsunami, or mudflow.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.10-1 **Violate Any Water Quality Standards or Waste Discharge Requirements.** *Adoption and implementation of Burbank2035 would potentially increase the amount of impervious surface within the planning area, thereby increasing the total volume, peak discharge rate of stormwater runoff, and associated pollutants. Construction activities resulting from implementation of Burbank 2035 could also increase the amount of sediments and pollutants in stormwater runoff. However, implementation of Burbank2035 policies and programs and enforcement of existing grading, erosion, and flood control regulations would result in a* ***less-than-significant*** *impact.*

Burbank is generally built out with urban development, with the exception of open space areas in the Verdugo Mountains. Since Burbank is largely built out, vacant, buildable permeable land within the city generally does not exist. Urbanized land within Burbank is not anticipated to substantially increase with the implementation of *Burbank2035*. Proposed *Burbank2035* land use policy is based on long-established land use patterns and enables incremental intensification of existing land use patterns to better utilize existing development and accommodate infill and redevelopment. Because *Burbank2035* was designed to focus on redevelopment of existing urbanized areas, there would be very small amounts of new impervious surface that would result from development associated with implementation of the plan and thus, increased volumes or rates of discharge and associated pollutants in runoff would be minimal.

Additionally, open space features of the Verdugo Mountains would be preserved as permeable undeveloped land. *Burbank2035* Land Use Element Policy 2.2 discourages development from encroaching on the undeveloped portions of the Verdugo Mountains by directing future development to more appropriate infill locations. This expansive open space area would remain largely pervious, would continue to absorb stormwater, and would not

contribute to an increase in volume or discharge rate of stormwater. In addition, existing parkland and landscaped open space areas within the urbanized area of Burbank would remain as pervious surfaces.

Construction activities such as grading, excavation, and trenching may result from development associated with implementation of *Burbank2035*. These types of land disturbing construction activities generate the potential for increased soil erosion and sedimentation in stormwater runoff. In addition, general construction activities could contribute pollutants such as construction waste, diesel and oil from equipment, solvents, and lubricants. Sediment and contaminants could enter the stormwater drainage system and eventually enter downstream waterways and water bodies. The potential increase in soil erosion, siltation, and construction-related pollutants could degrade downstream surface water or groundwater. However, regulatory requirements described below would control construction activities and minimize, to the maximum extent practicable, the degradation of water quality.

Future projects would be required to comply with NPDES requirements. Construction activities disturbing one acre or more would be subject to the NPDES general construction activity permit and would be required to eliminate or reduce non-storm water discharges to storm sewer systems and other waters and consider the use of post-construction permanent BMPs. Projects would be required to develop and implement a SWPPP with BMPs that would be employed to prevent soil erosion and discharge of other construction related pollutants, as well as a monitoring program to ensure that BMPs are implemented appropriately and are effective at controlling discharges of pollutants that are related to stormwater. BMC Title 1, Chapter 1, Section 9-1-9-907 describes requirements for sediment and erosion control BMPs and SWPPPs. BMPs may consist of a wide variety of measures appropriate to reduce pollutants in stormwater. Projects would also be required to comply with the SUSMP, including implementation of BMPs to infiltrate or treat stormwater runoff, control peak flow discharge, and reduce the post-project discharge of pollutants from stormwater conveyance systems.

Additionally, multiple *Burbank2035* policies would serve to protect water quality. Open Space and Conservation Element Policy 9.4 would require on-site drainage improvements to use native vegetation to capture and clean stormwater runoff. Safety Element Policies 6.7 and 6.9 would require the preparation and update of a storm drain master plan to ensure proper maintenance and improvements to storm drainage facilities and would reduce the area of impervious surface in new development projects, respectively. *Burbank2035* programs would also protect water quality by establishing development standards to address NPDES requirements (Program LU-1), requiring applicants to comply with NPDES permit requirements and demonstrate achievement of water quality objectives (Program OSC-7), comply with NPDES permit provisions, and support of Los Angeles RWQCB efforts to improve and protect regional surface water quality (Program OSC-9).

Because only small areas of new impervious surface would result from development associated with implementation the plan, the increased volumes or rates of discharge and associated pollutants in runoff would be minimal. Additionally, adherence to the required water quality control permits and requirements described above and implementation of *Burbank2035* policies and programs would reduce the potential for future development to degrade water quality to the extent that a violation of water quality standards or discharge requirements would result. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-2 **Interfere with Groundwater Supply and Recharge.** *Adoption and implementation of Burbank2035 would potentially increase the amount of impervious surface within the planning area, thereby decreasing the area available to provide groundwater recharge. However, the new areas of impervious surface would be minimal, existing areas of open space would be preserved, and implementation of Burbank2035 policies and programs would require protection of groundwater recharge resources, resulting in a* ***less-than-significant*** *impact.*

Development that could result from implementation of *Burbank2035* may create areas of new impervious surface that would no longer serve as locations for infiltration of water to recharge the underlying San Fernando Basin. However, as described above in Impact 4.10-1, Burbank is generally built out with urban land uses and has minimal areas of vacant, developable permeable land. Proposed *Burbank2035* land use policy promotes the redevelopment of existing urbanized areas and the overall net area of urbanized land is not anticipated to substantially increase. Redevelopment would generally occur in underutilized areas that are currently covered with impervious surfaces. Site redevelopment may provide opportunities to create new permeable surfaces through new landscaping and use of porous pavements, potentially reducing the amount of runoff and associated pollutants. Thus, there would be very small amounts of new impervious surface that would result from development associated with implementation of the plan, which would not significantly affect infiltration of water into the ground.

Additionally, open space features of the Verdugo Mountains would be preserved as permeable undeveloped land. *Burbank2035* Land Use Element Policy 2.2 discourages development from encroaching on the undeveloped portions of the Verdugo Mountains. This expansive open space area would remain largely pervious and would continue to naturally absorb water and provide groundwater recharge.

Multiple *Burbank2035* policies would maintain groundwater recharge occurring within the planning area. Open Space and Conservation Element Policy 9.5 requires on-site drainage improvements using native vegetation to capture and clean stormwater runoff. Safety Element Policy 6.9 requires strategies and design features to reduce the area of impervious surface in new development projects. Program OSC-7 limits areas of impervious surfaces and preserves natural areas; requires the use of natural treatment systems such as wetlands and bioswales to treat storm runoff; and requires areas for on-site infiltration and/or temporary retention areas.

Due to the minimal amount of new impervious surface that would result with implementation of *Burbank2035* and the continued preservation of large open space areas in the Verdugo Mountains, the rate of infiltration needed to support groundwater recharge would not be substantially decreased. Additionally, implementation of *Burbank2035* policies and programs would maintain and protect groundwater recharge resources. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-3 **Alter Stormwater Drainage Systems and Patterns Resulting in Erosion.** *Adoption and implementation of Burbank2035 would increase the amount of impervious surface within the planning area, thereby increasing the total volume and peak discharge rate of stormwater runoff and potential for erosion and sedimentation. However, adoption and implementation of Burbank2035 policies and programs and enforcement of existing grading, erosion, and flood control regulations would result in a* ***less-than-significant*** *impact.*

As described above in Impact 4.10-1, Burbank is generally built out with urban development and has minimal areas of vacant permeable land. The exception is the large open space area in the Verdugo Mountains. Proposed *Burbank2035* land use policy is based on long-established existing land use patterns and promotes the redevelopment of existing urbanized areas. Thus, there would be very small amounts of new impervious surface that would result from development associated with implementation of *Burbank2035,* and the minimal amount of newly generated surface runoff would not be of the volume or magnitude necessary to alter drainage patterns or increase the potential for erosion or sedimentation.

Burbank2035 does not include any programs or policies that would alter existing drainages that traverse the city. Therefore, the major drainages through the city, the Los Angeles River and the Burbank Western Channel, would not be modified by implementation of the plan.

Burbank2035 Land Use Element Policy 2.2 discourages development from encroaching on the undeveloped portions of the Verdugo Mountains. Therefore, open space in the Verdugo Mountains would be preserved as permeable undeveloped land. This expansive open space area would continue to naturally absorb stormwater, and existing drainage patterns would be maintained.

Existing requirements and regulations, as well as *Burbank2035* programs and policies would reduce the amount of surface water runoff in the planning area through measures such as compliance with the NPDES permit requirements, flood control measures, water conservation measures, and maintenance of pervious surfaces. Compliance with these regulations and the minimal amount of new surface runoff that would result from implementation of *Burbank2035* would minimize potential for existing drainage patterns to be altered in a manner that could cause increased erosion or sedimentation. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-4 **Alter Stormwater Drainage Systems and Patterns Resulting in Flooding.** *Adoption and implementation of Burbank2035 could increase the amount of impervious surface within the planning area, thereby increasing the total volume and peak discharge rate of stormwater runoff and potential for flooding. However, adoption and implementation of Burbank2035 policies and programs and enforcement of existing grading, erosion, and flood control regulations would result in a* ***less-than-significant*** *impact.*

Impact 4.10-3 discusses the potential for *Burbank2035* to alter stormwater drainage systems or patterns. The drainage systems and patterns of the area are not anticipated to be substantially altered due to the existing built-out conditions of the city, plans for new development to focus on infill locations, and programs to preserve open space areas. Thus, there would be very small amounts of new impervious surface that would result with implementation of the plan, and the minimal amount of newly generated surface runoff would not be of the

volume or magnitude necessary to alter drainage patterns of the area. Additionally, the minimal amounts of new surface runoff would not substantially add to an increased risk of flooding.

Existing requirements and regulations, as well as *Burbank2035* programs and policies would reduce the amount of surface water runoff through measures such as compliance with the NPDES permit requirements, flood control measures, water conservation measures, and maintenance of pervious surfaces. Compliance with these regulations and the minimal amount of new surface runoff that would result from implementation of *Burbank2035* would minimize potential for existing drainage patterns to be altered in a manner that could cause increased on or offsite flooding. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-5 **Create Runoff that Could Exceed the Capacity of Drainage Systems.** *Adoption and implementation of Burbank2035 would increase the amount of impervious surface within the planning area, thereby increasing the total volume of stormwater runoff that could exceed the capacity of stormwater drainage systems or create substantial additional sources of polluted runoff. However, adoption and implementation of Burbank2035 policies and programs and enforcement of existing grading, erosion, and flood control regulations would result in a* ***less-than-significant*** *impact.*

Capacities of City stormwater drainage systems are discussed in more detail in Section 4.16, Public Services. As described in Impact 10.4-1, a minimal amount of new runoff would be created by implementation of *Burbank2035* because most new development would be infill or redevelopment in areas currently urbanized with impervious surfaces. Site redevelopment may provide opportunities to create new permeable surfaces through new landscaping and use of porous pavements, potentially reducing the amount of runoff and associated pollutants. Open space, including the undeveloped portions of the Verdugo Mountains, would be preserved and remain as permeable surfaces. Because the volume of new runoff generated by implementation of *Burbank2035* would be minimal, it would not likely exceed the capacity of existing or planned stormwater drainage systems.

Construction activities may result from development associated with implementation of *Burbank2035* and generate the potential for increased pollutants in runoff or provide substantial additional sources of polluted runoff as described in Impact 4.10-1.

However, regulatory requirements described in Impact 4.10-1 would serve to reduce the amount of stormwater runoff and pollutants generated by new development. Specifically, projects would be required to comply with NPDES requirements, prepare a SWPPP, comply with the SUSMP, and the BMC. Mandatory compliance with these requirements would control construction activities and minimize, to the highest extent practicable, the degradation of water quality. These requirements would include BMPs appropriate to reduce the overall discharge volume and amount of pollutants in stormwater.

Additionally, multiple *Burbank2035* policies would minimize runoff and protect water quality. Safety Element Policies 6.7 and 6.9 would require the preparation and update of a storm drain master plan to ensure proper maintenance and improvements to storm drainage facilities and would reduce the area of impervious surface in new development projects, respectively. Many other policies and programs focus on reducing water use through

conservation efforts such as low-water landscaping, use of recycled water, and incentives for reduced water use. Reducing water consumption would minimize the amount of water entering the drainage system.

Because only small areas of new impervious surface would result from development associated with implementation of the plan, the increased volumes or rates of discharge and associated pollutants in runoff would be minimal. Additionally, adherence to applicable water quality regulations and implementation of *Burbank2035* policies and programs would minimize the potential to create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-6 **Otherwise Substantially Degrade Water Quality.** *Adoption and implementation of Burbank2035 could result in development that would increase pollutants and cause degradation of water quality during construction activities or long-term operation. However, adoption and implementation of Burbank2035 policies and programs and enforcement of existing grading, erosion, and flood control regulations would result in a* ***less-than-significant*** *impact.*

As detailed in previous impact discussions, implementation of *Burbank2035* has the potential to result in development that could create increased pollutants during both construction and operation of the project. However, multiple regulations and legal requirements mandatory for development to comply with regarding the protection of water quality and BMPs must be implemented to ensure water quality is not degraded during construction or long-term operation of a project. As described in the Regulatory Setting section above, multiple water quality protection laws, regulations, and permitting requirements serve to minimize potential to degrade water quality.

Additionally, multiple *Burbank2035* policies and programs listed above reduce the potential to degrade water quality and require steps to improve water quality through actions such as limiting impervious surface area, using natural materials and drainage areas, improving drainage systems, implementing water conservation practices, and continued compliance with regulatory permitting and use of appropriate BMPs. In particular, implementation of Program OSC-7 would help manage stormwater by requiring project applicants to incorporate best management practices into project designs. The use of natural treatment systems such as wetlands and bioswales would slow runoff, increase infiltration, and naturally treat stormwater. Controlling the velocity of runoff flows during and after construction would also increase infiltration rates while decreasing the potential for erosion and water quality pollution. Also, *Burbank2035* land use policies continue the historic patterns of development and would not result in substantial new areas of impervious surfaces that could contribute to increased stormwater runoff and associated pollutants entering local or downstream water bodies. The plan continues to preserve large areas of open space, such as the undeveloped portions of the Verdugo Mountains, to serve as natural permeable surfaces to absorb stormwater.

Adherence to required water quality control permits and requirements and implementation of *Burbank2035* policies and programs would reduce the potential for future development to degrade water quality. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-7 **Place Housing within 100-year Flood Hazard Area.** *Adoption and implementation of Burbank2035 would continue to allow for housing to be developed in areas designated as within a 100-year flood hazard area. However, adoption and implementation of Burbank2035 policies and programs and adherence to development regulations specific to flood hazard areas would result in a* ***less-than-significant*** *impact.*

Though most surface water is controlled by storm drainage infrastructure and the various channels that traverse the City, flooding may occur in Burbank when streams and channels overflow as a result of excessive precipitation, storm runoff, or inadequate, undersized, or unmaintained storm drainage infrastructure. As shown on Exhibit 11-2 of Appendix A, there are very limited locations where the delineated 100-year flood hazard area extends into areas designated for residential development. Generally, the 100-year flood hazard area is adjacent to residential development in areas along the Burbank Western Channel. Residential areas located adjacent to or within 100-year flood hazard areas are currently built-out and developed with existing residential homes. The land use plan in *Burbank2035* does not create new areas designated for residential development within the 100-year flood hazard areas found within the city.

Future projects would be required to comply with all regulations and requirements related to floodplain development. FEMA has established the design standard for flood protection in areas covered by FIRMs, with the minimum level of flood protection for new development determined to be within a 100-year flood hazard area. The CBC contains requirements for constructing structures in flood hazard zones. Additionally, Title 9, Chapter 1 of the BMC establishes flood hazard areas, defines the duties and responsibilities of the floodplain administrator, and sets requirements and performance standards for construction within flood zones.

The *Burbank2035* Safety Element contains multiple policies and programs to minimize flooding potential and reduce hazards associated with flooding. Policies 6.1 through 6.7 reduce flood hazards in various ways, such as informing applicants of flood risks and development requirements in high-risk inundation areas, and recommending hazard mitigation; maintaining and upgrading City-operated flood control system to ensure the system is capable of protecting existing and planned development; improving capacity of local and regional flood control systems; and preparing and updating a storm drain master plan to ensure proper maintenance and improvements to storm drainage facilities. Program S-5 requires annual review of floodplain mapping and updates to the General Plan as necessary to incorporate any changes to floodplain or flood hazard areas. Additionally, many *Burbank2035* policies and programs designed to conserve water and minimize surface runoff would also reduce volumes and flows in the drainage and flood control systems and ensure adequate stormwater systems to reduce stormwater contributions to flooding.

Because *Burbank2035* land use policies would not place new areas of residential development within flood hazard areas, and because all future development would be required to comply with flood hazard development regulations and requirements, the project would not create risk due to placement of housing in flood hazard areas. Additionally, implementation of *Burbank2035* policies and programs would minimize flooding potential and flood hazards. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-8 **Structures that May Impede or Redirect Flood Flows.** *Adoption and implementation of Burbank2035 would allow for continued development in locations designated as 100-year flood hazard areas. However, adoption and implementation of Burbank2035 policies and programs and adherence to development regulations specific to flood hazard areas would result in a* ***less-than-significant*** *impact.*

Burbank2035 land use policies would allow for continued development in some locations designated as a flood hazard area. As shown in Exhibit 11-2 of Appendix A, the 100-year flood areas within Burbank are generally located along the northern side of the Lockheed Channel, areas between the Burbank Western Channel and North Victory Boulevard, and an area north of the Los Angeles River near North Victory Boulevard. These areas are currently comprised mostly of commercial and industrial uses, and *Burbank2035* land use policies would continue these land use types in the future. Future development could place structures within a 100-year flood hazard area that would impede or redirect flood flows. However, because these areas are developed with existing urban uses, the addition of new infill or redevelopment of underutilized properties would not create a substantial change to flood flows that may pass through the area in flood conditions. Additionally, as described in Impact 4.10-3, implementation of *Burbank2035* is not anticipated to create major modifications to stormwater drainage patterns. Impact 4.10-7 discusses compliance with regulations and requirements that for any future development within a flood hazard area and *Burbank2035* policies and programs that would minimize flood potential and flood hazards.

Because *Burbank2035* would continue existing land use patterns, most areas within flood hazard areas are already built out, and any new development would be required to comply with flood hazard development regulations and requirements, implementation of the plan would not substantially redirect or impede flood flows due to placement of structures in flood hazard areas. Additionally, *Burbank2035* policies and programs would minimize flooding potential and flood hazards. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-9 **Risk of Loss, Injury, or Death Involving Flooding**. *Adoption and implementation of Burbank2035 would allow for continued development in locations designated as 100-year flood hazard areas which could result in loss, injury, or death from flooding, including flooding from the failure of a dam or levee. However, adoption and implementation of Burbank2035 policies and programs and adherence to development regulations specific to flood hazard areas would result in a* ***less-than-significant*** *impact.*

As described in Impacts 4.10-7 and 4.10-8, implementation of *Burbank2035* would allow for continued development in flood hazard areas, which could expose people or structures to risk of loss, injury, or death involving flooding. However, these potential impacts were found to be less than significant because most of the areas are already built out, and any new development would be required to comply with applicable regulations and building standards in flood hazard areas. Flooding hazards and risks are also minimized through *Burbank2035* policies and programs, as previously described in Impact 4.10-7. Thus, increased exposure to

flooding hazards that might result in significant loss, injury, or death would be minimal with implementation of the plan.

Burbank is in a location that could be subject to flood hazards resulting from the structural failure of a dam or a seismically induced wave that spills over the top of the structure. There are three reservoirs upstream from Burbank (Reservoirs #1, #4, and #5) that are classified as dams by the California Department of Water Resources. These three reservoirs are relatively small; Reservoirs #1 and #4 are one acre or less, and Reservoir #5 is three acres, with capacities of 21, 34, and 77 acre/feet, respectively (DWR 2012). Reservoir #1 is currently being reconstructed by the City (City of Burbank 2012). The capacities of these reservoirs are not of sufficient magnitude to create substantial flooding hazards, and the *Burbank2035* land use plan would not place new uses in the vicinity of these reservoirs that could result in new significant loss, injury, or death due to flooding if reservoir failure or overtopping were to occur.

Adherence to applicable development requirements and regulations in flood hazard areas and implementation of *Burbank2035* policies and programs to minimize flooding potential and hazards would also reduce potential for loss, injury, or death from flooding, including flooding from the failure of a dam or levee. Most locations within flood hazard areas are currently built out. Long-established land use patterns would continue with implementation of the plan, and would not create new situations where increased loss, injury, or death from flooding would be substantial. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-10 **Inundation by Seiche, Tsunami, or Mudflow**. *Adoption and implementation of Burbank2035 would allow for continued development in locations that may be subject to inundation by seiche or mudflow. However, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *impact.*

Impact 4.10-9 discusses the potential for local upstream reservoirs to create a seismically induced wave, known as a seiche, that can overtop the dam and cause flooding. As described above, the reservoirs are not of the size that could result in substantial flooding and the land use pattern in *Burbank2035* would not place new types of land uses in locations that could be subject to inundation by a seiche.

While coastal areas of California are subject to seismically induced ocean waves known as tsunamis, the inland location of Burbank eliminates risk from this type of hazard. Burbank is more than 12 miles from the Pacific Ocean coastline, and would not be subject to inundation from a tsunami.

A mudflow can develop when water accumulates in the ground during periods of heavy rainfall and results in a flowing river of mud, rock, and other materials. The risk of mudflow inundation in Burbank is limited to the undeveloped hillsides in the Verdugo Mountains and the base areas of those slopes, such as the area north and northeast of Sunset Canyon Drive. Implementation of *Burbank2035* would not change the land uses located along the base areas of the Verdugo Mountains, and Land Use Policy 2.2 discourages development from encroaching on the Verdugo Mountain open space by directing future development to more appropriate infill locations. The expansive open space area would remain preserved, and the plan would not create additional hazards related to

mudflows or place new development in the path of potential mudflows. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Water quality and hydrology are not confined by jurisdictional boundaries, rather they are dependent upon the regional watershed and hydrologic conditions of the surrounding areas. As described in the Environmental Setting, the planning area is located in the San Fernando Valley within the Los Angeles River Watershed. When analyzing cumulative impacts to water quality and hydrology, it is necessary to consider both upstream and downstream areas and water bodies that could influence or be influenced by actions within the planning area. Thus, the Los Angeles River Watershed is the general area of influence used in analysis of cumulative impacts for this topic.

IMPACT 4.10-11 **Cumulative Effects on Water Quality Standards Violations or Waste Discharge Requirements**. *Adoption and implementation of Burbank2035 in addition to anticipated regional growth throughout the Los Angeles River Watershed would increase the amount of impervious surface within the watershed, thereby increasing the total volume, peak discharge rate of stormwater runoff, and associated pollutants. Additionally, construction activities resulting from regional growth could increase the amount of sediments and pollutants in stormwater runoff. However, with implementation of Burbank2035 policies and programs and compliance with existing regulations, this impact is considered* ***less than significant****.*

Development within Burbank, in addition to other cumulative development in the Los Angeles River Watershed, could result in urbanization of currently undeveloped land, thereby increasing the amount of impervious surfaces and resulting in the potential for increased runoff. Surface water runoff could carry increased levels of sediment and urban contaminants from both construction and long-term operation that could affect receiving water quality in the Los Angeles River Watershed and other receiving water bodies.

Development in all portions of the Los Angeles River Watershed is subject to policies and regulations to improve water quality and minimize potential to degrade water quality. As described in the Regulatory Setting, applicable federal, state, and local laws, regulations, and permitting processes apply to all development within the watershed, such as the CWA, NPDES permitting requirements, Porter-Cologne Water Quality Control Act, and others. Within the Los Angeles River Watershed, there are various programs and requirements specific to maintaining and improving regional water quality including the Los Angeles RWQCB Basin Plan, NPDES General Permit administered by the SWRCB and Los Angeles RWQCB, and the Los Angeles County SUSMP. Additionally, similar to Burbank, many other local jurisdictions also have individual plans, policies, and programs in place to protect water quality.

Because of the federal, state, and local regulations and requirements that must be complied with by development projects within the Los Angeles River Watershed, the cumulative potential for increased pollutants or runoff would be minimized. Additionally, implementation of *Burbank2035* is anticipated to result in minimal effects to water quality or wastewater discharge, as described in Impact 4.10-1. Policies and programs contained within the

plan have been developed to improve overall water quality within the City. For these reasons, *Burbank2035*'s contribution to cumulative water quality violations or waste discharge requirements would not be considerable, and the cumulative impact is considered **less than significant**

Mitigation Measure

None required.

IMPACT 4.10-12 **Cumulative Effects on Groundwater Supply and Recharge.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth throughout the Los Angeles River Watershed would increase the amount of impervious surface within the watershed, thereby decreasing the area available to provide groundwater recharge. However, large portions of the watershed are protected as open space and would remain available to serve as groundwater recharge. New areas of impervious surface as a result of implementing Burbank2035 would be minimal, and existing open space areas would be preserved. However, with implementation of Burbank2035 policies and programs and compliance with existing regulations, this impact is considered* ***less than significant****.*

Development within Burbank that may result with the implementation of *Burbank2035* in addition to other cumulative development in the Los Angeles River Watershed could result in urbanization of currently undeveloped land, thereby increasing the amount of impervious surfaces and resulting in less pervious surface to serve as groundwater recharge areas.

Within the Los Angeles River Watershed, approximately 44% of land is currently open space and is not developed with urban or impervious surfaces (LACDPW 2012). Much of this land is contained within preserved areas such as the Angeles National Forest, would not be developed in the future, and would remain available for groundwater recharge. Other portions of the watershed are highly urbanized, with undeveloped areas remaining largely due to factors such as steep slopes or other natural elements making development unsuitable. Future development within the watershed would likely be in existing urbanized areas, with only small areas of infringement into currently undeveloped lands.

As described under Impact 4.10-2, implementation of *Burbank2035* is not anticipated to create substantial new areas of impervious surfaces, as the city is mostly built out, and the *Burbank2035* land use plan directs infill development and redevelopment of existing urban areas. Additionally, *Burbank2035* supports the preservation of large open space areas in the Verdugo Mountains that would continue to serve as permeable areas for infiltration of stormwater. *Burbank2035* policies and programs described under Impact 4.10-2 would minimize the amount of new impervious surface in the planning area, direct the use of more natural pervious drainage features to absorb stormwater, and implement water conservation measures to reduce water consumption. For these reasons, *Burbank2035's* contribution to cumulative groundwater recharge or supply impacts would not be considerable, and the impact is considered **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-13 **Cumulatively Alter Stormwater Drainage Systems and Patterns Resulting in Erosion.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth throughout the Los Angeles River Watershed would increase the amount of impervious surface within the watershed, thereby increasing the total volume and peak discharge rate of stormwater runoff and potential for erosion and sedimentation. However, with implementation of Burbank2035 policies and programs and compliance with existing regulations, this impact is considered* ***less than significant****.*

As described in Impact 4.10-1, Burbank is generally built out with urban land uses and has minimal areas of permeable, developable vacant land. One exception is the large undeveloped open space area in the Verdugo Mountains. In the cumulative context, there are extensive areas of existing urban development throughout the Los Angeles River Watershed, as well as large areas of undeveloped open space in locations such as the Angeles National Forest. Approximately 44% of the watershed is currently open space (LACDPW 2012). Regional encroachment of development and resulting new impervious surfaces or significant modification of slopes in currently undeveloped areas could alter drainage patterns and increase erosion. While this is not anticipated in areas of heavy urbanization, such as Burbank, or within large preserved areas of open space, cumulative potential exists for some new expansion into undeveloped areas within the watershed.

Cumulative development, as well as any development within Burbank, would be subject to regulatory requirements designed to minimize potential erosion that may result during construction and operational conditions. Compliance with BMPs implemented as part of the NPDES permit process, SWPPP, and SUSMP requirements, any site-specific WDR requirements issued by the Los Angeles RWQCB, along with compliance with the Los Angeles RWQCB Basin Plan would minimize cumulative stormwater drainage effects.

Burbank2035 land use policy is based on existing land use patterns and the redevelopment of urbanized areas. Thus, very small amounts of new impervious surface would result from development associated with implementation of the plan, and the minimal amount of newly generated surface runoff would not be of the volume or magnitude necessary to alter drainage patterns of the area and increase the potential for erosion or sedimentation. *Burbank2035* programs and policies would reduce the amount of surface water runoff through measures such as compliance with the NPDES permit requirements, flood control measures, water conservation measures, and maintenance of pervious surfaces. Therefore, *Burbank2035*'s contribution to cumulative impacts related to alteration of stormwater drainage that could result in increased erosion would not be considerable, and the impact is **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-14 **Cumulative Effects on Stormwater Drainage Systems and Patterns Resulting in Flooding.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth throughout the Los Angeles River Watershed would increase the amount of impervious surface within the watershed, thereby increasing the total volume and peak discharge rate of stormwater runoff that could cause increased flooding. However, with implementation of Burbank2035 policies and programs and compliance with existing regulations, this impact is considered* ***less than significant****.*

Impact 4.10-13 discusses the potential for *Burbank2035* and other cumulative development to alter stormwater drainage systems or patterns. While implementation of *Burbank2035* is not anticipated to substantially alter the drainage systems and patterns of the area due to the existing built out conditions of the city as well as the continued preservation of open space areas, cumulative encroachment of development and the resulting new impervious surfaces or significant modification of slopes in currently undeveloped areas could alter drainage patterns and increase potential for flooding.

Existing regional requirements and regulations to reduce stormwater runoff during construction and operation would apply to cumulative projects occurring within the Los Angeles River Watershed. Cumulative development, as well as any development within Burbank would be subject to regulatory requirements to minimize stormwater runoff during construction and operational conditions. Compliance with BMPs implemented as part of the NPDES permit process, SWPPP, and SUSMP requirements, any site-specific WDR requirements issued by the Los Angeles RWQCB, along with compliance with the Los Angeles RWQCB Basin Plan would minimize cumulative stormwater drainage or flooding effects.

Implementation of *Burbank2035* programs and policies would reduce the amount of surface water runoff through measures such as compliance with the NPDES permit requirements, flood control measures, water conservation measures, and maintenance of pervious surfaces. Enforcement of these regulations and the minimal amount of new surface runoff that would result from implementation of *Burbank2035* would minimize potential for existing drainage patterns to be altered in a manner that could cause increased on- or off-site flooding. Therefore, *Burbank2035*'s contribution to cumulative impacts related to drainage patterns and increased flooding risk would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-15 **Cumulatively Create Runoff that Could Exceed the Capacity of Drainage Systems.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would increase the amount of impervious surface within the Los Angeles River Watershed, thereby increasing the total volume of stormwater runoff that could exceed the capacity of stormwater drainage systems or create substantial additional sources of polluted runoff. However, with implementation of Burbank2035 policies and programs and compliance with existing regulations, this impact is considered* ***less than significant****.*

Construction activities may result from development associated with implementation of *Burbank2035,* and other cumulative development throughout the watershed could generate the potential for increased pollutants in runoff or provide substantial additional sources of polluted runoff that would enter drainage systems. Additional volumes of runoff and pollutants taxing drainage systems would also continue to occur throughout the operational life of cumulative projects throughout the watershed.

However, regulatory requirements described under Impact 4.10-1 would reduce the amount of stormwater runoff and pollutants generated by new development, both within Burbank and in other jurisdictions throughout the Los Angeles River Watershed. Specifically, projects within the Watershed would be required to comply with NPDES requirements, prepare a SWPPP, comply with the SUSMP and local UWMP, and any site-specific WDR requirements issued by the Los Angeles RWQCB. BMPs required by the Los Angeles RWQCB and these

permitting processes would reduce discharge volume and control stormwater runoff generated by construction activities, minimizing the volume of stormwater generated by future land uses consistent with *Burbank2035*. This would minimize potential cumulative impacts to the capacity of storm drain systems throughout the watershed.

As described under Impact 10.4-1, a minimal amount of new runoff would be created by implementation of *Burbank2035* as most new development would be infill or redevelopment in areas currently urbanized with impervious surfaces. Because the volume of new runoff generated by implementation of *Burbank2035* would be minimal, it would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Multiple *Burbank2035* policies and programs would also reduce the volume of stormwater generated. Therefore, *Burbank2035*'s contribution to cumulative impacts related to runoff that would exceed the capacity of drainage systems would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-16 **Otherwise Substantially Degrade Water Quality.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth in the Los Angeles River Watershed could result in increased pollutants and cause degradation of water quality during construction activities or long-term operation. However, with implementation of Burbank2035 policies and programs and compliance with existing regulations, this impact is considered* ***less than significant****.*

As described in previous cumulative impact discussions, implementation of *Burbank2035* and other cumulative projects would potentially result in development that could create increased pollutants during both construction and operation of future land uses that could impact water quality throughout the Los Angeles River Watershed. However, there are multiple regulations and legal requirements that are mandatory for new development regarding the protection of water quality, and numerous BMPs that must be implemented to ensure water quality is not degraded during construction or long-term operation of a project. As described in the Regulatory Setting section and previous impact sections, various federal, state, and local water quality protection laws, regulations, and permitting requirements minimize potential for cumulative water quality degradation.

Adherence to required water quality control permits and requirements and implementation of *Burbank2035* policies and programs would reduce the potential for future development to degrade water quality, and implementation of the plan would not result in a cumulatively considerable contribution to the degradation of water quality. Therefore, *Burbank2035*'s contribution to these cumulative impacts would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-17 **Place Housing within 100-year Flood Hazard Area.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth may allow housing to be developed in areas designated within a 100-year flood hazard area. However, with implementation of Burbank2035 policies and programs and compliance with existing regulations, this impact is considered* ***less than significant****.*

Flooding may occur throughout the Los Angeles River Watershed when streams and channels overflow as a result of excessive precipitation, storm runoff, or inadequate, undersized, or unmaintained storm drainage infrastructure. As described previously, FEMA mapping delineates areas located within flood hazard zones. New development within the watershed could potentially result in housing located within 100-year flood hazard areas; or, similar to Burbank, new or redeveloped housing may continue to be allowed within flood hazard areas in other jurisdictions.

However, all future projects, regardless of jurisdiction would be required to comply with regulatory requirements related to floodplain development. FEMA has established the design standard for flood protection in areas covered by FIRMs, with the minimum level of flood protection for new development determined to be within a 100-year flood hazard area. The CBC also contains requirements for constructing structures in flood hazard zones. Required compliance with these regulations and building codes would minimize risk due to the placement of housing in flood hazard zones, thereby reducing the potential cumulative impact.

Additionally, as described under Impact 4.10-7, multiple Burbank2035 policies and programs would minimize flooding potential and reduce hazards associated with flooding, and future development would be required to comply with flood hazard development regulations and requirements. Therefore, Burbank2035's contribution to cumulative impacts related to the placement of housing in flood hazard areas would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-18 **Structures that May Impede or Redirect Flood Flows.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth throughout the Los Angeles River Watershed would allow for development in locations designated as 100-year flood hazard areas. However, with implementation of Burbank2035 policies and programs and compliance with existing regulations, this impact is considered* ***less than significant****.*

Future development, both within Burbank and throughout the Los Angeles River Watershed, could place structures within a 100-year flood hazard area that would impede or redirect flood flows. The Los Angeles River is a major flood protection waterway and is channelized throughout the watershed (LACDPW 2012). Generally, development is not possible within this major flood control channel. However, development could occur within other locations designated as 100-year flood hazard areas that may carry surface water flows during flood conditions.

Impact 4.10-7 discusses mandatory compliance with regulations and requirements that would be obligatory for all future development within a flood hazard area. Any future development project would be required to adhere to all FEMA, CBC, and other local requirements that limit flood hazards.

Because *Burbank2035* would continue Burbank's long-established land use pattern, most areas within flood hazard areas have already built out, and new development would be required to comply with flood hazard development regulations and requirements. Therefore, implementation of the plan would not substantially redirect or impede flood flows by placing structures in flood hazard areas. Additionally, *Burbank2035* policies and programs would minimize flooding potential and hazards. Therefore, *Burbank2035*'s contribution to cumulative impacts related to structures placed in flood hazard areas would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-19 **Risk of Loss, Injury, or Death Involving Flooding, Including Dam or Levee Failure**. *Adoption and implementation of Burbank2035 in addition to anticipated regional growth throughout the Los Angeles River Watershed would allow for development in locations designated as 100-year flood hazard areas that could result in loss, injury, or death from flooding, including flooding from the failure of a dam or levee. However, with implementation of Burbank2035 policies and programs and compliance with existing regulations, this impact is considered* ***less than significant****.*

As described under Impacts 4.10-17 and 4.10-18, implementation of *Burbank2035* and development throughout the region would allow for new or continued development to occur in flood hazard areas, which could expose people or structures to risk of loss, injury, or death involving flooding.

New development would be required to comply with regulations and building standards for flood hazard areas. Thus, increased cumulative exposure to flood hazards that might result in significant loss, injury, or death would be minimized. The Los Angeles River Watershed is expansive, draining over 834 square miles, and there are multiple flood control structures and dams within the watershed, such as Devil Gates Dam, Hansen Basin, Lopez Dam, Pacoima Dam, and Sepulveda Basin (LACDPW 2012). Locations downstream from these dams could be subject to flood hazards resulting from the structural failure of a dam or a seismically induced wave that spills over the top of a dam or levee.

However, adherence to development requirements and regulations in flood hazard areas throughout the watershed, and implementation of *Burbank2035* policies and programs previously described under Impact 4.10-7 to minimize flood potential and hazards would reduce potential for loss, injury, or death from flooding, including flooding from the failure of a dam or levee. Implementation of *Burbank2035* would not result in new situations where increased loss, injury or death from flooding would be substantial. Therefore, *Burbank2035*'s contribution to this impact would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.10-20 **Inundation by Seiche, Tsunami, or Mudflow**. *Adoption and implementation of Burbank2035 in addition to regional growth throughout the Los Angeles River Watershed would allow for continued development in locations that may be subject to inundation by seiche or mudflow. However, with implementation of Burbank2035 policies and programs and compliance with existing regulations, this impact is considered* ***less than significant****.*

Impacts 4.10-9 and 4.10-19 discuss the potential for local upstream reservoirs to have a seismically induced wave, known as a seiche that can overtop the dam and cause flooding. Coastal areas of California are subject to seismically induced ocean waves known as tsunamis. Within the Los Angeles River Watershed, some coastal areas, such as Long Beach, could be exposed to a tsunami. Mudflows can develop when water accumulates in the ground during periods of heavy rainfall and results in a flowing river of mud, rock, and other materials. The cumulative risk of mudflow inundation throughout the watershed increases as development infringes on hillsides or previously undeveloped slopes. The risk of mudflow inundation is a relatively site specific impact and is generally dependent on the immediate development in the area and on the specific hillside. Regional growth anticipated within the watershed could increase inundation risk associated with seiches, tsunamis, and mudflows.

However, Burbank is more than 12 miles inland from the Pacific Ocean coastline and would not be subject to inundation from a tsunami or contribute to a coastal impact generated by a tsunami. As described above, reservoirs local to Burbank are also not large enough to result in substantial flooding, and the land use pattern promoted by *Burbank2035* would not place new land uses in locations that could be subject to inundation by a seiche. As described in Impact 4.10-10, mudflow hazards in Burbank are limited to undeveloped hillsides in the Verdugo Mountains and the base areas of those slopes. Implementation of *Burbank2035* discourages development from encroaching on the Verdugo Mountain hillsides by directing future development to more appropriate infill locations, reducing additional mudflow hazards. Therefore, Therefore, *Burbank2035*'s contribution to cumulative inundation impacts from seiches, tsunamis, and mudflows would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

4.11 LAND USE AND PLANNING

4.11.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to land use and planning associated with implementation of *Burbank2035*. The analysis includes a review of the proposed project for potential land use impacts and consistency with existing regional land use plans and policies. Potential inconsistencies between *Burbank2035* and the Southern California Association of Governments (SCAG) Regional Comprehensive Plan (RCP), Regional Transportation Plan (RTP), Sustainable Communities Strategy (SCS) and Compass Blueprint, as well as airport land use consistency are discussed in this resource chapter.

Burbank2035 Land Use Element policies and implementation programs guide land use decisions and future redevelopment in a manner that provides living, working, and entertainment options within the planning area.

NOP Comments: In response to the NOP, one comment from SCAG indicated that *Burbank2035* is regionally significant and should address consistency with the 2008 SCAG RTP and Compass Growth Visioning (CGV) policies. SCAG also identified the 2008 RTP as the appropriate document for consistency comparison. Since the NOP was published and comments received, SCAG adopted the 2012-2035 RTP/SCS. The City of Burbank determined the SCAG 2012-2035 RTP/SCS as the most appropriate document for comparison as the planning horizon is similar to that of *Burbank2035.* The consistency comparison with the SCAG 2012-2035 RTP/SCS is provided in this resource chapter. A separate comment addressed the need for consistency with the Airport Land Use Plan (ALUP); a discussion of consistency with local ALUP policies is provided in this resource chapter.

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR) and other publicly available documents. The TBR prepared for the project is attached to this document as Appendix A. This EIR, including the TBR, is also available electronically on the City's website: (http://www.burbank2035.com).

4.11.2 ENVIRONMENTAL SETTING

Section 12 of Appendix A describes the existing land use conditions of Burbank as well as the City's relationship to the Los Angeles County Airport Land Use Commission and the Bob Hope Airport. *Burbank2035*'s relationship to regional planning documents is also discussed. Key findings of the TBR are summarized below.

Existing Land Uses

The City's existing land uses encompass 17.1 square miles covered by nine broad land uses. Table 4.11-1 delineates the City's existing land uses.

- *Low-density residential uses* consisting of single-family homes and duplexes are distributed throughout the planning area.
- *Medium-density residential uses* in Burbank contain multifamily housing developments, often mixed with single-family housing units. Linear concentrations of multifamily uses occur adjacent to and within single-family neighborhoods and can be found along Victory Boulevard, Hollywood Way, and portions of Alameda

Table 4.11-1 Existing Uses			
Existing Use Categories	**Corresponding *Burbank2035* Category**	**Acreage**	**Percent of Total**
Low Density Residential	Low Density Residential	3,367	31%
Medium Residential	Medium Density Residential	546	5%
High Density Residential		64	1%
Commercial	Corridor Commercial, Regional Commercial,	660	6%
Industrial	Downtown Commercial, South San Fernando Commercial, North Victory Commercial/Industrial, Media District Commercial, Rancho Commercial, Golden State Commercial/Industrial	909	8%
Open Space	Open Space	2,671	24%
Institutional	Institutional	342	3%
Airport	Airport	436	4%
Right of Way	-	1,971	18%
Total		**10,966**	**100%**

Note: Existing land use data was provided with different land use designations than the updated *Burbank2035* Land Use Element. The Corresponding *Burbank2035* Category column shows the correlation between to the two classification systems.

Source: Compiled by AECOM in 2010 with data obtained from the City of Burbank

Avenue. Larger areas of multifamily housing can be found around SR 134, along West Olive Avenue, and between I-5 and Sixth Street. A large concentration of medium-density residential uses is located east of Downtown Burbank.

- *High-density residential uses* are primarily concentrated northeast of Downtown Burbank along North Sixth Street between Elmwood Avenue and Harvard Avenue. High-density residential uses generally contain multifamily housing developments with two- to four-story buildings.

- *Commercial uses* are dispersed across several areas. Neighborhood-serving commercial uses line several streets to create commercial corridors, and larger concentrations of auto-oriented commercial uses are found between Empire Avenue, Victory Place, and the Union Pacific Railroad (UPRR) railroad tracks. Airport-serving uses, such as chain restaurants and hotels are located along Hollywood Way. Uses serving employment centers, including restaurants, are clustered around the intersection of SR 134 and Olive Avenue within the *Media District Specific Plan* area. The Burbank Town Center is a regional commercial use at the intersection of Magnolia and San Fernando Boulevards that includes national retailers and chain restaurants. Pedestrian-oriented commercial uses are concentrated in Downtown Burbank between I-5, Verdugo Avenue, Third Street, and Magnolia Boulevard.

- *Institutional uses* include City facilities, public schools, flood control channels, railroad tracks, and other public and private institutions, and are distributed throughout the city.

- *Industrial uses* are concentrated around Bob Hope Airport, along the I-5 corridor, and in the southwestern planning area where the media studios are located.
- *Airport use* includes the Bob Hope Airport in the northwestern portion of the city.
- *Open space* is largely concentrated in the Verdugo Mountains east of the low-density residential neighborhoods. Open space also consists of public parks, cemeteries, private open space, and golf courses, which are dispersed throughout the city.
- *Right-of-way land uses* are roads and highways.

Existing Specific Plans

The City has two adopted specific plans and a third designated specific plan area with accompanying land use policies and zoning regulations.

The Burbank Center Plan (BCP) was adopted in 1997 as an economic revitalization plan for Downtown Burbank and its surrounding areas. The plan focuses on intensifying uses around existing and proposed intermodal transportation centers to increase opportunities for public transportation and walking within the downtown area.

The Media District Specific Plan (MDSP) was adopted in 1991 in response to the development of several high rise office buildings in the 1980s and the potential effects that similar future development could have on surrounding residential neighborhoods. The MDSP is generally located around the intersection of SR 134 and Olive Avenue. The MDSP restricts the growth of commercial and industrial uses in southwestern Burbank to minimize future effects on surrounding residential neighborhoods.

The Rancho Master Plan (RMP) was adopted in 1993 to to recognize and preserve the unique equestrian character of the Rancho area.

Airport Land Use Compatibility

The Airport Influence Area for the Bob Hope Airport is shown in shown in Exhibit 12-6 of Appendix A. The *Los Angeles County Airport Land Use Plan* (ALUP) identifies two safety zones within the planning boundaries of the airport: the Approach Surface and the Runway Protection Zone, which are dependent on runway use.

4.11.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to land use and planning, including general plans, specific plans, and zoning ordinances. They provide the regulatory framework for addressing aspects of land use planning that would be affected by implementation of *Burbank2035*. The regulatory setting for land use is discussed in Appendix A. Key regulations used to reduce environmental impacts are summarized below.

- **Obstructions and Airport Land Use Compatibility:** Part 77 of the Federal Aviation Regulations (FAR), "Objects Affecting Navigable Airspace," has been adopted as a means of monitoring and protecting the airspace required for safe operation of aircraft and airports. Objects that exceed certain specified height limits

constitute airspace obstructions. FAR Section 77.13 requires that FAA be notified of proposed construction or alteration of certain objects within a specified vicinity of an airport, among them the following:

> (1) Any construction or alteration of more than 200 feet in height above the ground level at its site. (2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at [a slope of] 100 to 1 for horizontal distance of 20,000 feet from the nearest point of the nearest runway of each [public-use airport, public-use airport under construction, or military airport] with at least one runway more than 3,200 feet in actual length, excluding heliports.

- **Planning Law and Guidelines:** California planning law requires cities and counties to prepare and adopt a "comprehensive, long-range general plan" to guide development (Government Code Section 65300). State law also specifies the content of general plans. Current law requires seven mandated elements: land use, circulation , housing, conservation, open space, noise, and safety.

- **Airport Land Use Compatibility Planning:** The Caltrans Division of Aeronautics has published guidance for complying with State aeronautics law in the Airport Land Use Planning Handbook. The Handbook outlines the structure and functions of Airport Land Use Commissions (ALUCs), describes the components of noise and safety compatibility planning, and provides support, guidance, and reference materials to be used in preparation of Airport Land Use Compatibility Plans (ALUCPs) by ALUCs.

- **City of Burbank Zoning Ordinance:** The City of Burbank Zoning Ordinance (Title 10 of the Burbank Municipal Code (BMC)) is the primary implementation tool for the Land Use Element. The Zoning Ordinance consists of two parts: the Official Zoning Map dividing the city into zones consistent with the land use designations of the General Plan and text establishing development standards for each zone including permitted uses, density and intensity of uses, building height, performance standards, and other regulations.

- **Los Angeles County Airport Land Use Plan:** The Bob Hope Airport, located in the City of Burbank, is governed by the Los Angeles County ALUP as administered by the Los Angeles County Regional Planning Commission, which serves as the ALUC. The ALUC has adopted an Airport Influence Area for the Bob Hope Airport.

4.11.4 Impacts and Mitigation Measures

Analysis Approach

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analyses of impacts on land use and planning is based on the expected 2035 development capacity for the planning area compared to current conditions. The analysis assumes that all future and existing development within the planning area complies with the Land Use Diagram. An analysis of cumulative impacts uses qualitative information for the planning area.

Burbank2035 land use policy is based on long-established land use patterns, allowing for incremental intensification of existing uses to reinforce historical patterns and accommodate future economic and residential growth. Because Burbank is largely built out, vacant land within the city largely does not exist; however, some parcels and/or buildings are underutilized. *Burbank2035* land use policy enables incremental intensification of

existing land use patterns to better utilize existing development and accommodate market-driven redevelopment in limited areas, focused in Downtown Burbank, the Media District, and the Golden State area.

Overall, this incremental intensification of uses represents a relatively modest increase in dwelling units and population for the planning area. Expected development capacity pursuant to *Burbank2035* land use policy would result in an increase of approximately 5,910 dwelling units (13.3% growth); a net population increase of approximately 13,176 (12.7% growth); and an increase of 12.15 million square feet of non-residential land uses (29.7% growth). As established by *Burbank2035*, this growth will occur as incremental intensification of existing uses through redevelopment.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential land use impacts include:

POLICIES

Land Use Element

- **Policy 1.3:** Maintain and protect Burbank's residential neighborhoods by avoiding encroachment of incompatible land uses and public facilities.
- **Policy 2.2:** Preserve the undeveloped areas of the Verdugo Mountains by guiding new development to appropriate infill locations in other parts of the city.
- **Policy 3.1:** Recognize neighborhoods and districts as the building blocks of the community.
- **Policy 3.2:** Preserve unique neighborhoods and use specific plans to distinguish neighborhoods and districts by character and appearance and address physical and visual distinction, architecture, edge and entry treatment, landscape, streetscape, and other elements.
- **Policy 3.12:** Require that new development tie into the city's grid street program.
- **Policy 3.14:** Prohibit gated communities, private streets, private driveways, and other limited-access situations, except where special findings can be made.

Mobility Element

- **Policy 1.3:** Maintain and enhance the city's traditional street and alleyway grid network.
- **Policy 3.4:** Design street improvements so they preserve opportunities to maintain or expand bicycle, pedestrian, and transit systems.
- **Policy 6.1:** Maintain arterial street efficiency to discourage spillover traffic into residential neighborhoods.
- **Policy 6.3:** Pursue comprehensive neighborhood protection programs to avoid diverting unwanted traffic to adjacent streets and neighborhoods.

PROGRAMS

Land Use Element

- **Program LU-1: Zoning Ordinance.** The Zoning Ordinance, Title 10 of the Burbank Municipal Code (BMC), is the primary means of implementing the Land Use Element, as well as the other elements of the General Plan. The Zoning Ordinance includes the Zone Map that divides the city into various zones, and the text that specifies the different land uses and types of development that are permitted within each zone. As the primary implementing tool, it is important that the Zoning Ordinance reflect and support the goals and policies of the General Plan.

  The following Zoning Ordinance amendments are required to implement the updated General Plan:

  - Implement FARs for each land use designation by establishing limitations on development intensity for each applicable zone.
  - Amend the Zone Map as needed to be consistent with land use designations specified in this Land Use Element.
  - Establish development and design standards for single-family residential development to ensure that neighborhood character is maintained. Review these standards periodically to determine whether further changes would be appropriate.
  - Maintain special hillside development standards and discretionary review of hillside projects to ensure that the projects are compatible with the hillside environment and that scenic views are considered.
  - Establish standards and design criteria that minimize the visual intrusion/impact of development in the hillside area.
  - Maintain development standards for multi-family residential development, including requiring orientation to a public street. Continue to require open space in residential projects to supplement public open space. Review these standards periodically to determine whether changes would be appropriate.
  - Maximize the amount of pervious surfaces in new and infill developments.
  - Establish design standards applicable to pedestrian-oriented commercial corridors. Among possible guidelines, consider the following:
    - Locate patio dining or similar pedestrian-oriented activities in setback areas to encourage additional interaction between the street and businesses.
    - Locate parking areas to the rear of buildings or underground, with access taken from a side street or alley.
    - Do not locate parking areas, driveways, or other vehicle access areas between the sidewalk and the building, and promote redesign in existing areas with such features.

  - Minimize the interaction of pedestrians and automobiles by minimizing curb cuts along primary frontages.

- Consider creating a public facilities zone to allow for the efficient and orderly development of public facilities as an alternative to using traditional zoning methods. Develop criteria for balancing the community need for a proposed facility with the impacts on the surrounding neighborhood that would result. Also develop criteria for a zone change from a public facility to a non-public use to ensure that a public facility is no longer needed for public purposes before conversion to private use.

- Establish development standards that address national pollutant discharge elimination system (NPDES) requirements.

- Incorporate development standards that promote walkability into the Zoning Ordinance such as window and door size and placement, pedestrian accessibility, ground-floor uses and building orientation, setbacks and amenities within setback areas, and location of parking lots and vehicle access points.

- Revise bicycle parking requirements to facilitate citywide bicycle travel. New standards will include provisions for short-term and long-term bicycle parking and requirements to ensure bicycle parking is located conveniently for cyclists.

- Require bicycle and pedestrian amenities. (e.g., bike lockers, showers, transit stop amenities, bicycle and pedestrian connections) for new development.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on land use and planning are considered significant if adoption and implementation of *Burbank2035* would:

- physically divide an established community; or

- conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.11-1 **Physically Divide an Established Community.** *Adoption and implementation of Burbank2035 would result in limited changes in land use designations and mobility improvements throughout the planning area leading to a increase in dwelling units and non-residential square footage. However, adoption and implementation of the Burbank2035 Land Use Diagram, policies, and programs, and continued inter-agency relationships with regional entities would result in a* ***less-than-significant*** *impact.*

The City of Burbank is primarily built-out with a limited inventory of vacant and underutilized land. Implementation of proposed *Burbank2035* land uses would not result in the division of an established community. *Burbank2035* assumes that existing land use development patterns are the basis for future development and redevelopment, with an incremental intensification of existing land uses. *Burbank2035* Land Use Element and Mobility Element policies emphasize increasing connectivity and maintain the integrity of the community's built-

environment. Land Use Element Policy 3.1 establishes neighborhoods and districts as the building blocks of the community, emphasizing the importance of established communities. Land Use Policy 1.3 maintains the integrity of residential neighborhoods by preventing encroachment of incompatible land uses. Policy 3.14 limits gated communities to preserve the character and connectivity of the City. The form and accessibility of established neighborhoods are supported by Land Use Policy 3.12, which requires development to tie into the City's grid street program. Similarly, Mobility Element Policies 1.3, 6.1, and 6.3 support the existing grid pattern, prevent diversion of addition traffic into residential neighborhoods, and pursue comprehensive neighborhood protection programs. Mobility Element Policy 3.4 further supports the integrity and connectivity of existing communities by providing for street improvements that maintain or expand bicycle, pedestrian, and transit system opportunities. Furthermore, open space features of the Verdugo Mountains contribute to the character and integrity of the community. Land Use Element Policy 2.2 prevents development from encroaching on the Verdugo Mountain open space by directing future development to more appropriate infill locations. These policies, in combination with the *Burbank2035* land use plan, enhance the character of existing communities by supporting the form and integrity of land use and circulation patterns rather than dividing them.

Burbank2035 further promotes the integrity of established neighborhoods by placing value on unique neighborhood character, and adopting by reference three existing specific plans: the BCP, the MDSP, and the Rancho Master Plan. Specific plans provide an opportunity to establish development standards, central themes, and design features for a specific area that provide a sense of place for the community. *Burbank2035* policies continue to support this planning approach. Land Use Element Policy 3.2 preserves unique neighborhoods and continues the use of specific plans to distinguish neighborhoods by character and appearance.

Furthermore, *Burbank2035* was designed to focus on redevelopment of existing urbanized areas and providing for revitalization to the highest-and-best use for underutilized portions of the planning area. The *Burbank2035* land use policies listed above support the character and integrity of existing neighborhoods and do not introduce land uses or mobility improvements that would divide established communities. Therefore, implementation of *Burbank2035* supports existing land use and circulation patterns and does not divide communities. This would be a **less-than-significant** impact.

Mitigation Measure

None required.

IMPACT 4.11-2 **Conflict with an Applicable Plan, Policy or Regulation.** *Adoption and implementation of Burbank2035 in addition to anticipated local and regional growth would increase housing units, non-residential square footage and population in Burbank in combination with transportation improvements. However, these changes would be consistent with existing local and regional planning documents. Therefore, the impact would be* ***less than significant****.*

Consistency with applicable regional and local plans are described below.

City of Burbank Zoning Ordinance

The City of Burbank Zoning Ordinance, is one of the primary means of implementing *Burbank2035*. Adoption of *Burbank2035* would require an update of Zoning Ordinance development standards pertaining to land use FARs, density/intensity of development, zone map amendments, design and development standards, hillside

development and discretionary review standards, pedestrian-oriented design standards, and other pertinent topics to ensure consistency with *Burbank2035*. Consistent with Program LU-1 of the Plan Realization chapter, the Zoning Ordinance will be updated to be consistent with the *Burbank2035* land use plan and policies.

Measure One

Measure One was approved by Burbank voters in 1989 as a residential growth management measure. Among other requirements, Measure One prohibits the City from increasing the maximum allowed number of residential units in Burbank beyond that approved under the 1988 Land Use Element. The City Council has extended Measure One to be effective until January 1, 2020. This requires that any increase in residential units be consistent with the maximum residential capacity of 63,704 units established in 1988. Implementation of *Burbank2035* allows for a maximum development capacity of 61,647 units, with an estimated build out of 50,219 units. Table 4.11-2 shows the maximum and expected number of residential units provided for under Measure One and the *Burbank2035* Land Use Element. The *Burbank2035* Land Use Element specifically addresses this issue by identifying both maximum and estimated residential build out. Both are well below the limits established under Measure One. Therefore, implementation of *Burbank2035* would be consistent with Measure One.

Table 4.11-2
Measure One Consistency

Land Use Designation	*Burbank2035* Maximum Build Out	*Burbank2035* Estimated Build Out
Low Density Residential	22,225	18,476
Medium Density Residential[1]	11,502	13,997
High Density Residential[1]	15,910	13,754
Various Commercial	12,010[2]	3,992
Total[2]	**61,647**	**50,219**
Measure One Maximum Permitted Units	63,704	63,704
Difference	-2,057	-13,188

Notes:

[1] Estimated build out exceeds maximum build out because the estimated buildout densities for Medium Density Residential and High Density Residential land uses exceeds densities used in Measure One to calculate maximum build out. Total estimated residential build out of Burbank2035 remains below the maximum build out of Measure One.

[2] Assumes that 30% of all commercial land area citywide would develop at an average density of 43 units per acre.

Los Angeles County Airport Land Use Plan (ALUP)

The Bob Hope Airport is in the northwest corner of the city. The airport planning boundary and airport influence area includes the approach surface and runway protection zones. The Airport land use designation, designed to accommodate uses directly related to the airport and aircraft operation, comprises approximately 4% percent of the city. The Airport land use designation and location are not proposed to be altered by *Burbank2035*. Development within the airport influence area is subject to development standards and height regulations to

ensure the safety and integrity of airport functions. *Burbank2035* maintains existing land use designations and policies within the airport influence area to ensure safety and consistency with the ALUP.

Building and structure height limits within the airport influence area are required to be consistent with the BMC and will remain static through the *Burbank2035* planning horizon. Implementation of *Burbank2035* would not alter development standards, including building/structure heights; practices consistent with FAR Section 77.13; or real estate notification practices consistent with State regulations.

Furthermore, *Burbank2035* maintains consistent land use policies with the ALUP to ensure the integrity of the working relationship with the Burbank-Glendale-Pasadena Airport Authority. Consistent with the City Council-approved development agreement with the Burbank-Glendale-Pasadena Airport Authority, *Burbank2035*'s land use plan and policies do not take any action that constitutes planning for a new terminal, do not include new or updated policies regarding the terminal, and maintain consistent development and use standards applicable to the airport. Therefore, implementation of *Burbank2035* would be consistent with local and state airport-related regulations.

Southern California Association of Governments (SCAG)

The SCAG Regional Comprehensive Plan (RCP), the Regional Transportation Plan 2012-2035 Sustainable Communities Strategy (RTP/SCS), and the 2004 Compass Blueprint Growth Vision contain a number of policies applicable to *Burbank2035*. To responsibly contribute to regional growth, sustainability, and mobility initiatives, the City considered the goals and policies of SCAG documents in the formulation of *Burbank2035*. SCAG policies and their consistency with *Burbank2035* are evaluated in Tables 4.11-3 and 4.11-4.

As stated in the tables above, *Burbank2035* would be consistent with the 2012-2035 Sustainable RTP/SCS) and the 2004 Compass Blueprint Growth Vision administered by SCAG.

South Coast Air Quality Management District (SCAQMD)

The SCAQMD adopted its latest Air Quality Management Plan (AQMP) in 2007. The 2007 AQMP mandates a variety of measures to reduce traffic congestion and improve air quality. Local governments are responsible for developing and implementing the AQMP's transportation and control measures. *Burbank2035* Land Use Element policies include measures that support transportation demand and accessibility management. Specifically, Policy 2.1 requires land use decisions that support the improvement of Burbank's alternative transportation access to local and regional destinations. This policy supports region-wide traffic and air quality management. However, the SCAQMD and the AQMP are more closely related to CEQA Transportation thresholds. Therefore, consistency with the AQMP is addressed in Sections 4.3 (Air Quality), and 4.16 (Transportation).

Existing Specific Plans

Burbank has adapted the term "specific plan" to mean any planning document that focuses on a particular area of the city. Burbank's specific plans include the MDSP (1991), RMP (1993), and BCP (1997).

The MDSP was adopted in 1991 in response to the development of several high rise office buildings in the 1980s and the potential effects that similar future development could have on surrounding residential neighborhoods. The BCP was adopted in 1997 as an economic development plan to facilitate the revitalization of Downtown

Table 4.11-3 Compatibility of Burbank2035 with the 2012-2035 RTP/SCS		
SCAG RTP/SCS Goals		
G1	Align the plan investments and policies with improving regional economic development and competitiveness	**Consistent**: The *Burbank2035* Mobility Element contains numerous goals, policies, and programs to facilitate movement and accessibility throughout the city and the greater region. Policies are proposed to: ▸ prioritize investments in transportation projects and programs that support viable alternatives to automobile use, ▸ implement technology and intelligent transportation systems to increase street system capacity and efficiency, ▸ improve transit connections with nearby communities, ▸ work with Metro to develop the regional transit connections outlined in the Long Range Transportation Plan, ▸ consult with Metrolink and Amtrak to improve commuter and intercity rail services between Burbank and major destinations in Southern California, ▸ advocate for new or improved regional public transportation and multi-modal connections and transit centers, ▸ use transit technology to better link local destinations and improve rider convenience and safety, ▸ ensure safe interaction between all modes of travel that use the street network, ▸ address the needs of people with disabilities and comply with the requirements of the Americans with Disabilities Act, ▸ provide access to transportation alternatives for all users, and ▸ consider economic growth and transportation demands in developing a comprehensive transportation system that meets Burbank's needs.
G2	Maximize mobility and accessibility for all people and goods in the region	
G3	Ensure travel safety and reliability for all people and goods in the region	
G4	Preserve and ensure a sustainable regional transportation system	
G5	Maximize the productivity of our transportation system	
G6	Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)	**Consistent**: Goals, policies, and programs are proposed in the *Burbank2035* Mobility Element to create complete streets that provide facilities for non-motorized transportation; improve transit, bicycle, pedestrian, and equestrian connections; and preserve opportunities to maintain or expand bicycle, pedestrian, and transit systems. *Burbank2035* contains a number of policies to implement the Bicycle Master Plan by maintaining and expanding the bicycle network, integrating bicycle and transit facilities and connections, and requiring new development to accommodate bicycle and pedestrian infrastructure. *Burbank2035* also includes a policy to consult with local, regional, and state agencies to improve air quality and limit GHG emissions from transportation and goods movement.

Table 4.11-3 Compatibility of Burbank2035 with the 2012-2035 RTP/SCS		
SCAG RTP/SCS Goals		
G7	Actively encourage and create incentives for energy efficiency, where possible	**Consistent**: Goals, policies, and programs are proposed in the *Burbank2035* Open Space and Conservation Element to conserve energy, use alternative energy sources, and promote sustainable energy practices that reduce pollution and fossil fuel consumption. Policies include: ► incorporating energy conservation strategies in City projects, ► promoting energy-efficient design features to reduce fuel consumption for heating and cooling, ► continuing to purchase alternative fuel vehicles for the City's vehicle fleet, encouraging residents to reduce vehicle use, ► promoting technologies that reduce energy use or use sustainable energy resources, ► supporting private sources of sustainable, environmentally friendly energy supplies, and ► encouraging the use of solar energy systems in homes and commercial businesses.
G8	Encourage land use and growth patterns that facilitate transit and non-motorized transportation	**Consistent**: *Burbank2035* Mobility Element goals, policies, and programs ensure that future land uses can be adequately served by the planned transportation system. In addition, the Mobility Element contains a policy to improve Burbank's alternative transportation access to local and regional destinations through land use decisions that support multimodal transportation. In addition, the *Burbank2035* Land Use Element contains policies to accommodate a mix of residential and commercial land uses that enable residents to walk to work, shopping, and transit, and reduce auto use; and promote transit-oriented development and increased density near transit centers.
G9	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies	**Consistent**: *Burbank2035* Mobility Element goals, policies, and programs ensure that local transit service is reliable and safe for all users. Safety Element goals, policies, and programs prioritize disaster preparedness, coordination of services with other cities, and technology improvements for managing safety information and response, and reducing hazards by reviewing the needs of critical facilities, which includes roads.
Source: SCAG 2011		

Table 4.11-4 Compatibility of Burbank2035 with the SCAG Compass Growth Vision		
SCAG Compass Growth Vision		
Principle 1: Increasing the region's mobility		
GV P1.1	Encourage transportation investments and land use decisions that are mutually supportive.	**Consistent:** *Burbank2035* Mobility Element goals, policies, and programs ensure that future land uses can be adequately served by the planned transportation system. In addition, the Mobility Element contains a policy to improve Burbank's alternative transportation access to local and regional destinations through land use decisions that support multimodal transportation. Land Use Element policies accommodate a mix of residential and commercial land uses that enable residents to walk to work, shopping, and transit, reduce auto use, and promote transit-oriented development and increased density near transit centers. Mobility Element goals, policies, and programs would create complete streets that provide facilities for non-motorized transportation; improve transit, bicycle, pedestrian, and equestrian connections; and preserve opportunities to maintain or expand bicycle, pedestrian, and transit systems.
GV P1.2	Locate new housing near existing jobs and new jobs near existing housing.	
GV P1.3	Encourage transit-oriented development	
GV P1.4	Promote a variety of travel choices.	
Principle 2: Foster livability in all communities		
GV P2.1	Promote infill development and redevelopment to revitalize existing communities.	**Consistent:** *Burbank2035* Land Use Element goals, policies, and programs propose to accommodate a mix of residential and non-residential land uses in appropriate locations that support the diverse needs of Burbank residents and businesses, maintain and protect the residential nature and individual character of Burbank's residential neighborhoods, and encourage infill development and adaptive reuse of economically underused, obsolete, and dilapidated buildings. As Burbank is a built-out city, *Burbank2035* supports infill development through the addition of multi-family housing and greater intensity of non-residential uses. However, Land Use Element policies also support Burbank's well-designed neighborhoods and buildings and enhanced streets and public spaces, contributing to a strong sense of place and maintaining a healthy balance between Burbank's urban setting and its suburban roots by avoiding urban-scale residential densities and intensities in inappropriate locations.
GV P2.1	Promote developments which provide a mix of uses.	
GV P2.3	Promote "people scaled," walkable communities.	
GV P2.4	Support the preservation of stable, single-family neighborhoods.	
Principle 3: Enable prosperity for all people		
GV P3.1	Provide, in each community, a variety of housing types to meet the housing needs of all income levels.	**Consistent**: *Burbank2035* Land Use Element goals, policies, and programs propose to make and enforce land use policy in an equitable fashion to protect all people equally from adverse environmental effects, and encourage development projects to provide amenities and services that contribute to a sense of community. Numerous Land Use Element policies address housing, including encouraging areas of mixed-density and mixed-housing types in commercial corridors to allow people with diverse housing needs to live and interact in the same neighborhood. In addition, Land Use Element policies provide more diverse housing opportunities, increase home ownership opportunities, and support affordable housing by encouraging alternative and innovative forms of
GV P3.2	Support educational opportunities that promote balanced growth.	
GV P3.3	Ensure environmental justice regardless of race, ethnicity or income class.	

Table 4.11-4 Compatibility of Burbank2035 with the SCAG Compass Growth Vision		
GV P3.4	Support local and state fiscal policies that encourage balanced growth.	
GV P3.5	Encourage civic engagement.	**Consistent:** *Burbank2035* Land Use Element policies maximize participation from the community by providing information; consistently seeking direct public involvement in the planning process for new projects and plans, as well as for everyday planning matters; holding community meetings and workshops; and expanding the use of technology to disseminate planning information and solicit input from the public. In addition, Open Space and Conservation Element policies encourage citizen interest and participation in open space management and development.
Principle 4: Promote sustainability for future generations		
GV P4.1	Preserve rural, agricultural, recreational and environmentally sensitive areas.	**Consistent:** *Burbank2035* goals, policies, and programs encourage the permanent preservation of the undeveloped areas of the Verdugo Mountains as open space. Open Space and Conservation Element policies support development a multi-functional path and trail system, expand park and recreation facilities and programs (with a minimum level of 3 acres per 1,000 residents), and protect the ecological integrity of open spaces and maintain and restore natural habitats and native plant communities.
GV P4.2	Focus development in urban centers and existing cities.	**Consistent:** *Burbank2035* Land Use Element policies recognize and maintain Downtown Burbank as the city's central business district, providing a mix of commercial, civic, cultural, recreational, educational, entertainment, and residential uses. The Land Use Diagram concentrates commercial uses and medium- and high-density residential uses close to Downtown, along commercial corridors, and within existing employment centers such as the Media District and regional commercial centers.
GV P4.3	Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution, and significantly reduce waste.	**Consistent:** *Burbank2035* Land Use Element policies require sustainable building practices to be used in new construction and substantial remodels of existing buildings. Sustainable features include both structural systems and design features that facilitate pedestrian access, support alternative transportation modes, and further other sustainability objectives. Land Use Element policies encourage new building designs that minimize the consumption of energy, water, and other natural resources, as well as development incentives to retrofit existing buildings for a net reduction in energy and water consumption.
GV P4.4	Utilize "green" development techniques.	
Source: SCAG 2004		

Burbank, South San Fernando, and surrounding areas. The RMP was adopted in 1993 to recognize and preserve the unique equestrian character of this area. All of these specific plans are incorporated within the *Burbank2035*

Land Use Element to promote future development consistent with the detailed goals and policies of each specific plan. Additionally, *Burbank2035* Land Use Element policies further support specific plans as a planning and implementation tool to support the character, quality, and integrity of established communities. Policy 3.2

preserves unique neighborhoods and continues the use of specific plan to distinguish neighborhoods by character and appearance. Program LU-3 directs the City to review the three existing specific plans through a public process, to revise the plans as necessary to ensure that they reflect current desires for each area, to consider creating new specific plan areas, and to prepare a specific plan for the Golden State Commercial/Industrial Area to provide a framework for future development consistent with Goal 13 in the Land Use Element. These policies continue and expand the use of specific plans and their regulating power within the city. Therefore, implementation of *Burbank2035* would be consistent with existing specific plans.

Conclusion

As described above, adoption and implementation of *Burbank2035* would be consistent with applicable regional and local plans, resulting in a **less-than-significant** impact.

Mitigation Measure

None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

SCAG is the regional organization that provides guidance for planning for the region. Future land uses consistent with *Burbank2035* would be implemented according to the recommended distribution and intensity identified in the Land Use Element. Additionally, future development/redevelopment would comply with adopted land use standards, policies, and ordinances, and would be compatible with surrounding land uses consistent with the Land Use Element. Furthermore, *Burbank2035* is consistent with the SCAG RTP/SCS. Implementation of *Burbank2035* would not physically divide established communities, either within the City or surrounding areas. In addition, *Burbank2035* contains policies and implementation programs intended to ensure that development is compatible with existing regional plans. Therefore, implementation of *Burbank2035* would not contribute to a significant cumulative land use impact.

All impacts associated with land use and planning are **less than significant** based on the policies and attributes of *Burbank2035*. Therefore, no mitigation measures are required.

This page intentionally left blank.

4.12 MINERAL RESOURCES

4.12.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to mineral resources associated with implementation of *Burbank2035*. There are no applicable *Burbank2035* policies or implementation programs which address mineral resources.

NOP Comments: No comment letters were received in response to the NOP addressing mineral resource concerns.

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR), and other publicly available documents. The TBR is attached to this document as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.12.2 ENVIRONMENTAL SETTING

Section 13 of the TBR (Appendix A) describes the presence of Mineral Resource Zones (MRZs) within Burbank. Burbank lies within the San Fernando Valley Production-Consumption Region in Los Angeles County. Key findings from the TBR are summarized below.

As shown on Exhibit 13-1 in the TBR (Appendix A), the planning area contains one area designated as MRZ-2 (i.e., areas where mineral resources may be present). The MRZ-2 area extends from Bob Hope Airport in the north toward the southeastern border of the city.

Conservation of aggregate resources in the city is no longer feasible because the city is urbanized in this MRZ-2 area. Past land use changes to accommodate planned urbanization now preclude mining activities in Burbank.

4.12.3 REGULATORY SETTING

No federal, regional, or local plans, policies, regulations, or laws related to mineral resources apply to Burbank. However, State laws, regulations, and policies pertain to mineral resources in the planning area. They provide the regulatory framework for addressing aspects of mineral resources that would be affected by implementation of *Burbank2035*. The regulatory setting for mineral resources is presented in in the TBR (Appendix A). Key regulations used to reduce environmental impacts are summarized below.

- **Surface Mining and Reclamation Act:** The Surface Mining and Reclamation Act (SMARA) of 1975 (Public Resources Code, Division 2, Chapter 9, Section 2710 et seq.), mandated the classification and mapping of mineral lands throughout the state to help identify and protect mineral resources within areas that are subject to urban expansion or other irreversible land uses that would preclude mineral extraction. Once mapped, the State Mining and Geology Board (SMGB) is required to designate for future use those areas that contain aggregate deposits that are of prime importance in meeting the region's future need for construction quality aggregates.

4.12.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

No *Burbank2035* policies or implementation programs address mineral resources.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on mineral resources are considered significant if adoption and implementation of *Burbank2035* would:

- result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
- result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

As discussed in Section 13 of the TBR (Appendix A) the planning area contains one area designated as MRZ-2. The MRZ-2 classification identifies areas where data shows mineral resources may be present. The MRZ-2 area extends from the Bob Hope Airport in the north toward the southeastern border of the city (Miller 1994). Historically, no mining has occurred in the MRZ-2 area. In addition, conservation of aggregate resources in the city is no longer feasible because the city is urbanized in the MRZ-2 area. Implementation of *Burbank2035* would not result in the direct or indirect loss of availability of a known or locally important mineral resource, because urbanization in the MRZ-2 area now precludes mining activities in Burbank. Therefore, implementation of *Burbank2035* would have **no impact** on mineral resources.

4.13 NOISE

4.13.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to noise associated with implementation of *Burbank2035*. *Burbank2035* Noise Element policies and *Burbank2035* implementation programs presented in the Plan Realization Element guide development and infrastructure practices to protect the ambient noise environment from degradation due to changes in land uses and increases in transportation volumes.

NOP Comments: In response to the NOP, one comment related to noise was received from the California Department of Transportation (Caltrans), Division of Aeronautics (see Appendices B and C). The comment focused on the potential for future residential land uses to be subjected to elevated noise levels when located within the 65 dBA CNEL contour of the Bob Hope Airport. Caltrans recommended avoiding siting future residential uses within the 65 dBA CNEL contour or requiring design considerations such that interior noise standards (45 dBA CNEL) are maintained in all habitable rooms.

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR) and other publicly available documents. The TBR is attached to this document as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com). Appendix E to this EIR provides noise modeling data used to complete this analysis.

4.13.2 ENVIRONMENTAL SETTING

Section 5 of the TBR describes the basic science of acoustics and specific acoustic practices related to environmental noise and vibration, summarizes how noise affects humans in the built environment, and provides noise levels and descriptions of the existing noise sources and sensitive receptors within the city. A brief summary of topics discussed in the TBR is provided below.

EXISTING TRAFFIC NOISE

Traffic noise is the dominant noise source in the city, originating from major roads such as Olive Avenue, Hollywood Way, Glenoaks Boulevard, Burbank Boulevard, and Magnolia Boulevard along with freeway traffic on Interstate 5 and State Route (SR) 134. Traffic noise levels range from 56 to 72 A-weighted decibels (dBA) Day-Night Noise level (L_{dn}) at 100 feet from the roadway centerline.[1]

EXISTING AIRCRAFT NOISE

The Bob Hope Airport is located in the northwestern portion of the City of Burbank. The airport is identified as a scheduled air carrier with a total size of 435 acres and contains 310 based aircraft (Los Angeles County ALUC

[1] Because the human ear can detect a wide range of sound-pressure fluctuations, sound-pressure levels are expressed in logarithmic units called decibels (dB) to avoid a very large and awkward range in numbers. Because the human ear is not equally sensitive to all audible frequencies, a frequency-dependent rating scale was devised to relate noise to human sensitivity. An A-weighted dB scale performs this by deemphasizing the low-frequency sounds because humans are more sensitive to high frequency sounds.

2004: 4, 13). The Bob Hope Airport had 133,055 aircraft operations in 2008 which accounts for an average daily traffic count of 365 aircraft operations (Burbank-Glendale-Pasadena Airport Authority 2009: B-7).

Exhibit 14-2 of the TBR shows the most recent noise contours (i.e., 65, 70, 75 dBA CNEL) associated with Bob Hope Airport operations. Based on the 2008 baseline noise analysis, 255 acres of noise-sensitive land uses (e.g., residential, schools, places of worship) are located within the 65 dBA CNEL contour. By 2015, the noise-sensitive area within the 65 dBA CNEL contour is projected to increase to 383 acres due to increased aircraft operations at the airport. Additionally, an estimated 4,825 people currently reside within the 65 dBA CNEL contour, and this number is projected to increase to 8,217 by 2015 (Burbank-Glendale-Pasadena Airport Authority 2009: 4).

EXISTING TRAIN NOISE

Railroad operations within the *Burbank2035* planning area consist of freight on the Union Pacific Railroad (UPRR) I-5 Corridor Line and Coast Line, Amtrak passenger service, and Metrolink commuter train service. At a distance of 69 feet from the railroad tracks, the noise level attributable to overall train activity during the 24-hour measurement period taken for the *Burbank2035* project at West Empire Avenue and North Ontario Street (Site LT 1, as shown in Exhibit 14-3 of the TBR) was 68.8 dBA L_{dn}, at San Fernando Road and North Ontario Street (Site LT 5, as shown in Exhibit 14-3 of the TBR) was 69.4 dBA L_{dn}, and at East Linden Avenue and San Fernando Road (Site LT 6, as shown in Exhibit 14-3 of the TBR) was 73.2 dBA L_{dn}.

EXISTING STATIONARY SOURCE NOISE

Noise is produced as a result of many processes and activities, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by federal and state employee health and safety regulations, but noise levels that extend beyond the facility's property line may exceed locally acceptable standards. Activities associated with commercial, recreational, and public service facilities can also produce noise that affects adjacent sensitive land uses. Operation of aircraft arriving at or departing from the Bob Hope Airport is not considered to be a stationary source of noise.

Although the City of Burbank includes large industrial areas, activities associated with these land uses primarily occur indoors and thus do not create any discernable noise outside of buildings. The Burbank Water and Power (BWP) campus is the only industrial land use in the city that is considered to be an industrial noise source that may affect the immediate noise environment of noise sensitive uses due to their proximity. Noise measurements taken at this facility (Site ST 16 as shown in Exhibit 14-3 of the TBR) on April 9, 2010 indicated that ambient noise levels are approximately 68 dBA L_{eq} at 150 feet from the facility. The industrial and commercial land uses immediately surrounding the BWP campus are not considered noise-sensitive land uses.

COMMUNITY NOISE SURVEY

In Burbank, the primary noise source is vehicle traffic. Additional noise sources in the city include stationary sources (e.g., HVAC systems, active construction sites), aircraft overflights, and rail traffic. Noise created by aircraft overflights in the city is primarily associated with airport operations at Bob Hope Airport. Noise created by rail traffic is primarily associated with Metrolink commuter trains running from Los Angeles Union Station to/from downtown Burbank and Bob Hope Airport.

A community noise survey was conducted on April 7, 2010 through April 9, 2010 to document the existing noise environment at noise-sensitive receptors within the city and existing noise sources. During the survey, average daytime ambient hourly noise levels ranged from 51.7 dBA to 72.0 dBA hourly equivalent noise level (L_{eq}), 24-hour ambient noise levels ranged from 66.0 dBA to 79.8 dBA L_{dn}, and maximum noise levels that ranged from 69.5 dBA to 88.3 dBA maximum noise level (L_{max}). Maximum noise levels were attributable to back-up alarms, car horns, garbage trucks, and pedestrians.

EXISTING NOISE SENSITIVE RECEPTORS

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are also considered sensitive to exterior noise levels. Schools, places of worship, hotels, libraries, nursing homes, retirement residences, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. The majority of noise-sensitive land uses within the city are residential and are primarily located in two areas of the city. The first area of residential uses is located generally northeast of commercial and industrial land uses along I-5. The second area of residential uses is located generally north of SR 134 and southwest of commercial and industrial land uses adjacent to I-5 and the Bob Hope Airport. Additional noise-sensitive land uses located in the city of note include two hospitals (i.e., Providence Saint Joseph Urgent Care Center at North Hollywood Way and Pacific Avenue, Providence Saint Joseph Medical Center at West Alameda Avenue and South Buena Vista Street). Other sensitive land uses in the city are listed in Table 14-6 of the TBR.

4.13.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies regulate noise in the planning area. They provide the regulatory framework for addressing all aspects of noise that would be affected by implementation of *Burbank2035*. The regulatory setting for noise is discussed in detail in the TBR (Appendix A). While federal and state guidelines outline noise requirements, specific noise policies are enacted at the local level.

The City of Burbank has established non-transportation related noise standards of 55 dBA $L_{eq[h]}$ for daytime hours (7 a.m. to 10 p.m.), and 45 dBA $L_{eq[h]}$ for nighttime hours (10 p.m. to 7 a.m.), and land use compatibility noise standards of up to 65 dBA L_{dn} for outdoor activity areas and 45 dBA L_{dn} for interior spaces for residential land uses. The City of Burbank exempts construction noise that occurs between the hours of 7:00 a.m.to 8:00 p.m. weekdays, and 8:00 a.m. to 5:00 p.m. Saturdays. Construction noise is held to regular noise standards outside the hours listed above and on Sundays and Federal Holidays (City of Burbank 1987, 1992).

4.13.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analyses of impacts on ambient noise levels are based on available information for the planning area, along with review of regional information. The analysis assumes that

all future and existing development within the planning area complies with applicable laws, regulations, design standards, and plans.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential noise impacts include the following:

Noise Element

- **Policy 1.1:** Ensure the noise compatibility of land uses when making land use planning decisions.
- **Policy 1.2:** Provide spatial buffers in new development projects to separate excessive noise-generating uses from noise-sensitive uses.
- **Policy 1.3:** Incorporate design and construction features into residential and mixed-use projects that shield residents from excessive noise.
- **Policy 1.4:** Maintain acceptable noise levels at existing noise-sensitive land uses.
- **Policy 1.5:** Reduce noise from activity centers located near residential areas, in cases where noise standards are exceeded.
- **Policy 1.6:** Consult with movie studios and residences that experience noise from filming activities to maintain a livable environment.
- **Policy 2.1:** Require the design and construction of buildings to minimize commercial noise within indoor areas of residential components of mixed-use projects.
- **Policy 2.2:** Locate the residential portion of new mixed-use projects away from noise-generating sources such as mechanical equipment, gathering places, loading bays, parking lots, driveways, and trash enclosures.
- **Policy 3.1:** Support noise-compatible land uses along existing and future roadways, highways, and freeways.
- **Policy 3.2:** Encourage coordinated site planning and traffic management that minimize traffic noise affecting noise-sensitive land uses.
- **Policy 3.3:** Advocate the use of alternative transportation modes such as walking, bicycling, mass transit, and non-motorized vehicles to minimize traffic noise.
- **Policy 3.4:** Install, maintain, and renovate freeway and highway right-of-way buffers and sound walls through continued work with Caltrans and Los Angeles County Metropolitan Transportation Authority (MTA).
- **Policy 3.5:** Monitor noise levels in residential neighborhoods and reduce traffic noise exposure through implementation of the neighborhood protection plans.
- **Policy 3.6:** Prohibit heavy trucks from driving through residential neighborhoods.

- **Policy 3.7:** Where feasible, employ noise-cancelling technologies such as rubberized asphalt, fronting homes to the roadway, or sound walls to reduce the effects of roadway noise on sensitive receptors.
- **Policy 4.1:** Support noise-compatible land uses along rail corridors.
- **Policy 4.2:** Require noise-reducing design features as part of transit-oriented, mixed-use development located near rail corridors.
- **Policy 4.3:** Promote the use of design features, such as directional warning horns or strobe lights, at railroad crossings that reduce noise from train warnings.
- **Policy 5.1:** Prohibit incompatible land uses within the airport noise impact area.
- **Policy 5.2:** Work with regional, state, and federal agencies, including officials at Bob Hope Airport, to implement noise reduction measures and to monitor and reduce noise associated with aircraft.
- **Policy 5.3:** Coordinate with the Federal Aviation Administration and Caltrans Division of Aeronautics regarding the siting and operation of heliports and helistops to minimize excessive helicopter noise.
- **Policy 6.1:** Minimize excessive noise from industrial land uses through incorporation of site and building design features.
- **Policy 6.2:** Require industrial land uses to locate vehicular traffic and operations away from adjacent residential areas.
- **Policy 7.1:** Avoid scheduling city maintenance and construction projects during evening, nighttime, and early morning hours.
- **Policy 7.2:** Require project applicants and contractors to minimize noise in construction activities and maintenance operations.
- **Policy 7.3:** Limit the allowable hours of construction activities and maintenance operations located adjacent to noise-sensitive land uses.
- **Policy 7.4:** Limit the allowable hours of operation for and deliveries to commercial, mixed-use, and industrial uses located adjacent to residential areas.

PROGRAMS

Noise Element

- **Program N-1: Noise Control Ordinance.** Enforce Burbank's Noise Control Ordinance limits for industrial uses to limit the effect of noise on adjacent land uses. Update the Noise Control Ordinance to incorporate the new noise standards presented in the Noise Element and to ensure effectiveness in controlling noise sources. Revise the Noise Control Ordinance to achieve the following objectives:

- Limit the hours of deliveries to commercial, mixed-use, and industrial uses adjacent to residential and other noise-sensitive land uses.
- Limit the hours of operation for commercial and retail uses to limit noise intrusion into nearby residential and other noise-sensitive land uses.
- Limit commercial and industrial noise levels.
- Limit outdoor industrial activities or operations to control excessive noise at adjacent residential properties.
- Limit the hours of operation of industrial equipment generating high levels of noise.
- Limit the hours of operation for refuse vehicles and parking lot sweepers if their activity results in an excessive noise level that adversely affects adjacent residential uses.
- Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses.
- Require the placement of all commercial heating, ventilation, and air conditioning (HVAC) machinery within mechanical equipment rooms wherever possible. (Equipment manufacturer's specifications for venting and access to outside air shall be maintained).
- Require the provision of localized noise barriers or rooftop parapets around HVAC machinery, cooling towers, and mechanical equipment so that the line of sight to the noise source from the property line of the noise sensitive receptors is blocked. (The equipment manufacturer's specifications for venting and access to outside air shall be maintained.)
- Include a statement acknowledging that construction noise is an acceptable public nuisance when conducted within the defined exemption period.

► **Program N-2: Written Warning of Noise Intrusion.** Provide written warning to potential residents about noise intrusion as a condition of project approval, assistance, or facilitation when the City exercises discretionary review, provides financial assistance, or otherwise facilitates residential development in a non-residential area, as provided for by Land Use Element policy.

► **Program N-3: Noise Standards and Compatibility Criteria.** Review development proposals to ensure that noise standards and compatibility criteria set forth in the Noise Element are met. Consult Noise Element guidelines and standards for noise compatible land uses to determine the suitability of proposed projects relative to existing and forecasted noise levels. Enforce the California Noise Insulation Standards to ensure an acceptable interior noise level of 45 A-weighted decibels (dBA) community noise equivalent level (CNEL) or day-night noise level (Ldn) in habitable rooms.

► **Program N-4: Noise Impact Analysis Guidelines and Acoustical Studies.** Develop noise impact analysis guidelines that describe the City's desired procedure and format for acoustical studies. Require an acoustical

study for future discretionary projects in areas where the existing or projected noise level exceeds or would exceed the maximum allowable levels identified in Table N-3 in the Noise Element, or when any of the following conditions applies:

- The project includes a noise-sensitive land use that is located within the existing or future 65-dBA CNEL/Ldn contour for transportation noise sources.
- The project will cause future traffic volumes to increase by 10% or more on any roadway that fronts a sensitive land use.
- The project will expose a noise-sensitive land use to a stationary noise source exceeding the standards outlined in Table N-4 in the Noise Element. Such stationary sources may include mechanical equipment operations and industrial facilities.
- The project includes a noise-sensitive land use in the vicinity of existing or proposed commercial and industrial areas.
- The project is located within 100 feet of a rail line and includes sensitive land uses.
- The project is a mixed-use development that includes a residential component. The focus of this type of acoustical study is to determine likely interior and exterior noise levels and to recommend appropriate design features to reduce noise.

An acoustical analysis shall:

- be the financial responsibility of the applicant seeking project approval;
- be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics;
- measure representative noise levels with sufficient sampling periods and locations to adequately describe local conditions and predominant noise sources;
- estimate existing and projected cumulative noise in terms of CNEL/Ldn or Leq, and compare those noise levels to the adopted standards and policies of the Noise Element;
- recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element (where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms); and
- estimate noise exposure after the prescribed mitigation measures have been implemented.

► **Program N-5: Vehicle Noise Reduction.** Implement the following strategies to reduce vehicular traffic noise throughout the city:

- Review and designate local truck routes to reduce truck traffic in noise-sensitive land use areas.

- Use alternative paving materials, such as rubberized asphalt, to reduce traffic noise where determined feasible and cost efficient.

- **Program N-6: Construction Noise.** Require contractors to implement the following measures during construction through contract provisions and/or conditions of approval as appropriate:

  - Maintain construction equipment per manufacturers' specifications and fit equipment with the best available noise suppression devices (e.g., mufflers, silencers, wraps).

  - Shroud or shield all impact tools and muffle or shield all intakes and exhaust ports on power equipment.

  - Comply with the operational hours outlined in the Burbank Noise Control Ordinance or mitigate noise at sensitive land uses to below Noise Control Ordinance standards during all construction operations and related activities associated with a proposed project.

  - Prohibit idling of construction equipment for extended periods of time in the vicinity of noise-sensitive receptors.

  - Locate fixed and/or stationary equipment (e.g., generators, compressors, rock crushers, cement mixers) as far as possible from noise-sensitive receptors.

  - Shroud or shield all impact tools and muffle or shield all intakes and exhaust ports on powered construction equipment.

  - Place temporary barriers, where feasible, as close to the noise source or as close to the receptor as possible and break the line of sight between the source and receptor where modeled levels exceed applicable standards. Acoustical barriers shall be constructed of material having a minimum surface weight of 2 pounds per square foot or greater and a demonstrated Sound Transmission Class rating of 25 or greater as defined by American Society for Testing and Materials Test Method E90. Placement, orientation, size, and density of acoustical barriers shall be specified by a qualified acoustical consultant.

- **Program N-7: Regional Roadway Noise Abatement.** Consult with Caltrans and MTA on plans, activities, and projects that may affect state roadway facilities or transportation corridors passing through Burbank. Additionally, work with these agencies to achieve the following objectives:

  - Plan for noise abatement along freeways and highways.

  - Install, maintain, and update freeway and highway right-of-way buffers and sound walls.

- **Program N-8: Aircraft Noise Abatement.** Work to reduce noise associated with aircraft overflights and helicopter operations within Burbank. Actions may include but are not limited to the following:

  - Regulate the siting and operation of heliports/helistops through the Conditional Use Permit process.

  - Implement flight profiles, tracks, and operating parameters for noise control with heliport/helistop operators (e.g., police, fire, hospital, private).

- Work with the Burbank-Glendale-Pasadena Airport Authority in implementing the Residential Acoustical Treatment Program.

- **Program N-9: Mixed-Use Noise Notification Requirement.** Notify residents in mixed-use projects located adjacent to commercial or retail land uses that they could be affected by noise from adjacent uses.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on noise are considered significant if adoption and implementation of *Burbank2035* would result in:

- exposure of persons to or generation of noise levels in excess of applicable local, state, or federal standards;
- exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or
- for a project located within two miles of Bob Hope Airport, would the project expose people residing or working in the project area to excessive noise levels.

Burbank has developed land use compatibility standards that rate compatibility using the terms normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. Using these land use compatibility guidelines, the City has established interior and exterior noise standards. The City's current land use compatibility standards are presented in Table 14-7 of Appendix A. New standards proposed by *Burbank2035* are presented in Table 4.13-1. These standards, which use the CNEL/L_{dn} noise descriptor, provide for normally acceptable conditions based on state recommendations. They are intended to apply to land uses exposed to noise levels generated by transportation sources (e.g., traffic, railroad operations, aircraft). These standards also establish maximum interior noise levels for new residential development, requiring that sufficient insulation be provided to reduce interior ambient noise levels to 45 dBA CNEL/L_{dn}.

Application of the noise standards will vary on a case-by-case basis according to location, development type, and associated noise sources. When stationary noise is the primary noise source, and to ensure that noise producers do not adversely affect noise-sensitive land uses, the City applies a second set of standards. These hourly daytime and nighttime performance standards (expressed in L_{eq}) for stationary noise sources are designed to protect noise-sensitive land uses adjacent to stationary sources from excessive noise. Table 4.13-2 summarizes stationary-source noise standards for various land use types, which represent acceptable noise levels at exterior spaces of the sensitive receptor.

To account for permanent increases in ambient noise levels, the City has established numeric thresholds of significance. Where the existing ambient noise level is less than 60 dBA, a project-related permanent increase in ambient noise levels of 5 dBA CNEL/L_{dn} or greater would be considered substantial. Where the existing ambient

Table 4.13-1 Maximum Allowable Noise Exposure—Transportation Sources				
Land Use Category	**Exterior Normally Acceptable[1] (dBA CNEL/Ldn)**	**Exterior Possibly Acceptable[2] (dBA CNEL/Ldn)**	**Exterior Normally Unacceptable[3] (dBA CNEL/Ldn)**	**Interior Acceptable[4] (dBA CNEL/Ldn except where noted)**
Residential, single-family	Up to 60	61-70	71 and higher	45
Residential, multi-family	Up to 65	66-70	71 and higher	45
Residential, multi-family mixed-use	Up to 65	66-70	71 and higher	45
Transient lodging	Up to 65	66-70	71 and higher	45
Hospitals; nursing homes	Up to 60	61-70	71 and higher	45
Theaters; auditoriums; music halls	Up to 60	61-70	71 and higher	35 dBA L_{eq}[5]
Churches; meeting halls	Up to 60	61-70	71 and higher	40 dBA L_{eq}
Playgrounds; neighborhood parks	Up to 70	71-75	75 and higher	--
Schools; libraries; museums[6]	--	--	--	45 dBA L_{eq}
Offices[7]	--	--	--	45 dBA L_{eq}
Retail/commercial[7]	--	--	--	--
Industrial	--	--	--	--

Notes:

[1] Normally acceptable means that land uses may be established in areas with the stated ambient noise level, absent any unique noise circumstances.

[2] Possibly acceptable means that land uses should be established in areas with the stated ambient noise level only when exterior areas are omitted from the project or noise levels in exterior areas can be mitigated to the normally acceptable level.

[3] Normally unacceptable means that land uses should generally not be established in areas with the stated ambient noise level. If the benefits of the project in addressing other *Burbank2035* goals and policies outweigh concerns about noise, the use should be established only where exterior areas are omitted from the project or where exterior areas are located and shielded from noise sources to mitigate noise to the maximum extent feasible.

[4] Interior acceptable means that the building must be constructed so that interior noise levels do not exceed the stated maximum, regardless of the exterior noise level. Stated maximums are as determined for a typical worst-case hour during periods of use.

[5] dBA L_{eq} is as determine for a typical worst-case hour during periods of use.

[6] Within the Airport Influence Area, these uses are not acceptable above 65dBA CNEL if subject to the City's discretionary review procedures.

[7] Within the Airport Influence Area, these uses may be acceptable up to 75 dBA CNEL following review for additional noise attenuation; in excess of 75 dBA CNEL these uses are not acceptable.

Table 4.13-2 Maximum Allowable Noise Exposure—Stationary Noise Sources			
Noise Source	**Noise Level Descriptor**	**Exterior Spaces[2]—Daytime (7 a.m. to 10 p.m.)**	**Exterior Spaces[2]—Nighttime (10 p.m. to 7 a.m.)**
Typical	Hourly dBA L_{eq}	55[1]	45[1]
Tonal, impulsive, repetitive, or consisting primarily of speech or music	Hourly dBA L_{eq}	50[1]	40[1]
Any	dBA L_{max}	75	65

Notes:

[1] The City may impose noise level standards that are more or less restrictive than those specified above based upon determination of existing low or high ambient noise levels.

[2] Where the location of exterior spaces (i.e., outdoor activity areas) is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the exterior space.

noise level is greater than 60 dBA, a project-related permanent increase in ambient noise levels of 3 dBA CNEL/L_{dn} or greater would be considered substantial.

The State CEQA Guidelines do not define the levels at which groundborne vibration or groundborne noise is considered "excessive." For the purpose of this analysis, groundborne vibration impacts associated with human annoyance would be considered significant if the proposed project exceeds 85 VdB, which is the vibration level that is considered by the Federal Transit Administration (FTA) to be acceptable only if there are an infrequent number of daily events. In terms of groundborne vibration impacts on structures, this analysis will use the Federal Transit Administration's vibration damage threshold of approximately 100 VdB for fragile buildings, and approximately 95 VdB for extremely fragile historic buildings (FTA 2006).

IMPACTS AND MITIGATION MEASURES

IMPACT 4.13-1 **Expose Noise Sensitive Receptors to Construction Noise Levels.** *Short-term construction noise levels associated with implementation of Burbank2035 could exceed applicable City of Burbank standards at nearby noise-sensitive receptors. In addition, if construction activities were to occur during more noise-sensitive hours (outside the construction hours defined in BMC Section 9-1-1-105.8), construction noise levels could also result in annoyance and/or sleep disruption to occupants of existing and proposed noise-sensitive land uses and create a substantial temporary increase in ambient noise levels. Adoption and implementation of Burbank2035 policies and programs and enforcement of the City's noise control ordinance would reduce the impact, but the impact would be* ***significant****.*

While implementation of *Burbank2035* would not directly result in new development within Burbank, it would allow redevelopment, which would generate noise during construction activity. Future, new redevelopment potential within the city exists primarily where existing development has not reached the development potential allowed by the existing General Plan designations.

Construction activity within these areas would have the potential to impact noise sensitive land uses. Table 4.13-3 illustrates typical noise levels associated with the operation of construction equipment at a distance of 50 feet. As shown, construction equipment generates high levels of intermittent noise ranging from 55 dBA to 95 dBA and would result in a significant impact where noise sensitive land uses adjoin construction sites.

Although construction activities will result in a substantial noise increase in such locations, this impact will be short term and will cease upon completion of construction.

The City of Burbank exempts construction noise between the hours of 7:00 a.m.to 8:00 p.m. weekdays and 8:00 a.m. to 5:00 p.m. Saturdays, but does not contain quantified noise level limits for construction activities. The regulatory exemption reflects the City's acknowledgement that construction noise is a necessary part of new development and does not create an unacceptable public nuisance when conducted during the least noise sensitive hours of the day.

As discussed in the TBR, noise levels drop off at a rate of about 6 dBA per doubling of distance between the noise source and receptor. However, intervening structures would also result in lower noise levels. Sound levels may be attenuated 3.0 dBA to 5.0 dBA by a first row of houses/buildings and 1.5 dBA for each additional row of houses

Table 4.13-3 Construction Equipment Noise Levels	
Equipment Item	**Typical Maximum Noise Level (dBA) at 50 Feet**
Earthmoving	
Backhoes	80
Bulldozers	85
Front Loaders	80
Graders	85
Paver	85
Roller	85
Scrapers	85
Tractors	84
Slurry Trencher	82
Dump Truck	84
Pickup Truck	55
Materials Handling	
Concrete Mixer Truck	85
Concrete Pump Truck	82
Crane	85
Man Lift	85
Stationary Equipment	
Compressors	80
Generator	82
Pumps	77
Impact Equipment	
Compactor	80
Jack Hammers	85
Impact Pile Drivers (Peak Level)	95
Pneumatic Tools	85
Rock Drills	85
Other Equipment	
Concrete Saws	90
Vibrating Hopper	85
Welding Machine / Torch	73
Source: Bolt, Beranek and Newman Inc. 1981, FTA 2006:12-6	

in built-up environments (FHWA 1978). These factors generally limit the distance construction noise travels and ensure noise impacts from construction are localized.

Although construction noise would attenuate rapidly from individual construction sites, noise sensitive land uses could be intermittently exposed to substantial temporary increases in ambient noise levels. As a result, construction activities that would occur under *Burbank2035* are considered potentially significant. Due to the potential for high short-term and instantaneous noise levels during peak construction activity at nearby residential properties, several *Burbank2035* Noise Element policies and programs have been developed to reduce noise levels associated with construction.

Burbank2035 Noise Element Policies 7.1 through 7.4, Program N-1, and Program N-6 include measures to limit exposure of noise sensitive land uses to excessive noise levels from point sources, including construction activities. Additionally, the *Burbank2035* Noise Element requires future projects to conduct project-level noise analyses. Program N-4 establishes parameters for cases where assessment of construction impacts and mitigation of impacts is considered appropriate.

However, if multiple construction projects were to occur concurrently in the planning area, construction noise could exceed the levels shown in Table 4.13-2. This would be a **significant** impact.

Mitigation Measures

None available.

Significance After Mitigation

Although implementation of *Burbank2035* policies and programs and enforcement of the City's noise ordinance would reduce the impact, no additional feasible mitigation is available, and the impact would be **significant and unavoidable.**

IMPACT 4.13-2 **Long-Term Increase in Traffic Noise Levels at Existing Noise-Sensitive Receptors.** *Implementation of Burbank2035 would result in a significant increase in traffic noise levels exceeding 3-5 dBA. Adoption and implementation of Burbank2035 policies and programs would improve traffic flow, roadway design, and site design to reduce overall traffic noise within the city. However, based on traffic modeling conducted for Burbank2035, this impact would be* ***potentially significant****.*

Implementation of *Burbank2035* would allow new development and redevelopment within the city that would generate additional traffic, which would increase ambient noise levels along local and regional roadways. However, *Burbank2035* includes policies aimed at reducing noise related to vehicular traffic. These policies require new development and/or modifications to existing development to include sound-reducing design measures to maintain compatibility with adjacent and surrounding uses; promote alternative transportation technologies that minimize noise impacts; and requirements to perform project-specific acoustical studies for individual development projects. Chapter 4.16, "Transportation," describes future traffic conditions attributed to implementation of *Burbank2035*.

To examine traffic noise impacts, traffic noise levels associated with *Burbank2035* were calculated for roadway segments in the city using FHWA's Highway Noise Prediction Model (FHWA-RD-77-108) (FHWA 1978). Traffic

noise levels were modeled under existing and 2035 conditions, with and without implementation of *Burbank2035*. Peak PM intersection volumes were obtained from the traffic analysis prepared for *Burbank2035* (Fehr & Peers 2012). Vehicle mix classification and speeds for local area roadways were based on field observations and the *2010 Annual Average Daily Truck Traffic on the California State Highway System* prepared by Caltrans (2010). Exhibit 4.13-1 shows 2035 noise contours along major roadways and near the Bob Hope Airport.

Table 4.13-4 summarizes modeled noise levels at 100 feet from the roadway centerline for affected roadway segments in the city. These traffic noise levels represent an application of conservative traffic noise modeling methodologies, which assume no natural or artificial shielding from existing or proposed structures or topography. Actual traffic noise exposure levels at noise sensitive receptors in the project vicinity would vary depending on a combination of factors, including variations in daily traffic volumes, shielding provided by existing and proposed structures, and meteorological conditions. Please refer to Appendix G of this EIR for complete modeling inputs and results.

Based on the modeling presented in Table 4.13-4, implementation of *Burbank2035* would result in a substantial change in traffic noise levels under 2035 conditions, when compared to existing conditions. Two roadway segments (North Hollywood Way between Olive Avenue and Warner Boulevard, and Empire Avenue between Buena Vista Street and Hollywood Way) would experience increases in ambient noise levels that exceed significance criteria. Therefore, increases in long-term ambient noise levels associated with implementation of *Burbank2035* would result in a substantial permanent increase in ambient noise levels, (i.e., +3 dB or greater increase) and would be considered **potentially significant**.

Mitigation Measure

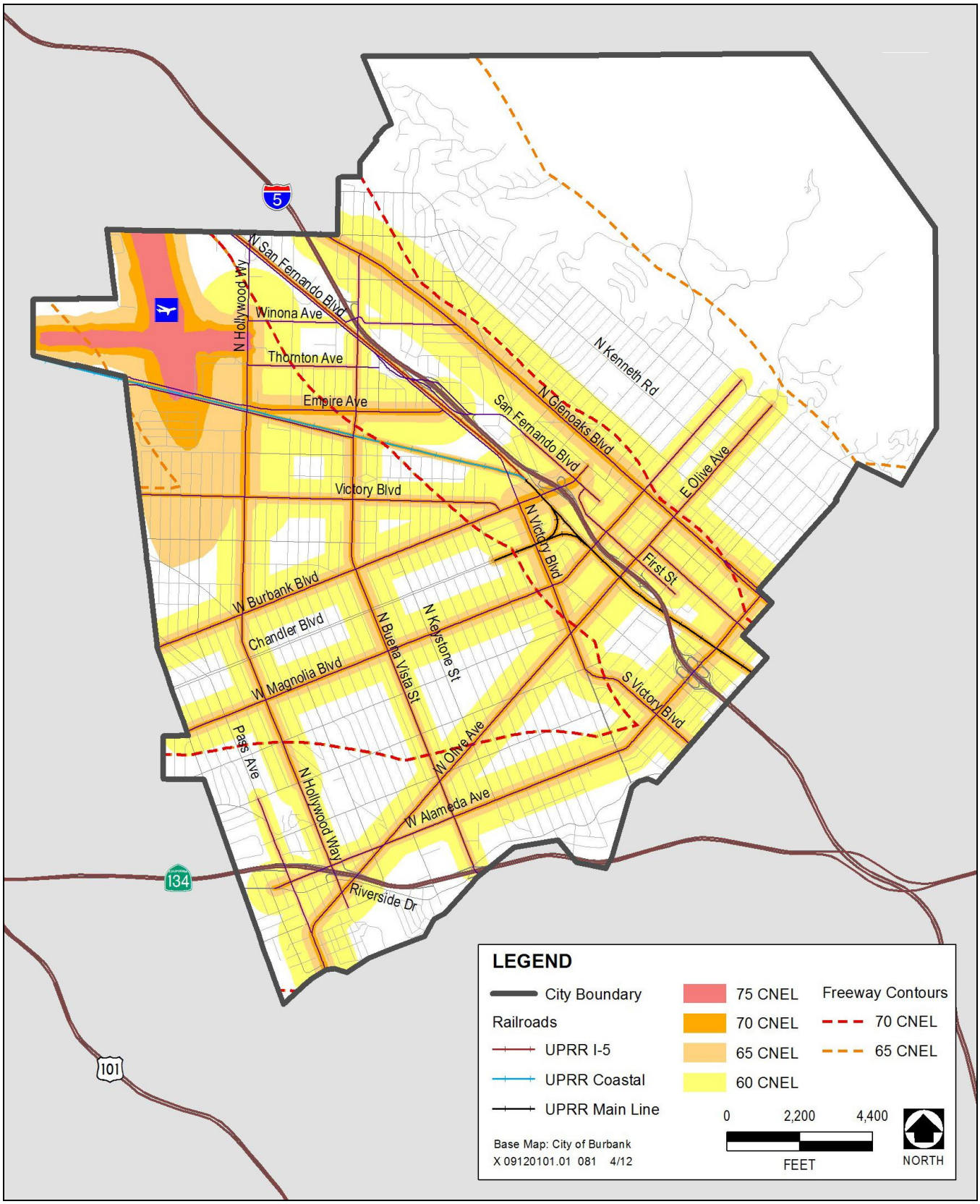
No feasible mitigation is available to reduce this impact.

Significance After Mitigation

Implementation of *Burbank2035* is anticipated to decrease future noise levels compared against future conditions without implementation of *Burbank2035*. Multiple *Burbank2035* policies and programs address traffic flow, roadway design, and site design to reduce overall traffic noise within the City. Nonetheless, based on the traffic modeling conducted, program-level traffic noise impacts would be **significant and unavoidable**.

IMPACT 4.13-3 **Exposure of Noise Sensitive Receptors to Stationary Source Noise in Excess of Applicable Standards.** *Implementation of Burbank2035 would result in increases in on-site stationary-source noise levels associated with the proposed residential, commercial, mixed-use, office/industrial, park, and educational land uses. These stationary noise sources could exceed applicable hourly and maximum noise standards and result in a substantial increase in ambient noise levels. However, adherence to and implementation of Burbank2035 policies and programs and adherence to the City's Noise Control Ordinance would result in a* ***less-than-significant impact****.*

As described in Chapter 3.0, Project Description, implementation of *Burbank2035* would enable development of up to 5,910 additional dwelling units and 12.0 million additional square feet of non-residential (i.e., commercial retail, hotel, office) uses by 2035. As a result of increased residential development in the City, the number of noise-sensitive receptors would also increase. As a consequence, the increase in dwelling units could result in



Source: AECOM 2012

Exhibit 4.13-1 **Future Year (2035) Noise Contours**

Table 4.13-4
Predicted Traffic Noise Levels
Future 2035 Conditions and Future *Burbank2035* Buildout Conditions

Roadway	Segment		L_{dn} at 100 Feet, dBA				
	From	To	Existing Condition*	Future 2035 Without Project*	Future 2035 With Project*	Project Net Change from Existing Conditions	Significant Impact?
Alameda Ave	Riverside Dr	City boundary	67.9	69.2	69.1	1.2	No
Alameda Ave	Pass Ave	Olive Ave	66.0	66.5	66.4	0.4	No
Alameda Ave	Olive Ave	Buena Vista St	66.5	67.3	67.2	0.7	No
Alameda Ave	Buena Vista St	Victory Blvd	68.6	69.1	69.0	0.4	No
Alameda Ave	Victory Blvd	San Fernando Blvd	70.2	70.3	70.3	0.1	No
Alameda Ave	San Fernando Blvd	Glenoaks Blvd	69.1	69.2	69.2	0.1	No
Olive Ave	Glenoaks Blvd	Towards Fifth St	66.2	67.2	67.0	0.8	No
Olive Ave	First St	Glenoaks Blvd	67.9	68.2	68.2	0.3	No
Olive Ave	Victory Blvd	First St	69.6	70.1	69.8	0.2	No
Olive Ave	Buena Vista St	Victory Blvd	68.6	69.0	68.7	0.1	No
Olive Ave	Alameda Ave	Buena Vista St	67.7	68.5	68.4	0.7	No
Olive Ave	Riverside Dr	Alameda Ave	68.0	68.4	68.4	0.4	No
Olive Ave	Hollywood Blvd	Riverside Dr	68.7	69.1	69.9	1.2	No
Olive Ave	Pass Ave	Hollywood Blvd	68.8	69.5	69.3	0.5	No
Olive Ave	Pass Ave	City boundary	68.0	70.1	70.1	2.1	No
Magnolia Blvd	Hollywood Blvd	City boundary	68.2	68.8	68.8	0.6	No
Magnolia Blvd	Hollywood Blvd	Buena Vista St	68.5	68.8	69.0	0.5	No
Magnolia Blvd	Buena Vista St	Victory Blvd	69.0	69.2	69.1	0.1	No
Magnolia Blvd	Victory Blvd	First St	69.2	69.6	69.4	0.2	No
Magnolia Blvd	First St	Glenoaks Blvd	68.5	69.3	69.2	0.7	No

Table 4.13-4
Predicted Traffic Noise Levels
Future 2035 Conditions and Future *Burbank2035* Buildout Conditions

Roadway	Segment		L_{dn} at 100 Feet, dBA				
	From	To	Existing Condition*	Future 2035 Without Project*	Future 2035 With Project*	Project Net Change from Existing Conditions	Significant Impact?
Magnolia Blvd	Glenoaks Blvd	Towards Fifth St	64.4	65.6	65.4	1.0	No
Burbank Blvd	Hollywood Way	City boundary	68.6	68.9	68.9	0.3	No
Burbank Blvd	Hollywood Way	Buena Vista St	68.7	69.0	68.9	0.2	No
Burbank Blvd	Buena Vista St	Victory Blvd	68.3	68.8	68.6	0.3	No
Burbank Blvd	Victory Blvd	San Fernando Blvd	72.1	72.7	72.6	0.5	No
Burbank Blvd	San Fernando Blvd	Third St	67.4	67.7	67.7	0.3	No
Victory Blvd	Hollywood Way	City boundary	67.5	68.2	68.1	0.6	No
Victory Blvd	Hollywood Way	Buena Vista St	66.8	67.7	67.7	0.9	No
Victory Blvd	Buena Vista St	Burbank Blvd	67.3	67.6	67.6	0.3	No
Victory Blvd	Burbank Blvd	Magnolia Blvd	70.1	70.9	70.7	0.6	No
Victory Blvd	Magnolia Blvd	Olive Ave	69.9	70.2	70.2	0.3	No
Victory Blvd	Olive Ave	Alameda Ave	68.8	69.0	68.9	0.1	No
Victory Blvd	Alameda Ave	City boundary	68.8	69.0	68.9	0.1	No
Vanowen St	Buena Vista St	Hollywood Way	69.2	67.8	67.8	-1.4	No
Empire Ave	Buena Vista St	Victory Blvd	69.2	71.1	71.5	2.3	No
Empire Ave	Buena Vista St	Hollywood Way	66.5	69.9	70.0	3.5	**Yes**
Thornton Ave	Hollywood Way	Towards Ontario St	64.1	65.7	64.9	0.8	No
Winona Ave	Hollywood Way	Towards Ontario St	60.8	63.5	62.5	1.7	No
Hollywood Way	Winona Ave	Thornton Ave	70.9	72.2	72.0	1.1	No
Hollywood Way	Thornton Ave	Victory Blvd	71.5	71.5	71.7	0.2	No

Table 4.13-4
Predicted Traffic Noise Levels
Future 2035 Conditions and Future *Burbank2035* Buildout Conditions

Roadway	Segment		L_{dn} at 100 Feet, dBA				
	From	To	Existing Condition*	Future 2035 Without Project*	Future 2035 With Project*	Project Net Change from Existing Conditions	Significant Impact?
Hollywood Way	Victory Blvd	Burbank Blvd	68.8	69.0	69.0	0.2	No
Hollywood Way	Burbank Blvd	Magnolia Blvd	68.5	68.6	68.6	0.1	No
Hollywood Way	Magnolia Blvd	Verdugo Ave	68.4	68.6	68.7	0.3	No
Hollywood Way	Verdugo Ave	Olive Ave	66.1	66.7	66.7	0.6	No
Hollywood Way	Olive Ave	Warner Blvd	56.3	63.6	63.6	7.3	**Yes**
Pass Ave	Alameda Ave	Verdugo Ave	64.2	64.9	64.9	0.7	No
Pass Ave	Alameda Ave	Olive Ave	61.9	63.3	63.3	1.4	No
Buena Vista St	Glenoaks	San Fernando	62.8	63.5	63.5	0.7	No
Buena Vista St	San Fernando Blvd	Empire Ave	66.2	66.3	66.2	0.0	No
Buena Vista St	Empire Ave	Vanowen St	67.6	67.4	68.2	0.6	No
Buena Vista St	Vanowen St	Victory Blvd	69.2	69.4	69.4	0.2	No
Buena Vista St	Victory Blvd	Burbank Blvd	68.9	70.2	69.1	0.2	No
Buena Vista St	Burbank Blvd	Magnolia Blvd	69.2	69.6	69.6	0.4	No
Buena Vista St	Magnolia Blvd	Olive Ave	66.8	67.0	67.0	0.2	No
Buena Vista	Olive	Alameda	66.6	67.1	66.9	0.3	No
Buena Vista St	Alameda Ave	Riverside Dr	66.3	66.6	66.7	0.4	No
Buena Vista St	Riverside Dr	South of Riverside Dr	64.1	64.8	64.6	0.5	No
San Fernando Blvd	Burbank Blvd	Amherst Dr	67.7	66.6	66.5	-1.2	No
San Fernando Blvd	Burbank Blvd	Cypress Ave	66.4	66.9	66.7	0.3	No
San Fernando Blvd	Alameda Ave	Olive Ave	67.2	67.8	67.6	0.4	No

Table 4.13-4
Predicted Traffic Noise Levels
Future 2035 Conditions and Future *Burbank2035* Buildout Conditions

Roadway	Segment		L_{dn} at 100 Feet, dBA				
	From	To	Existing Condition*	Future 2035 Without Project*	Future 2035 With Project*	Project Net Change from Existing Conditions	Significant Impact?
San Fernando Blvd	Alameda Ave	City boundary	67.3	68.3	68.1	0.8	No
First St	Magnolia Blvd	San Fernando Blvd	64.6	66.3	66.0	1.4	No
First St	Olive Ave	Magnolia Blvd	66.8	67.6	67.1	0.3	No
First St	Olive Ave	Santa Anita Ave	67.6	67.0	66.5	-1.1	No
Glenoaks Blvd	Buena Vista St	City boundary	69.2	69.6	69.5	0.3	No
Glenoaks Blvd	Buena Vista St	Scott Rd	68.4	70.8	70.7	2.3	No
Glenoaks Blvd	Scott Rd	Magnolia Blvd	68.4	70.8	70.7	2.3	No
Glenoaks Blvd	Magnolia Blvd	Olive Ave	67.4	69.5	69.4	2.0	No
Glenoaks Blvd	Olive Ave	Alameda Ave	67.5	69.6	69.5	2.0	No
Glenoaks Blvd	Alameda Ave	City boundary	67.5	69.9	69.8	2.3	No

Note

* Traffic noise levels are predicted at a standard distance of 100 feet from the roadway centerline and do not account for shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

Source: Data modeled by AECOM in 2012

locating noise-sensitive receptors near existing and planned noise-generating land uses. As stated in the TBR and in the setting above, existing 24-hour ambient noise levels in the City range from approximately 66 dBA to 80 dBA L_{dn}.

Where exterior noise levels are below 65 dBA L_{dn}, interior noise levels for new construction would typically meet the interior 45 dBA L_{dn} standard established in Title 24. Typical residential construction in warm climates, such as Burbank, provides approximately 15 dB of noise reduction from exterior noise sources with windows partially open, and approximately 25 dBA of noise reduction with windows kept closed (EPA 1974). Where exterior noise levels range from 60 dBA to 70 dBA L_{dn}, interior noise can be mitigated by standard wall and window construction, and the inclusion of mechanical forced-air ventilation to allow occupants the option to keep windows closed to control noise. Where exterior noise levels exceed 70 dBA L_{dn}, residential units would not normally be able to meet the 45 dBA L_{dn} interior standard simply through typical construction methods. Thus, noise-sensitive uses located within the 70 dBA L_{dn} contour may require additional noise reduction measures, such as windows and doors with high Sound Transition Class (STC) ratings to meet the 45 dBA L_{dn} criteria.

Burbank2035 also proposes an increase in non-residential land uses in the City. Noise sources associated with commercial and industrial land uses could include mechanical equipment operations, public address systems, parking lot noise (e.g., opening and closing of vehicle doors, people talking, car alarms), delivery activities (e.g., use of forklifts, hydraulic lifts), trash compactors, and air compressors. Noise from such equipment can reach intermittent levels of approximately 90 dBA 50 feet from the source (EPA 1974: B-1). However, these noise generating activities would be subject to the requirements of the City's Noise Control Ordinance (Title 9, Chapter 3, Article 2, Section 8), which establishes limits on noise generated by machinery, equipment, fans, and HVAC equipment.

In addition, *Burbank2035* Noise Element Policies 1.1 through 1.7, 2.1, 2.2, 6.1, and 6.2 and Programs N-1, N-3, N-4 and N-9 include actions to reduce noise related conflicts between residential and non-residential land uses. These policies include requiring construction and occupancy of new development be compatible with, and not exceed thresholds defining the acceptable noise environment in surrounding areas; requiring the inclusion of noise-reducing design features in development projects to address the impact of noise on residential development; reviewing development proposals to ensure that noise standards and compatibility criteria set forth in *Burbank2035* are met; requiring acoustical analyses for all proposed development within the 65 dBA L_{dn} contour as shown on Exhibit N-3 in the Noise Element of *Burbank2035*; requiring acoustical analyses for all proposed residential projects in the vicinity of existing and proposed commercial areas; requiring development projects to implement mitigation measures, where necessary, to reduce noise levels to meet the adopted standards and criteria, which may include berms, walls, and sound attenuating architectural design and construction methods; permitting development only if adopted noise standards and regulations can be met; enforcing provisions of the California Noise Insulation Standards (Title 24), which specify that indoor noise levels shall not exceed 45 dBA L_{dn}, and applying these standards to all hotel, motels, single-family, and multi-family dwelling units; requiring new development and/or modifications to existing development to include sound-reducing design measures to maintain compatibility with adjacent and surrounding uses; working to minimize stationary noise impacts on sensitive receptors and noise emanating from construction activities, private developments/residences, landscaping activities and special events; requiring that mixed-use structures and areas be designed to prevent transfer of noise from commercial uses to residential uses; and requiring mitigation measures for development of new nightclubs, bars, and other high noise-generating uses adjacent to residences, schools, senior citizen housing,

and other noise-sensitive uses. With adherence to and implementation of these *Burbank2035* policies and programs and adherence to the City's Noise Control Ordinance, program-level stationary noise source and land use conflict noise impacts would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.13-4 **Exposure of Noise Sensitive Receptors to Rail Noise.** *Implementation of Burbank2035 could result in increased exposure of sensitive receptors to rail-generated noise. Burbank2035 policies and programs would reduce potential noise exposure, but not to an acceptable level in all circumstances. Therefore, this impact is* ***potentially significant.***

Railroad operations within the city consist of freight, Amtrak, and Metrolink passenger service on the UPRR mainline track that runs north/south adjacent to Downtown Burbank. The community noise survey conducted for the TBR included measurements of existing rail operations within the city. The 24-hour continuous noise measurement taken along the tracks located in the city indicated that the average sound exposure level (SEL) associated with operation of an individual train was approximately 97 dB at a distance of 69 feet from the railroad centerline. Based upon the SEL noise levels, L_{max} noise levels, and event durations of the continuous noise measurement field data, approximately 8 freight trains, 10 Amtrak trains, and 53 Metrolink trains operated each day, resulting in L_{dn} levels ranging from 69-73 dBA. Please refer to Section 5 of the TBR for complete noise data on rail activities within the city. Anticipated development of the California High-Speed Train project could also increase the number, speed, and frequency of trains passing through the planning area.

Burbank2035 Policies 4.1 through 4.3 and Programs N-2, N-3, N-4, and N-7 are designed to prevent and mitigate sources of excessive noise, including rail operations. Guidance included in *Burbank2035* will be applied at the project level as the City considers land use changes in the future. Development projects located along the railroad lines will be required to mitigate according to *Burbank2035* policies and an updated Noise Control Ordinance through project design and site planning. Although many techniques exist to reduce both internal and exterior noise levels, future development projects may experience rail noise levels in excess of City standards, despite inclusion of all feasible mitigation. This would be a **potentially significant** impact.

Mitigation Measure

No feasible mitigation is available to reduce this impact.

Significance After Mitigation

During the planning stages of individual projects consistent with *Burbank2035*, project-specific analysis will identify and mitigate to the extent feasible potential noise exposure issues resulting from train pass-bys in accordance with the City of Burbank Noise Ordinance and *Burbank2035*. *Burbank2035* Program N-4 requires that any receptor within 100 feet of rail lines complete a noise study and incorporate appropriate design considerations into the proposed development. Thus, even though specific site plans, equipment types, or construction schedules are unknown at this time, it is reasonable to conclude that noise from rail operations would be reduced through design. However, the extent to which the City can reduce those noise impacts by requiring design modifications is unknown. Although noise levels could be reduced in some cases, the City may not be able to control all aspects of

a project, such as the number of trains that could use any given transit node. Therefore, because potential future sensitive receptors could be exposed to noise levels above City standards, this impact would be considered **significant and unavoidable**.

IMPACT 4.13-5 **Exposure of Noise Sensitive Receptors to Aircraft Noise.** *Burbank2035 implementation could result in increased exposure of sensitive receptors to aircraft generated noise. Burbank2035 policies and programs would reduce potential noise exposure, however because the location and operation of aircraft are beyond the City's jurisdiction, this impact would be* ***potentially significant.***

Bob Hope Airport is located in the northwestern portion of the city. The airport was established in 1930 as a private field and is now owned and operated by the Burbank-Glendale-Pasadena Airport Authority (Authority). The airport is identified as a scheduled air carrier with a total size of 435 acres and contains 310 based aircraft (Los Angeles County ALUC 2004: 4, 13). Approximately 133,055 aircraft operations occurred in 2008, which equates to an average daily traffic count of 365 operations (Burbank-Glendale-Pasadena Airport Authority 2009: B-7).

Exhibit 14-2 of the TBR shows the most recent noise contours (i.e., 65, 70, 75 dB CNEL) associated with Bob Hope Airport operations. Based on the 2008 baseline noise analysis, 255 acres of noise-sensitive land uses (e.g., residential, schools, places of worship) are located within the 65 dB CNEL contour. By 2015, the noise-sensitive area within the 65 dB CNEL contour is projected to increase to 383 acres. Additionally, an estimated 4,825 people currently reside within the 65 dB CNEL contour. This population is projected to increase to 8,217 in 2015 (Burbank-Glendale-Pasadena Airport Authority 2009: 4). As such, additional existing and future residents within the city could be exposed to noise levels in excess of city standards as a result of continued operation of the airport. This would be a **potentially significant** impact.

Mitigation Measure

No feasible mitigation is available to reduce this impact.

Significance After Mitigation

Burbank2035 Noise Element Policies 5.1 through 5.3 and Programs N-2, N-3, N-4, and N-8 are designed to prevent and mitigate sources of excessive noise, including aircraft operations. Guidance included in the *Burbank2035* will be applied at the project level as the City considers land use changes in the future. Development projects located within the Airport Influence Area will be required to mitigate according to *Burbank2035* policies, an updated Noise Control Ordinance, and Airport Land Use Plan guidelines through project design and site planning.

The airport is also governed by the Los Angeles Regional Planning Commission/Airport Land Use Commission's guidelines, which are intended to provide for reasonable, safe, and efficient use of the airport as a public transportation facility and as a base for aviation and aviation-related operations. In addition, this guidance is intended to protect the environment from the effects of aircraft noise. *Burbank2035* itself, and potential land use development pursuant to *Burbank2035*, will be evaluated for compatibility with airport operations, using criteria set forth in the ALUC Procedural Policies contained in the Airport Land Use Compatibility document. As such, although implementation of *Burbank2035* would expose additional people residing or working the planning area

to excessive aircraft noise levels, regulating the location and operation of aircraft is beyond the City's jurisdiction. Therefore, this impact would be **significant and unavoidable.**

IMPACT 4.13-6 **Exposure of Vibration Sensitive Receptors to Construction Vibration.** *Sensitive receptors could be subjected to construction vibration levels in excess of established thresholds. This impact would be* ***significant****.*

Construction-related vibration has two potential effects. First, vibration at high enough levels can result in human annoyance. Second, groundborne vibration can potentially damage the foundations and exteriors of older and potentially historic structures. Groundborne vibration that can cause this kind of damage is typically limited to impact equipment, such as pile drivers. Construction activities that would occur under *Burbank2035* have the potential to generate low levels of groundborne vibration. Ground vibration levels associated with various types of construction equipment are summarized below in Table 4.13-5. Based on the vibration levels presented for various construction equipment types, sensitive receptors located in proximity to construction operations could be exposed to groundborne vibration levels exceeding the recommended FTA and Caltrans guidelines of 85 VdB and 0.2 in/sec PPV, respectively.

Table 4.13-5
Representative Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 feet (in/sec)[1, 3]	Approximate L_v (VdB) at 25 feet[2]
Pile Driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile Driver (sonic)	Upper range	0.734	105
	Typical	0.170	93
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Heavy-duty Trucks		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

Notes;

[1] Where PPV is the peak particle velocity.

[2] Where Lv is the RMS velocity expressed in vibration decibels (VdB), assuming a crest factor of 4.

[3] Vibration levels can be approximated at other locations and distances using the above reference levels and the following equation: PPVequip = PPVref (25/D)1.1 (in/sec); where "PPV ref" is the given value in the above table, "D" is the distance for the equipment to the new receiver in feet.

Source: FTA 2006

Similar to noise, groundborne vibration would attenuate at a rate of approximately 6 VdB per doubling of distance. The groundborne vibration generated during construction activities would primarily impact existing sensitive uses (e.g., residences, schools, and hospitals) that are located adjacent to or within the vicinity of specific projects. These sensitive uses could sometimes be located as close as 25 feet to the construction site or as far as several hundred feet away. Based on the information presented in Table 4.13-5, vibration levels could reach up to 87 VdB for typical construction activities (and up to 112 VdB if pile driving activities were to occur) at sensitive uses located within 25 feet of construction. For sensitive uses that are located at or within 25 feet of potential project construction sites, sensitive receptors (e.g., residents, school children, and hospital patients) at these locations may experience vibration levels during construction activities that exceed the FTA's vibration impact threshold of 85 VdB. If construction occurs more than 50 feet from sensitive receptors, the impact associated with groundborne vibration generated by the typical construction equipment would be below 85 VdB and thus would be less than significant. However, as specific site plans, equipment types, or construction schedules are unknown at this time, it may be possible that construction activities could occur as close as 25 feet from sensitive receptors or that pile driving activities could occur. This would result in these sensitive receptors experiencing vibration levels beyond the 85 VdB threshold. Therefore, because sensitive receptors could be subjected to construction vibration levels in excess of established thresholds, impacts would be **significant**.

Mitigation Measure

No feasible mitigation is available to reduce this impact.

Significance After Mitigation

Adherence to the *Burbank2035* programs and policies identified above would reduce potential construction vibration impacts, but would not preclude the potential for impacts to occur. Therefore, this impact remains **significant and unavoidable**.

IMPACT 4.13-7 **Exposure of Vibration Sensitive Receptors to Operational Vibration.** *Operational vibration sources, including roadway traffic and industrial and commercial operations would be unlikely to expose sensitive receptors to levels exceeding recommended thresholds of significance. Adherence to the Burbank2035 programs and policies identified above would reduce potential operational vibration impacts, but does not preclude the potential for impacts from rail traffic to occur. This impact would be* ***significant****.*

During operation of uses proposed under *Burbank2035*, generally three types of activities (vehicles operating on local and regional roadways, railway traffic, and commercial and industrial operations) could generate perceivable operational vibration.

Roadway Vibration

With respect to roadway traffic, vehicles traveling on the local and regional roadway network are generally supported on flexible suspension systems and therefore are not an efficient source of ground vibration. However, vehicles can cause vibration when they roll over pavement surfaces that are not smooth. These discontinuities typically develop as a result of cracking, potholes, or misaligned expansion joints caused by settling of pavement section or the support structures of a span, due to normal geological conditions or fault activity. When these discontinuities develop, vehicles passing over the imperfection impart energy into the ground, generating

vibration. Groundborne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. However, due to the rapid drop-off rate of groundborne vibration and the short duration of the associated events, vehicular traffic-induced groundborne vibration is rarely perceptible outside the roadway right-of-way, resulting in vibration levels that cause damage to building in the roadway vicinity. Groundborne vibration levels associated with roadway traffic rarely exceed criteria established for evaluation of building damage or human annoyance (Caltrans 2004: 13-18).

Implementation of *Burbank2035* does not propose the construction or realignment of any major roadway projects. Additionally, it is not anticipated that land use changes associated with implementation of *Burbank2035* will result in the exposure of persons within the city to roadway groundborne vibration levels exceeding the FTA and Caltrans guidelines of 80 VdB and 0.2 in/sec PPV.

Rail Operations Vibration

To evaluate vibration impacts at potential future residential receptors from rail operations, the FTA Transit Noise and Vibration Impact Assessment manual (FTA manual) General Vibration Assessment methods were applied to the *Burbank2035* planning area (FTA 2006: Chapter10). Impacts to sensitive receptors from rail would occur within approximately 85 feet from the center of the tracks where vibration levels could reach 79.7 VdB and 0.04 ppv at 85 feet (FTA 2006: 10-3, 10-7). Please refer to Appendix F to this EIR for vibration modeling calculations. Therefore, since trains pass within 85 feet of potential sensitive receptors at several locations throughout the city, groundborne vibration levels attributable to rail sources would exceed the threshold of significance for exposing sensitive receptors to vibration and groundborne noise. *Burbank2035* Program N-4 includes a provision that any receptor proposed within 100 feet of rail lines complete a noise study. However, as specific site plans, equipment types, or construction schedules are unknown at this time, it may be possible that rail operations could occur within 85 feet of sensitive receptors. This would result in these sensitive receptors experiencing vibration levels beyond the 80 VdB threshold.

Industrial and Commercial Operations Vibration

Light industrial and commercial operations have, on occasion, been known to utilize equipment or processes in the manufacture and distribution of materials that have a potential to generate groundborne vibration. However, vibrations found to be excessive for human exposure that are the result of a manufacturing process or industrial machinery are generally addressed from an occupational health and safety perspective. The residual vibrations from industrial processes or machinery are typically of such low amplitude that they quickly dissipate into the surrounding soil and are rarely perceivable at the surrounding land uses.

Distribution of materials to and from industrial and commercial land uses can have the potential to generate more substantial levels of groundborne vibration than that of the mechanical equipment. Heavy trucks used for delivery and distribution of materials to and from industrial and commercial sites generally operate at very low speeds while on the industrial or commercial site. Therefore, the groundborne vibration induced by heavy truck traffic at industrial or commercial land uses is not anticipated to be perceptible at distances greater than 25 feet (i.e., the typical distance from the roadway centerline to the edge of the right-of-way for a single-lane road).

Based on the operational characteristics of mechanical equipment and distribution methods used for general light industrial and commercial land uses, it is not anticipated that light industrial and commercial operations would

result in groundborne vibration levels that approach or exceed the FTA and Caltrans guidelines of 80 VdB and 0.2 in/sec PPV.

Conclusion

Adherence to the *Burbank2035* programs and policies identified above would reduce potential operational vibration impacts, but does not preclude the potential for impacts from rail traffic to occur. Therefore, because sensitive receptors could be subjected to operational vibration levels from rail traffic in excess of established thresholds, impacts would be considered **significant**.

Mitigation Measure

No feasible mitigation is available to reduce this impact.

Significance After Mitigation

As no feasible mitigation is available, and because sensitive receptors could be subjected to operational vibration levels from rail traffic in excess of established thresholds, impacts would be remain **significant and unavoidable**.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

The geographic context for the analysis of cumulative noise impacts depends on the impact being analyzed. For construction impacts, only the immediate area around a project site (in this case the City of Burbank or adjacent cities, where applicable) are included in the cumulative context. For example, construction impacts related to noise dissipate/attenuate quickly as the distance between the construction site and the receptor increases. As a result, and because the project impacts discussed above address all development within the city, only construction projects located outside of the city but within a distance of no more than 1,000 feet are considered within the cumulative context of construction noise.

For operational/roadway related impacts, the context is the increase in roadway volumes as a result of existing and future development in the city. Future roadway volumes contain regional growth calculations, as they affect traffic volumes within the city, and are thus considered cumulative. Traffic-related noise increases discussed under Impact 4.13-2 are therefore also cumulative in nature.

IMPACT 4.13-8 **Cumulative Effects of Construction Noise.** *Adoption and implementation of Burbank2035, in addition to anticipated growth in the region, would result in additional construction activity throughout the city and in adjacent jurisdictions, thereby increasing overall ambient noise levels. Adoption and implementation of the Burbank2035 land use plan, policies, and programs would reduce the effects of construction noise on nearby sensitive receptors, but not to an acceptable level in all circumstances. Burbank2035's contribution would be cumulatively considerable, and impacts would be* ***potentially significant****.*

Increases in noise at sensitive uses would occur as a result of construction of new land uses under *Burbank2035* along with other construction in the vicinity but outside of the city. As discussed in Impact 4.13-1, construction of new land uses within the city under *Burbank2035* could expose sensitive receptors near future construction sites to noise levels above noise standards established by the City. This construction noise would be temporary, and must be conducted in accordance with the requirements of the City's Noise Control Ordinance.

Multiple projects being constructed within Burbank and adjacent areas concurrently could create a cumulative condition. Other construction that may occur in the vicinity of one future construction site would contribute noise levels similar to those generated for a particular project. Where there are two adjoining construction sites, the combined construction noise levels would have a cumulative effect on nearby sensitive uses. Noise is not strictly additive, and a doubling of noise sources would not cause a doubling of noise levels, but rather would result in a 3 dBA increase over a single source. However, cumulative construction noise levels could be in excess of City noise standards.

As discussed under Impact 4.13-1, the City of Burbank exempts construction noise between the hours of 7:00 a.m.to 8:00 p.m. weekdays and 8:00 a.m. to 5:00 p.m. Saturdays, but does not contain quantified noise level limits for construction activities. The regulatory exemption reflects the City's acknowledgement that construction noise is a necessary part of new development and does not create an unacceptable public nuisance when conducted during the least noise sensitive hours of the day. However, should multiple construction activities occur simultaneously, noise thresholds could be exceeded as a result of construction activities. Future development consistent with *Burbank2035* would provide for increased density and intensity within the planning area, potentially exposing sensitive receptors to increased construction noise in exceedance of acceptable levels. Therefore, this impact would be **potentially significant**.

Mitigation Measure

No feasible mitigation is available to reduce this impact.

Significance After Mitigation

Burbank2035 could enable multiple construction activities to occur concurrently, and *Burbank2035*'s contribution would be cumulatively considerable. Since the City cannot fully mitigate this impact, the impact would be **significant and unavoidable**.

IMPACT 4.13-9 **Cumulative Effects of Roadway Noise.** *Adoption and implementation of Burbank2035 in addition to anticipated growth in the region would result in additional vehicle trips throughout the city and in adjacent jurisdictions, thereby increasing overall ambient noise levels. Adoption and implementation of the Burbank2035 land use plan, policies, and programs would reduce the effects of future development on roadway noise levels, but noise levels would substantially increase beyond existing conditions. Burbank 2035's contribution to this impact would be considerable, and impacts would be* ***significant****.*

Substantial permanent increases in noise would occur primarily as a result of increased traffic on local roadways due to *Burbank2035*, related projects, and other regional growth through year 2035. Cumulative traffic-generated noise impacts have been assessed based on the total change from existing conditions to future cumulative conditions with implementation of *Burbank2035*. As shown in Table 4.9-4, cumulative traffic, including traffic resulting from implementation of *Burbank2035*, would result in substantial increases in noise along two roadway segments compared to existing conditions. This would be a **significant** impact.

Mitigation Measure

No feasible mitigation is available to reduce this impact.

Significance After Mitigation

As roadway segments within the City would experience a substantial increase in noise over existing conditions with implementation of *Burbank2035* including cumulative traffic conditions, Burbank2035's contribution to this cumulative impact is considerable, and the impact is considered **significant and unavoidable**.

IMPACT 4.13-10 **Cumulative Effects of Stationary Source Noise.** *Adoption and implementation of Burbank2035 in addition to anticipated growth in the region would result in additional stationary source noise throughout the City and in adjacent jurisdictions, thereby potentially increasing overall ambient noise levels. Adoption and implementation of the Burbank2035 land use plan, policies, and programs and compliance with the City's Noise Control Ordinance would reduce the effects of future development, such that noise levels would not substantially increase. This cumulative impact would be* ***less than significant****.*

The operation of uses anticipated under *Burbank2035* would be subject to operational noise requirements of the City's Noise Control Ordinance, as identified in Impact 4.13-3. Based on existing land uses and development trends within the city, the types of development anticipated within the cumulative context are not anticipated to include features that are considered substantial noise generators, such as a helipad or airport. Typical operational sources of noise generated by land uses within the cumulative context include rooftop heating, ventilation, and air conditioning (HVAC) systems for office, commercial and mixed-use development, all of which would be regulated by the City Municipal Code (Title 9, Chapter 3, Article 2). As such, cumulative operational impacts, with the exception of vehicular roadway noise, which is discussed under Impact 4.13-9, would be localized and are considered **less than significant** with compliance with the City Municipal Code.

Mitigation Measure

None required.

IMPACT 4.13-11 **Cumulative Effects of Rail Noise on Nearby Receptors.** *Adoption and implementation of Burbank2035 in addition to anticipated growth in the region could result in the construction of additional residences near existing rail operations, thereby resulting in the potential exposure of those residences to elevated noise levels due to rail operations. Adoption and implementation of the Burbank2035 land use plan, policies, and programs, and compliance with the City's Noise Control Ordinance would reduce the effects of future development, but not to an acceptable level in all circumstances. Burbank2035's contribution would be cumulatively considerable, and impacts would be* ***significant****.*

There are no current plans, whether as part of *Burbank2035* or otherwise, to expand rail operations within the city. However, anticipated development of the California High-Speed Train project and expanded rail operations in other regions could increase the number and/or frequency of trains passing through the planning area and adjacent to intensified development in the planning area.

Future land uses, including those identified in *Burbank2035*, would be evaluated for compatibility, as required by *Burbank2035* policies and programs. Implementation of *Burbank2035* policies would ensure that any specific development within the vicinity of rail operations would be subject to review and additional design criteria, as applicable, intended to reduce potential impacts due to rail operations. However, the extent to which the City can reduce such impacts by requiring design considerations is unknown. Although noise levels could be reduced in

some cases, the City may not be able to control all aspects of a project, such as the number of trains that could use any given transit node. Therefore, because future sensitive receptors could be exposed to noise levels above City standards, this impact would be potentially significant. Although there are no plans to expand rail operations in the city, planned increases in density and intensity of uses within the city around transit nodes would expose additional people to rail noise. Therefore, *Burbank2035*'s contribution to the exposure of receptors to rail noise is cumulatively considerable. This impact would be **significant**.

Mitigation Measure

No feasible mitigation is available to reduce this impact.

Significance After Mitigation

Since the City cannot fully mitigate this impact, the impact would be **significant and unavoidable**.

IMPACT 4.13-12 **Cumulative Effects of Airport Noise on Nearby Receptors.** *Adoption and implementation of Burbank2035 in addition to anticipated growth in the region could result in the construction of additional residences near Bob Hope Airport, thereby resulting in the potential exposure of those residences to elevated noise levels due to airport operations. However, adoption and implementation of the Burbank2035 land use plan, policies, and programs, and compliance with the City's Noise Control Ordinance and ALUC requirements would reduce the effects of future development, such that This cumulative impact would be* ***less than significant****.*

As stated above, under 2035 conditions, operations at the Bob Hope Airport are expected to increase. However, the airport is governed by Los Angeles Regional Planning Commission/Airport Land Use Commission guidelines, which are intended to provide for reasonable, safe, and efficient use of the airport as a public transportation facility and as a base for aviation and aviation-related operations. In addition, the ALUC guidance is intended to protect the environment from the effects of aircraft noise. *Burbank2035* and future land uses consistent with *Burbank2035* will be evaluated for land use compatibility using criteria set forth in the ALUC Procedural Policies contained in the Airport Land Use Compatibility document. Existing policies would ensure that any specific development within the vicinity of the airport, including development consistent with *Burbank2035*, would be subject to review and additional design criteria, as applicable, to reduce potential impacts due to airport operations. Therefore, in the absence of any plans to expand the Bob Hope Airport, this cumulative impact would be considered **less than significant**.

Mitigation Measure

None required.

IMPACT 4.13-13 **Cumulative Effects of Construction Vibration.** *Construction of future land uses consistent with Burbank2035, in conjunction with other activities within the city, would expose nearby sensitive receptors to excessive vibration levels. Adoption and implementation of the Burbank2035 land use plan, policies, and programs, and compliance with the City's Noise Control Ordinance would reduce these effects of future development. However Burbank 2035's contribution would be cumulatively considerable, and impacts would be* ***potentially significant****.*

As discussed in Impact 4.13-6, construction of new land uses under *Burbank2035* would produce temporary vibration impacts, and the construction-related vibration impact would be significant and unavoidable. Due to the localized nature of vibration impacts, the overall cumulative impact would also be limited due in part to the fact that all construction would not occur at the same time or at the same location. Only receptors located in close proximity to each construction site would be cumulatively affected by each activity. As future land uses consistent with *Burbank2035* may be constructed concurrently with each other or other related projects, it is possible that intense construction from two or more projects would simultaneously occur at distances of 50 feet or less from existing receptors. Therefore, vibration from construction of future new land uses within the city and in immediately surrounding areas could potentially combine with construction vibration from the proposed project to result in a **potentially significant** cumulative impact.

Mitigation Measure

No feasible mitigation is available to reduce this impact.

Significance After Mitigation

As no feasible mitigation is available to reduce this impact, *Burbank2035's* contribution would be considered cumulatively considerable, and the cumulative impact would be **significant and unavoidable**.

IMPACT 4.13-14 **Cumulative Effects of Operational Vibration.** *Operation of uses associated with implementation of Burbank2035 in conjunction with other development could expose nearby sensitive receptors to excessive vibration levels. Adoption and implementation of the Burbank2035 land use plan, policies, and programs, and compliance with the City's Noise Control Ordinance would reduce the impacts of operational vibration, but not to an acceptable level in all circumstances. However, Burbank2035's contribution would not be cumulatively considerable, and impacts from cumulative operational vibration levels impacts would be* ***less than significant****.*

Groundborne vibration could be generated by operation of individual projects in the city, including future land uses consistent with *Burbank2035*. Uses contemplated within *Burbank2035* would not be considered uses that would generate substantial sources of groundborne vibration. Although there are no current plans, whether as part of *Burbank2035* or otherwise, to expand rail operations within the city, expanded rail operations in other regions could increase the number and/or frequency of trains passing through the planning area and adjacent to intensified development in the planning area. As a result, future land uses, including those identified in *Burbank2035*, could be subjected to increased levels of vibration. Implementation of *Burbank2035* policies and programs could reduce the level of vibration experienced by nearby uses and new uses would be evaluated for compatibility.

The City of Burbank has no plans to increase rail activity in the planning area. Any increase in rail activity through the planning area would be a result of other agencies or jurisdictions increasing the number or frequency of trains operating on rail lines in the city. Because the City of Burbank has no plans to increase rail traffic, Burbank2035 would not result in a cumulatively considerable contribution, and cumulative operational groundborne vibration impacts would be **less than significant**.

Mitigation Measure

None required.

4.14 POPULATION, EMPLOYMENT, AND HOUSING

4.14.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to population, employment, and housing associated with implementation of *Burbank2035* (proposed project). The analysis includes a review of the potential to induce population growth and the potential for displacement of people or housing. *Burbank2035* Land Use Element policies and *Burbank2035* implementation programs presented in the Plan Realization Element describe development and infrastructure practices that permit orderly growth while protecting existing residential neighborhoods.

NOP Responses: In response to the NOP, one comment relevant to population, employment, and housing was received from the Southern California Association of Governments (SCAG, see Appendix B). The comment was focused on consistency with the Regional Transportation Plan (addressed in Section 4.17, "Transportation") and Compass Growth Principles (addressed in Section 4.11, "Land Use.") However, the comment letter also identifies adopted population forecasts for the City of Burbank, which are discussed below, and compared with forecasts included in Chapter 3, "Project Description."

Reference Information: Information for this resource chapter is based on numerous references, including the *Burbank2035* Technical Background Report (TBR), U.S. Census Bureau data (Census 2010a, 2010b, 2011a and 2011b), California Department of Finance Data (DOF 2010), and other publicly available documents. The TBR prepared for the project is attached to this document as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.14.2 ENVIRONMENTAL SETTING

Section 15.1 of Appendix A describes population, employment, and housing data for Burbank, as well as the jobs/housing ratio. Table 3-2 in Chapter 3, "Project Description" presents existing 2010 figures for population, housing units, and non-residential square footage, as well as 2035 estimates for the expected buildout of *Burbank2035*. Key findings from the TBR are summarized below.

Population Growth

- From 2000 to 2010, Burbank's population increased 3.0% from 100,316 to 103,340 (Census 2011a). This was slightly less than the growth rate of Los Angeles County during the same time period (3.1%) (Census 2011b).
- In 2010, Burbank had 41,940 households with an average household size of 2.45 persons (SCAG 2011:2, Census 2010a). Household size was smaller than for Los Angeles County as a whole (3.03 persons) (Census 2010a).
- SCAG's 2012 *Regional Transportation Plan/Sustainable Communities Strategy* provides population, households, and employment for Burbank, including 2035 forecasts. SCAG's forecasts are presented in Table 4.14-1, below.

Table 4.14-1 2008 RTP Forecasts	
	2035
Population	133,391
Households	51,842
Jobs	115,695
Source: SCAG 2012, citing SCAG 2008	

Employment

- Burbank had a total of 94,932 jobs in 2010. Approximately 60% of these jobs were in the information, education and health, and professional and management industries.
- According to the City of Burbank (2010), major employers account for 30% of the jobs in the city. The number of jobs at major employers are summarized in Table 15-1 in Appendix A. Major employers in Burbank include The Walt Disney Company, Warner Bros. Entertainment, Providence/Saint Joseph Medical Center, Bob Hope Airport, ABC, Burbank Unified School District, the City of Burbank, NBC/Universal, FotoKem Industries, and Crane/Hydro-Aire Company.

Housing

- According to the US Census, the number of housing units in Burbank increased 7.1% from 41,365 to 44,309 between 2000 and 2010, similar to the increase in Los Angeles County during the same time period (Census 2011a; Census 2011b). According to the State Department of Finance, approximately 45% of these housing units are single-family detached units, while 40% are multifamily homes with five or more units (DOF 2010).
- Approximately 5.3% of housing units in Burbank were vacant in 2010 (Census 2010b). According to the California Department of Housing and Community Development (HCD) (2000), a housing vacancy rate of 5% is considered normal. Vacancy rates below 5% indicate a housing shortage in a community. Though Burbank's vacancy rate seems to indicate a balanced housing supply, the much higher proportion of jobs to housing units suggests there may be additional unmet housing demand.

Jobs/Housing Balance

- In 2010, Burbank had a jobs/housing ratio of 2.14 (94,932 jobs / 44,309 housing units), meaning there were slightly more than two jobs for every housing unit in the city. A jobs/housing ratio of 1.0 means one job exists for every housing unit in an area. Jobs-rich areas like Burbank are net importers of employees from other areas because they have more jobs than resident workers.

4.14.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to population, employment, and housing in the planning area. They provide the regulatory framework for addressing all aspects of population, employment, and

housing that would be affected by implementation of *Burbank2035*. The regulatory setting for population, employment, and housing is provided in Appendix A.

- **Regional Housing Needs Allocation (RHNA):** The RHNA is developed by SCAG and allocates to cities and counties their "fair share" of the region's projected housing needs based on household income groupings over the planning period for the housing elements of each specific jurisdiction. Due to the requirements of SB 375, SCAG is currently preparing the next RHNA planning cycle, which will cover 2013-2021. Cities and counties must develop a Housing Element to address how they will meet their RHNA.

- **Housing Element Requirements:** Under California law, housing elements must analyze existing and projected housing needs, examine special housing needs within the population, evaluate the effectiveness of current goals and policies, identify governmental and other constraints, determine compliance with other housing laws, and identify opportunities to incorporate energy conservation into the housing stock. The element must also establish goals, policies, and programs to maintain, enhance, and develop housing. Burbank last updated its Housing Element in 2008. The Housing Element noted a continuing need to develop affordable workforce housing, as well as housing for seniors, disabled residents, and other residents with special needs. The Housing Element also identified growing need for, and interest in, mixed-use housing, infill housing in Downtown Burbank, and small-lot single-family homes. Burbank was able to accommodate its RHNA within existing zoning and land uses, demonstrating that the city has sufficient sites at appropriate densities to meet legal requirements for addressing its fair share of the regional housing need.

- **California Relocation Law:** California Public Resources Code Section 7260(b) requires the fair and equitable treatment of persons displaced as a direct result of programs or projects undertaken by a public entity. The law requires agencies to prepare a relocation plan, provide relocation payments, and identify substitute housing opportunities for any resident that is to be displaced by a public project.

- **Residential Growth Management Ordinance:** Measure One was adopted and codified in Article 20, Sections 10-1-2001 through 10-1-2012 of the BMC. Measure One was adopted to coordinate residential growth with the provision of sufficient public facilities, and established a maximum allowable number of residential units for the City based on the existing Land Use Element. Measure One prohibits amendments to the Land Use Element, as it existed on July 1, 1988, which would increase the maximum allowable number of residential units that can be maintained and constructed in the city. The ordinance does not restrict the ability of the City Council to issue density bonuses to low- and moderate-income multi-family development projects. The most recent extension of the ordinance extends the effective date to January 1, 2020.

4.14.4 Impacts and Mitigation Measures

Analysis Approach

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analysis of population, employment, and housing impacts is qualitative and based on available demographic and economic data for the planning area, along with review of regional information. The analysis assumes that all future and existing development within the planning area complies with applicable laws, regulations, design standards, and plans. An analysis of cumulative impacts uses qualitative information for the planning area and the region.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential population, employment, and housing impacts include:

POLICIES

Land Use Element

- **Policy 1.2:** With discretionary approval, allow for the density and intensity limits specified in *Burbank2035* to be exceeded for transit-oriented development projects within transit centers as identified in the Mobility Element. The density and intensity limits may be exceeded by no more than 25%..

- **Policy 1.3:** Maintain and protect Burbank's residential neighborhoods by avoiding encroachment of incompatible land uses and public facilities.

- **Policy 1.4:** With discretionary approval, allow for the density and intensity limits to be exceeded, by no more than 25%, for exceptional projects that advance the goals and policies of *Burbank2035*..

- **Policy 5.4:** Allow residential units in traditionally non-residential areas, and support adaptive reuse of non-residential buildings for residential and live-work units in Downtown Burbank and other appropriate locations.

- **Policy 5.5:** Provide options for more people to live near work and public transit by allowing higher residential densities in employment centers such as Downtown Burbank and the Media District.

Mobility Element

- **Policy 1.2:** Recognize that Burbank is a built-out city and wholesale changes to street rights-of-way are infeasible.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on population, employment, and housing are considered significant if adoption and implementation of *Burbank2035* would:

- induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);

- displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere; or

- displace substantial numbers of people, necessitating the construction of replacement housing elsewhere;

IMPACTS AND MITIGATION MEASURES

IMPACT 4.14-1 **Induce Substantial Population Growth.** *Adoption and implementation of Burbank2035 would increase population in the planning area compared to 2010 conditions, and would also increase employment in the planning area, thereby indirectly causing population increases. However, providing for the orderly growth of Burbank is a basic purpose of Burbank2035. Nevertheless, this would be a* ***significant*** *impact.*

Burbank2035 includes land use designations that would allow new residential uses and non-residential development, generally focused in existing commercial and industrial areas and areas with access to transit. Land Use Element Policies 1.2, 1.4, 5.4, and 5.5 would allow for increased densities and intensities in focused areas, including within ¼ mile of transit stops, Downtown Burbank, and the Media District. Table 3-2 in Chapter 3, "Project Description," presents the current population in Burbank, and the forecast population in 2035 with implementation of *Burbank2035*. In addition to forecast population growth, implementation of *Burbank2035* would also result in new commercial and industrial development which would increase the City's employment base. Table 4.14-2 presents the 2010 and 2035 forecast population, housing units, and employment for the planning area.

Table 4.14-2
Burbank2035 Population, Employment, and Housing Forecasts

	2010	2035
Population	103,340	116,516
Housing Units	44,309	50,219
Jobs	94,932	125,461
Jobs/Housing Ratio	2.14	2.50

Source: AECOM 2012

SCAG's adopted forecasts for the City of Burbank are provided in Table 4.14-1. These forecasts are the sum of small area data and are to be used for advisory purposes only. SCAG forecasts a population of 133,391 and 115,695 jobs in Burbank in 2035. SCAG's forecasts include a higher population (16,875 more people) than the anticipated changes under *Burbank2035* would accommodate. However, SCAG's forecasted employment is less (9,766 fewer jobs) than anticipated employment growth under *Burbank2035*. SCAG's forecast would result in a jobs/housing units ratio of about 2.02 in 2035.

Adoption and implementation of *Burbank2035* would result in an increase in population growth, both directly through new residential units envisioned by the plan, and indirectly through new job generating uses. The planning area has relatively more jobs than housing as of 2010. The jobs/housing ratio for the forecast buildout of *Burbank2035* through 2035 would increase compared to 2010 conditions, resulting in a further increase in the number of jobs compared to housing units in the planning area, and potentially inducing population growth indirectly. This would be a **significant** impact.

Mitigation Measures

No feasible mitigation measures are available.

Significance After Mitigation

The purpose of a general plan is to guide growth and development in a community. Accordingly, *Burbank2035* is premised on a certain amount of growth taking place. The focus of *Burbank2035* is to provide a framework in which the growth can be managed and to tailor it to suit the needs of the community and surrounding area. *Burbank2035* provides the necessary tools to accommodate future growth, provides direction for new development and redevelopment projects, and establishes the desired mix and relationship between land use types. Such direct and indirect inducement of population growth, although a desirable outcome for the City, would constitute a **significant and unavoidable** impact.

IMPACT 4.14-2 **Displace People or Housing.** *Adoption and implementation of Burbank2035 would result in construction of new multifamily residential, commercial, and industrial uses, as well as infrastructure, public service, and recreation improvements. However, adoption and implementation of Burbank2035 policies would result in a* ***less-than-significant*** *impact.*

Burbank2035's proposed land use changes would allow the development of new multifamily units in the Media District, Downtown Burbank, the Golden State area, and other locations in Burbank. Land Use Element and Mobility Element policies would protect existing residential neighborhoods from encroachment of incompatible uses (Land Use Element Policy 1.3) and state that wholesale changes to street rights-of-way are infeasible (Mobility Element Policy 1.2), limiting effects on existing residential neighborhoods. Although Land Use Element Policies 1.2 and 1.4 allow for increased densities for exemplary projects and within ¼ mile of transit centers, these policies would not substantially displace people or housing. Changes in land use envisioned by these policies would be indirect and incremental, and would primarily affect existing commercial and industrial parcels. Land Use Element Policies 5.4 and 5.5 allow for the development of additional residential units in employment areas and other locations that are not traditionally residential in character. Because *Burbank2035* policies would protect existing residential neighborhoods and do not propose substantial changes to existing residential areas, impacts related to the displacement of people or housing would be **less than significant**.

Mitigation Measure

None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

The cumulative context for population, employment, and housing impacts is the Arroyo Verdugo Cities Subregion, as defined by SCAG. The Arroyo Verdugo Cities include Burbank, Glendale, La Cañada-Flintridge, Pasadena, and South Pasadena.

IMPACT 4.14-3 **Cumulative Inducement of Population Growth.** *Adoption and implementation of Burbank2035 in addition to anticipated land use changes throughout the Arroyo Verdugo Cities subregion would increase population both directly and indirectly (through increased employment). Burbank2035's contribution to this impact would be considerable, and the impact would be* ***significant****.*

SCAG forecasts that the population in the Arroyo Verdugo Cities (the subregion) will increase by 41,176 to 406,873 by 2035, an increase of more than 11% over the forecast 2010 population. Employment in the subregion is also forecast to increase by 27,675 (13%) to 232,268. The jobs/households ratio (which is similar to, but not directly comparable with the jobs/housing unit ratio identified in Impact 4.14-1) is forecast to increase slightly, from 1.54 to 1.57. This would be a **significant** cumulative impact.

Mitigation Measure

No feasible mitigation measures are available.

Significance After Mitigation

Burbank2035 forecasts an additional 13,176 residents and 30,529 jobs by 2035, representing a substantial portion of the growth forecast for the subregion. Therefore, *Burbank2035*'s contribution to this impact would remain considerable. As with the program-level impact discussed in Impact 4.14-1, no feasible mitigation measures are available to reduce this contribution, and the impact is **significant and unavoidable**.

IMPACT 4.14-4 **Cumulative Effects Displacing People or Housing.** *Adoption and implementation of Burbank2035 in addition to anticipated changes throughout the Arroyo Verdugo Cities subregion could directly or indirectly displace people or housing. Burbank2035's contribution to this impact would not be considerable, and the impact would be* ***less than significant****.*

Changes in the subregion through 2035 could result in displacement of people or housing, through expansion of non-residential land uses, infrastructure improvements such as roadway, utility, or transit expansion, or other changes. This would be a potentially significant cumulative impact. However, as described in Impact 4.14-2, implementation of *Burbank2035* would not displace people or housing in the planning area, and the regional effects of the changes forecast (including job and population growth in the planning area) would not make a considerable contribution, and this impact would be **less than significant**.

Mitigation Measure

None required.

This page intentionally left blank.

4.15 PUBLIC SERVICES AND UTILITIES

4.15.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to public services and utilities associated with implementation of *Burbank2035*. The analysis includes a review of public services, including fire protection, police protection, school enrollment, park facilities, library services, and utilities, including wastewater treatment, water supply and service facilities, and solid waste disposal. *Burbank2035* Land Use, Open Space and Conservation, and Safety Element policies and *Burbank2035* implementation programs presented in the Plan Realization Element guide City program, development, and infrastructure practices to provide adequate public services, parkland, and recreation opportunities, as well as conserve water resources.

NOP Comments: In response to the NOP, one comment was received from the Metropolitan Water District (Metropolitan), stating that *Burbank2035* is not regionally significant to Metropolitan as it does not own facilities or maintain real estate entitlements within the city (see Appendix C). No comments regarding police protection, fire protection, schools, libraries, or other public services were received in response to the NOP.

Reference Information: Information for this resource chapter is based on numerous references, including the Burbank Fire Department (BFD) Standards of Cover (May 2011), Burbank Unified School District (BUSD) Enrollment Report 2010-11 (March 2012), Burbank Water and Power (BWP) 2010 Urban Water Management Plan (UWMP) (June 2011), other publicly available documents, personal and written communication with service providers, and service agency websites. The Technical Background Report (TBR) is attached to this document as Appendix A. This EIR, including the TBR, is also available electronically on the City's website (http://www.burbank2035.com).

4.15.2 ENVIRONMENTAL SETTING

Section 16.1 of Appendix A describes existing public services available in Burbank, including fire and police protection services, BUSD student enrollment, parkland acreage, and library services. Section 16.1 also describes the existing utility services, including water supply and distribution systems, wastewater treatment services, stormwater drainage systems, and solid waste disposal services. Key findings from the TBR are summarized below.

POLICE PROTECTION

- The Burbank Police Department (BPD) provides police protection services within the city limits. In 2012, BPD had 159 sworn officers. Based on the number of sworn officers and the City's Census-estimated 2010 population of 103,340, BPD has a ratio of 1.54 sworn officers per 1,000 residents.

FIRE PROTECTION

- The BFD is a member department of the Verdugo Fire Communications Center, a regional communications center that fields calls for service for the Cities of Burbank, Glendale, Pasadena, Alhambra, Arcadia, Monrovia, Montebello, Monterey Park, San Gabriel, San Marino, Sierra Madre, and South Pasadena. The service area for the communications center covers approximately 134 square miles, with a combined population of approximately 875,000 people.

- Currently, BFD maintains approximately one fire station per 18,000 residents. BFD has established a response objective for fire suppression to maintain an average response time of 4 minutes for all emergency calls 80% of the time. In fiscal year 2009-10, the average response time was 4 minutes and 5 seconds with 78% of calls answered in less than 5 minutes.

SCHOOLS

- School enrollment for the Burbank Unified School District is summarized in Table 16-1 of Appendix A.

PARKS

- There are more than 700 acres of parkland within the city, the majority of which consists of the 500-acre Wildwood Canyon Park, a regional park that is largely undeveloped. An inventory of parks in Burbank is provided in Table 16-2 of Appendix A.

LIBRARIES

- Burbank has three library branches and 78,500 square feet of library space (Central Library: 44,000 sq ft, Buena Vista Library: 28,000 sq ft, and Northwest Library: 6,500 sq ft).

WASTEWATER TREATMENT

- Wastewater in Burbank flows through two pump stations and is treated at tertiary level standards at the Burbank Water Reclamation Plant (BWRP), which has a treatment capacity of 12.5 million gallons per day (MGD).

- The BWRP is part of the City of Los Angeles' integrated network of facilities, known as the North Outfall Sewer (NOS), which includes four treatment plants.

- The wastewater received at the BWRP is a mixture of domestic and industrial wastewater. The BWRP discharges tertiary-treated municipal wastewater to the Burbank Western Channel.

WATER AND WASTEWATER INFRASTRUCTURE

- Major facility improvements to water infrastructure are directed by the Burbank Urban Water Management Plan and BWP 2010 UWMP.

- The 2006 Sewer System Evaluation and Capacity Assurance Plan directs the City to develop a dynamic hydraulic modeling package for the City's infrastructure planning needs that is compatible with the City's existing wastewater data model. The City has since implemented the hydraulic modeling package.

STORM WATER DRAINAGE FACILITIES

- A comprehensive storm drain master plan is currently being prepared by the City.

WATER SUPPLIES

- Water is supplied by the BWP Water Division. More than half (56%) of BWP's water is supplied locally from groundwater wells drawing from the San Fernando Groundwater Basin.
- The BWP 2010 UWMP concludes that there will be sufficient water supplies to meet demand through 2035 in normal and dry years due to existing contracts with wholesale supplier Metropolitan.
- Metropolitan supplies a little less than half of Burbank's potable water in addition to providing BWP with groundwater supplies to replenish the San Fernando Groundwater Basin.

SOLID WASTE

- The City of Burbank owns and operates the Burbank Landfill, located in the Verdugo Hills at the eastern edge of the planning area. The facility is located on 86 acres, 48 acres of which are used for disposal. The landfill has a maximum permitted capacity of 5,933,365 cubic yards and as of May 31, 2006, had a remaining capacity of 5,107,465 cubic yards (approximately 86% of the maximum permitted capacity). The maximum permitted throughput is 240 tons per operating day. Burbank Landfill has an expected closure date of January 1, 2053.
- In 2010, Burbank generated 85,297.22 tons of solid waste, of which 43.09 tons were burned.

4.15.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to public services and utilities in the planning area. They provide the regulatory framework for addressing all aspects of public services and utilities that would be affected by implementation of *Burbank2035*. The regulatory setting for public services and utilities is discussed in Appendix A. Key regulations used to reduce environmental impacts are summarized below.

- **Burbank Urban Water Management Plan:** The 2010 UWMP provides information for Water Supply Assessments and Written Verifications of Water Supply. The UWMP is a long-range planning document and provides estimates for population, water demand, and water supply with projections in five-year increments to 2035.
- **Sewer System Management Plan:** The 2006 Sewer System Evaluation and Capacity Assurance Plan (SSECAP) directs the City to develop a dynamic hydraulic modeling package for infrastructure planning that is compatible with the City's existing wastewater data model. The SSECAP also identifies areas of future study that are cost-effective and technically feasible to address both potential capacity and operational constraints and are coordinated with other improvement projects.
- **Quimby Act:** The Quimby Act allows a city to require dedication of land, the payment of in-lieu fees, or a combination of both to be used for the provision of parks and recreational purposes.
- **Education Code Section 17620:** Education Code Section 17620 authorizes school districts to levy a fee, charge, dedication, or other requirement against any development project for the construction or reconstruction of school facilities, provided that the district can show justification for levying of fees.

- **California Water Conservation Bill (Senate Bill X7-7):** The Water Conservation Bill, enacted in 2009, set an overall goal of reducing per capita urban water use in the state by 20% by December 31, 2020. The state shall make incremental progress towards this goal by reducing per capita water use by at least 10% by December 31, 2015. The Bill requires urban water suppliers to reduce per capita water use 20% by 2020. Urban water suppliers are required to establish water conservation targets for the years 2015 and 2020. Urban retail water suppliers are directed to include in their water management plans the baseline daily per capita water use, water use targets, interim water use targets, and compliance daily per capita water use.

- **City of Burbank Water Conserving Fixtures and Fittings Ordinance:** The City of Burbank passed the Water Conserving Fixtures and Fittings Ordinance in 2008, which requires the following projects to meet water conserving construction standards:

  - All new construction,
  - All additions over 100 square feet,
  - Bathroom remodels,
  - Tenant improvements of commercial, retail or office spaces, or
  - Remodel of 50% or more of a floor or a building.

  These types of projects are required to install low flow showerheads, lavatory faucets, water closets and urinals.

- **City of Burbank Retrofit Upon Resale Ordinance:** The City of Burbank passed the Retrofit Upon Resale Ordinance in 2010, which requires that any residential, commercial, or industrial property resold in Burbank be upgraded to current California Plumbing Code requirements for toilets, urinals, showerheads, and kitchen and bathroom faucet aerators as a condition of escrow. BWP provides cash rebates for upgrades to appliances or provides the aforementioned household items at no cost to customers.

- **City of Burbank Sustainable Use Ordinance:** The City of Burbank passed the Sustainable Use Ordinance in 2008 in order to implement voluntary and mandatory conservation measures to reduce water use to conserve the water supply. Water use restrictions are implemented in four stages and increase in severity of voluntary to mandated measures based on drought levels. Stage I, consisting of all voluntary measures, took effect immediately on the effective date of the ordinance. Stages II, III and IV consist of mandatory measures and require subsequent action of the City Council.

- **Senate Bill (SB) 1016:** The purpose of SB 1016, the per capita disposal measurement system, is to make the process of goal measurement as established by the Integrated Waste Management Act of 1989 (AB 939) simpler, more timely, and more accurate. SB 1016, which took effect for measurement year 2007 and beyond, builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator – the per capita disposal rate – which uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities.

- **Senate Bill (SB) 610:** SB 610 requires the preparation of water supply assessments for large developments (e.g., for projects of 500 or more residential units; 500,000 square feet of retail commercial space; or 250,000 square feet of office commercial space). These assessments address whether adequate existing or projected

water supplies are available to serve proposed projects, in addition to urban and agricultural demands and other anticipated development in the service area in which the project is located.

- **City of Burbank Zero Waste Policy and Zero Waste Strategic Plan:** In 2008, the City of Burbank adopted a Zero Waste Policy setting a zero waste goal by 2040, and a Zero Waste Strategic Plan to implement the policy. This plan includes four basic strategies, with a priority placed on "upstream" solutions to eliminate waste before it is created. The plan also includes actions to build on the City's traditional "downstream" recycling programs to fully utilize the existing waste diversion infrastructure.

4.15.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analyses are both quantitative and qualitative and based on available information for services provided within the planning area. The analysis assumes that all future and existing development within the planning area complies with applicable laws, regulations, standards, and plans. An analysis of cumulative impacts uses quantitative and qualitative information for the planning area and applicable broader service areas.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential impacts to public services and utilities include:

POLICE PROTECTION

POLICIES

Safety Element

- **Policy 2.1:** Maintain an average police response time of less than 4 minutes to emergency calls for service.
- **Policy 2.2:** Ensure adequate staffing, facilities, equipment, technology, and funding for the Burbank Police Department to meet existing and projected service demands and response times.
- **Policy 2.3:** Provide and use up-to-date technology to improve crime prevention.
- **Policy 2.4:** Develop and support crime prevention programs throughout the city, including the Crime Prevention Through Environmental Design (CPTED) and Neighborhood Watch programs.
- **Policy 2.5:** Provide public education for neighborhood safety programs to encourage active participation by Burbank residents and businesses.
- **Policy 3.1:** Adapt to the changing safety needs of the community.

- **Policy 3.2:** Reduce opportunities for criminal activity through physical design standards such as CPTED and youth programs, recreation opportunities, educational programs, and counseling services.

PROGRAMS

Land Use Element

- **Program LU-8: Development Impact Fees and Art in Public Places.** As new development occurs in the city, greater demands are placed on city facilities and services. Development impact fees offset these impacts by funding improvements related to fire, police, library, and park and recreation services. A separate transportation impact fee funds improvements to the city's street and transportation networks to mitigate the effects of new development.

  The City's Art in Public Places program requires project applicants to either provide art as part of their projects or pay in-lieu fees to the Art in Public Places fund, which funds public art projects. The City will complete the following actions related to development impact fees and art in public places:

  - Review and update the transportation impact fee program to implement Land Use Element and Mobility Element goals and policies and to ensure that identified long-term projects to improve transportation are adequately funded.
  - Review and revise the community facilities fee program to ensure that fees are adequately addressing impacts on City services caused by new development.
  - Review the art value and in-lieu fee requirements of the Art in Public Places program to ensure that they remain adequate.
  - Consider creating a public benefits program where project applicants for large projects must provide public benefits through methods such as incorporating design features or programs into the project, constructing or providing funding for off-site improvements or facilities, and providing one-time or ongoing funding for community programs and activities.

Safety Element

- **Program S-1: Review and Update Safety Plans on a Regular Basis.** Regularly review and update the City's safety plans every five years. Plans to be updated include, but are not limited to the:

  - All-Hazard Mitigation Plan,
  - Multi-Hazard Functional Plan,
  - Police Strategic Plan,
  - Fire Strategic Plan, and
  - Hazardous Materials Area Plan.

- **Program S-2: Review Critical Facilities.** Review critical facilities proposed for development or expansion to ensure that hazardous conditions are mitigated or hazard reduction features are incorporated to the satisfaction of the responsible agencies. Critical facilities include power and water utilities, roads, hospitals, fire and police stations, emergency operation centers, communication centers, high-risk or high-occupancy facilities, and dependent care facilities with special evacuation considerations.

FIRE PROTECTION

POLICIES

Safety Element

- **Policy 4.1:** Maintain a maximum response time of 5 minutes for fire suppression services. Require new development to ensure that fire response times and service standards are maintained.
- **Policy 4.2:** Provide adequate staffing, equipment, technology, and funding for the Burbank Fire Department to meet existing and projected service demands and response times.
- **Policy 4.3:** Implement fire prevention and suppression programs in areas of high fire hazard risk, including both urban and wildland areas.
- **Policy 4.4:** Maintain adequate fire breaks in areas within and adjacent to areas of high wildfire risk.
- **Policy 4.5:** Coordinate firefighting efforts with local, state, and federal agencies.
- **Policy 4.6:** Reduce fire hazards associated with older buildings, multi-story structures, and industrial facilities.
- **Policy 4.7:** Maintain adequate fire suppression capability in areas of intensifying urban development, as well as areas where urban uses and open spaces mix.

PROGRAMS

Land Use Element

- **Program LU-8: Development Impact Fees and Art in Public Places .** As new development occurs in the city, greater demands are placed on city facilities and services. Development impact fees offset these impacts by funding improvements related to fire, police, library, and park and recreation services. A separate transportation impact fee funds improvements to the city's street and transportation networks to mitigate the effects of new development.

  The City's Art in Public Places program requires project applicants to either provide art as part of their projects or pay in-lieu fees to the Art in Public Places fund, which funds public art projects. The City will complete the following actions related to development impact fees and art in public places:

- Review and update the transportation impact fee program to implement Land Use Element and Mobility Element goals and policies and to ensure that identified long-term projects to improve transportation are adequately funded.

- Review and revise the community facilities fee program to ensure that fees are adequately addressing impacts on City services caused by new development.

- Review the art value and in-lieu fee requirements of the Art in Public Places program to ensure that they remain adequate.

- Consider creating a public benefits program where project applicants for large projects must provide public benefits through methods such as incorporating design features or programs into the project, constructing or providing funding for off-site improvements or facilities, and providing one-time or ongoing funding for community programs and activities.

Safety Element

- **Program S-1: Review and Update Safety Plans on a Regular Basis.** Regularly review and update the City's safety plans every five years. Plans to be updated include, but are not limited to the:

  - All-Hazard Mitigation Plan,

  - Multi-Hazard Functional Plan,

  - Police Strategic Plan,

  - Fire Strategic Plan, and

  - Hazardous Materials Area Plan.

- **Program S-2: Review Critical Facilities.** Review critical facilities proposed for development or expansion to ensure that hazardous conditions are mitigated or hazard reduction features are incorporated to the satisfaction of the responsible agencies. Critical facilities include power and water utilities, roads, hospitals, fire and police stations, emergency operation centers, communication centers, high-risk or high-occupancy facilities, and dependent care facilities with special evacuation considerations.

- **Program S-3: Fire Protection Requirements.** Regularly update fire protection requirements, especially in transition areas between developed and undeveloped land. Enforce stringent construction and design standards, and work to preserve open space where wildfire hazards exist.

- **Program S-7: Manage Safety Information with GIS Technology.** Use the City's Geographic Information System (GIS) to manage safety information, such as the following:

  - Existing and future geotechnical and seismic data contained in public, private, and City archives.

- The locations and details of hazardous structures, critical lifelines and critical facilities. Data about these facilities should include the building's age, function, occupancy, and structural risk.
- A listing of disaster response plans and resources available so these can be implemented immediately in case of emergency.
- An overlay of seismic constraints to assist in emergency response planning.

PARKS

POLICIES

Open Space and Conservation Element

- **Policy 2.1:** Identify areas of the city that are currently underserved and focus park expansion and open space acquisition in these areas.
- **Policy 2.2:** Provide a community or neighborhood park within 1/2 mile of all Burbank residences.
- **Policy 2.3:** Provide park and recreation facilities at a minimum level of 3 acres per 1,000 persons, with the goal of 5 acres per 1,000 persons.
- **Policy 2.4:** Seek opportunities to develop additional parks and open space in areas where needed, including pocket parks, dog parks, athletic fields, amphitheaters, gardens, and shared facilities.
- **Policy 3.1:** Improve and rehabilitate existing parks and recreation facilities.
- **Policy 3.2:** Improve existing athletic fields with lights, equipment, and seating.
- **Policy 3.3:** Develop a clear and unified system of identification and directional signs for all park and recreation facilities.
- **Policy 3.4:** Provide low-maintenance, vandal-resistant parks, recreation facilities, and equipment.
- **Policy 3.5:** Provide adequate lighting in parking areas to ensure user safety.
- **Policy 3.6:** Improve and maintain access to accommodate persons with disabilities at all parks.
- **Policy 3.7:** Ensure that the public transit system connects parks and recreation facilities to the rest of the community.
- **Policy 4.1:** Provide a variety of arts, cultural, historical, fitness, and environmental education programs at parks and recreation facilities.
- **Policy 4.2:** Enhance and expand existing recreation programs in response to changing community demographics and needs.
- **Policy 4.3:** Continue the joint use of facilities owned by the Burbank Unified School District.

- **Policy 4.4:** Continue the use of "drop-in" centers in existing and future recreation facilities.

- **Policy 4.5:** Ensure that buildings, equipment, fields, and other recreation amenities are in full use and capable of accommodating changing program demands.

PROGRAMS

Land Use Element

- **Program LU-2: Subdivision Regulations.** Require dedication of parkland at a ratio of 3.0 acres per 1,000 residents or payment of in-lieu fees, pursuant to Quimby Act requirements.

- **Program LU-8: Development Impact Fees and Art in Public Places.** As new development occurs in the city, greater demands are placed on city facilities and services. Development impact fees offset these impacts by funding improvements related to fire, police, library, and park and recreation services. A separate transportation impact fee funds improvements to the city's street and transportation networks to mitigate the effects of new development. The City will complete the following actions related to development impact fees and art in public places:

  - Review and update the transportation impact fee program to implement Land Use Element and Mobility Element goals and policies and to ensure that identified long-term projects to improve transportation are adequately funded.

  - Review and revise the community facilities fee program to ensure that fees are adequately addressing impacts on City services caused by new development.

  - Review the art value and in-lieu fee requirements of the Art in Public Places program to ensure that they remain adequate.

  - Consider creating a public benefits program where project applicants for large projects must provide public benefits through methods such as incorporating design features or programs into the project, constructing or providing funding for off-site improvements or facilities, and providing one-time or ongoing funding for community programs and activities.

Open Space and Conservation Element

- **Program OSC-7: Development Review.** Implement the following actions during development review and the CEQA process to achieve Open Space and Conservation Element goals and policies:

  - Require parkland dedication and improvement as part of large residential developments. The required dedication shall be 3 acres for every 1,000 residents expected in the development. Allow an in-lieu fee to be paid if the applicant is not able to dedicate land or the land is considered unsuitable for park or recreation use.

- **Program OSC-2: Park, Recreation, and Community Services Master Plan.** Development of a Park, Recreation, and Community Services Master Plan would direct long-term acquisition, operation, management, and programming for parks, open space, and recreation facilities. The Master Plan may include:
  - Standards and criteria for how parkland will be acquired. Standards should address priorities for which lands and under what circumstances the City should acquire land for parks;
  - Parkland standards to provide the following ratios of parkland per 1,000 residents:
    - Regional Parks: 8.0 acres/1,000 residents
    - Community Parks: 2.0 acres/1,000 residents
    - Neighborhood Parks: 1.5 acres/1,000 residents
    - Pocket Parks: 0.04 acre/1,000 residents
  - An update to the in-lieu fee structure for the acquisition and management of recreation land in connection with the development review process;
  - Guidance for which suitable tax-deeded lands (those which have reverted to the state as a result of tax delinquencies) are suitable for acquisition;
  - Information on existing and potential programs for a variety of passive, educational, and active recreation opportunities for all area residents; and
  - An overview of facilities and guidance on how to improve the visibility, add signage or appropriate signage, and other guidance related to maintenance and improvements.
- **Program OSC-8: Capital Improvement Program.** Continue to use the City's CIP to prioritize, finance, and complete parks and infrastructure improvements, including:
  - construction of new parks and improvements to current parklands and park facilities to the standards mentioned in policies above;
  - construction of a network of multi-use trails that connects the City's parks and open spaces; and
  - maintenance of City-owned and operated recreation facilities.

LIBRARIES

PROGRAMS

Land Use Element

- **Program LU-8: Development Impact Fees and Art in Public Places.** As new development occurs in the city, greater demands are placed on city facilities and services. Development impact fees offset these impacts by funding improvements related to fire, police, library, and park and recreation services. A separate

transportation impact fee funds improvements to the city's street and transportation networks to mitigate the effects of new development. The City will complete the following actions related to development impact fees:

- Review and update the transportation impact fee program to implement Land Use Element and Mobility Element goals and policies and to ensure that identified long-term projects to improve transportation are adequately funded.
- Review and revise the community facilities fee program to ensure that fees are adequately addressing impacts on City services caused by new development.
- Review the art value and in-lieu fee requirements of the Art in Public Places program to ensure that they remain adequate.
- Consider creating a public benefits program where project applicants for large projects must provide public benefits through methods such as incorporating design features or programs into the project, constructing or providing funding for off-site improvements or facilities, and providing one-time or ongoing funding for community programs and activities.

WATER/WASTEWATER/STORMWATER DRAINAGE FACILITIES

POLICIES

Land Use Element

- **Policy 2.4:** Require that new development pay its fair share for infrastructure improvements. Ensure that needed infrastructure and services are available prior to or at project completion.
- **Policy 2.5:** Provide public facilities and services in the most equitable and efficient manner possible.
- **Policy 2.7:** Design new buildings to minimize the consumption of energy, water, and other natural resources. Develop incentives to retrofit existing buildings for a net reduction in energy consumption, water consumption, and stormwater runoff.

Open Space and Conservation Element

- **Policy 9.1:** Meet the goal of a 20% reduction in municipal water use by 2020.
- **Policy 9.2:** Provide public information regarding the importance of water conservation and avoiding wasteful water habits.
- **Policy 9.3:** Offer incentives for water conservation and explore other water conservation programs.
- **Policy 9.4:** Pursue infrastructure improvements that would expand communitywide use of recycled water.
- **Policy 9.5:** Require on-site drainage improvements using native vegetation to capture and clean stormwater runoff.

PROGRAMS

Open Space and Conservation Element

- **Program OSC-7: Program OSC-7: Development Review.** Implement the following actions during development review and the CEQA process to achieve Open Space and Conservation Element goals and policies:

  - Require parkland dedication and improvement as part of large residential developments. The required dedication shall be 3 acres for every 1,000 residents expected in the development. Allow an in-lieu fee to be paid if the applicant is not able to dedicate land or the land is considered unsuitable for park or recreation use.

  - Encourage applicants to use native plants and low-water landscaping methods.

  - Promote the use of native plant species in landscaping areas adjacent to open space.

  - Evaluate change to the total mountain area for any proposed development in the Verdugo Mountains.

  - Require applicants to comply with NPDES permit requirements and demonstrate that their development will:

    – incorporate structural and nonstructural best management practices to mitigate projected increases in pollutant loads and flows;

    – control the velocity of pollutant loading flows during and after construction;

    – limit areas of impervious surfaces and preserve natural areas;

    – limit directly connected areas of impervious surfaces;

    – use natural treatment systems such as wetlands and bioswales to treat storm runoff where technically and economically feasible;

    – provide areas for on-site infiltration and/or temporary retention areas;

    – limit disturbance of natural water bodies, natural drainage systems, and highly erodable areas;

    – use pollution prevention methods, source controls, and treatment with small collection strategies located at or as close as possible to the source; and

    – implement erosion protection during construction.

- **Program OSC-9: Regional Water Consultation.** Consult with Metropolitan Water District of Southern California (Metropolitan) and the Los Angeles Regional Water Quality Control Board (RWQCB) to achieve the following water supply, distribution, and conservation objectives:
  - Maintain groundwater recharge areas to protect water quality and ensure continued recharge of local groundwater basins.
  - Reduce the amount of water used for landscaping and increase use of native and drought tolerant plants.
  - Encourage the production, distribution, and use of recycled water for landscaping projects.
  - Maintain water quality objectives for urban runoff.
  - Comply with all provisions of the NPDES permit, and support regional efforts by the Los Angeles RWQCB to improve and protect surface water quality.
- **Program OSC-11: Burbank Urban Water Management Plan and Recycled Water Master Plan.** Continue to update the Burbank Urban Water Management Plan and Recycled Water Master Plan every five years to serve as foundational documents and source of information for Water Supply Assessments and Written Verifications of Water Supply. Include estimates for population, water demand, and water supply with projections in five-year increments to 2035. Use the Recycled Water Master Plan to ensure the use of recycled water wherever allowed and feasible.

SOLID WASTE

PROGRAMS

Open Space and Conservation Element

- **Program OSC-12: Sustainability Element and Sustainability Coordinator.** Prepare a General Plan Sustainability Element to provide comprehensive direction regarding how best to incorporate sustainability in all City policies and operations. To ensure quality and efficiency in implementing City sustainability policies, it is important that the City identifies an internal resource person with dedicated job-hours to carry out the GGRP and Sustainability Element. The City will establish a Sustainability Coordinator position to manage inter-departmental efforts and the work of the Sustainable Burbank Commission to prioritize and implement sustainability in all City policies and operations.

DRAFT *BURBANK2035* GREENHOUSE GAS REDUCTION PLAN MEASURES AND ACTIONS

WATER EFFICIENCY

Measure W-1.1: Water Conservation Programs

- **Action W-1.1A:** Implement UWMP water conservation improvements.

Measure W-1.2: Recycled Water Use Master Plan

- **Action W-1.2A:** Expand recycled water system.
- **Action W-1.2B:** Increase the number of targeted large irrigation customers required to use recycled water.

Measure W-1.3: Stormwater Management Plan

- **Action W-1.3A:** Prepare and adopt a Stormwater Management Plan.

Organic Waste Diversion

Measure SW-1.1: Food Scrap and Compostable Paper Diversion Ordinance

- **Action SW-1.1A:** Adopt a food scrap and compostable paper diversion ordinance.
- **Action SW-1.1B:** Revise the yard waste collection program to allow co-mingling of yard waste, food scraps, and compostable paper.

Measure SW-1.2: Yard Waste Diversion Ordinance

- **Action SW-1.2A:** Adopt a yard waste diversion ordinance banning the disposal of yard waste in trash bins or dumpsters.

Measure SW-1.3: Lumber Diversion Ordinance

- **Action SW-1.3A:** Modify the Construction and Debris Diversion Ordinance to include requirements for 75% diversion.

Measure SW-1.4: Reusable Bags

- **Action SW-1.4A:** Promote the environmental benefits of reusable shopping bags on the City website.

Measure SW-1.5: Recycling Ordinance

- **Action SW-1.5A:** Adopt an ordinance requiring recycling bins or recycling areas in all buildings.

Landfill Methane Recovery

Measure SW-2.1: Enhanced Methane Recovery

- **Action SW-2.1A:** Ensure that methane capture systems at Burbank Landfill meet ARB requirements.

Thresholds of Significance

For the purposes of this EIR, impacts on public services and utilities are considered significant if adoption and implementation of *Burbank2035* would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of

which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- police protection,
- fire protection,
- schools,
- parks, or
- other public facilities.

- increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.
- exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board.
- require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- have insufficient water supplies available to serve the project from existing entitlements and resources, or would require new or expanded entitlements.
- have inadequate capacity to serve the project's projected demand for wastewater treatment, in addition to the provider's existing commitments.
- be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- not comply with federal, state, and local statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.15-1 **Demand for Additional Police Facilities.** *Implementation of Burbank2035 would result in an increase in population in the planning area, which would increase demand for police protection services, resulting in the need for additional and/or expanded police protection facilities. However, adoption and implementation of Burbank2035 policies and programs would require the City to continue to provide funding and adequate staffing, facilities, equipment, and technology to meet existing and projected service demands and response times. Therefore, this impact would be* ***less than significant****.*

An increase in population resulting from implementation of *Burbank2035* may place higher demands on police facilities to maintain acceptable response times and service ratios. Development associated with future land uses consistent with *Burbank2035* would result in 13,176 new residents in the planning area. Intensification of

development would lead to increased demand for police services. Although not mandated, the BPD uses a desired ratio of 1.6 officers to 1,000 residents to measure the adequacy of policing levels. As of 2012, the City provided 1.54 sworn officers per 1,000 residents. In order to meet the desired ratio of 1.6 officers to 1,000 residents with implementation of *Burbank2035*, BPD would need approximately 186 sworn officers, or an additional 27 officers from current staffing levels.

Burbank2035 is designed to achieve steady and orderly growth that allows for the adequate provision of services and community facilities. Implementation of *Burbank2035* policies and programs would direct the provision of adequate facilities, staffing, equipment, technology, and funding to meet existing and projected police protection service demands and response times as demands grow with the increase in population.

Burbank2035 policies would ensure adequate police protection is provided to accommodate the anticipated increase in new residents. Safety Element Policy 2.1 would maintain an average police response time of less than 4 minutes to emergency calls for service, and Safety Element Policy 2.2 would ensure adequate staffing, facilities, equipment, technology, and funding for the BPD to meet existing and projected service demands and response times. Safety Element Policies 2.3 through 2.5 would assist the BPD to reduce crime by providing up-to-date technology, developing and supporting crime prevention programs, and providing public education for neighborhood safety programs. Safety Element Policy 3.1 would allow the City to adapt to the changing safety needs of the community, and Policy 3.2 would reduce opportunities for criminal activity through physical design standards such as CPTED and youth programs, recreation opportunities, educational programs, and counseling services. Program S-1 would require review and update of the Police Strategic Plan to determine the needs of the BPD, and Program S-2 would review the needs of police stations and other facilities in order to provide adequate infrastructure and technology for police protection and emergency response needs. Program LU-8 would review and revise the community facilities fee program to ensure that new development adequately offsets impacts related to fire, police, library, and park and recreation services.

The City continually evaluates demand and capacity, and plans for facility needs. If project-level significant impacts are identified, applicable mitigation measures would be placed on the project as conditions of approval. Therefore, implementation of *Burbank2035* policies and programs would appropriate adequate equipment, technology, and funding for the BPD to meet existing and projected service demands and response times. Therefore, adoption and implementation of *Burbank2035* policies and programs would ensure that the City would meet increased demands for police protection associated with an increase in population. Therefore, impacts to police protection services and facilities would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-2 **Demand for Additional Fire Protection Facilities.** *Implementation of Burbank2035 would result in an increase in population in the planning area, which would increase demand for fire protection services, and potentially result in the need for additional and/or expanded fire protection facilities. However, adoption and implementation of Burbank2035 policies and programs would require the City to continue to review fire protection facility and staffing needs and provide appropriate adequate funding to meet those needs. Therefore, this impact would be* ***less than significant****.*

An increase in population resulting from implementation of *Burbank2035* may place higher demands on fire protection facilities to maintain acceptable response times and service ratios. Development associated with future land uses consistent with *Burbank2035* would result in 13,176 new residents in the planning area. Intensification of development would lead to increased demand for fire protection services. BFD does not have an official staffing ratio goal. The department uses a number of measures to determine need for fire protection services, and compares statistics to other cities in the Los Angeles region. Currently, BFD maintains approximately one fire station per 18,000 residents, which is slightly above average compared with other cities in the region. BFD has established a response objective for fire suppression to maintain an average response time of 4 minutes for all emergency calls 80% of the time. In fiscal year 2009-10, the average response time was 4 minutes and 5 seconds, with 78% of calls answered in less than 5 minutes (BFD 2011). Currently, the BFD is not staffed at capacity (Lenahan 2012).

Burbank2035 is designed to achieve steady and orderly growth that allows for the adequate provision of services and community facilities. Implementation of *Burbank2035* policies and programs would direct the provision of adequate facilities, staffing, equipment, technology, and funding to meet existing and projected fire protection service demands and response times as demands grow with the increase in population.

Burbank2035 policies would ensure that adequate response times and staffing ratios are maintained to provide fire protection services. *Burbank2035* Safety Element Policy 4.1 would maintain a maximum response time of 5 minutes for fire suppression services and require new development to ensure that response times and services standards are maintained. Safety Element Policy 4.2 would provide adequate staffing, equipment, technology, and funding to meet existing and projected service demands and response times. Safety Element Policies 4.3 through 4.7 would decrease risk of fire hazards and increase emergency response capabilities throughout the City by implementing fire suppression programs, maintaining adequate fire breaks in areas of high wildfire risk, coordinating firefighting efforts with other agencies, and reducing fire hazards in existing and future development. Program S-1 would require regular review and updates to the City's safety plans every five years, which includes the Fire Strategic Plan. Program S-2 would review critical facilities, including fire stations, to ensure that adequate fire protection services are maintained or constructed as needed. Program S-3 would develop and enforce fire protection standards for urban development, particularly in areas of high wildfire risk, to decrease the burden on fire protection agencies. Program S-7 would assist BFD in improving response times and services by implementing and augmenting GIS capabilities. Program LU-8 would review and revise the community facilities fee program to ensure that new development adequately offsets impacts related to fire, police, library, and park and recreation services.

The environmental effects of expansion, construction, and operation of additional fire protection facilities would be evaluated under CEQA by the City of Burbank in its efforts to plan for construction of new facilities or expansion of existing facilities, if applicable. If project-level significant impacts are identified, applicable mitigation measures will be placed on the project as conditions of approval. Therefore, with implementation of *Burbank2035* policies and programs, impacts to fire protection services and facilities would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-3 **Demand for Additional School Facilities.** *Implementation of Burbank2035 would result in an increase in population in the planning area, resulting in the need for additional and/or expanded school facilities. However, existing laws and regulations would require funding for the provision or expansion of new school facilities to offset impacts from new residential or commercial development. Therefore, this impact would be* ***less than significant****.*

An increase in population resulting from implementation of *Burbank2035* may place higher demands on education facilities due to the projected increase of 5,910 dwelling units. New development would primarily consist of multi-family residential units or mixed-use projects and would be expected to have lower generation rates for schoolchildren than single-family residential development. BUSD bases student generation rates on a 2008 Developer Fee Study, which uses an average student generation rate of 0.7 students per residence, but does not distinguish between single-family residences and multi-family residences (BUSD 2008). Additionally, the BUSD student generation rate does not distinguish between grade levels. The 2010 Los Angeles Unified School District (LAUSD) Residential Development School Fee Justification Study uses student generation rates which distinguish residential types by grade level (LAUSD 2010). Using these student generation rates, implementation of *Burbank2035* would result in an estimated 1,421 new students, as shown in Table 4.15-1.

Table 4.15-1
Student Generation

Dwelling Unit Type	Proposed New Dwelling Units	Education Level	Generation Factor	Approximate Students Generated
Multi-Family	5,330	Elementary School (K-5)	0.1141	674
		Middle School (6-8)	0.0571	337
		High School (9-12)	0.0694	410
Total students generated from implementation of *Burbank2035*				**1,421**

At this time, elementary schools in the BUSD are not at capacity, due to increasing the maximum class sizes for K-3 levels. However, Burbank's middle schools and high schools are at capacity. Due to steady enrollment over the last few years, a Facility Needs Analysis has not been performed for BUSD, and a school facilities master plan has not been prepared since 1993. When additional space is needed, schools add modulars to accommodate students. Implementation of *Burbank2035* would not require additional facilities at elementary schools, but additional modulars or the reconstruction of current modulars as two-story buildings would be anticipated at middle schools and high schools (Statton 2012).

Because the public schools used by Burbank residents are operated by BUSD, the City does not control school programming or facilities. The authority for the governing board of a school district to levy developer fees is contained in Education Code Section 17620. Education Code Section 17620 provides for the collection and expenditure of fees based upon new residential and commercial/industrial construction using criteria that establish a district's justification for a need for such fees. In January 2012, the State Allocation Board established the current fees at $3.20 per square foot of residential construction, and $0.51 per square foot of commercial/industrial construction (State of California 2012). BUSD and the City will require developers to provide for adequate educational facilities, to the extent allowed by law. The environmental effects of expansion,

construction, and operation of additional school facilities would be evaluated under CEQA by BUSD in its efforts to plan for construction of new schools or expansion of existing facilities, if applicable.

BUSD evaluates demand, capacity, and plans for facility needs. If project-level significant impacts are identified, applicable mitigation measures will be placed on the project as conditions of approval. Therefore, existing laws and regulations would require funding for the provision or expansion of new school facilities to offset impacts from new residential or commercial development, and this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-4 **Demand for Additional Park Facilities.** *Implementation of Burbank2035 would result in an increase in population in the planning area, which would increase demand for parks and recreation services, resulting in the need for additional and/or expanded parks and recreation facilities. However, adoption and implementation of Burbank2035 policies and programs would require provision of new parks and recreation facilities and ongoing parkland maintenance to prevent deterioration. Therefore, this impact would be* ***less than significant****.*

An increase in population resulting from implementation of *Burbank2035* may place higher demands on parks or recreational facilities in the planning area such that deterioration of these facilities could occur or be accelerated. Development associated with future land uses consistent with *Burbank2035* would result in 13,176 new residents in the planning area. Based on the goals set forth in Open Space and Conservation Policy 2.3 of 5 acres/1,000 residents, the City would need to provide 582.58 acres of parks and open space to meet demand for *Burbank2035* buildout. Many of the Park, Recreation, and Community Services Department (PRCSD)'s facilities were built in the 1940's; therefore, at the present time the PRCSD is focusing on rehabilitating many of its existing facilities. Over the past few months, the PRCSD has been working with the Park, Recreation and Community Services Board to prioritize infrastructure needs. Although no approved plans exist for future acquisition or development of additional parkland or recreation facilities, the PRCSD is considering a number of potential future projects, including an additional community center, a new community garden or open space area, a dog park, and use of the City's old landfill as open space (Frank 2012).

Burbank2035 is designed to achieve steady and orderly growth that allows for the adequate provision of services and community facilities. As described in the TBR, the Quimby Act allows a city to require dedication of land, the payment of in-lieu fees, or a combination of both to be used for the provision of parks and recreational purposes.

Burbank2035 policies would ensure that adequate parks and recreational facilities are provided to accommodate the anticipated increase in new residents. Open Space and Conservation Element Policy 2.2 establishes a standard to provide a community or neighborhood park within ½ mile of all residences in the city. Open Space and Conservation Element Policy 2.3 establishes a minimum park service ratio of 3 acres of park and recreation facilities per 1,000 residents, with a goal of providing 5 acres per 1,000 residents. Open Space and Conservation Element Policy 2.4 encourages the City to provide additional types of park facilities such as pocket parks, dog parks, athletic fields, amphitheaters, gardens, and shared facilities. Open Space and Conservation Element Policies 3.1 through 3.6 provide specific guidance to the City to maintain existing parks and recreation facilities by rehabilitating facilities, installing improvements (e.g., field lighting), and providing low-maintenance facilities

and equipment in parks and recreation areas. Program OSC-2 requires the development of a Park, Recreation, and Community Services Master Plan which would direct long-term acquisition, operation, management, and programming for parks, open spaces, and recreation facilities. The Master Plan should guide the in-lieu fee structure for the acquisition and management of recreation land in connection with the development review process. Program LU-8 would review and revise the community facilities fee program to ensure that new development adequately offsets impacts related to fire, police, library, and park and recreation services.

Burbank2035 policies and programs maintain existing levels of service for park and recreation facilities for both existing and new residents, including maintenance to prevent deterioration of existing parks. Implementation of *Burbank2035* policies and programs would direct construction of new parks and provide ongoing park maintenance to prevent deterioration of existing facilities. Therefore, adoption and implementation of *Burbank2035* policies and programs would ensure that increased demand associated with an increase in population would not significantly accelerate the deterioration of existing park areas or recreational facilities. Therefore, impacts to parks and recreation facilities would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-5 **Demand for Additional Library Facilities.** *Implementation of Burbank2035 would result in an increase in population in the planning area, which would increase demand for library services. However, the City would not need to expand or construct library facilities to meet recommended standards. Therefore, this impact would be* ***less than significant****.*

With the increase in population and new development and redevelopment anticipated with implementation of *Burbank2035*, additional demands would be placed on library services. The Burbank Public Library (BPL) uses a recommended standard of 0.51 - 0.61 square feet of library space per capita. Currently, the City has 78,500 square feet of library space (Central Library: 44,000 sq ft, Buena Vista: 28,000 sq ft, and Northwest: 6,500 sq ft), which amounts to 0.76 square feet per capita. The City currently meets the recommended standard. Development pursuant to *Burbank2035* would not require the provision of additional library space in order to achieve the recommended standard.

The City has recognized the need to ensure that library development keeps pace with overall City development and population growth. The City's 10-Year Strategic Plan includes the renovation of the Central Library. A renovated Central Library would utilize the current footprint of the existing building (approximately 44,000 sf) and may include a building across the street (approximately 8,000 sf) to accommodate community needs (Dietrich 2012). A separate environmental review of this facility will be conducted at the appropriate stage of development; environmental impacts from the renovation of the Central Library cannot be determined at this time.

Burbank2035 is designed to achieve steady and orderly growth that allows for the adequate provision of services and community facilities. Implementation of *Burbank2035* policies and programs would direct the provision of adequate facilities, staffing, equipment, technology, and funding to meet existing and projected library service needs as demands grow with the increase in population. Program LU-8 would review and revise the community facilities fee program to ensure that new development adequately offsets impacts related to fire, police, library,

and park and recreation services. Therefore, with implementation of *Burbank2035* policies and programs, this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-6 **Demand for Wastewater Treatment.** *Implementation of Burbank2035 would result in an increase in population in the planning area, which would increase the amount of wastewater treated by the Burbank Water Reclamation Plant. However, adoption and implementation of Burbank2035 policies would continue the City's compliance with Los Angeles Regional Water Quality Control Board requirements. Therefore, this impact would be* ***less than significant****.*

The increased population resulting from implementation of *Burbank2035* would generate additional wastewater flows that would be treated by the Burbank Water Reclamation Plant (BWRP). Currently, the average daily wastewater flow is approximately 8.20 MGD. The average daily flow has decreased in recent years due to water conservation measures implemented by the City, residents, and businesses. Additionally, an increase in the use of recycled water for landscaping irrigation in recent years has resulted in less water flowing into the wastewater treatment system (Rynn 2012).

As indicated in Table 4.15-2, implementation of *Burbank2035* is projected to increase wastewater flow by approximately 2.13 MGD; however, the actual amount may be less due to the continuation of water conservation measures and the anticipated increase in the use of recycled water (Rynn 2012). As no specific development is proposed, wastewater generation rates in Table 4.15-3 are based on the estimation of probable future land uses under *Burbank2035*.

Wastewater generation anticipated with implementation of *Burbank2035* would increase from approximately 8.20 MGD under current conditions to 10.33 MGD in 2035.

The wastewater received at the BWRP is a mixture of domestic and industrial wastewater that is pre-treated pursuant to 40 CFR Part 403. The BWRP discharges tertiary-treated municipal to the Burbank Western Channel, a water of the United States, above the Estuary. During dry weather (May 1 – October 31), the BWRP's effluent is the primary source of water flow in the Burbank Western Channel and is a significant source of water flow in the Los Angeles River, together with urban runoff conveyed through the municipal separate storm sewer systems.

The BWRP is part of the City of Los Angeles' integrated network of facilities, known as the North Outfall Sewer (NOS), which includes four treatment plants. The upstream treatment plants (Donald C. Tillman WRP, Los Angeles-Glendale WRP, and BWRP) discharge solids to the Hyperion Treatment Plant (HTP). This system also allows biosolids, solids, and excess flows to be diverted from the upstream plants to the Hyperion Wastewater Treatment Plant for treatment and disposal. All solids removed from the BWRP treatment process are returned untreated to the NOS for downstream treatment at the HTP.

The BWRP is currently subject to Order No. R4-2012-0059 adopted by the Los Angeles RWQCB dated March 1, 2012. The order shall become effective on April 22, 2012 and expire on February 10, 2017. The permit is renewed every five years. BWP and the City of Burbank plans to continue compliance with the requirements set forth by the Los Angeles RWQCB to 2035 and beyond (Rynn 2012).

Table 4.15-2 Estimated Wastewater Generation			
Land Use	**Wastewater Generation Rate**	**Additional Units or SF Anticipated under *Burbank2035***	**Wastewater Generated (gpd) (Additional)**
Multi-Family Residential (Average of 1-3 bedrooms)	160 gpd/unit[1]	5,330 units	852,800.00
Single-Family Residential	230 gpd/unit[1]	0 units	0
Commercial/Retail*	0.08 gpd/sf[1]	2,878,419 sq ft	230,273.52
Commercial Service*	0.08 gpd/sf[1]	46,984 sq ft	3,758.72
Office*	0.15 gpd/sf[1]	6,580,363 sq ft	987,054.45
Hospital	0.25 gpd/sf[1]	0 sq ft	0
Hotel	130/room[1]	0 rooms	0
Industrial*	0.08 gpd/sf[1]	448,461 sq ft	35,876.88
School (Average for all grades)	0.15 gpd/sf[2]	7,500 sq ft	1,125.00
Religious Institution	0.15 gpd/sf[2]	17,600 sq ft	2,640.00
Studio	0.08 gpd/sf[1]	243,254 sq ft	19,460.32
Total			**2,132,988.89**

Notes:

[1] City of Los Angeles Thresholds Guide (2006)

[2] City of Beverly Hills General Plan EIR (2008)

* Includes square footage of commercial retail space, commercial service space, office space, or industrial space located within film studios, as taken from Studio Master Plan Traffic Studies and/or tally of building permits to date.

Table 4.15-3 Potential Environmental Impacts Associated with Alternative Water Supply Projects		
Environmental Issue Area	**Potential Impact**	**Possible Mitigation**
Aesthetic Resources	Construction may alter scenic views. Addition of new visual features may block views and cause additional sources of light and glare.	Project applicant shall implement short-term construction equipment staging areas with appropriate screening; provide a vegetative buffer around facility; install fencing that is complementary with surrounding environment; and shield exterior light sources away from adjoining uses.
Air Quality	Temporary construction air quality impacts, emission of toxic air contaminants, and conflicts with local Air Quality Management Plan may occur.	Project applicant shall comply with applicable federal, state, and local air quality guidelines.

Table 4.15-3 Potential Environmental Impacts Associated with Alternative Water Supply Projects		
Environmental Issue Area	**Potential Impact**	**Possible Mitigation**
Biological Resources	Construction and operation activities may affect terrestrial and marine biological resources.	Project applicant shall comply with applicable federal, state, and local regulatory agencies to ensure proper safeguards are in place protecting all sensitive biological resources before, during, and after construction.
Cultural Resources	Construction and operation activities may disturb undiscovered archaeological and paleontological resources.	Project applicant shall perform preconstruction surveys; require a professional archaeologist and/or paleontologist on-site during construction; flag and monitor Areas of Potential Effects (APE).
Geology and Soils	Seismic hazards including earthquakes, geologic hazards including landslides and liquefaction, soil and topsoil erosion, and water and wind erosion may occur.	Project applicant shall comply with standards set forth in the UBC (most current edition) to assume seismic safety. A detailed site-specific geotechnical study must be prepared. Compliance with the recommendations set forth in site-specific geologic and/or geotechnical studies will be made a condition of the site development permit for subsequent projects.
Greenhouse Gas Emissions	Project may increase the emission of greenhouse gases.	Project shall implement and comply with all state and local initiatives to reduce the emission of greenhouse gases.
Hazards and Hazardous Materials	Project may create hazards due to the storage, transportation, and/or handling of hazardous materials, thereby increasing the risk of exposure to hazards and hazardous materials.	All hazardous materials shall be handled, and stored, transported, and disposed in accordance with all applicable federal, state, and local codes and regulations.
Hydrology and Water Quality	Storm water runoff and flooding may occur.	Project applicant shall have a Water Quality Management Plan specifically identifying best management practices. The project applicant shall demonstrate compliance with all applicable regulations established by the U.S. Environmental Protection Agency as set forth in the National Pollutant Discharge Elimination System permit requirements for urban runoff and storm water discharge and any regulations adopted by the jurisdiction within which construction will take place; appropriate hydrology and hydraulic analysis shall be performed for the project prior to grading or building permits; and appropriate on-site drainage systems shall be installed.
Noise	Construction and operation may affect nearby sensitive receptors.	Project applicant shall prepare acoustical analysis reports and appropriate construction plans, and all stationary equipment shall be designed to comply with the appropriate noise standards set by the jurisdiction in which the project is located.
Public Services and Utilities	Increased solid waste production may occur.	Project must comply with the appropriate waste reduction and recycling regulations; project must comply with AB 939.

Table 4.15-3 Potential Environmental Impacts Associated with Alternative Water Supply Projects		
Environmental Issue Area	**Potential Impact**	**Possible Mitigation**
Traffic and Circulation	Project construction and operation could potentially affect transportation system performance.	Prior to improvement plan approval, a traffic control plan will be prepared for approval by each jurisdiction within which the project is proposed to be located; the traffic control plan will show all signage and striping, and delineate detours, flagging operations, and any other devices that will be used during construction to guide motorists safely through the construction zone and allow for adequate access and circulation, to the satisfaction of the jurisdiction or agency.
Source: AECOM 2012		

Burbank2035 Open Space and Conservation Program OSC-9 directs the City to consult with the Los Angeles RWQCB to comply with all provisions of the NPDES permit, and to support regional efforts by the Los Angeles RWQCB to improve and protect surface water quality. Therefore, implementation of *Burbank2035* would result in a **less than significant** impact with regard to compliance with wastewater treatment requirements.

Mitigation Measure

None required.

IMPACT 4.15-7 **Demand for New or Expanded Water or Wastewater Treatment Facilities.** *Implementation of Burbank2035 would result in the need for additional wastewater treatment. However, the anticipated increase in wastewater generated would not exceed the capacity of the BWRP and result in the need for the construction or expansion of water or wastewater treatment facilities that would result in significant environmental effects. Therefore, this impact would be* ***less than significant****.*

An increase in population resulting from implementation of *Burbank2035* would place higher demands on water facilities, including supply and distribution facilities. The greatest increase in service demand would be in areas with intensified commercial use and multifamily residential redevelopment. As described under Impact 4.15-6, wastewater generation is anticipated to increase by approximately 2.13 MGD to a total of 10.33 MGD in 2035, although the actual amount may be less due to continued implementation of water conservation measures and anticipated increases in the use of recycled water (Rynn 2012). The capacity of the BWRP system is 12.5 MGD; therefore, implementation of *Burbank2035* would not require the construction or expansion of BWRP treatment facilities that would result in significant environmental effects.

It is anticipated that the City's overall water and wastewater infrastructure system would be improved over the next 25 years, particularly as redevelopment occurs and the system services additional residences and businesses. Major facility improvements to water infrastructure are directed by the BWP 2010 UWMP and RWMP, which pursuant to *Burbank2035* Program OSC-11, would be updated every five years. Improvements will be designed to provide reliable water supply to meet short-term peaks and maximum day demand conditions (i.e., highest expected demand over a 24-hour period). Additionally, the 2006 SSECAP directs the City to develop a dynamic hydraulic modeling package for the City's infrastructure planning needs that is compatible with the City's existing wastewater data model. The modeling system will obtain accurate dry and wet weather flow data to develop valid

duty factors, sound design criteria, support model calibration, and provide a more detailed understanding and prioritization of potential I/I problem areas. The Plan identifies areas of future study that are cost-effective and technically feasible to address both potential capacity and operational constraints and are coordinated with other improvement projects. The City has since implemented the hydraulic modeling package (Cruz 2012).

Water infrastructure improvement phasing will relate to the pace of development. *Burbank2035* Land Use Element Policy 2.5 would direct the City to provide public facilities and services in the most equitable and efficient manner possible. With regard to specific projects, Land Use Element Policy 2.4 would require that new development pay its fair share for infrastructure improvements and ensure that needed infrastructure and services are available prior to or at project completion. Open Space and Conservation Element Program OSC-7 would require developers to pay the cost of providing new and/or improved water services to project sites. Impacts to water infrastructure by new development would be offset by developer fees during the development review and CEQA process. The City would continue to review development proposals and amendments, in consultation with the appropriate water district, for consistency with wastewater collection system requirements established in development plans and agreements and ensure that sufficient wastewater infrastructure capacity is available to serve a new development prior to approval of the project. Specific improvements to the wastewater collection system may be necessary to accommodate new development. These improvements would be evaluated and defined at the time development occurs, and would be incorporated into the project design. The cost of any improvements necessary to provide wastewater collection service to the development would be borne by the developer.

The specific environmental impact of constructing new wastewater collection infrastructure in the planning area cannot be determined as part of this program-level analysis, because no specific construction projects are proposed; however, individual development projects would be required to evaluate potential impacts of the proposed project in accordance with CEQA.

In addition to development requirements, numerous *Burbank2035* policies and programs would reduce water consumption and wastewater flow, which would decrease the overall burden on existing water facilities and decrease the number of facilities that would need to be constructed or expanded. Land Use Element Policy 2.7 would encourage the design of new buildings to minimize consumption of energy, water, and other natural resources, and would direct the City to develop incentives to retrofit existing buildings to achieve a net reduction in both energy and water consumption. Open Space and Conservation Element Policy 9.1 would encourage the City to meet a goal of 20% reduction in municipal water use by 2020. Open Space and Conservation Element Policy 9.2 would direct the City to provide public information regarding the importance of water conservation and avoiding wasteful water habits. Open Space and Conservation Element Policy 9.3 would offer incentives for water conservation and explore other water conservation programs. Open Space and Conservation Element Policy 9.4 would direct the City to pursue infrastructure improvements that would expand communitywide use of recycled water. Open Space and Conservation Element Policy 9.5 would require on-site drainage improvements using native vegetation to capture and clean stormwater runoff. Additionally, Program OSC-9 would direct the City to consult with MWD and the Los Angeles RWQCB to achieve water conservation objectives to ensure continued recharge of local groundwater basins; reduce the amount of water used for landscaping; increase use of native and drought tolerant plants; and encourage the production, distribution, and use of recycled water for landscaping projects.

Implementation of *Burbank2035* would not result in the need for the construction or expansion of water treatment facilities that would result in significant environmental effects. *Burbank2035* policies and programs would guide the development of water and wastewater treatment facilities and infrastructure as development and redevelopment occurs, and would reduce the demand for use of water treatment facilities and infrastructure. Therefore, impacts to water and wastewater treatment facilities would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-8 **Demand for Stormwater Drainage Facilities.** *Implementation of Burbank2035 would result in redevelopment in the planning area, but would generally not increase the amount of impervious surface. Adoption and implementation of Burbank2035 policies and programs would direct construction of development projects to include on-site drainage improvements, which would reduce the impact on existing stormwater drainage facilities. Therefore, this impact would be* ***less than significant****.*

The City is currently preparing a comprehensive storm drain master plan. The storm drain master plan will determine whether improvements to the stormwater drainage system are necessary to accommodate growth anticipated as a result of *Burbank2035*. However, implementation of *Burbank2035* would not substantially increase the amount of current impervious surfaces within the City. New residential and nonresidential development will occur primarily through infill and redevelopment activities that would occur in areas that are already urbanized. Redevelopment activities may provide opportunities to create new pervious surfaces to facilitate groundwater infiltration through new greenspace, landscaping, or use of porous pavements. Incorporation of stormwater management facilities, such as retention basins, swales, or vegetation planted for evapotranspiration, would reduce drainage loads through the stormwater system.

Burbank2035 Open Space and Conservation Policy 9.5 would require new development to include on-site drainage improvements using native vegetation in project design to capture and clean stormwater runoff. With implementation of Open Space and Conservation Program OSC-7, the City would continue to require all new development and modifications to existing development to use BMPs to reduce stormwater runoff and increase on-site retention, as well as use natural treatment systems such as wetlands and bioswales to treat stormwater runoff where technically and economically feasible. *Burbank2035* water conservation policies and programs, as described under Impact 4.15-7, would also decrease the amount of water used for landscaping and other water needs that flows through storm drains, which would further reduce impacts to the City's drainage infrastructure.

If new development were likely to increase stormwater runoff beyond existing capacity, such impacts would be offset by developer fees collected during the development review and CEQA process, as described under Impact 4.15-7. Therefore, with implementation of *Burbank2035* policies and programs, impacts to stormwater drainage facilities would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-9 **Demand for Water Supplies.** *Implementation of Burbank2035 would result in the need for additional water supply. The increased population growth projected from implementation of Burbank2035 would be less than that anticipated by the UWMPs of water suppliers, and no new entitlements would be needed. However, uncertainty surrounding future water supply to the planning area and southern California as a whole results in a* ***significant*** *impact.*

New development and redevelopment pursuant to *Burbank2035* would result in an increase in residential and nonresidential uses over existing conditions, which would result in the need for additional water supply. Water in Burbank is supplied by the BWP Water Division. More than half (56%) of BWP's water is supplied locally from groundwater wells drawing from the San Fernando Groundwater Basin, where groundwater levels have been steadily declining over the past thirty years (BWP 2011).

However, the BWP 2010 UWMP concludes that there will be sufficient water supplies to meet demand through 2035 in normal and dry years due to existing contracts with wholesale supplier Metropolitan. The BWP 2010 UWMP uses demographic projections from the California Department of Finance, which include population estimates greater than those anticipated under *Burbank2035*. The BWP UWMP estimates Burbank's population to be 132,877 by 2035, which represents 16,361 more residents than anticipated under *Burbank2035* (BWP 2011). Therefore, the BWP 2010 UWMP represents a more conservative scenario than *Burbank2035*.

The City believes it can, with continued conservation efforts, sustain low water use in accordance with the requirements of the California Water Conservation Bill of 2009 (Senate Bill X7-7), which requires urban water suppliers to reduce per capita water use 20% by 2020. Burbank adopted a Sustainable Water Use Ordinance in June 2008, which has implemented sustainable water use measures and prepares the City for cases of extreme water shortage. Additionally, the Burbank City Council approved a 2010 Retrofit Upon Resale Ordinance requiring the upgrade of toilets, showerheads, urinals, and faucet aerators to high water efficiency levels as property is resold in Burbank. These measures and others have resulted in a water savings of more than 20% in recent years (BWP 2011).

Numerous *Burbank2035* policies and programs would reduce water consumption, as described under Impact 4.15-7, further reducing the need for new or expanded entitlements by 2035. In addition, SB 610 requires the preparation of water supply assessments for large developments (e.g., for projects of 500 or more residential units; 500,000 square feet of retail commercial space; or 250,000 square feet of office commercial space). These assessments address whether adequate existing or projected water supplies are available to serve proposed projects, in addition to urban and agricultural demands and other anticipated development in the service area in which the project is located.

Metropolitan supplies a little less than half of Burbank's potable water, in addition to providing BWP with groundwater supplies to replenish the San Fernando Groundwater Basin. Even though water demand estimates use a greater population forecast, Metropolitan projects 100% reliability for full-service demands serving Burbank through the year 2035. As a result, Burbank does not expect critical shortages through 2035. The City will continue to rely on Metropolitan for water, either for direct use or for groundwater replenishment (BWP 2011). Reliability and certainty of future Metropolitan supplies therefore also need to be considered when determining the reliability of the planning area's future water supplies.

Metropolitan has implemented a variety of projects and programs designed to reduce its dependency on imported water during droughts. These have included (1) providing financial incentives for local projects and conservation; (2) increased surface storage via Diamond Valley Lake and use of the State Water Project (SWP) terminus reservoirs; (3) groundwater storage programs in the Central Valley, Imperial Valley, and Coachella Valley; (4) short- and long-term water transfers; and (5) local groundwater storage programs with participating member agencies. Metropolitan's integrated resource plan (IRP) calls for further expanding all of these alternative supplies. Metropolitan is also planning for the development of a 500,000-AF buffer supply to mitigate for any shortfall in future supply. Implementation of Metropolitan's IRP would provide sufficient water to its member agencies even during critically dry events from now until at least 2025.

However, uncertainty exists for the long-term water supply for all of California. Variable hydrology could reduce the quantity of water that the SWP delivers to Metropolitan, and in turn to the City of Burbank. Restrictions on Bay-Delta pumping related to the listing of endangered species, hydrology constraints, and several years of drought also contribute to long-term uncertainty in water supply. Operational constraints with the SWP will likely continue until a long-term solution to environmental effects in the Bay-Delta is achieved.

Metropolitan is taking actions (including conservation programs, increasing local storage and groundwater storage, and water transfers) to ensure an adequate supply, and the successful implementation of these long-range actions would reduce the uncertainty surrounding Metropolitan's supply.

Although implementation of *Burbank2035* policies and programs would result in water conservation and the requirement for new developments to provide proof of adequate water supply, uncertainty surrounding future water supply to the planning area and southern California as a whole results in a **significant** water supply impact.

Mitigation Measure

No additional feasible mitigation is available.

Significance After Mitigation

Actions described in *Burbank2035*, Metropolitan's IRP, and the UWMP present a range of activities being undertaken by multiple agencies to ensure reliable water supplies that meet the future needs of the planning area. No additional mitigation measures beyond these actions would be feasible. Thus, the water supply impact is considered **significant and unavoidable**.

Alternative Water Source Options

Because long-term water supply is considered uncertain, the California Supreme Court's decision in *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (the *Vineyard* Case) requires an explanation of how long-term demand for adequate water supplies is likely to be met with other water source options. The following section describes other water source options, potential environmental impacts of exploiting those options, and how such impacts would be mitigated. Other water source options that may be available to offset potential uncertainty of long-term water supply to the southern California region are described. Potential impacts of other water source options identified in the following discussion and the mitigation for those potential impacts do not represent direct impacts of, or necessary mitigation for, *Burbank2035*. Rather, they are provided in accordance with guidance under the California Supreme Court decision in the *Vineyard* Case.

Desalinated Water

Seawater desalination describes the process of removing salts and other impurities from seawater to produce potable water. With increasing demand for water and limited new supply options, the future value of seawater desalination as a part of California's water supply portfolio has become apparent. While the potential use of desalination represents less than 5% of the region's total water supplies, it is considered by water planners as an important part of the region's water supply portfolio.

The planning area is not located adjacent to the ocean and the City has no future plans for a local or regional desalination facility. The City could participate in a regional desalination facility that supplied treated water to Metropolitan's distribution system, but Metropolitan also does not currently have a plan for such a facility.

Beneficial Reuse of Urban Runoff

Urban runoff is a relatively untapped alternative water supply for the planning area. By managing runoff and beneficially reusing it, consumers can essentially reduce dependence on imported water. Both dry and wet weather runoff can be beneficially used. Dry weather runoff describes runoff that occurs in the absence of rainfall, while wet weather runoff describes runoff that occurs as a direct result of rainfall. Wet weather runoff represents a larger volume of water than dry weather runoff.

The beneficial use option for dry weather runoff consists of capturing runoff, treating it, and then reusing it. The level of treatment required for the runoff would be determined by the ultimate end use of the water. For dry weather flow, most runoff could be diverted to beneficial use, particularly during summer months when demands for nonpotable irrigation water are high. Additionally, a portion of recycled water demand could be supplied by treated runoff.

Wet weather beneficial reuse consists of the use of cisterns, treatment and beneficial reuse, neighborhood recharge, and regional recharge. Cisterns are water conservation devices that store diverted runoff from roof areas and other impervious surfaces. This stored runoff can provide a source of chemically untreated water for gardens and compost free of most sediment and dissolved salts. Because residential irrigation can account for up to 40% of domestic water consumption, water conservation measures can reduce demands, especially during summer months.

Treatment and beneficial reuse of wet weather runoff depends greatly on seasonal storage capacity. Wet weather runoff would require regional or local storage until demand exists. A regional approach to seasonal storage could include the use of out-of-service reservoirs. A local approach would consist of constructing distributed underground storage facilities in open spaces, parks, and schools.

Graywater and Recycled Water

Graywater describes untreated household waste water that has not come into contact with toilet waste. It includes used water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines and laundry tubs. Graywater may be reused for other purposes, particularly landscape irrigation. The Graywater Systems for Single-Family Residences Act of 1992 legally incorporated the use of graywater as part of the California Plumbing Code. In September 1994, the City of Los Angeles approved an ordinance that permitted the installation of graywater systems in residential homes.

Unlike graywater, recycled water needs to comply with regulatory health standards. Recycled water extends graywater to include water that has come into contact with toilet waste. The City's RWMP establishes goals to use recycled water for outdoor purposes. The potentially high cost of installation and maintenance and lack of widespread public interest has historically limited implementation of graywater systems, but these systems could reduce outdoor water demand in the planning area.

Metropolitan Water District Actions

As discussed above, the City relies on imported water from Metropolitan, which has implemented a variety of projects and programs designed to reduce its dependency on imported water during droughts. Implementation of Metropolitan's IRP will provide sufficient water to its member agencies (which includes the City) even during critically dry events from now until at least 2025 (Metropolitan 2005). Metropolitan has implemented a variety of projects and programs designed to reduce its dependency on imported water during droughts, which would be considered alternative supply sources. Potential environmental impacts and mitigation measures of these alternative water sources are summarized within the discussion below.

Potential Environmental Impacts of Alternative Supplies

Both construction and operation impacts associated with alternative water sources would be determined by future environmental analysis on a project-by-project basis. Appropriate mitigation measures would be identified as needed to reduce potentially significant environmental impacts at the time each project is proposed. However, in an effort to supply a general overview of the potential environmental impacts associated with the construction and operation of such projects, comparable projects in southern California can provide indications of anticipated environmental impacts and typical mitigation. Such comparable projects include:

- City of Huntington Beach – Final EIR for the Seawater Desalination Project at Huntington Beach (April 5, 2005);
- Irvine Ranch Water District – Final EIR for the Michelson Water Reclamation Plant Phase 2 and 3 Capacity Expansion Project (February 2006);
- Aliso Creek Urban Runoff Recovery, Reuse and Conservation Project – Mitigated Negative Declaration (2008)

These projects provide reasonable examples of the types of potential environmental impacts and mitigation measures for similar projects in southern California. Environmental issues associated with these projects are similar and are therefore summarized in Table 4.15-3. The information included in Table 4.15-3 has been gathered from the documents mentioned above, is meant to be general in nature, and does not directly apply to any other specific desalination project, reuse of urban runoff, or *Burbank2035*.

IMPACT 4.15-10 **Capacity to Serve Wastewater Treatment.** *Implementation of Burbank2035 would result in the need for additional wastewater treatment. However, the anticipated increase in wastewater generated would not exceed the capacity of the BWRP or result in the need for the construction or expansion of water or wastewater treatment facilities. Therefore, this impact would be* ***less than significant****.*

As described under Impact 4.15-7, wastewater from the City's system is collected and treated at the BWRP, which has a capacity of 12.5 MGD. Current flows are approximately 8.20 MGD, well below the facility's design capacity. As described under Impact 4.15-6, it is anticipated that with implementation of *Burbank2035*, wastewater generation would increase by approximately 2.13 MGD to 10.33 MGD per year, although the actual amount may be less due to continued water conservation efforts and the use of recycled water. Therefore, the BWRP has capacity to treat the anticipated increase in wastewater attributable to the land use changes and population growth proposed in *Burbank2035*. Therefore, impacts to wastewater treatment facilities would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-11 **Demand for Solid Waste Disposal.** *Implementation of Burbank2035 would result in additional solid waste disposal needs. Adequate capacity exists in the landfills receiving waste generated in Burbank to accommodate these additional needs. Therefore, this impact would be* ***less than significant****.*

New development and population growth with implementation of *Burbank2035* would increase demand for solid waste collection services and disposal capacity. As identified in Table 4.15-4, implementation of *Burbank2035* would increase solid waste generation by approximately 94,935 pounds (47 tons) per day, or 17,155 tons per year. In 2010, the City of Burbank generated 85,297.22 tons of solid waste, of which 43.09 tons were burned (CalRecycle 2010). Implementation of *Burbank2035* would increase the amount of solid waste generated to approximately 102,452 tons per year by 2035.

Table 4.15-4
Estimated Solid Waste Generation

Land Use	Solid Waste Generation Rate[1]	Additional Units or SF Generated by Buildout of *Burbank2035*	Solid Waste Generated (lbs/day)	Solid Waste Generated (tons/day)
Single-Family Residential	12.23lb/du/day	580 units	7,093.40	3.55
Multi-Family Residential	4.00 lb/du/day	5,330 units	21,320.00	10.66
Commercial/Retail*	0.006 lb/sf/day	2,878,419 sq ft	17,270.51	8.64
Commercial Service*	0.031 lb/sf/day	46,984 sq ft	1,456.50	0.73
Office*	0.006 lb/sf/day	6,580,363 sq ft	39,482.18	19.74
Industrial	0.014 lb/sf/day	205,207 sq ft	2,913.94	1.46
School	0.007 lb/sf/day	7,500 sq ft	52.20	0.03
Institution/Public	0.007 lb/sf/day	17,600 sq ft	123.20	0.06
Studio[2]	0.006 lb/sf/day	870,563 sq ft	5,223.38	2.61
Total			**94,935.31**	**47.48**

Notes:

[1] CalRecycle 2012

[2] The solid waste generation rate for studio space is assumed to be similar to the rate for office space.

Table 4.15-5 identifies the eight primary landfills that receive waste generated in Burbank.

Table 4.15-5
Municipal Solid Waste Hauled to Landfills (2007)

Facility Name	Tons Burbank Hauled to Each Landfill (2007)	Percentage of Burbank's Annual Waste[1]	Remaining Landfill Capacity (cubic yards)[2]	Landfill Closure Date[2]
Burbank Landfill Site No. 3	37,676	44.20	5,107,465	2053
Chiquita Canyon Sanitary Landfill	25,882	30.40	29,300,000	2019
Sunshine Canyon City/County Landfill	9,737	11.40	112,300,000	2037
Simi Valley Landfill and Recycling Center	6,039	7.10	119,600,000	2052
Puente Hills Landfill	4,695	5.50	35,200,000	2013
Lancaster Landfill and Recycling Center	879	1.00	19,088,739	2012
Olinda Alpha Sanitary Landfill	195	0.20	38,578,383	2021
Azusa Land Reclamation Co. Landfill	147	0.20	N/A	2009
Total	**85,250**	**100.00**	**215,378,383**	

Sources: CalRecycle 2012a, CalRecycle 2012b.

Data compiled by AECOM 2012

As identified in Table 4.15-5, assuming the majority of solid waste generated from development associated with *Burbank2035* is typical trash (i.e. household and office waste), each of the seven remaining landfills with available capacity has sufficient remaining capacity to hold the anticipated increase in waste generation anticipated with implementation of *Burbank2035*, based on a calculation using a standard ratio of 0.40 tons per cubic yard (CalRecycle 2009).

The City plans to continue existing programs to recycle and reduce solid waste. In 2008, the City of Burbank formed the Sustainable Burbank Commission to advise and make recommendations to the City Council on matters related to the implementation of the City of Burbank Sustainability Action Plan, and to help engage the community by participating in various public education, outreach, and promotional activities related to environmental sustainability. The City has already implemented programs to reduce solid waste, such as the promotion of Zero Waste events and holding composting workshops.

Burbank2035 Program OSC-12 directs the City to establish a Sustainability Coordinator position to manage inter-departmental efforts and the work of the Sustainable Burbank Commission to prioritize and implement

sustainability in all City policies and operations. Recycling and reducing solid waste will continue to be one of the efforts of the City administered by the Sustainability Coordinator. This program would further decrease impacts to solid waste and landfill capacity.

Because adequate capacity exists in the Burbank Landfill to dispose of solid waste and *Burbank2035* policies and programs would further reduce the amount of waste generated by the community, impacts to landfills would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-12 **Compliance with Solid Waste Disposal Regulations.** *Implementation of Burbank2035 would result in additional solid waste disposal needs. The City would continue current programs and policies that result in a per capita disposal rate below target amounts. Therefore, this impact would be* ***less than significant****.*

Beginning with reporting year 2007 jurisdiction annual reports, diversion rates are no longer determined to review compliance with state solid waste regulations. With the passage of SB 1016, the Per Capita Disposal Measurement System, only per capita disposal rates are measured. In 2010, the Annual Per Capita Disposal Rate for the City of Burbank was estimated to be 4.5 pounds per person per day for residents and 3.4 pounds per person per day for employees. Both figures are below the target amounts of 7.6 pounds per person per day for residents and 6.1 pounds per person per day for employees (CalRecycle 2010). The City will continue its efforts to stay below target levels for per capita disposal rates even as new development and population growth occurs. Furthermore, implementation of GGRP Actions SW-1.1A, SW-1.1B, SW-1.2A, and SW-1.2B would require adoption of new City ordinances or modifications to existing City ordinances that would increase diversion requirements for food scraps, compostable paper, yard waste, and construction lumber. Therefore, with implementation of *Burbank2035* and the GGRP, impacts related to compliance with solid waste regulations would be **less than significant**.

Mitigation Measure

None required.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

The boundaries for the cumulative impact analysis for public services and utilities vary by the specific impact and associated service provider. For example, the boundary of the cumulative impact on school facilities is limited to the boundary of the BUSD, which corresponds to the City limits. By contrast, the boundary of the cumulative impact on fire protection is the boundary of the Verdugo Fire Communications Center, a regional communications center serving multiple cities.

IMPACT 4.15-13 **Cumulative Effects on Police Protection and Facilities.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would increase the population in the coverage area of the mutual aid agreement BPD participates in, thereby potentially requiring an increase in or expansion of facilities for police protection to accommodate staffing needs. However, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *cumulative impact within the coverage area of the mutual aid agreement.*

The BPD maintains mutual aid agreements with the police departments for the Cities of Los Angeles, San Fernando, Glendale, and Pasadena; and as a result shares resources and receives assistance from those police departments, if needed. *Burbank2035* and general plan updates for other cities that share the mutual aid agreement would increase the population of the coverage area for the mutual aid agreement, thereby increasing the need to provide staff, equipment, and facilities to maintain acceptable officer to resident population coverage ratios. As previously described, *Burbank2035* policies and programs would direct adequate equipment, facilities, technology, and funding for the BPD to meet existing and projected service demands and response times as growth occurred, and would therefore result in a less-than-significant impact on police protection within the city. The City of Burbank and other cities in the mutual aid agreement continually evaluate the demand, capacity, and plans for facility needs. If project-level significant impacts are identified, applicable mitigation measures would be placed on the project as conditions of approval of those cities. Therefore, cumulative impacts to police protection in the area covered by the mutual aid agreement would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-14 **Cumulative Effects on Fire Protection and Facilities.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would increase the population in the coverage area of the Verdugo Fire Communications Center of which BFD is a partner, thereby potentially requiring an increase in or expansion of facilities for fire protection to accommodate staffing needs. However, adoption and implementation of Burbank2035 policies and programs would result in a* ***less-than-significant*** *cumulative impact within the coverage area of the Verdugo Fire Communications Center.*

The BFD is a member department of the Verdugo Fire Communications Center, a regional communications center that fields calls for service for the Cities of Burbank, Glendale, Pasadena, Alhambra, Arcadia, Monrovia, Montebello, Monterey Park, San Gabriel, San Marino, Sierra Madre, and South Pasadena. The service area for the communications center covers approximately 134 square miles. *Burbank2035* and general plan updates for other cities that comprise the Verdugo Fire Communications Center would increase the population of the coverage area for the Center, thereby increasing the need to provide staff, equipment, and facilities to maintain acceptable emergency response times and other indicators of fire protection services. As previously described, *Burbank2035* policies and programs would direct adequate equipment, technology, and funding for the BFD to meet existing and projected service demands and response times as growth occurred, and would therefore result in a less-than-significant impact on fire protection within the city. The City of Burbank and other cities of the Verdugo Fire Communications Center continually evaluate the demand, capacity, and plans for facility needs. If project-level significant impacts are identified, applicable mitigation measures would be placed on the project as conditions of approval of those cities. Therefore, cumulative impacts to fire protection in the area covered by Verdugo Fire Communications Center would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-15 **Cumulative Effects on School Facilities.** *Adoption and implementation of Burbank2035 would increase the population in the coverage area of the BUSD, thereby potentially requiring an increase in or expansion of school facilities. However, existing laws and regulations would require funding for the provision or expansion of new school facilities to offset impacts from new residential or commercial development. Therefore, this cumulative impact would be* ***less than significant****.*

The cumulative impact area for school facilities is the boundary of the BUSD, which is identical to the planning area. As previously described, existing laws and regulations would require funding for the provision or expansion of new school facilities to offset impacts from new residential or commercial development. Therefore, cumulative impacts to school facilities would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-16 **Cumulative Effects on Park Facilities.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would increase the population in the San Fernando Valley, thereby requiring an increase in or expansion of parkland and recreation facilities to meet park standards. However, with implementation of Burbank2035 policies and programs, Burbank2035's contribution would not be considerable, and this would be a* ***less-than-significant*** *impact.*

Although there is no defined boundary for cumulative impacts to parkland and recreation facilities, residents of a city lacking in parkland or recreation facilities may travel to an adjacent city to use such facilities, thereby increasing the use and furthering deterioration of those facilities. *Burbank2035* and other general plan updates for nearby cities in the San Fernando Valley would increase the population of the area, thereby increasing the need for additional or expanded parkland and recreation facilities.

As previously described, *Burbank2035* policies and programs would maintain existing levels of service for park and recreation facilities for both existing and new residents, including maintenance to prevent deterioration of existing parks. Implementation of *Burbank2035* policies and programs would direct construction of new parks and provide ongoing park maintenance to prevent deterioration of existing facilities. Therefore, adoption and implementation of *Burbank2035* policies and programs would ensure that increased demand associated with an increase in population would not significantly accelerate the deterioration of existing park areas or recreational facilities within the city. Therefore, *Burbank2035*'s contribution to this cumulative impact would not be considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-17 **Cumulative Effects on Library Facilities.** *Implementation of Burbank2035 would result in an increase in population in the planning area, which would increase demand for library services. However, the City would not need to expand or construct library facilities to meet recommended standards. Therefore, this impact would be* ***less than significant****.*

The cumulative impact area for library facilities is the planning area. As previously described, the City would not need to construct new or expanded library facilities to meet square feet per resident population ratio standards. Therefore, cumulative impacts to library facilities would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-18 **Cumulative Effects on Wastewater Treatment.** *Implementation of Burbank2035 and anticipated regional growth would result in an increase in population in the jurisdiction of the Los Angeles RWCQB, which would increase the amount of wastewater that would be subject to compliance with the Los Angeles RWCQB. However, regional compliance with Los Angeles RWQCB permit requirements would result in a* ***less-than-significant*** *cumulative impact to wastewater treatment.*

The Los Angeles RWQCB protects ground and surface water quality in the Los Angeles region, including the coastal watersheds of Los Angeles and Ventura Counties, along with very small portions of Kern and Santa Barbara Counties. *Burbank2035* and other general plan updates for nearby cities in the Los Angeles region would increase the population of the area, thereby increasing the amount of wastewater needing to be treated in the region.

Burbank2035 Open Space and Conservation Program OSC-9 directs the City to consult with the Los Angeles RWQCB to comply with all provisions of the NPDES permit, and support regional efforts by the Los Angeles RWQCB to improve and protect surface water quality. Other cities and counties in the Los Angeles RWQCB are subject to and would comply with the same regulations. Therefore, regional compliance with the NPDES permit would result in a **less-than-significant** cumulative impact.

Mitigation Measure

None required.

IMPACT 4.15-19 **Cumulative Effects on Water or Wastewater Treatment Facilities.** *Implementation of Burbank2035 would result in an increase in population and increased demand for cumulative water and wastewater service in the planning area. However, the anticipated increase in wastewater generated would not exceed the capacity of the BWRP and result in the need for the construction or expansion of water or wastewater treatment facilities that would result in significant environmental effects. Therefore, this impact would be* ***less than significant****.*

The cumulative impact area for water and wastewater facilities is the boundary of the service area of BWP UWMP and SSECAP, which is identical to the planning area. As previously described, the anticipated increase in wastewater generated would not exceed the capacity of the BWRP and would not require the construction or expansion of treatment facilities that would result in significant environmental effects. *Burbank2035* policies and programs would guide the development of water and wastewater treatment facilities and infrastructure as

development and redevelopment occur, and would also reduce the demand for use of water treatment facilities and infrastructure. Therefore, implementation of *Burbank2035* would result in a **less than significant** cumulative impact to water and wastewater treatment facilities.

Mitigation Measure

None required.

IMPACT 4.15-20 **Cumulative Effects on Stormwater Drainage Facilities.** *Implementation of Burbank2035 and regional growth would result in new development and redevelopment throughout the Los Angeles County Drainage Area that could increase the amount of impervious surface in the area resulting in increased stormwater flows. However, the amount of impervious surface in Burbank would not generally increase. With implementation of Burbank2035 policies and programs, Burbank2035's contribution would not be considerable, and this impact would be* ***less than significant****.*

The cumulative impact area for stormwater drainage facilities is Los Angeles County Drainage Area (LACDA), which drains 1,460 square miles inhabited by more than eight million people. The LACDA is drained by the Los Angeles River and the San Gabriel River, both of which carry water to the Pacific Ocean. *Burbank2035* and other general plan updates for cities in the LACDA would increase the population of the area, and could increase the amount of impervious surface in the area, resulting in increased stormwater flows.

As previously described, implementation of policies and programs included in *Burbank2035* would not substantially increase the amount of impervious surfaces within the city and result in the need for additional storm drainage facilities. Additionally, *Burbank2035* policies and programs would decrease water use and the amount of wastewater that would flow through stormwater drainage facilities. Therefore, *Burbank2035*'s contribution would not be considerable, and this impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-21 **Cumulative Effects on Water Supplies.** *Implementation of Burbank2035 would result in the need for additional water supply. The increased population growth projected from implementation of Burbank2035 would be less than that anticipated by the Urban Water Management Plans of water suppliers, and no new entitlements would be needed. However, uncertainty surrounding future water supply to the planning area and southern California as a whole results in a potentially significant cumulative water supply impact. Burbank2035's contribution to this impact would be considerable, and the impact would be* ***significant****.*

The cumulative impact area for water supplies is Metropolitan's service area As described in Impact 4.15-9, both the BWP and the Metropolitan UWMPs conclude that there will be sufficient water supplies to meet demand in normal and dry years. However, the same uncertainties described in Impact 4.15-9 affect the water supply reliability throughout Metropolitan's service area, and would result in a **significant** cumulative impact.

Mitigation Measure

No additional feasible mitigation is available.

Significance After Mitigation

The same *Burbank2035* policies, programs, and regulations described under Impact 4.15-9 would reduce this cumulative impact. Nevertheless, as no additional feasible mitigation is available, *Burbank2035's* contribution to this impact would be considerable, and this impact would be **significant and unavoidable**.

IMPACT 4.15-22 **Cumulative Effects on Wastewater Treatment.** *Implementation of Burbank2035 would result in an increase in population in the area included by the BWP in its UWMP, which would increase the use of water and wastewater. However, the anticipated increase in wastewater generated would not exceed the capacity of the BWRP and result in the need for the construction or expansion of water or wastewater treatment facilities. Therefore, this impact would be* ***less than significant****.*

The cumulative impact area for wastewater treatment facilities is the planning area. As previously described, the anticipated increase in wastewater generated would not exceed the capacity of the BWRP and would not require the construction or expansion of treatment facilities that would result in significant environmental effects. Therefore, this cumulative impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-23 **Cumulative Effects on Solid Waste Disposal.** *Implementation of Burbank2035 and regional growth would result in the need for additional solid waste disposal needs. However, adequate capacity exists in the various landfills that receive waste generated in Burbank to accommodate these additional needs. Therefore, this impact would be* ***less than significant****.*

The cumulative impact area for solid waste is the service area of the remaining seven landfills identified as receiving waste generated in Burbank in Table 4.15-5. As previously described, assuming the majority of solid waste generated from development associated with *Burbank2035* is typical trash (i.e. household and office waste), each of the seven remaining landfills with available capacity has sufficient remaining capacity to hold the anticipated increase in waste generation anticipated with implementation of *Burbank2035*, based on a calculation using a standard ratio of 0.40 tons per cubic yard (CalRecycle 2009). Adequate capacity exists in the various landfills to accommodate this increase in solid waste disposal; therefore, *Burbank2035*'s contribution to this impact would not be cumulatively considerable, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.15-24 **Cumulative Effects on Compliance with Solid Waste Regulations.** *Implementation of Burbank2035 would result in additional development and population growth, which would generate additional waste disposal needs. However, the City would continue current programs and policies that result in a per capita disposal rate below target amounts. Therefore, this impact would be* ***less than significant****.*

The cumulative impact area for solid waste is the service area of the Burbank Landfill, which is identical to the planning area. As previously described, the City will continue efforts to stay below target levels for per capita

disposal rates even as new development and population growth occurs. Therefore, cumulative impacts related to compliance with solid waste regulations would be **less than significant**.

Mitigation Measure

None required.

4.16 TRANSPORTATION

4.16.1 INTRODUCTION

This resource chapter of the EIR evaluates the potential environmental effects related to transportation and associated with implementation of *Burbank2035*. The analysis includes a review of the vehicular, transit, bicycle, pedestrian and aviation components of the circulation system. *Burbank2035* Mobility Element and Safety Element policies and implementation programs presented in the Plan Realization Element provide a framework to evaluate, manage and improve transportation infrastructure and practices to address increased congestion and serve all modes of transportation.

NOP Comments: In response to the NOP, several isolated comments referred to compatibility with the Airport Land Use Plan and the Regional Transportation Plan. Consistency with those documents is outlined in this resource chapter and further referenced/addressed in Chapter 4.11, "Land Use and Planning."

Reference Information: Information for this resource chapter is based on numerous references. The Technical Background Report (TBR) is attached to this document as Appendix A. The *Burbank2035 Traffic Study* is attached to this document as Appendix F, and consists of both an existing conditions report and a transportation analysis report. This EIR, including the TBR and Traffic Study, is also available electronically on the City's website (http://www.burbank2035.com).

4.16.2 ENVIRONMENTAL SETTING

Section 17 of Appendix A describes the existing transportation system classifications and functionality. Key findings of the TBR are summarized below.

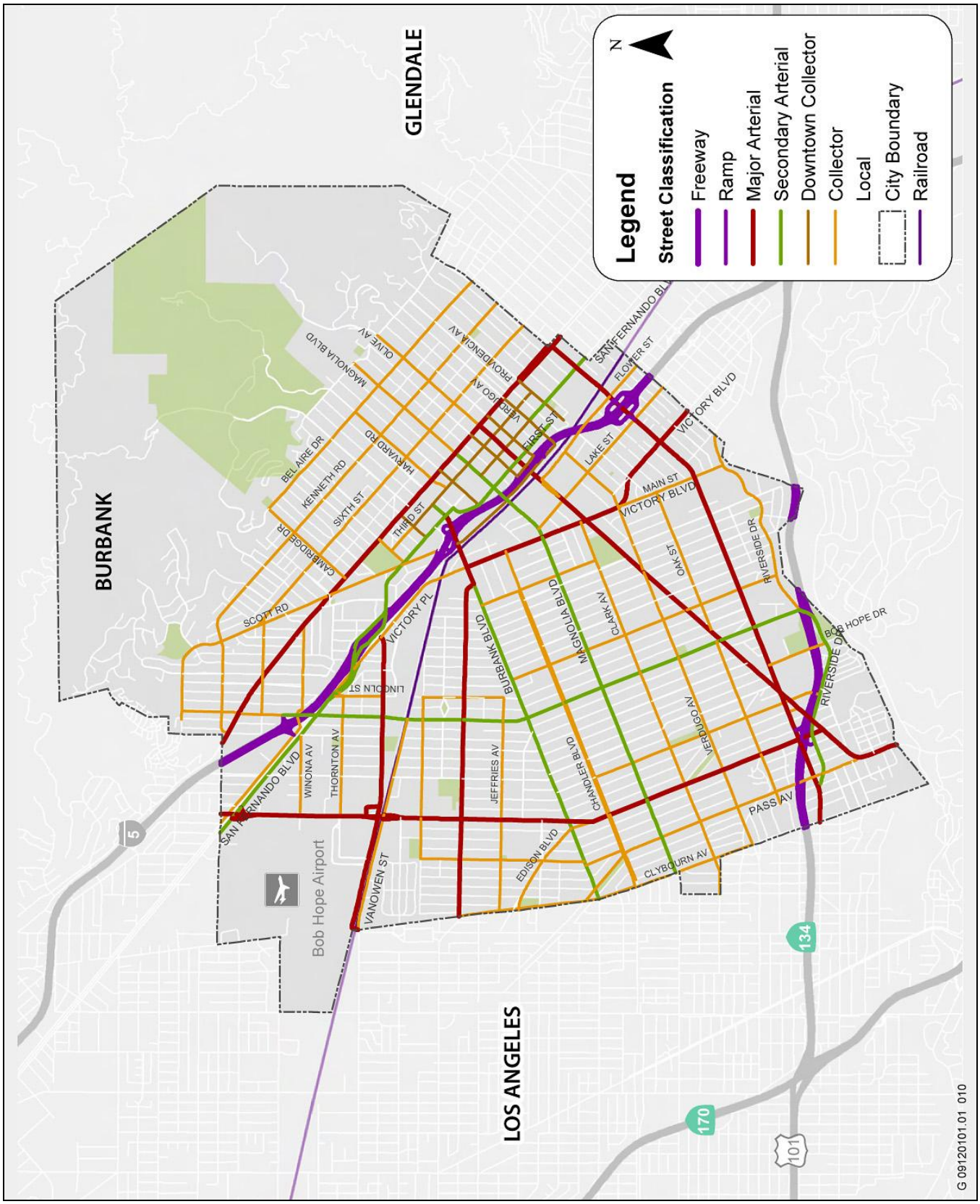
MULTI-MODAL TRANSPORTATION SYSTEM

The city includes two major freeways, the Golden State (I-5) Freeway and the Ventura (SR 134) Freeway; various local and regional transit systems; over 20 miles of existing bicycle facilities; and a multitude of developed pedestrian facilities, all supporting a multimodal transportation network connecting multiple neighborhoods to neighboring communities. In addition, the Bob Hope Airport is located in the northwest section of the city, which provides domestic air service between Burbank and various locations throughout California and the United States. The existing street system classifications are illustrated in Exhibit 4.16-1.

LEVEL OF SERVICE (LOS)

The efficiency and congestion of the roadway circulation system is described in terms of "level of service" (LOS). LOS rankings range from A to F, depending on the levels of congestion. The City of Burbank calculates LOS rankings based on the volume-to-capacity ratio. Table 4.16-1 presents definitions of each LOS threshold for signalized intersections.[1] The City of Burbank has established LOS D as the lowest acceptable LOS for all signalized intersections during peak hours (i.e., weekday mornings between 7:00 AM and 9:00 AM, and weekday evenings between 4:00 PM and 6:00 PM) to provide acceptable levels of mobility throughout the city.

[1] No unsignalized intersections were analyzed in the analysis; therefore, the LOS threshold for unsignalized intersections was not included in the report.



Source: Fehr & Peers 2011, adapted by AECOM

Exhibit 4.16-1 **Burbank Street Classifications**

Table 4.16-1 Level of Service Definitions for Signalized Intersections		
LOS	**Volume/Capacity Ratio**	**Definition**
A	0.000–0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	0.601–0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701–0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801–0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901–1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.
Source: Transportation Research Board 1980		

Thirty-five (35) study intersections were identified for analysis of *Burbank2035*. Operating conditions and Measures of Effectiveness (MOEs) were analyzed for existing traffic conditions at each intersection during the weekday morning peak hour and evening peak hour. The study intersections are shown in Exhibit 4.16-2.

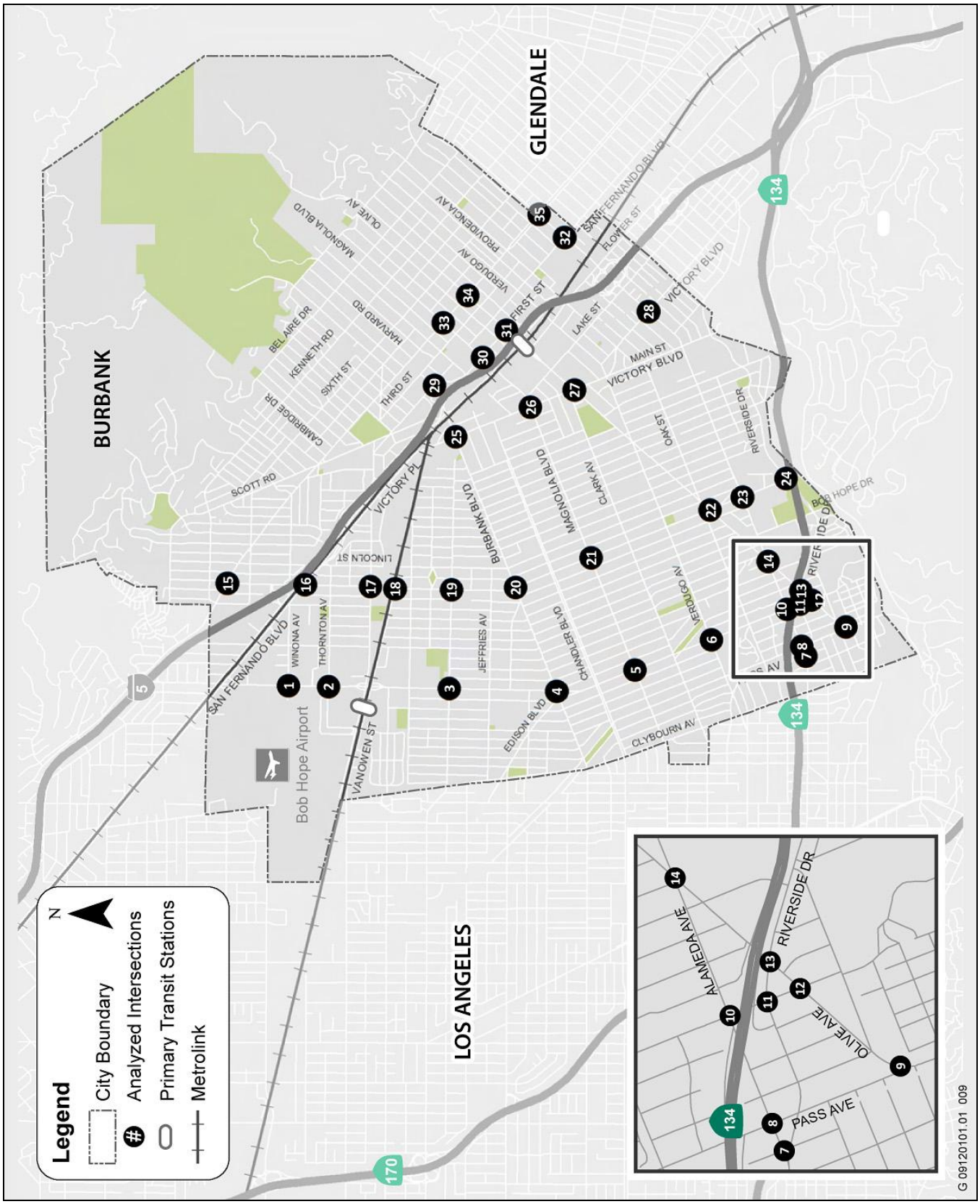
The City requires the use of Critical Movement Analysis (CMA) methodology to evaluate the operations of intersections. The CMA method of intersection capacity analysis determines the intersection volume-to-capacity (V/C) ratio and corresponding LOS for turning movements and intersection characteristics at signalized intersections. Intersection traffic volumes and LOS were analyzed using the CMA analysis described above to determine the current operating conditions at each intersection. Results of the intersection CMA analysis are provided in Table 4.16-2 and illustrated in Exhibit 4.16-3.

Of the 35 intersections, 33 study intersections operate at LOS D or better under existing (2010) peak hour traffic conditions. Two intersections currently operate at LOS E, below the adopted standard:

- Hollywood Way & Victory Boulevard (PM peak hour)
- Buena Vista Street & Magnolia Boulevard (AM and PM peak hour)

CONGESTION MANAGEMENT PLAN (CMP) OPERATING STANDARDS

Both I-5 and SR 134 are part of the CMP network, although there is only one CMP study segment located within the planning area, at I-5 and Burbank Boulevard. The CMP is a state-mandated program administered by the Los Angeles County Metropolitan Transportation Authority (Metro) that provides a mechanism for coordinating land use and development decisions. CMP statute requires establishment of LOS standards to measure congestion on the system. Level of service ranges from LOS A to F, with LOS A representing free-flow conditions and LOS F representing a high level of congestion. LOS threshold definitions for CMP freeway segments are provided in Table 17-3 in Appendix A.



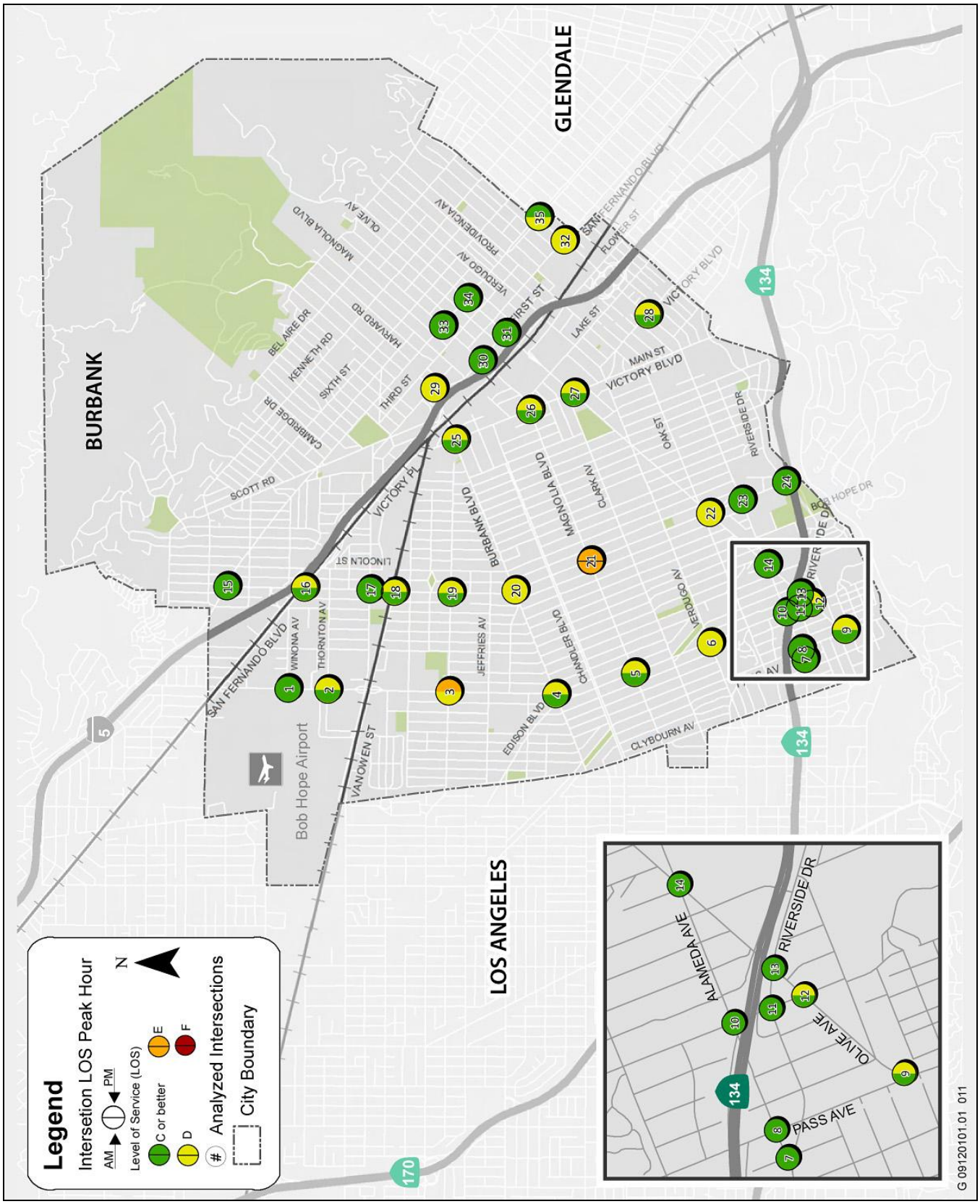
Source: Fehr & Peers 2011, adapted by AECOM

Exhibit 4.16-2 **Analyzed Intersections**

Table 4.16-2
Existing Intersection Level of Service

Intersection	Peak Hour	Existing V/C	Existing LOS	Intersection	Peak Hour	Existing V/C	Existing LOS
1. Hollywood Way Winona Ave	AM	0.426	A	19. Buena Vista St Victory Blvd	AM	0.761	C
	PM	0.583	A		PM	0.848	D
2. Hollywood Way Thornton Ave	AM	0.731	C	20. Buena Vista St Burbank Blvd	AM	0.826	D
	PM	0.813	D		PM	0.839	D
3. Hollywood Way Victory Blvd	AM	0.873	D	21. Buena Vista St Magnolia Blvd	AM	0.954	**E**
	PM	0.953	**E**		PM	0.984	**E**
4. Hollywood Way Burbank Blvd	AM	0.721	C	22. Buena Vista St Olive Ave	AM	0.873	D
	PM	0.850	D		PM	0.896	D
5. Hollywood Way Magnolia Blvd	AM	0.766	C	23. Buena Vista St Alameda Ave	AM	0.572	A
	PM	0.894	D		PM	0.696	B
6. Hollywood Way Verdugo Ave	AM	0.805	D	24. Buena Vista St Riverside Dr [a]	AM	0.758	C
	PM	0.893	D		PM	0.720	C
7. Riverside Dr Alameda Ave	AM	0.479	A	25. Victory Blvd/Victory Pl Burbank Blvd	AM	0.693	B
	PM	0.739	C		PM	0.831	D
8. Pass Ave Alameda Ave	AM	0.672	B	26. Victory Blvd Magnolia Blvd	AM	0.551	A
	PM	0.559	A		PM	0.875	D
9. Pass Ave Olive Ave	AM	0.761	C	27. Victory Blvd Olive Ave	AM	0.742	C
	PM	0.815	D		PM	0.883	D
10. Hollywood Way Alameda Ave	AM	0.589	A	28. Victory Blvd Alameda Ave	AM	0.674	B
	PM	0.716	C		PM	0.839	D
11. Hollywood Way Riverside Dr	AM	0.524	A	29. San Fernando Blvd Burbank Blvd [a]	AM	0.888	D
	PM	0.645	B		PM	0.873	D
12. Hollywood Way Olive Ave	AM	0.601	B	30. First St Magnolia Blvd [a]	AM	0.392	A
	PM	0.807	D		PM	0.579	A
13. Olive Ave Riverside Dr	AM	0.427	A	31. First St Olive Ave [a]	AM	0.537	A
	PM	0.528	A		PM	0.744	C
14. Olive Ave Alameda Ave	AM	0.388	A	32. San Fernando Blvd Alameda Blvd [a]	AM	0.839	D
	PM	0.666	B		PM	0.843	D
15. Buena Vista St Glenoaks Blvd	AM	0.588	A	33. Glenoaks Blvd Magnolia Blvd	AM	0.452	A
	PM	0.627	B		PM	0.641	B
16. Buena Vista St San Fernando Blvd	AM	0.669	B	34. Glenoaks Blvd Olive Ave	AM	0.606	B
	PM	0.814	D		PM	0.701	C
17. Buena Vista St Empire Ave	AM	0.616	B	35. Glenoaks Blvd Alameda Ave	AM	0.866	D
	PM	0.663	B		PM	0.790	C
18. Buena Vista St Vanowen St	AM	0.620	B				
	PM	0.827	D				

Note: [a] No Computerized Signal Control System (CSCS) capacity credit applied.
Source: Fehr & Peers 2011



Source: Fehr & Peers 2011, adapted by AECOM

Exhibit 4.16-3 **Existing (2010) Intersection Level of Service**

Highways and roadways designated in the CMP network are required to operate at LOS E, except where base year LOS is worse than LOS E. In such cases, the base year LOS is the standard (Metro 2004:18). In accordance with the CMP guidelines, freeway (mainline) operating conditions during peak periods were evaluated using the general procedures established by the CMP. The freeway mainline location of I-5 at Burbank Boulevard, CMP station number 1006, is analyzed in Table 4.16-3. The analysis concluded that this CMP freeway segment operates at acceptable LOS (LOS E or better) during the AM and PM peak hours.

Table 4.16-3
Existing CMP Freeway Segment Level of Service

CMP Fwy. Station	Dir	Lanes	Capacity	Daily Volume	AM Peak Hour			PM Peak Hour		
					Volume	D/C	LOS	Volume	D/C	LOS
I-5 Burbank Blvd.	NB	4	8,000	204,373	6,833	0.854	D	6,784	0.848	D
	SB	4	8,000		6,598	0.825	D	5,299	0.662	C

Source: Fehr & Peers 2011

VEHICLE MILES TRAVELED

The locally-validated citywide travel demand model was used to estimate vehicle miles traveled (VMT) by isolating only those trips that start or end within the City boundaries, also known as the Origin-Destination (OD) Method. The speed and length of these trips were used to develop the VMT estimates. Since this VMT estimate will be used for a greenhouse gas (GHG) analysis, the data is stratified by five-mile speed bins. Current daily VMT for Burbank is 1,421,321 miles per day. For GHG analysis purposes, Burbank is responsible for all VMT that begins *and* ends in the city, but only responsible for half of the VMT that either begins *or* ends in the city.

TRANSIT

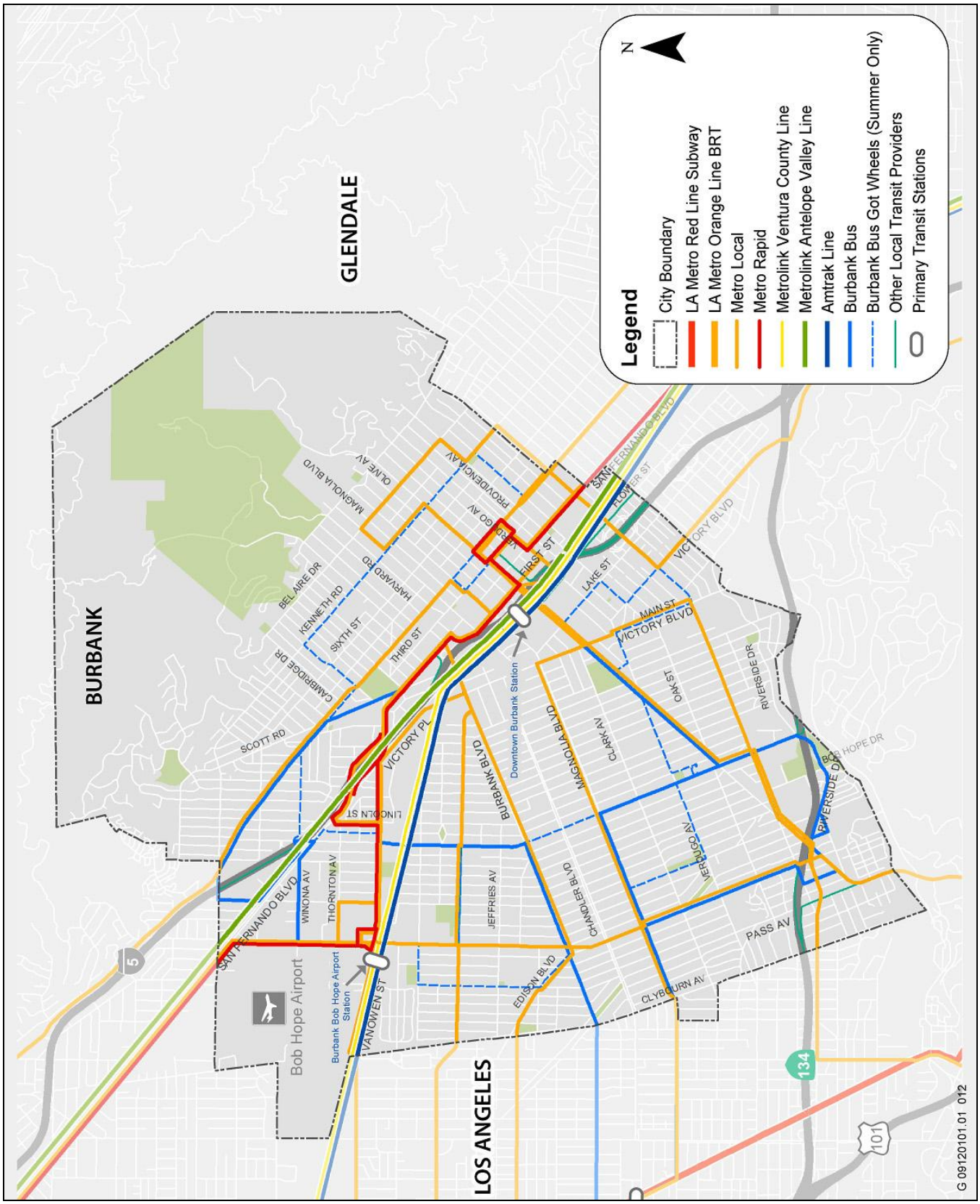
The City of Burbank includes a comprehensive public transportation system (see Exhibit 4.16-4), with local shuttle services, regional bus routes, and commuter rail.

BurbankBus is the local transit service, providing weekday and peak-hour service connecting the Downtown Burbank Metrolink Station to major destinations, including the Media District, Downtown Burbank, the North Hollywood Metro Rail Station, and the Golden State Area. Routes operated by BurbankBus are summarized in Table 4.16-4.

Table 4.16-4
Burbank Bus Routes

From	To	Peak Headway
NoHo Station	Empire	16 min
Empire	Downtown	18 min
Metrolink Station	Media District	12 min
NoHo Station	Media District	12 min

Source: BurbankBus 2010



Source: Fehr & Peers 2011, adapted by AECOM

Exhibit 4.16-4 **Existing (2010) Transit Network**

A paratransit service is available for senior and disabled passengers for travel in the City of Burbank. A special weekday bus service for youth ages 10 to 18 years is available during the summer months and provides service to schools, libraries, parks, and other youth-oriented destinations.

Metro operates several bus routes that serve local destinations in Burbank. Metro operates nine local bus routes and one rapid bus route that provide transit coverage in a general north-south and east-west orientation. In addition, Metro Local Bus routes #154 and #183 provide direct connection to the North Hollywood Metro Rail Station, which connects to the Metro Red and Orange lines. Routes operated by Metro that serve Burbank are summarized in Table 4.16-5.

Table 4.16-5
Metro Routes

Route	Type	Dir.	Service To/From	Peak Headway
92	Local	N-S	Downtown Burbank, Glendale, Los Angeles via Glenoaks Blvd.	15 min
94	Local	N-S	Sun Valley, Downtown Burbank, Glendale, Los Angeles via San Fernando Blvd., Hollywood Way, and Empire Ave.	15 min
96	Local	N-S	Downtown Burbank, Griffith Park, Los Angeles via South Victory Blvd.	30 min
154	Local	E-W	Downtown Burbank, North Hollywood, Van Nuys, Tarzana via Burbank Blvd. and Edison Blvd.	60 min
155	Local	E-W	Downtown Burbank, Universal City, Sherman Oaks via Olive Ave. and Riverside Dr.	30 min
164	Local	E-W	Downtown Burbank, North Hollywood, Van Nuys, West Hills via West Victory Blvd.	15 min
165	Local	E-W	Downtown Burbank, North Hollywood, Van Nuys, West Hills via Vanowen St.	15 min
183	Local	E-W	Glendale, Downtown Burbank, North Hollywood, Sherman Oaks via Magnolia Blvd.	30 min
222	Local	N-S	Sun Valley, Burbank, Hollywood via Hollywood Way	30 min
292	Local	N-S	Sylmar, Sun Valley, Downtown Burbank via Glenoaks Blvd.	30 min
794	Rapid	E-W	Sylmar, Downtown Burbank, Glendale, Downtown Los Angeles via San Fernando Blvd., Hollywood Way, and Empire Ave. Sylmar	15 min

Source: Los Angeles County Metropolitan Transportation Authority 2011

The Los Angeles Department of Transportation's Commuter Express provides one bus route (Commuter Express Route 549) that connects Downtown Burbank to several neighborhoods within Los Angeles and surrounding communities.

Metrolink commuter rail service provides transit connections to several communities in central and southern California, including Ventura, Orange County, Santa Clarita, the Inland Empire, and the Antelope Valley. Two commuter routes serve the greater Burbank area. The Metrolink Commuter Rail Downtown Burbank Station is located along Front Street at Magnolia Boulevard, directly west of I-5. The station serves as a transfer point for the Metrolink Antelope Valley and Ventura County lines. The Ventura County line also provides service to Bob Hope Airport Station, which is located within walking distance of the airport.

Amtrak provides passenger rail service within California and to locations across the U.S. Currently, the Amtrak "Pacific Surfliner" Route services the Bob Hope Airport, which is located in the western portion of Burbank, near North Hollywood Way at West Empire Avenue. Weekday and weekend service is provided along the Pacific Surfliner route. Metrolink, BurbankBus, and several additional transit operators provide direct access to the Amtrak Pacific Surfliner route, as well as to the Bob Hope Airport.

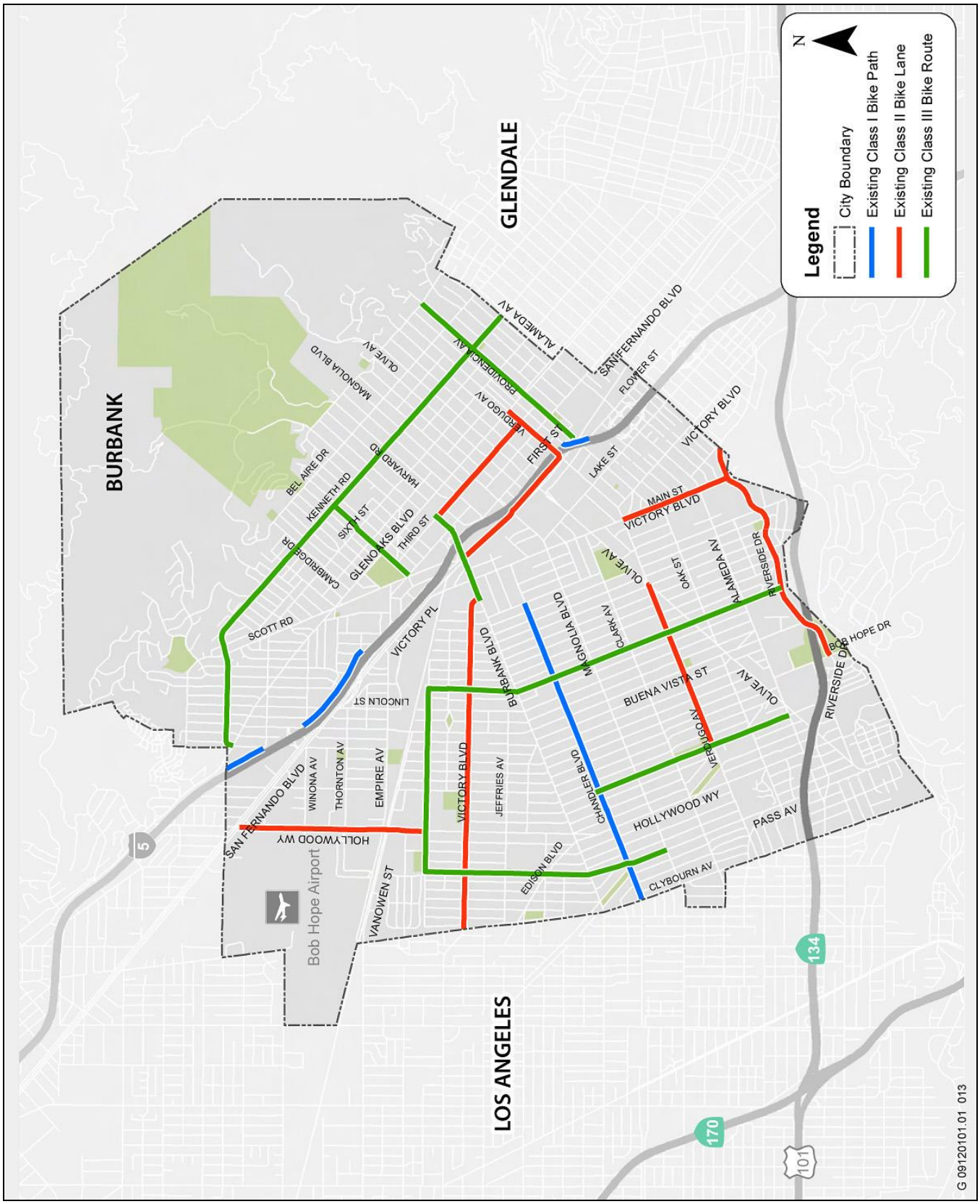
Pedestrian and Bicycle Facilities

Burbank currently has 18 designated bikeways, including Class I, II, and III facilities (see Table 4.16-6 and Exhibit 4.16-5). Existing bikeway mileage in Burbank comprises 2.88 miles of Class I, 4.50 miles of Class II, and 11.64 miles of Class III bikeways, for a total of 22.30 bikeway miles (City of Burbank 2009:9).

Table 4.16-6
Burbank Bicycle Facilities

Class	Street/Path	Origin	Destination	Length (mi)
I	Chandler Bikeway	Clybourn Avenue	Mariposa Street	1.98
I	Burbank Channel Bike Path – North 1	Cohasset Street	Tulare Avenue	0.3
I	Burbank Channel Bike Path – North 2	Buena Vista Street/Winona Avenue	Jackson Street	0.6
II	Riverside Drive	Bob Hope Drive	Glendale City limit	1.6
II	Main Street	Alameda Drive	Riverside Drive	0.2
II	Third Street	Verdugo Avenue	Burbank Boulevard	0.79
II	Verdugo Avenue	First Street	Glenoaks Boulevard	0.41
		Hollywood Way	Olive Avenue	1.32
II	Hollywood Way	Pacific Avenue	Cohasset Street	1.01
II	Victory Boulevard	Clybourn Avenue	Burbank Boulevard	2.1
II	Front Street	Burbank Boulevard	Downtown Metrolink	0.64
III	Keystone Street	Pacific Avenue	Riverside Drive	2.32
III	California Street	Chandler Boulevard	Alameda Avenue	1.28
III	Maple Street/Pass Avenue	Pacific Avenue	Magnolia Avenue	1.53
III	Pacific Avenue	Maple Street	Keystone Street	1.14
III	Burbank boulevard	Victory boulevard	Third Street	0.54
III	Amherst Drive	Kenneth Road	San Fernando Road	0.64
III	Providencia Avenue	Bonnywood Place	Sunset Canyon Drive	1.33
III	Kenneth Road	Glenoaks Boulevard	Glendale City Limit	3.4

Source: Fehr & Peers 2011



Source: Fehr & Peers 2011, adapted by AECOM

Exhibit 4.16-5 **Existing (2010) Bicycle Network**

Brief descriptions of each bikeway class are as follows:

- **Class I Bikeway**—often referred to as a "bike path," this facility provides for bicycle travel on a paved right-of-way completely separated from any street or highway.
- **Class II Bikeway**—often referred to as a "bike lane," this facility provides a striped and stenciled lane for one-way travel on a street or highway.
- **Class III Bikeway**—often referred to as a "bike route," this facility provides for shared use with pedestrian or motor vehicle traffic and is identified only by signage.

A citywide bicycle parking program has been implemented to construct and manage bicycle parking facilities throughout Burbank. The program has installed 250 inverted "U-shaped" racks throughout the city in major employment centers, retail districts, commercial corridors, public institutions, transportation centers, and parks. Major corridors with bicycle racks are Olive Avenue, Magnolia Boulevard, Burbank Boulevard, Victory Boulevard, Glenoaks Boulevard, and Riverside Drive. Burbank BikeStop at the Burbank Metrolink station is an indoor facility that provides secure bicycle parking for up to 50 bicycles (City of Burbank 2012).

In an effort to promote multimodal connectivity, several transit providers have included bicycle racks on transit vehicles to encourage riders to utilize other modes of transportation. Currently, BurbankBus and Metro buses have bicycle racks, commonly located in the front portion of the transit vehicle. Rail operators, including Metrolink, permit bicycles onboard and Amtrak vehicles include bicycle parking on their trains.

Pedestrian Network

Most arterials and local streets include a developed pedestrian network, interconnected by a variety of paved sidewalks and painted crosswalks (see Table 4.16-7). Specific corridors, including Magnolia Boulevard, Burbank Boulevard, Victory Boulevard, Glenoaks Boulevard, and portions of Downtown Burbank, provide wide sidewalks to accommodate significant pedestrian activity.

4.16.3 REGULATORY SETTING

State, regional, and local laws, regulations, and policies pertain to transportation in the planning area. They provide the regulatory framework for addressing all aspects of transportation planning and infrastructure that would be affected by implementation of *Burbank2035*. The regulatory setting for transportation is summarized here.

- **State Transportation Improvement Program (STIP)**: The California Department of Transportation (Caltrans) provides for the mobility of people, goods, services, and information. Caltrans provides administrative support for transportation programming decisions made by the California Transportation Commission and Caltrans. The State Transportation Improvement Program (STIP) is a multi-year capital improvement program that sets priorities and funds transportation projects envisioned in long-range transportation plans. STIP programming generally occurs every two years. The STIP is a resource management document to assist state and local entities to plan and implement transportation improvements and to utilize available resources in a cost- effective manner.

Table 4.16-7
Burbank Pedestrian Facilities

Intersection	North-South			East-West			Intersection	North-South			East-West		
	Cross-walk	Ped Signal	Curb ramps	Cross-walk	Ped Signal	Curb ramps		Cross-walk	Ped Signal	Curb ramps	Cross-walk	Ped Signal	Curb ramps
1. Hollywood Way Winona Ave.	X	X	X	X	X	X	19. Buena Vista St. Victory Blvd.	X	X	X	X	X	X
2. Hollywood Way Thornton Ave.	X	X	X	X	X	X	20. Buena Vista St. Burbank Blvd.	X	X	X	X	X	X
3. Hollywood Way Victory Blvd.	X	X	X	X	X	X	21. Buena Vista St. Magnolia Blvd.	X	X	X	X	X	X
4. Hollywood Way Burbank Blvd.	X	X	X	X	X	X	22. Buena Vista St. Olive Ave.	X	X	X	X	X	X
5. Hollywood Way Magnolia Blvd.	X	X	X	X	X	X	23. Buena Vista St. Alameda Ave.	X	X	X	X	X	X
6. Hollywood Way Verdugo Ave.	X	X	X	X	X	X	24. Buena Vista St. Riverside Dr.	Southbound only			Westbound only		
7. Riverside Dr. Alameda Ave.	X	X	X	Westbound only			25. Victory Blvd./ Victory Pl. Burbank Blvd.	X	X	X	Eastbound only		
8. Pass Ave. Alameda Ave.	X	X	X	X	X	X	26. Victory Blvd. Magnolia Blvd.	X	X	X	X	X	X
9. Pass Ave. Olive Ave.	X	X	X	Westbound only			27. Victory Blvd. Olive Ave.	X	X	X	X	X	X
10. Hollywood Way Alameda Ave.	X	X	X	X	X	X	28. Victory Blvd. Alameda Ave.	X	X	X	X	X	X
11. Hollywood Way Riverside Dr.	X	X	X	X	X	X	29. San Fernando Blvd Burbank Blvd	X	X	X	X	X	X
12. Hollywood Way Olive Ave.	X	X	X	X	X	X	30. First St. Magnolia Blvd.	X	X	X	Westbound only		
13. Olive Ave Riversi.de Dr.	X	X	X	X	X	X	31. First St. Olive Ave.	X	X	X	X	X	X
14. Olive Ave. Alameda Ave.	X	X	X	Westbound only			32. San Fernando Blvd. Alameda Blvd.	X	X	X	X	X	X
15. Buena Vista St. Glenoaks Blvd.	X	X	X	X	X	X	33. Glenoaks Blvd. Magnolia Blvd.	X	X	X	X	X	X
16. Buena Vista St. San Fernando Blvd.	Northbound only			X	X	X	34. Glenoaks Blvd. Olive Ave.	X	X	X	X	X	X
17. Buena Vista St. Empire Ave.	X	X	X	X	X	X	35. Glenoaks Blvd. Alameda Ave.	X	X	X	X	X	X
18. Buena Vista St. Vanowen St.	X	X	X	Westbound only									

Source: Fehr & Peers 2011

The STIP lists all capital improvement projects that are expected to receive an allocation of state transportation funds from the California Transportation Commission (CTC) during the following five years. The STIP consists of two broad programs; the regional program is funded using 75% of new STIP funding, while the interregional program is funded using 25% of the same source. The 75% regional program is further subdivided by formula into county shares.

- **SCAG Regional Transportation Plan Sustainable Communities Strategy:** In April 2012, the Southern California Association of Governments (SCAG) adopted the Regional Transportation Plan 2012-2035 Sustainable Communities Strategy (RTP/SCS). The plan evolved out of a massive outreach undertaking involving a broad range of stakeholders across the region to update the shared vision for the region's sustainable future. The RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375 (SB 375), improve public health, and meet the National Ambient Air Quality Standards (NAAQS) as set forth by the federal Clean Air Act. The plan focuses on the interconnected components of economic, social, and transportation investments required to achieve a sustainable regional multimodal transportation system. The goals and policies of the RTP/SCS require the participation of individual municipalities and multi-level investment of stakeholders throughout the region.

- **Senate Bill (SB) 375 – California Sustainable Communities and Climate Protection Act:** Passed in 2008 by the California State legislature, SB 375 requires SCAG to develop a Sustainable Communities Strategy (SCS) to reduce GHG emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning.

- **Los Angeles County Congestion Management Program (CMP):** State statute requires that a congestion management program be developed, adopted, and updated biennially for every county that includes an urbanized area. The CMP for Los Angeles County is administered by the Los Angeles County Metropolitan Transportation Authority (Metro) (Metro 2010). The 2010 Congestion Management Program for Los Angeles County provides a mechanism for coordinating land use and development decisions throughout the county.

- **Los Angeles County Long Range Transportation Plan (LRTP) 2009:** Metro, the state-designated transportation planning and programming agency for Los Angeles County, developed the LRTP as a long-range vision for the transportation system that reflects both regional needs and local concerns. The 2009 Plan is the guiding policy behind funding decisions on subsequent transportation projects and programs in Los Angeles County. The plan reflects Metro's mobility priorities to regional, state, and federal governments to qualify for transportation funds. Metro's long-range priorities coincide with the SCAG RTP/SCS. Consistency between these planning efforts ensure that transportation priorities are eligible for federal funding.

- **City of Burbank Bicycle Master Plan:** To promote bicycle travel, the City of Burbank adopted a Bicycle Master Plan in 2009 to encourage bicycling and ensure that adequate facilities are maintained within the City to serve bicycle riders of all ages and skill sets. The City recognizes that a safe and effective bikeway network enhances the quality of life for residents and visitors to the city. The Bicycle Master Plan incorporates the planning of routes and facilities into the circulation network, promotes bicycling as a primary form of travel to reduce traffic, and prioritizes investments in bicycle infrastructure.

4.16.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of *Burbank2035*, compared to existing conditions. The following analyses of impacts on transportation is based on the 2011 Burbank Travel Demand Model and traffic analysis using City of Burbank-required Critical Movement Analysis (CMA) for 35 key citywide intersections. The analysis assumes demand based on the land use buildout projected by the *Burbank2035* Land Use Element and *Burbank2035* Mobility Element policies and programs. An analysis of cumulative impacts uses information for the planning area and the region.

DRAFT *BURBANK2035* POLICIES AND IMPLEMENTATION PROGRAMS

Burbank2035 policies and implementation programs that reduce potential transportation impacts include:

POLICIES

Land Use Element

- **Policy 1.3:** Maintain and protect Burbank's residential neighborhoods by avoiding encroachment of incompatible land uses and public facilities.
- **Policy 1.9:** Ensure that development in Burbank is consistent with the land use designations presented in the Land Use Plan and shown on the Land Use Diagram, including individual policies applicable to each land use designation.

Mobility Element

- **Policy 1.2:** Recognize that Burbank is a built-out city and wholesale changes to the street rights-of-way are infeasible.
- **Policy 1.4:** Ensure that future land uses can be adequately served by the planned transportation system.
- **Policy 1.5:** Design transportation improvements to be compatible with the scale and design of existing infrastructure.
- **Policy 1.6:** Use technology and intelligent transportation systems to increase street system capacity and efficiency as an alternative to street widening.
- **Policy 2.1:** Improve Burbank's alternative transportation access to local and regional destinations through land use decisions that support multimodal transportation.
- **Policy 2.3:** Prioritize investments in transportation projects and programs that support viable alternative to automobile use.
- **Policy 3.1:** Use multi-modal transportation standards to assess the performance of the City street system.
- **Policy 3.2:** Complete city streets by providing facilities for all transportation modes.

- **Policy 3.3:** Provide attractive, safe street designs that improve transit, bicycle, pedestrian, and equestrian connections between homes and other destinations.
- **Policy 3.5:** Design street improvements so they preserve opportunities to maintain or expand bicycle, pedestrian, and transit systems.
- **Policy 5.1:** Maximize pedestrian and bicycle safety, accessibility, connectivity, and education throughout Burbank to create neighborhoods where people choose to walk or ride between nearby destinations.
- **Policy 5.2:** Implement the Bicycle Master Plan by maintaining and expanding the bicycle network, providing end-of-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer.
- **Policy 5.3:** Provide bicycle connections to major employment centers, shopping districts, residential areas, and transit connections.
- **Policy 5.4:** Ensure that new commercial and residential developments integrate with Burbank's bicycle and pedestrian networks.
- **Policy 5.5:** Require new development to provide land necessary to accommodate pedestrian infrastructure, including sidewalks at the standard widths specified in Table M-2.
- **Policy 6.3:** Pursue comprehensive neighborhood protection programs to avoid diverting unwanted traffic to adjacent streets and neighborhoods.
- **Policy 8.1:** Update and expand the citywide transportation demand management requirements to improve individual economic incentives and change traveler choice.
- **Policy 8.2:** Strengthen partnerships with transit management organizations to develop citywide demand management programs and incentives to encourage alternative transportation options.
- **Policy 8.3:** Require multi-family and commercial development standards that strengthen connections to transit and promote walking to neighborhood services.
- **Policy 9.1:** Ensure safe interaction between all modes of travel that use the street network, specifically the interaction of bicyclists, pedestrians, and equestrians with motor vehicles.
- **Policy 9.2:** Address the needs of people with disabilities and comply with the requirements of the Americans with Disabilities Act during the planning and implementation of transportation improvement projects.

Safety Element

- **Policy 1.1:** Regularly update all disaster preparedness and emergency response plans.
- **Policy 1.5:** Establish designated emergency response and evacuation routes throughout the city.
- **Policy 3.1**: Adapt to the changing safety needs of the community.

- **Policy 7.2:** Ensure that land uses, densities, and building heights within Airport Land Use Compatibility Zones are compatible with safe operation of Bob Hope Airport.

- **Policy 7.4:** Coordinate disaster response with the Bob Hope Airport Fire Department.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on transportation are considered significant if adoption and implementation of *Burbank2035* would:

- conflict with the *Burbank2035* Mobility Element, which establishes LOS D as the performance standard for signalized intersections;

- conflict with the *Los Angeles County Congestion Management Program*;

- result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses;

- result in inadequate emergency access; or

- conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Applicable policies, plans and program include, but are not limited to, the Los Angeles County *Long Range Transportation Plan* and City of Burbank *Bicycle Master Plan*.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.16-1 **LOS D Performance Standard.** *Adoption and implementation of Burbank2035 would increase traffic volumes within the city, resulting in 16 out of 35 signalized intersections operating below the LOS D standard. This would be a* ***significant*** *impact.*

The City of Burbank is built-out with a limited inventory of vacant and underutilized land. Future development under *Burbank2035* would occur through infill and redevelopment activities primarily within the Media District, Downtown Burbank, and the Golden State area. These infill and redevelopment activities would result in minor residential population growth. However, increases in non-residential land uses would result in a higher number of employees and visitors to the city, with corresponding increases in traffic volumes.

The City of Burbank has established LOS D as the lowest acceptable LOS for all signalized intersections during peak hours. LOS definitions for signalized intersections are presented in Table 4.16-1.

Conflicts with the City's LOS D standard occur where mitigation to increase service to LOS D is infeasible or would conflict with the goals and policies of *Burbank2035*. Mobility Element Policy 1.2 acknowledges that Burbank is built-out and wholesale changes to the street rights-of-way are infeasible. Thus, conflicts to the LOS D standard are as follows:

- **Right-of-Way Conflict.** If any right-of-way acquisition would be needed to implement the proposed mitigation (assuming minimum lane widths and a minimum of 6-foot sidewalks), the improvement would conflict with Mobility Element Policies 1.2 and 3.4.

- **Scale and Design Conflict.** If an improvement would not be compatible with the scale and design of the existing infrastructure or would increase the existing roadway width (measured from curb-to-curb) along a residential or mixed use area, the improvement would conflict with Mobility Element Policy 1.5.

- **Complete Streets Conflict.** If an improvement would prevent development of complete streets by increasing the roadway width at the intersection so as to narrow existing sidewalks, decrease bike lane width, or greatly disturb transit/bus stop locations, the improvement would conflict with Mobility Element Policies 3.2 and 3.5.

- **Pedestrian Opportunities Conflict.** If an improvement would require sidewalk widths to go below the minimum sidewalk standards specified in Table M-2 of the Mobility Element, it would conflict with Mobility Element Policies 3.3, 3.5, and 5.5.

Implementation of *Burbank2035* includes the completion of planned City transportation improvements including restriping, signal phasing, and changes to geometry at five intersections. The following intersection characteristics were assumed in evaluating future conditions in 2035 with implementation of *Burbank2035*:

- Hollywood Way and Alameda Avenue (Intersection #10). The northbound approach would be reconfigured to provide two exclusive left-turn lanes, two through lanes, and one exclusive right-turn lane. The eastbound approach would include one exclusive left-turn lane, two through lanes, and one shared through/right-turn lane. The westbound and southbound approaches would not be affected.

- Buena Vista Street and Empire Avenue (Intersection #17). The northbound approach would be reconfigured to provide a right-turn overlap phase. The eastbound, westbound, and southbound approaches would not be affected.

- Buena Vista Street and Vanowen Street (Intersection #18). The southbound approach would be reconfigured to provide two through lanes and one exclusive right-turn lane. The eastbound approach would be modified to include two exclusive left-turn lanes and one exclusive right-turn lane. The westbound and southbound approaches would not be affected.

- Victory Place and Burbank Boulevard (Intersection #25). The westbound approach would be reconfigured to provide two exclusive left-turn lanes, three through lanes, and one exclusive right turn lane. The northbound, eastbound and southbound approaches would not be affected.

- San Fernando Boulevard and Burbank Boulevard (Intersection #29). The southbound approach would be reconfigured to provide one exclusive left-turn lane, one through lane, and two exclusive right-turn lanes. The northbound, eastbound and westbound approaches would not be affected.

In accordance with the *Burbank Empire Center Environmental Impact Report* (SCH# 1997101035), the City of Burbank is obligated to make certain additional improvements to Intersection #17 and Intersection #19 if the operations of those intersections drop below LOS D. Currently, Intersection #17 is operating at LOS B in the AM and PM peak hours, and Intersection #19 is operating at LOS C in the AM peak hours and LOS D in the PM peak

hours. In order to be conservative, the improvements required by the Empire Center EIR for Intersections #17 and #19 were not assumed to be in existence for this analysis. However, those requirements are not being eliminated as part of *Burbank2035* adoption.

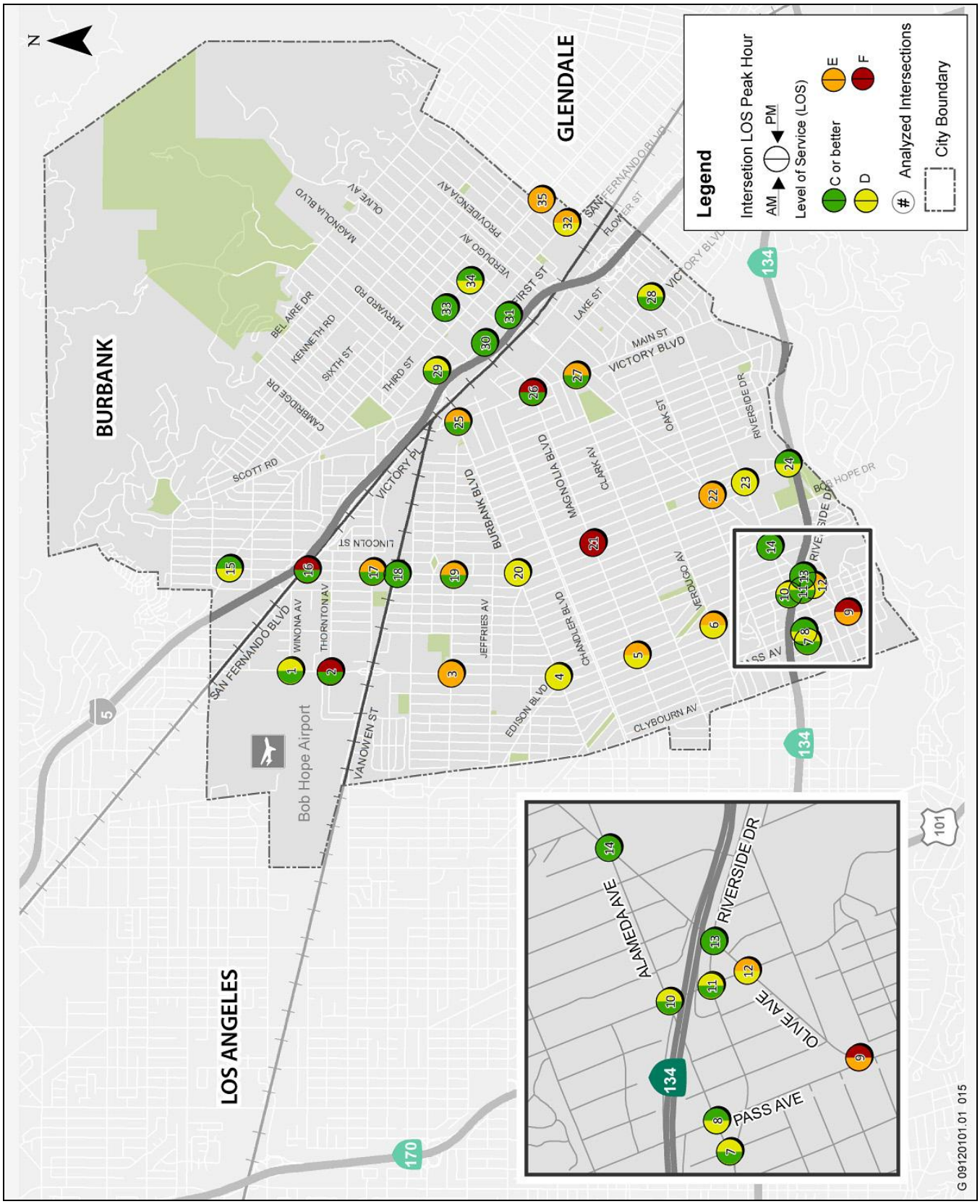
Table 4.16-8 compares existing (2010) and 2035 LOS at the 35 study intersections in the planning area. Exhibit 4.16-6 illustrates 2035 intersection LOS with implementation and expected buildout of *Burbank2035*. Implementation of *Burbank2035* would result in a significant impact at an intersection if the LOS would be LOS E or below. Future LOS modeling accounts for implementation of the intersection improvements listed above, and implementation of the policies of the Mobility and Land Use Elements to reduce vehicle trips.

Table 4.16-8
***Burbank2035* Level of Service (LOS)**

Intersection			Existing				*Burbank2035*				Below LOS D Standard	
			AM		PM		AM		PM			
#	N/S Street	E/W Street	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
1	N. Hollywood Way	Winona Ave.	0.426	A	0.583	A	0.693	B	0.834	D	No	No
2	N. Hollywood Way	Thornton Ave.	0.731	C	0.813	D	0.756	C	1.019	**F**	No	**Yes**
3	N. Hollywood Way	W. Victory Blvd.	0.873	D	0.953	**E**	0.925	**E**	0.983	**E**	**Yes**	**Yes**
4	N. Hollywood Way	W. Burbank Blvd.	0.721	C	0.850	D	0.841	D	0.885	D	No	No
5	N. Hollywood Way	Magnolia Blvd.	0.766	C	0.894	D	0.830	D	0.954	**E**	No	**Yes**
6	N. Hollywood Way	W. Verdugo Ave.	0.805	D	0.893	D	0.860	D	0.955	**E**	No	**Yes**
7	Riverside Dr.	W. Alameda Ave.	0.507	A	0.754	C	0.624	B	0.836	D	No	No
8	N. Pass Ave.	W. Alameda Ave.	0.672	B	0.559	A	0.848	D	0.683	B	No	No
9	N. Pass Ave.	W. Olive Ave.	0.761	C	0.815	D	0.941	**E**	1.037	**F**	**Yes**	**Yes**
10	N. Hollywood Way	W. Alameda Ave.	0.697	B	0.779	C	0.770	C	0.880	D	No	No
11	N. Hollywood Way	Riverside Dr.	0.512	A	0.621	B	0.637	B	0.810	D	No	No
12	N. Hollywood Way	W. Olive Ave.	0.685	B	0.714	C	0.830	D	0.926	**E**	No	**Yes**
13	Riverside Dr.	W. Olive Ave.	0.546	A	0.536	A	0.599	A	0.615	B	No	No
14	W. Olive Ave.	W. Alameda Ave.	0.581	A	0.674	B	0.742	C	0.733	C	No	No
15	N. Buena Vista St.	N. Glenoaks Blvd.	0.820	D	0.730	C	0.806	D	0.781	C	No	No
16	N. Buena Vista St.	N. San Fernando Blvd.	0.697	B	0.859	D	0.775	C	1.060	**F**	No	**Yes**
17	N. Buena Vista St.	W. Empire Ave.	0.616	B	0.663	B	0.776	C	0.911	**E**	No	**Yes**
18	N. Buena Vista St.	Vanowen St.	0.620	B	0.827	D	0.562	A	0.615	B	No	No

Table 4.16-8 *Burbank2035* Level of Service (LOS)												
Intersection			Existing				*Burbank2035*				Below LOS D Standard	
			AM		PM		AM		PM			
#	N/S Street	E/W Street	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
19	N. Buena Vista St.	W. Victory Blvd.	0.761	C	0.848	D	0.774	C	0.924	**E**	No	**Yes**
20	N. Buena Vista St.	W. Burbank Blvd.	0.826	D	0.839	D	0.853	D	0.885	D	No	No
21	N. Buena Vista St.	W. Magnolia Blvd.	0.954	**E**	0.984	**E**	1.005	**F**	1.066	**F**	**Yes**	**Yes**
22	N. Buena Vista St.	W. Olive Ave.	0.873	D	0.896	D	0.997	**E**	0.980	**E**	**Yes**	**Yes**
23	S. Buena Vista St.	W. Alameda Ave.	0.743	C	0.859	D	0.863	D	0.877	D	No	No
24	S. Buena Vista St.	W. Riverside Dr.	0.758	C	0.720	C	0.840	D	0.778	C	No	No
25	N. Victory Blvd.	W. Burbank. Blvd.	0.693	B	0.831	D	0.781	C	0.999	**E**	No	**Yes**
26	N. Victory Blvd.	Magnolia Blvd.	0.551	A	0.875	D	0.619	B	1.006	**F**	No	**Yes**
27	N. Victory Blvd.	W. Olive Ave.	0.742	C	0.883	D	0.760	C	0.998	**E**	No	**Yes**
28	N. Victory Blvd.	W. Alameda Ave.	0.674	B	0.839	D	0.782	C	0.832	D	No	No
29	N. San Fernando Blvd.	Burbank Blvd.	0.888	D	0.873	D	0.676	B	0.845	D	No	No
30	N. First St.	E. Magnolia Blvd.	0.399	A	0.662	B	0.433	A	0.777	C	No	No
31	N. First St.	E. Olive Ave.	0.537	A	0.744	C	0.652	B	0.788	C	No	No
32	S. San Fernando Blvd.	E. Alameda Ave.	0.839	D	0.843	D	0.857	D	0.940	**E**	No	**Yes**
33	N. Glenoaks Blvd.	Magnolia Blvd.	0.650	B	0.681	B	0.690	B	0.739	C	No	No
34	Glenoaks Blvd.	E. Olive Ave.	0.749	C	0.757	C	0.887	D	0.795	C	No	No
35	S. Glenoaks Blvd.	E. Alameda Ave.	0.845	D	0.870	D	0.920	**E**	0.943	**E**	**Yes**	**Yes**
Source: Fehr & Peers 2012												

Burbank2035 Land Use and Mobility Element policies would manage growth and the transportation system to reduce vehicle trips and reduce traffic impacts. Mobility Element policies also manage transportation resources, minimize congestion, enhance traffic circulation and reduce vehicle trips connected to residential and non-residential growth. Mobility Element Policy 8.3 would leverage proximity to transit and services and promote walking to neighborhood services. Mobility Element Policies 8.1 and 8.2 would improve individual economic



Source: Fehr & Peers 2011, adapted by AECOM

Exhibit 4.16-6 ***Burbank2035* Future Level of Service (LOS)**

incentives and develop citywide demand management programs to encourage alternative transportation options, further reducing vehicle trips in the future. Mobility Element Policy 1.4 would require that future land uses be adequately served by the transportation system, thereby ensuring transportation improvements are made in step with growth. Mobility Element Policies 2.1, 2.3, and 3.2 would improve the City's alternative transportation access, promote Complete Streets that serve all transportation modes, and prioritize non-automobile transportation improvements. These policies would enhance the complete circulation system and support a reduction in vehicle trips in relation to population growth.

However, implementation of *Burbank2035* would still result in LOS E or LOS F at 16 of the analyzed 35 intersections (intersections #2, 3, 5, 6, 9, 12, 16, 17, 19, 21, 22, 25, 26, 27, 32 and 35). This impact would be **significant**.

LOS Conflicts

At seven of these intersections, no feasible mitigation is available because the required physical widening at these locations would conflict with Mobility Element policies, triggering the LOS D conflicts described above. These seven intersections are described below:

- Hollywood Way and Victory Boulevard (Intersection #3). Physical improvements required to improve the service condition to LOS D or better would include striping all four approaches to provide two exclusive left-turn lanes, two through lanes, and one exclusive right-turn lane, as well as modifying the signal phasing on all approaches from protected/permitted to protected. To accommodate the requisite widening within the 100-foot right-of-way, sidewalks would be narrowed to a width of 10 feet on all approaches. A conflict with the LOS D standard is permitted based on the following:

  - the scale and design of this intersection would be compromised, inconsistent with Mobility Element Policy 1.5; and

  - the mitigation would narrow sidewalks at transit transfer points, inconsistent with Mobility Element Policies 3.2 and 3.5.

- Hollywood Way and Magnolia Boulevard (Intersection #5). Physical improvements required to improve the service condition to LOS D or better would include adding a second exclusive left-turn lane to all approaches. The widening would provide two exclusive left-turn lanes, two through lanes, and one exclusive right-turn lane on all approaches. A conflict with the LOS D standard is allowed because:

  - the widening would not be able to sustain the minimum 10-foot sidewalk widths, inconsistent with Mobility Element Policies 3.3, 3.5, and 5.5;

  - the scale and design of this intersection would be compromised, inconsistent with Mobility Element Policy 1.5; and

  - the mitigation would narrow sidewalks at transit transfer points, inconsistent with Mobility Element Policies 3.2 and 3.5.

- Buena Vista Street and Magnolia Boulevard (Intersection #21). Physical improvements required to improve the service condition to LOS D or better would include adding a second exclusive left-turn lane to all approaches. This intersection experiences heavy southbound and northbound through traffic volumes in the AM and PM peaks; however, adding through lane capacity would require the receiving end of the south and north leg be expanded to receive three through lanes at both legs. The current right-of-way along Buena Vista is only 80 feet. A conflict with the LOS D standard is permitted based on the following:

  - the widening would narrow sidewalks to less than the minimum 10-foot sidewalk widths, inconsistent with Mobility Element Policies 3.3, 3.5, and 5.5; and

  - the scale and design of this intersection would be compromised, inconsistent with Mobility Element Policy 1.5.

- Victory Boulevard and Burbank Boulevard (Intersection #25). Physical improvements required to improve the service condition to LOS D or better would include restriping the northbound approach to provide two exclusive right-turn lanes, two through lanes, and two exclusive right-turn lanes. A conflict with the LOS D standard is permitted based on the following:

  - the widening would narrow sidewalks to less than the minimum 6-foot sidewalk widths, inconsistent with Mobility Element Policies 3.3, 3.5, and 5.5;

  - the widening would require impacts to surrounding properties, inconsistent with Mobility Element Policy 1.2; and

  - the mitigation would narrow sidewalks, inconsistent with Mobility Element Policies 3.2 and 3.5.

- Victory Boulevard and Magnolia Boulevard (Intersection #26). In order to bring this intersection to LOS D or better, the City would need to restripe the northbound and southbound approaches to provide two exclusive left-turn lanes, two through lanes, and one exclusive right-turn lane. Adequate right-of-way is available to accommodate the required widening on both approaches assuming the sidewalk widths are 10 feet. However, conflicts are found under the scale and design and complete streets policies set forth in *Burbank2035* because the mitigation does not address the bicycle route connecting the Chandler Bikeway.

- San Fernando Boulevard and Alameda Avenue (Intersection #32). Physical improvements required to improve the service condition to LOS D or better would include providing two exclusive left-turn lanes, one through lane, and one shared through/right-turn lane. In addition, the eastbound approach would require one exclusive right-turn lane, two through lanes, and one exclusive right-of-way lane to be provided. The bus stop on the receiving end of the western leg would have to be relocated to properly accommodate this configuration. A conflict with the LOS D standard is permitted based on the following:

  - the widening would narrow sidewalks to less than the minimum 10-foot sidewalk widths, inconsistent with Mobility Element Policies 3.3, 3.5, and 5.5; and

  - the mitigation would narrow sidewalks and hamper transit opportunities, inconsistent with Mobility Element Policies 3.2 and 3.5.

- Glenoaks Boulevard and Alameda Avenue (Intersection #35). Physical improvements required to improve the service condition to LOS D or better would include providing two exclusive left-turn lanes, one through lane, and one exclusive right-turn lane. In addition, the eastbound approach would require one exclusive right-turn lane on the eastbound approach. Restriping would require a sub-standard lane offset or, as an alternative, widening of the eastbound approach which is located in the City of Glendale. A conflict with the LOS D standard is permitted based on the following:

  - the scale and design of this intersection would be compromised, inconsistent with Mobility Element Policy 1.5; and

  - the widening would narrow sidewalks to less than the minimum 10-foot sidewalk widths, inconsistent with Mobility Element Policies 3.3, 3.5, and 5.5.

Mitigation Measures

Mitigation Measure 4.16-1a. *The City of Burbank shall complete implementation of the Citywide Signal Control System (CSCS) and apply signal optimization at all the 35 key intersections identified in the Transportation Analysis Report.*

The City of Burbank is currently in the process of implementing a CSCS consistent with Mobility Element Policy 1.6. Application of the CSCS would improve the function of the entire circulation network, including improvements to intersection LOS. CSCS functionality was not accounted for in the existing conditions LOS presented in Table 4.16-2, or the 2035 analysis presented in Table 4.16-5, because the system has not been completed or fully implemented.

Mitigation Measure 4.16-1b. *The City of Burbank shall implement the following intersection improvements:*

- *Hollywood Way and Thornton Avenue (Intersection #2). Provide one exclusive left-turn lane, two through lanes, and one shared through/right-turn lane on northbound and southbound approaches. The existing right-of-way on Hollywood Way is 100 feet; no additional right-of-way is needed and improvements comply with the goals and policies of Burbank2035.*

- *Hollywood Way and Verdugo Avenue (Intersection #6). Provide a second exclusive left-turn lane, two through lanes, and a new exclusive right-turn lane in the southbound approach. Modify signal phasing on the southbound approach from permitted to protected. The existing right-of-way on Hollywood Way is 100 feet; no additional right-of-way is needed and improvements comply with the goals and policies of Burbank2035.*

- *Pass Avenue and Olive Avenue (Intersection #9). Widen the eastbound approach to provide two exclusive left-turn lanes and three through lanes. The existing right-of-way on Olive Avenue is 100 feet; no additional right-of-way is needed. This improvement has been previously identified as a mitigation measure in the Warner Brothers Studio Master Plan and improvements comply with the goals and policies of Burbank2035.*

- *Buena Vista Street and San Fernando Boulevard (Intersection #16). Restripe the eastbound approach to provide two exclusive left-turn lanes, one through lane, and one shared through/right-turn lane. The existing right-of-way on San Fernando Boulevard is 70 feet; no additional right-of-way is needed and improvements comply with the goals and policies of Burbank2035.This mitigation should be completed concurrently with the railroad grade separation at Buena Vista Street.*

- *Buena Vista Street and Olive Avenue (Intersection #22). Reconfigure the eastbound approaches to provide two exclusive left-turn lanes, one through lane, and one shared through/right-turn lane. Restripe the westbound approach to provide two exclusive left-turn lanes, two through lanes, and one exclusive right-turn lane. Modify signal phasing on the eastbound and westbound approached from protected/permitted to protected. Restrict parking along the westbound approach for 100 feet. The existing right-of-way on Olive Avenue is 100 feet; no additional right-of-way is needed and improvements comply with the goals and policies of Burbank2035.*

- *Victory Boulevard and Olive Avenue (Intersection #27). Restripe the southbound, westbound and eastbound approaches to provide two exclusive left-turn lanes, two through lanes, and one exclusive right-turn lanes. Modify signal phasing on the southbound, eastbound and westbound approaches from protected/permitted to protected. The existing right-of-way approach is 100 feet; no additional right-of-way is needed and improvements comply with the goals and policies of Burbank2035.*

Significance After Mitigation

Signal optimization resulting from implementation of Mitigation Measure 4.16-1a would improve intersections #12, 17, and 19 to LOS D. Implementation of the improvements identified in Mitigation Measure 4.16-1b would improve functionality of the intersections to meet the LOS D standard. These improvements are consistent with Mobility Element Policies 1.2, 1.4, 1.5, 2.3, 3.2, 3.3, 3.5 and 5.5. Table 4.16-9 and Exhibit 4.16-7 present LOS for each intersection after implementation of Mitigation Measures 4.16-1a and 4.16-1b.

Impacts at nine intersections (intersections #2, 6, 9, 12, 16, 17, 19, 22, and 27) would be reduced to a **less-than-significant** level with implementation of Mitigation Measures 4.16-1a and 4.16-1b.

Impacts at seven intersections (intersections #3, 5, 21, 25, 26, 32 and 35) would remain **significant and unavoidable** because no feasible mitigation measures are available for these intersections.

IMPACT 4.16-2 **Conflict with Los Angeles County Congestion Management Program.** *Adoption and implementation of Burbank2035 in addition to anticipated intersection improvements and regional growth in Los Angeles County would maintain the base year (2010) LOS standards for I-5 at Burbank Boulevard and comply with CMP. This would result in a **less-than-significant** impact.*

Future infill development and redevelopment consistent with *Burbank2035* would result in increases in traffic volumes due to increased resident population, number of employees, and number of visitors to the city. Highways and roadways designated in the CMP network are required to operate at LOS E, except where base year LOS is worse than LOS E; in such cases, the base year LOS is the standard. Interstate 5 (I-5) at Burbank Boulevard is a CMP designated freeway segment. Interstate 5 is planned for expansion through Burbank and improvements to interchanges at Burbank Boulevard and Empire Avenue will be constructed, and one HOV land and one auxiliary lane will be constructed in each direction. Table 4.16-7 presents a comparison of existing and future LOS and V/C ratio at the Burbank/I-5 CMP freeway segment; the information is presented as "Future No Project" and "Future *Burbank2035*" as the above stated planned improvements would alter the "Future No Project" condition from the existing 2010 conditions presented in Table 4.16-10.

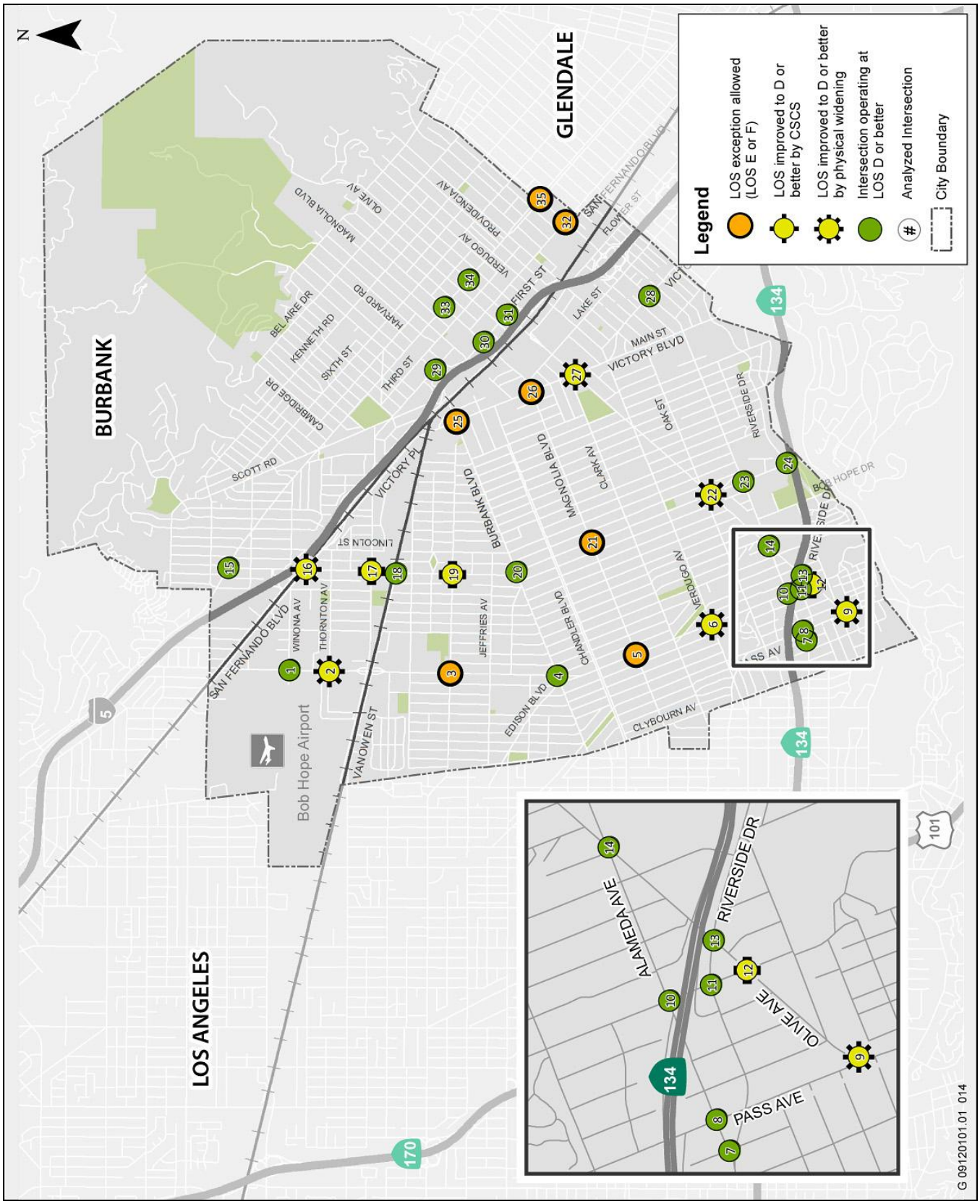
Table 4.16-9
***Burbank2035* Level of Service (LOS) After Mitigation**

Intersection			*Burbank2035*				*Burbank2035* with CSCS Upgrades				*Burbank2035* with Improvements			
			AM		PM		AM		PM		AM		PM	
#	N/S Street	E/W Street	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
1	N. Hollywood Way	Winona Ave.	0.693	B	0.834	D	0.693	B	0.834	D	0.693	B	0.834	D
2	N. Hollywood Way	Thornton Ave.	0.756	C	1.019	**F**	0.735	C	0.990	E	0.655	B	0.873	D
3	N. Hollywood Way	W. Victory Blvd.	0.925	**E**	0.983	**E**	0.899	D	0.955	E	0.899	D	0.955	**E**
4	N. Hollywood Way	W. Burbank Blvd.	0.841	D	0.885	D	0.841	D	0.885	D	0.841	D	0.885	D
5	N. Hollywood Way	Magnolia Blvd.	0.830	D	0.954	**E**	0.806	D	0.927	E	0.806	D	0.927	**E**
6	N. Hollywood Way	W. Verdugo Ave.	0.860	D	0.955	**E**	0.835	D	0.927	E	0.773	C	0.894	D
7	Riverside Dr.	W. Alameda Ave.	0.624	B	0.836	D	0.624	B	0.836	D	0.624	B	0.836	D
8	N. Pass Ave.	W. Alameda Ave.	0.848	D	0.683	B	0.848	D	0.683	B	0.848	D	0.683	B
9	N. Pass Ave.	W. Olive Ave.	0.941	**E**	1.037	**F**	0.914	**E**	1.008	F	0.829	D	0.773	C
10	N. Hollywood Way	W. Alameda Ave.	0.770	C	0.880	D	0.770	C	0.880	D	0.744	C	0.880	D
11	N. Hollywood Way	Riverside Dr.	0.637	B	0.810	D	0.637	B	0.810	D	0.637	B	0.810	D
12	N. Hollywood Way	W. Olive Ave.	0.830	D	0.926	**E**	0.806	D	0.899	D	0.806	D	0.899	D
13	Riverside Dr.	W. Olive Ave.	0.599	A	0.615	B	0.599	A	0.615	B	0.599	A	0.615	B
14	W. Olive Ave.	W. Alameda Ave.	0.742	C	0.733	C	0.742	C	0.733	C	0.742	C	0.733	C
15	N. Buena Vista St.	N. Glenoaks Blvd.	0.806	D	0.781	C	0.806	D	0.781	C	0.806	D	0.781	C
16	N. Buena Vista St.	N. San Fernando Blvd.	0.775	C	1.060	**F**	0.753	C	1.030	F	0.772	C	0.878	D
17	N. Buena Vista St.	W. Empire Ave.	0.776	C	0.911	**E**	0.754	C	0.885	D	0.754	C	0.885	D
18	N. Buena Vista St.	Vanowen St.	0.562	A	0.615	B	0.562	A	0.615	B	0.562	A	0.615	B
19	N. Buena Vista St.	W. Victory Blvd.	0.774	C	0.924	**E**	0.752	C	0.898	D	0.752	C	0.898	D
20	N. Buena Vista St.	W. Burbank Blvd.	0.853	D	0.885	D	0.853	D	0.885	D	0.853	D	0.885	D
21	N. Buena Vista St.	W. Magnolia Blvd.	1.005	**F**	1.066	**F**	0.976	**E**	1.036	F	0.976	**E**	1.036	**F**
22	N. Buena Vista St.	W. Olive Ave.	0.997	**E**	0.980	**E**	0.969	**E**	0.949	E	0.866	D	0.886	D
23	S. Buena Vista St.	W. Alameda Ave.	0.863	D	0.877	D	0.863	D	0.877	D	0.863	D	0.877	D
24	S. Buena Vista St.	W. Riverside Dr.	0.840	D	0.778	C	0.840	D	0.778	C	0.840	D	0.778	C

Table 4.16-9
***Burbank2035* Level of Service (LOS) After Mitigation**

Intersection			*Burbank2035*				*Burbank2035* with CSCS Upgrades				*Burbank2035* with Improvements			
			AM		PM		AM		PM		AM		PM	
#	N/S Street	E/W Street	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
25	N. Victory Blvd.	W. Burbank. Blvd.	0.781	C	0.999	**E**	0.758	C	0.971	E	0.758	C	0.938	**E**
26	N. Victory Blvd.	Magnolia Blvd.	0.619	B	1.006	**F**	0.601	B	0.977	E	0.601	B	0.977	**E**
27	N. Victory Blvd.	W. Olive Ave.	0.760	C	0.998	**E**	0.739	C	0.969	E	0.683	B	0.804	D
28	N. Victory Blvd.	W. Alameda Ave.	0.782	C	0.832	D	0.782	C	0.832	D	0.782	C	0.832	D
29	N. San Fernando Blvd.	Burbank Blvd.	0.676	B	0.845	D	0.676	B	0.845	D	0.676	B	0.845	D
30	N. First St.	E. Magnolia Blvd.	0.433	A	0.777	C	0.433	A	0.777	C	0.433	A	0.777	C
31	N. First St.	E. Olive Ave.	0.652	B	0.788	C	0.652	B	0.788	C	0.652	B	0.788	C
32	S. San Fernando Blvd.	E. Alameda Ave.	0.857	D	0.940	**E**	0.833	D	0.913	E	0.833	D	0.913	**E**
33	N. Glenoaks Blvd.	Magnolia Blvd.	0.690	B	0.739	C	0.690	B	0.739	C	0.690	B	0.739	C
34	Glenoaks Blvd.	E. Olive Ave.	0.887	D	0.795	C	0.887	D	0.795	C	0.887	D	0.795	C
35	S. Glenoaks Blvd.	E. Alameda Ave.	0.920	**E**	0.943	**E**	0.894	D	0.916	E	0.894	D	0.916	**E**
		Total LOS E or F		**5**		**16**		**3**		**13**		**1**		**7**

Source: Fehr & Peers 2012



Source: Fehr & Peers 2011, adapted by AECOM

Exhibit 4.16-7 ***Burbank2035* Level of Service (LOS) After Mitigation**

Table 4.16-10 Future CMP Freeway Segment Level of Service										
CMP Fwy. Station	Dir	Lanes	Capacity	Daily Volume	AM Peak Hour			PM Peak Hour		
					Volume	D/C	LOS	Volume	D/C	LOS
Existing (2010)	NB SB	6 6	10,600 10,600	246,685	8,157 8,651	0.770 0.816	C D	8,586 6,713	0.810 0.633	D C
Future (*Burbank2035*)	NB SB	6 6	10,600 10,600	249,233	8,369 8,808	0.790 0.831	D D	8,627 6,845	0.814 0.646	D C
Source: Fehr & Peers 2011										

Implementation of *Burbank2035* would result in a slight increase (1% increase) in daily volume which would maintain AM and PM peak hour LOS within the CMP operation standards. Thus, conflicting with the Los Angeles County Congestion Management Program would be a **less-than-significant** impact.

Mitigation Measure

None required.

IMPACT 4.16-3 **Air Traffic Patterns.** *Adoption and implementation of Burbank2035 would not modify the planning or operations of the Bob Hope Airport or introduce land use patterns that may cause substantial safety risks to or from air operations. Thus, implementation would result in a* ***less-than-significant*** *impact.*

The Bob Hope Airport is located in the northwest section of the city. Bob Hope Airport provides air travel operations between Burbank and various locations throughout California and the U.S.

The Los Angeles County Airport Land Use Plan (ALUP) is administered by the Los Angeles County Regional Planning Commission, which also serves as the Airport Land Use Commission (ALUC). The ALUC has adopted an Airport Influence Area for the Bob Hope Airport. The Airport Influence Area is the area in which noise, overflight, safety, or airspace protection factors may affect land uses or necessitate restrictions on those uses. The Los Angeles County Airport Land Use Plan identifies two safety zones within the planning boundaries of the airport: the Approach Surface and the Runway Protection Zone.

Implementation of *Burbank2035* would revise land use designations in the Golden State area, east of Bob Hope Airport, to allow for a mix of commercial, industrial, and live-work housing, continuing existing trends in the area. Although land uses near the airport would develop, redevelop, and intensify, the Bob Hope Airport location and its Airport land use designation are not being altered by *Burbank2035*. Development within the airport influence area is subject to development standards and height regulations to ensure the safety and integrity of airport functions. *Burbank2035* maintains existing land use designations and policies within the airport influence area to ensure safety and consistency with the ALUP.

Burbank2035 policies and programs related to land use, mobility, and structural heights would not influence air traffic patterns by creating either an increase in traffic levels or a change in location that results in substantial safety risks. Implementation of Safety Element Policy 7.2 would ensure that land uses, densities, and building heights within Airport Land Use Compatibility Zones are compatible with safe operation of Bob Hope Airport.

This policy will reduce the impacts of any City activities on the air traffic patterns or safety of the Airport. Therefore, implementation of *Burbank2035* would not result in a change in air traffic patterns, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.16-4 **Design Hazards.** *Adoption and implementation of Burbank2035 would not increase hazards due to design or incompatible uses. Thus, implementation would result in a* ***less-than-significant*** *impact.*

Traffic generated by infill and redevelopment under *Burbank2035* policies, as addressed in Impact 4.16-1, would not increase hazards due to design features or incompatible uses. Mobility Element policies constrain the alteration of right-of-way widening. Specifically, Mobility Policy 1.2 states wholesale changes to the street rights-of-way are infeasible. Limiting right-of-way widening would reduce the potential conflicts that could occur between motorists, bicycles, pedestrians, and transit vehicles. In addition, Mobility Element Policy 1.6 supports technological improvements over street widening. Mobility Element Policy 1.5 requires transportation improvements to be compatible with the scale and design of existing streets, which would take into consideration the available right-of-way width and roadway configurations. Mobility Element Policy 3.2 supports improvements for pedestrian, bicycle and transit opportunities to complete streets. Due to these policies, no new major roadways are planned within the planning area, and transportation improvements are limited to street and intersection reconfigurations within existing right-of-ways. All improvements to existing roadways would be subject to existing City design standards for roadways and sidewalks.

Land Use Element policies support the established land use patterns of the city and provide safeguards against incompatible uses. Specifically, Land Use Element Policy 1.3 protects neighborhoods from encroachment of incompatible and public facility uses and Land Use Element Policy 1.9 requires consistency with the Land Use Plan which generally continues the established land use patterns. Mobility Element Policy 6.3 provides for neighborhood protection plans to divert unwanted traffic from neighborhood streets. Thus, *Burbank2035* policies, particularly in the Land Use Element and Mobility Element, are designed to reduce design hazards and conflicts between incompatible land uses and between all transportation network users, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.16-5 **Result in Inadequate Emergency Access.** *Adoption and implementation of Burbank2035 policies would reduce emergency access program-level impacts to a* ***less-than-significant*** *level.*

Traffic-calming goals and policies in the Mobility Element may have implications for emergency response, and recommendations for evacuation and emergency access routes in the Safety Element affect the Mobility Element. Emergency vehicles take the fastest and most expedient routes to access an emergency. In the event of an evacuation, the primary routes used, if available, are Glenoaks Boulevard, San Fernando Boulevard, Burbank Boulevard, and Victory Boulevard.

Burbank2035 policies include a variety of actions aimed at ensuring emergency response readiness. Safety Element policies specifically address emergency preparedness impacts. Safety Element Policy 1.1 requires the regular update of all disaster preparedness and emergency response plans and Safety Element Policy 3.1 requires the City to adapt to the changing needs of the community. This will reduce impacts by maintain preparedness efforts in line with community and transportation conditions over time. Safety Element Policy 1.5 stipulates the establishment of designated emergency response and evacuation routes throughout the city. This will reduce impacts by establishing appropriate routes based on the location of events and conditions within the city. Safety Element Policy 7.4 ties emergency access and response to safety issues related to the airport by coordinating disaster response with the Bob Hope Airport Fire Department. This will reduce emergency access impacts to and near the airport by pooling and coordinating resources between agencies in the vicinity.

Implementation of current state and federal regulations, combined with *Burbank2035* policies, would reduce the potential impacts on emergency preparedness and emergency access in Burbank. Therefore, the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.16-6 **Public Transit, Bicycle, and Pedestrian Facilities.** *Adoption and implementation of Burbank2035 supports the maintenance and expansion of transit, bicycle and pedestrian facilities consistent with adopted local and regional plans. Thus, implementation would result in a* ***less-than-significant*** *impact.*

Future development in the City of Burbank under *Burbank2035*would occur through infill and redevelopment activities primarily within the Media District, Downtown Burbank, and the Golden State area. Such infill and redevelopment would increase the demand for transit, bicycle, and pedestrian facilities.

Mobility Element Policy 5.1 supports safe, accessible connectivity and education to promote neighborhoods and destinations where people can choose to walk or bicycle as primary transportation. Mobility Element Policy 5.5 requires new development to provide pedestrian infrastructure consistent with specific standards established by *Burbank2035*; ensuring that pedestrian facilities are maintained and promoted.

The majority of arterials and local streets, including specific key corridors throughout the city provide wide sidewalks to accommodate significant pedestrian activities. Bicycle paths (Class I), lanes (Class II), and routes (Class III) provide a moderate level of access to highly-traveled locations throughout the city, as shown in Exhibit 4.16-5. Exhibit 4.16-4 shows the existing transit network in the city including Metro bus lines, Metrolink commuter rail, and BurbankBus routes.

Mobility Element policies would improve transit, bicycle, and pedestrian access throughout the city, supporting a multi-modal circulation system. Mobility Element Policy 3.5 requires all street improvements to maintain or enhance bicycle, pedestrian, and transit systems. Mobility Element Policies 3.3 and 5.5 require the provision of transit, bicycle, and pedestrian connections between homes and other destinations. Mobility Element Policy 2.1 supports land use decisions that improve multimodal transportation access. Mobility Element Policy 2.3 prioritizes transportation investments that support viable alternatives to automobile use. Mobility Element Policy 3.2 institutes complete streets to provide facilities supporting all transportation users. Mobility Element Policy 3.1

requires the City to evaluate the system based on functionality across all transportation modes. These policies collectively support local and regional adopted plans and will improve multi-modal access throughout the city to reduce traffic congestion.

Implementation of *Burbank2035*would be consistent with the goals of the Los Angeles County LRTP. Mobility Element policies promote transit opportunities within the city and provide opportunities to connect to regional infrastructure. Specifically, Mobility Element Policy 4.4 supports the improvement of a variety of transit mode services connecting residential and employment within the city to the region; this directly supports the goals and plans of the LRTP. Mobility Element Policy 4.6 supports the financing plans of the LRTP by requiring local transit planning and funding to compensate for regional financial and service cutbacks. Mobility Element Policy 4.9 further supports a robust transit system locally and regionally by promoting seamless fare-transfer systems among modes and operators. Therefore, *Burbank2035* policies directly support and are consistent with the Los Angeles County LRTP.

Implementation of *Burbank2035* would be consistent with the goals of the City of Burbank BMP. Mobility Element policies support and reinforce the policies of the Burbank BMP by promoting bicycle facilities and parking throughout the city to provide a higher level of connectivity and access for bicycles. Table 4.16-11 provides BMP policy text and discusses how *Burbank2035* policies are consistent with them.

Burbank2035 policies directly support the expansion of pedestrian, bicycle, and transit facilities and support the City's goal of being a multi-modal community. The Mobility Element and Land Use Element policies also support the goals and policies of the Los Angeles County Long Range Transportation Plan and City of Burbank Bicycle Master Plan. Therefore, impacts to pedestrian, bicycle, and transit facilities would be **less than significant**.

Mitigation Measure

None required.

4.16.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

The traffic analysis included in this EIR addresses cumulative impacts to the regional transportation system. A regional traffic model was used to analyze impacts of *Burbank2035* at buildout, along with projected regional growth. The regional traffic model already assumes a level of growth for other nearby jurisdictions based on all reasonably foreseeable and probable future projects in the region and population/employment projections. In sum, all scenarios studied in this resource chapter of the EIR are considered cumulative by nature because anticipated land use forecasts for other areas are already included in the traffic model.

IMPACT 4.16-7 **Cumulative LOS D Performance Standard.** *Adoption and implementation of Burbank2035 would increase traffic volumes within the city, resulting in 16 out of 35 signalized intersections operating below the LOS D standard under cumulative conditions. Burbank2035's contribution would be considerable, and this would be a* ***significant*** *cumulative impact.*

Table 4.16-11 Burbank Bicycle Master Plan and *Burbank2035* Consistency		
Burbank Bicycle Master Plan Policy	**BMP Policy Text**	***Burbank2035* Policy Consistency**
Policy 1	Make bicycle travel an integral part of daily life in Burbank, particularly for trips of less than five miles, by: • implementing and maintaining a bikeway network, • providing end-of-trip facilities, • improving bicycle/transit integration, encouraging bicycle use, • making bicycling safer, and • engaging the public in bicycling related issues and decisions.	Mobility Element Policies 1.4, 2.3, 3.2 3.3, and 5.1 support the increase in attractive and safe transportation routes that improve bicycle connections to neighborhoods and access throughout the city. Mobility Element Policy 5.2 outlines and reinforces BMP Policy 1.
Policy 2	Provide bicycle-friendly connections to transit centers, major employment centers, retail districts, and residential areas to make the overall road network more hospitable to bicycle travel.	Mobility Element Policies 2.1, 3.3, 3.5, and 5.3 support increasing bicycle connections to local and regional destinations with complete streets improvements.
Policy 3	Ensure that new commercial and residential development integrates with the city's bicycle network by requiring contributions to the city's non-motorized transportation system in proportion to its expected vehicle trip-generation.	Mobility Element Policies 1.4, 3.3, and 5.3 require new development to tie into the existing bicycle network, to provide adequate bicycle facilities, and to accommodate bicycle routes.
Policy 4	Encourage a livable street environment through comprehensive roadway planning that considers the interaction between the street, sidewalk, and adjacent land-uses.	Mobility Element Policies 3.1, 3.3 and 5.5 provide for complete streets that include facilities for all transportation modes, ensure that streets will be designed in an attractive and safe manner for all users, and establish sidewalk standards to accommodate pedestrians.
Policy 5	Encourage all roadways and intersections to incorporate the complete streets concept that users of all ages and abilities, pursuing all activities, shall be able to move safely throughout the street network.	Mobility Element Policy 3.1 provides for complete streets that include facilities for all transportation modes and Policies 3.3, 9.1, and 9.2 ensure that streets will be designed in an attractive, safe and accessible manner for all users.
Policy 6	Pursue roadway design that will minimize cut-through and spillover traffic in residential neighborhoods and maintain the neighborhoods' character and quality of life.	Land Use Policy 1.3 and Mobility Element Policy 6.3 protect neighborhood integrity by preventing traffic spillover into surrounding residential neighborhoods.
Source: City of Burbank Bicycle Master Plan December 2009; *Burbank2035*.		

Regional population and employment growth is anticipated to result in traffic volumes that would exceed acceptable levels of service at 16 signalized intersections, as discussed in Impact 4.16-1. This represents a significant cumulative impact. While *Burbank2035* includes various policies to reduce traffic demand and mitigation for roadway segments and intersections, traffic is anticipated to exceed level of service standards at these intersections. Therefore, *Burbank2035* would make a cumulatively considerable contribution to this **significant** impact.

Mitigation Measures

Mitigation Measure 4.16-7. *Implement Mitigation Measures 4.16-1a and 4.16-1b.*

Significance After Mitigation

Signal optimization resulting from implementation of Mitigation Measure 4.16-1a would improve intersections #12, 17, and 19 to LOS D. Implementation of the improvements identified in Mitigation Measure 4.16-1b would improve functionality of the intersections to meet the LOS D standard. These improvements are consistent with Mobility Element Policies 1.2, 1.4, 1.5, 2.3, 3.2, 3.3, 3.5 and 5.5. Table 4.16-9 and Exhibit 4.16-7 present LOS for each intersection after implementation of Mitigation Measures 4.16-1a and 4.16-1b.

Impacts at nine intersections (intersections #2, 6, 9, 12, 16, 17, 19, 22, and 27) would be reduced to a **less-than-significant** level with implementation of Mitigation Measures 4.16-1a and 4.16-1b.

Impacts at seven intersections (intersections #3, 5, 21, 25, 26, 32 and 35) would remain **significant and unavoidable** because no feasible mitigation measures are available for these intersections.

IMPACT 4.16-8 **Conflict with Los Angeles County Congestion Management Program.** *Adoption and implementation of Burbank2035 in addition to anticipated intersection improvements and regional growth in Los Angeles County would maintain the base year (2010) LOS standards for I-5 at Burbank Boulevard and comply with CMP. This would result in a* ***less-than-significant*** *impact.*

As discussed under Impact 4.16-2, implementation of *Burbank2035* would result in a slight increase (1% increase) in daily volume which would maintain AM and PM peak hour LOS within the CMP operation standards. Thus, *Burbank2035* would not conflict with the Los Angeles County Congestion Management Program and cumulative impacts to the CMP would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.16-9 **Cumulative Air Traffic Patterns.** *Adoption and implementation of Burbank2035 in addition to anticipated cumulative growth in the Bob Hope Airport influence area would not modify the planning or operations of the Bob Hope Airport or introduce land use patterns that may cause substantial safety risks to or from air operations. This would be a* ***less-than-significant*** *impact.*

As discussed under Impact 4.16-3, land uses near the Bob Hope Airport would develop, redevelop, and intensify under *Burbank2035* and other development and planning efforts outside of the planning area. However, the location of Bob Hope Airport and its Airport land use designation are not being altered by *Burbank2035,* and would not be altered by any other cumulative development project in the vicinity. Development within the airport influence area, but outside the planning area, is also subject to ALUP development standards and height regulations to ensure the safety and integrity of airport functions. Future projects pursuant to *Burbank2035* as well as other development proposals near the airport would not influence air traffic patterns by creating either an increase in traffic levels or a change in location that results in substantial safety risks. Therefore, cumulative

implementation of *Burbank2035* and other development would not result in a change in air traffic patterns, and cumulative air traffic impacts would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.16-10 **Design Hazards.** *Adoption and implementation of Burbank2035 in addition to anticipated regional growth would not increase hazards due to design or incompatible uses. This would result in a* ***less-than-significant*** *impact.*

As discussed under Impact 4.16-4, traffic generated by infill and redevelopment under *Burbank2035* would not increase hazards due to design features or incompatible uses. Burbank and surrounding communities are urban and include vehicle, transit, rail, bicycle, and pedestrian routes. Development policies from surrounding jurisdictions in combination with *Burbank2035* policies, particularly in the Land Use Element and Mobility Element, would reduce design hazards and conflicts between incompatible land uses and between all transportation network users and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.16-11 **Result in Inadequate Emergency Access.** *Adoption and implementation of Burbank2035 policies in addition to anticipated regional growth would not result in inadequate emergency access, and the impact would be* ***less than significant****.*

As discussed in Impact 4.16-5, emergency vehicles take the fastest and most expedient routes to access an emergency. In some cases, emergency vehicles may travel through multiple jurisdictions to respond to a mutual aid call. *Burbank2035* policies would ensure emergency response readiness. *Burbank2035* Safety Element policies specifically address emergency preparedness impacts including maintaining emergency response plans and the establishment of designated emergency response and evacuation routes. Surrounding communities implement similar emergency response and evacuation plans. Implementing and maintaining these plans would reduce impacts by establishing appropriate routes based on the location of events and conditions within the city and to adjacent areas. Coordinating disaster response with the Bob Hope Airport Fire Department will also ensure adequate emergency response. This will reduce emergency access impacts to and near the airport by pooling and coordinating resources between agencies in the vicinity. Implementation of current state and federal regulations, combined with *Burbank2035* policies and adjacent jurisdictions' emergency response plans, would reduce potential cumulative impacts on emergency preparedness and emergency access, and the impact would be **less than significant**.

Mitigation Measure

None required.

IMPACT 4.16-12 **Public Transit, Bicycle, and Pedestrian Facilities.** *Adoption and implementation of Burbank2035 supports the maintenance and expansion of transit, bicycle and pedestrian facilities consistent with adopted local and regional plans. Thus, implementation of Burbank2035 and additional development would result in a* ***less-than-significant*** *impact.*

As discussed in Impact 4.16-6, future development in Burbank under *Burbank2035*would occur through infill and redevelopment activities. Burbank and surrounding communities are urbanized and include transit, bicycle, and pedestrian routes. Such infill and redevelopment would increase the demand for transit, bicycle, and pedestrian facilities.

The majority of arterials and local streets, including specific key corridors throughout the city and surrounding communities provide sidewalks to accommodate pedestrians. Bicycle paths (Class I), lanes (Class II), and routes (Class III) provide a moderate level of access to highly-traveled locations throughout the planning area and surrounding communities.

The connection of regional infrastructure to the local street system, as well as the provision of funding for such facilities, would ensure connectivity between residential and employment centers throughout the region. Implementation of *Burbank2035* as well as other multi-modal plans would ensure the maintenance and expansion of transit, bicycle and pedestrian facilities. Therefore, the cumulative impact to transit, bicycle, and pedestrian facilities would be **less than significant**.

Mitigation Measure

None required.

5 OTHER CEQA REQUIRED CONSIDERATIONS

5.1 INTRODUCTION

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines require that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the EIR must also identify (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, and (4) growth inducing impacts of the proposed project. It should be noted that although growth inducement itself is not considered an environmental effect, it could potentially lead to foreseeable physical environmental effects, which are discussed under growth inducing impacts below.

5.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe significant impacts that cannot be avoided, even with implementation of feasible mitigation measures. Chapter 2.0, Executive Summary, of this EIR identifies *Burbank2035*'s significant and unavoidable impacts.

5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Section 15126.2(c) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impact and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should e evaluated at assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if:

- the primary and secondary impacts would generally commit future generations to similar uses;
- the project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project;
- the project would involve a large commitment of nonrenewable resources; or
- the proposed consumption of resources is not justified (e.g., the project involved the wasteful use of energy).

Implementation of *Burbank2035* would result in the continued commitment of the majority of the planning area to urban uses, thereby precluding non-urban uses through the lifespan of the plan. Restoration of the planning area to

a less developed condition would not be feasible given the degree of disturbance, the urbanization of the area, long-term historic urban use, and the level of capital investment. Implementation of *Burbank2035* would represent a continued investment in historic uses within the urban area. Furthermore, *Burbank2035* policies and programs commit the City to preserve existing open space in the Verdugo Mountains, and limit the commitment of nonrenewable resources to areas of existing urbanized investment.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with the project. While implementation of *Burbank2035* would result in the use, transport, storage, and disposal of hazardous wastes, as described in Section 4.9, "Hazards and Hazardous Materials", all activities would comply with applicable state and federal laws related to hazardous materials transport, use, and storage, which significantly reduces the likelihood and severity of accidents that could result in irreversible environmental damage. *Burbank2035* does not propose an increase in airport or transportation activities directly. Specific projects resulting in expansion of such activities would be subject to all applicable state and federal laws and require project-level CEQA review.

Implementation of *Burbank2035* would result in the continuation of long-term resource commitments to urban development. The incremental intensity increase represented by *Burbank2035* land use policy is estimated to result in a 13.3% increase in housing units and a 30.1% growth in non-residential square footage. However, this increased intensity would represent a redevelopment of existing land uses to their highest-and-best use, committing long-term resources to areas of existing investment, and limiting expansion of the urban development footprint. Operations associated with future uses would also consume fossil fuels, water, natural gas, and electrical energy, and create GHG emissions. These unavoidable consequences of urban growth are described throughout Chapter 4.0 of this EIR.

Resources that would be permanently and continually consumed with implementation of *Burbank2035* include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in the inefficient or wasteful use of such resources. With respect to operational activities, compliance with all applicable building codes, as well as *Burbank2035* policies, standard conservation features, and current City programs would ensure that natural resources are conserved to the maximum extent possible. It is possible that new technologies or systems will emerge, or will become more cost-effective or user-friendly, to further reduce the reliance upon nonrenewable natural resources. Nonetheless, future construction activities related to implementation of *Burbank2035* would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobiles and construction equipment.

5.4 GROWTH INDUCING IMPACTS

As required by Section 15126.2(d) of the CEQA Guidelines, an EIR must discuss ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, the EIR must discuss the characteristics of the project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, through the stimulation of economic activity within the region, or through the establishment of policies or other precedents that directly or indirectly encourage additional growth. Although growth inducement itself is not considered an environmental effect, it could potentially lead to environmental effects.

In general, a project may foster spatial, economic, or population growth in a geographic area if the project removes an impediment to growth (e.g., the establishment of an essential public service, the provision of new access to an area; a change in zoning or general plan amendment approval); or economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion, etc). These circumstances are further described below:

- Elimination of Obstacles to Growth: This refers to the extent to which a proposed project removes infrastructure limitations or provides infrastructure capacity, or removes regulatory constraints that could result in growth unforeseen at the time of project approval.

- Economic Effects: This refers to the extent to which a proposed project could cause increased activity in the local or regional economy. Economic effects can include effects such as the "multiplier effect." A "multiplier" is an economic term used to describe interrelationships among various sectors of the economy. The multiplier effect provides a quantitative description of the direct employment effect of a project, as well as indirect and induced employment growth. The multiplier effect acknowledges that the on-site employment and population growth of each project is not the complete picture of growth caused by the project.

Impacts of Induced Growth

Potential growth inducement impacts of adoption and implementation of *Burbank2035* are addressed in Section 4.14, "Population, Employment, and Housing" of this EIR under Impact 4.14-1. As described therein, the purpose of a general plan is to guide growth and development in a community. Accordingly, *Burbank2035* is premised on a certain amount of growth taking place. The focus of *Burbank2035* is to provide a framework in which the growth can be managed and to tailor it to suit the needs of the community and surrounding area. *Burbank2035* provides the necessary tools to accommodate future growth, provides direction for new development and redevelopment projects, and establishes the desired mix and relationship between land use types. Nevertheless, inducement of population growth anticipated under *Burbank2035* would constitute a significant and unavoidable impact.

5.5 CUMULATIVE IMPACTS

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the proposed project. As defined in CEQA Guidelines Section 15355, "Cumulative impacts refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Although project-related impacts may be individually minor, the cumulative effects of these impacts, in combination with the impacts of other project, could be significant under CEQA and must be addressed (CEQA Guidelines Section 15130(a)).Through the evaluation of cumulative impacts, CEQA attempts to ensure that large-scale environmental impacts will not be ignored.

CEQA Guidelines Section 15130(b) allow for the use of two alternative methods to determine the scope of projects for the cumulative impact analysis:

- List Method - A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency.

- Regional Growth Projections Method - A summary of projects contained in an adopted general plan or related planning document or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact (Section 15130).

The analysis of cumulative effects "need not provide as great detail as is provided for the effects attributable to the project alone," but the discussion "shall reflect the severity of the impacts and their likelihood of occurrence" (CEQA Guidelines Section 15130(a)(b)). Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of past, present, and probable future projects, are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable," and thus significant in and of itself (CEQA Guidelines Section 15130(a)). The section additionally states "when the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. A lead agency shall identify facts and analysis supporting the lead agency's conclusion that the cumulative impact is less than significant."

Burbank2035 establishes policy that would guide future development/redevelopment within the City and implementation measures that are long term in nature. The Regional Growth Projection Method is appropriate for evaluating cumulative impacts because it accounts for general growth within the region and considers long-term growth. The Southern California Association of Governments (SCAG) publishes an Integrated Growth Forecast which satisfies the Regional Growth Projection Method qualifiers by providing regional and long-term growth considerations based on regional planning documents.

The SCAG Integrated Growth Forecast represents a regional and small-area socio-economic forecasting/allocation model that estimates and projects population and households for the 2020 and 2035 planning horizons by federal and state mandated long-range planning efforts such as the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the Air Quality Management Plan (AQMP), the Regional Transportation Improvement Program (RTIP), and the Regional Housing Needs Assessment (RHNA). It should be noted that forecasts such as the one prepared for the SCAG Integrated Growth Forecast are prepared as planning tools and do not predict the course of future events. SCAG's forecast, which are based on adopted general plan land use policies for jurisdictions, among other factors, are used primarily to prepare the RTP/SCS and to provide inputs into air quality management plans. Experience shows that these forecasts are most reliable at the regional and county level and less so for smaller areas like cities and census tracts.

SCAG's projections do not account for the proposed land use designation updates included as part of *Burbank2035*. SCAG's current projections for Burbank reflect the current General Plan, not *Burbank2035*. Thus, there is variance between SCAG's projections cited in Table 5-1 and those set forth in *Burbank2035*. SCAG projects a 2035 population total of 115,300 persons and 47,000 households for Burbank (SCAG 2012A).

Cumulative impacts for each impact area are identified in each technical discussion presented in Section 4.0. The basis of the cumulative analysis varies by technical area. The geographic area that could be affected by implementation of *Burbank2035* varies depending on the type of environmental resource being considered.

Table 5-1
Burbank and Regional Growth Projections

	Existing (2010 Baseline)[1]		2035 Estimated Projections		
	City of Burbank	Los Angeles County	City of Burbank Burbank2035	City of Burbank SCAG IGF3	Los Angeles County SCAG IGF2
Population	103,340	9,818,605	116,516	133,391	11,353,000
Housing	44,309	3,228,000[2]	50,219	51,842	3,852,000

Notes:

[1] 2010 population and dwelling units from US Census 2010

[2] SCAG 2012 Draft Integrated Growth Forecast

[3] SCAG 2008 RTP Growth Forecast adopted by the Regional Council, May 2008. NOP comments from SCAG directed the lead agency to use this adopted growth forecast.

This page intentionally left blank.

6 ALTERNATIVES TO THE PROPOSED PROJECT

6.1 INTRODUCTION

Section 15126.6(a) of the State CEQA Guidelines requires EIRs to describe "… a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."

An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible.

The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. Section 15126.6(b) describes the purpose of the alternatives analysis as follows:

> Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

The State CEQA Guidelines suggest that alternatives should be compared to the proposed project's environmental impacts, and that the "no project" alternative be considered (State CEQA Guidelines Section 15126.6[e]). In defining "feasibility" (e.g., "… feasibly attain most of the basic objectives of the project …"). State CEQA Guidelines Section 15126.6(f)(1) states, in part:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a) of the State CEQA Guidelines.

For the purposes of this EIR, the "project," as described in the various CEQA guidance summarized above, is adoption and implementation of *Burbank2035*. Please refer to Chapter 3, "Project Description," for the project objectives.

6.2 ALTERNATIVES EVALUATED

Project alternatives are intended to reduce or eliminate the potentially significant adverse environmental effects of *Burbank2035*, while attempting to meet most of the project objectives. An EIR is required to contain a discussion of a reasonable range of alternatives to the project, or to the location of the project, that could feasibly attain the basic objectives of the project (State CEQA Guidelines Section 15126.6[a]). The comparative merits of the alternatives should also be presented. CEQA also provides the following guidelines for considering alternatives to the project:

- If an alternative would cause one or more significant environmental effects in addition to those that would be caused by the project, the significant effects of the alternatives shall be discussed, but in less detail than the significant effects of the project. (State CEQA Guidelines Section 15126.6[d])

- The "no project" alternative shall be evaluated. If the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. (State CEQA Guidelines Section 15126.6[e])

- The range of alternatives required by an EIR is governed by the "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The key issue is whether the selection and discussion of alternatives fosters informed decision-making and informed public participation. An EIR need not consider an alternative whose effect cannot be ascertained and whose implementation is remote and speculative. (State CEQA Guidelines Section 15126.6[f])

6.2.1 *BURBANK2035* PLANNING ALTERNATIVES

The City considered a range of land use alternatives when formulating *Burbank2035*. The previous public discussion of land use alternatives is distinct from the alternatives analysis presented in this EIR, although there may be overlap with certain concepts presented earlier. Because the purpose of the EIR alternatives is primarily to identify means to reduce or avoid significant environmental effects of the project, the alternatives considered during the public discussion leading to formulation of *Burbank2035* are not considered.

6.2.2 *BURBANK2035* EIR ALTERNATIVES

For this EIR, four alternatives to *Burbank2035* are evaluated:

- Alternative 1: No Project/Existing (1988) Land Use Element
- Alternative 2: Distributed Land Use
- Alternative 3: Golden State Area – Increased Density
- Alternative 4: Centers & Corridors - 2006 Draft Land Use Element

No alternatives were considered and rejected. The four alternatives were identified after publication of the notice of preparation for the project, but before the release of this EIR, at a point in time where many potential impacts of *Burbank2035* were known. Accordingly, each alternative – with the exception of the CEQA-required No Project alternative – was formulated to provide rational and meaningful modifications to proposed land uses that would reduce environmental impacts while still achieving most project objectives. Section 15126.6(a) of the State

CEQA Guidelines allows the City to select alternatives that would result in reduction of *any* significant effects of the project, and does not require reduction of impacts to a less-than-significant level. Project alternatives are not required to reduce specific individual impacts of the proposed project, so long as the City has established a reasonable range of feasible alternatives that address the significant effects of the project.

Each alternative is described briefly below. Table 6-1 summarizes the development potential of each land use alternative, and compares the impacts of each alternative relative to *Burbank2035*. It is important to note that these are not growth projections. That is, they do not anticipate what is likely to occur by a certain time horizon, but rather provide a likely development scenario that would only occur if all portions of the city were to develop to the probable capacities yielded by the land use designations.

ALTERNATIVE 1. NO PROJECT / EXISTING (1988) LAND USE ELEMENT

This alternative is analyzed within this EIR as it is required under CEQA Guidelines Section 15126.6(e). According to Section 15126.6(e)(2) of the CEQA Guidelines, the "no project" analysis shall discuss, " . . . what is reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

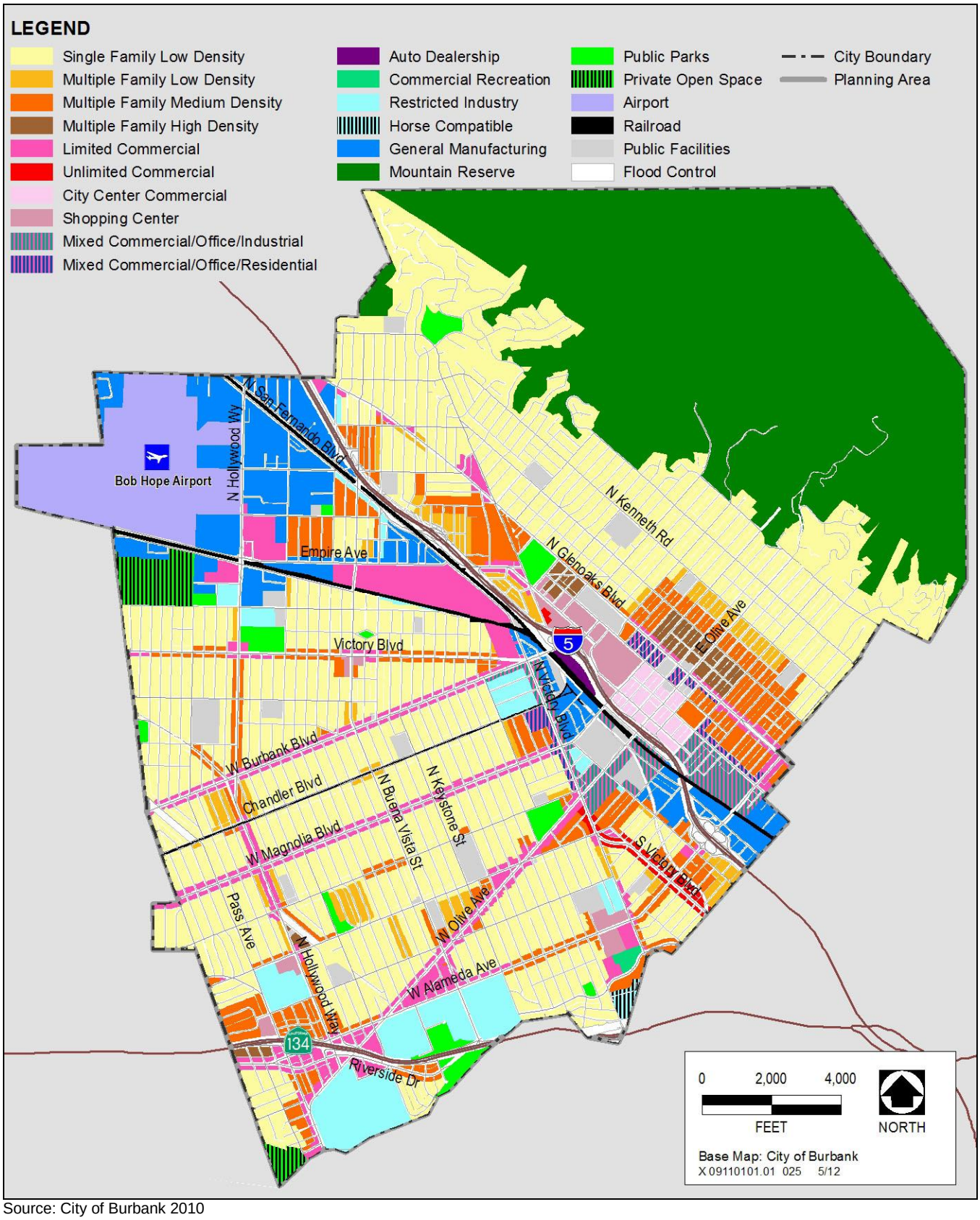
This alternative assumes that *Burbank2035* would not be adopted and implemented. Instead, the City of Burbank would continue to grow and develop consistent with currently allowable land uses according to the existing 1988 Land Use Element (Exhibit 6-1); however, redevelopment patterns would be expected to be similar to *Burbank2035* because the same infill properties would be vacant or available for redevelopment, resulting in increased intensity of development within an identical development footprint as *Burbank2035*. Alternative 1 would allow for 55,707 dwelling units, 58.2 million square feet of nonresidential development, 55.0 million square feet of cumulative office-equivalent development, an estimated population of 123,461, and estimated employment of 143,152. Future development under Alternative 1 would result in approximately 5,488 more dwelling units, approximately 6.2 million more square feet of nonresidential development, 6.8 million square feet of cumulative office-equivalent development, 6,945 more people, and 17,691 more employees than would be allowed under *Burbank2035*.

This alternative would implement the same mobility improvements prescribed under *Burbank2035* and would have the same overall circulation network as *Burbank2035*. The proposed Mobility Element of *Burbank2035* plans for improvements to overburdened intersections throughout the city and promotes reductions in vehicle trips and an increase in biking, walking, and use of mass public transit. As has been done in the past, the City would still update its transportation improvements blueprint and Capital Improvement Program (CIP) based on current available information without adopting a new Mobility Element. The City would pursue the same physical improvements with or without an updated Mobility Element.

Alternative 1 assumes that none of the other proposed *Burbank2035* elements would be adopted and implemented, and that the City would not adopt the GGRP.

Table 6-1
***Burbank2035* Alternatives Development Capacity Comparison**

	Burbank2035	Alternative 1: No Project/Existing (1988) Land Use Element		Alternative 2: Distributed Land Use		Alternative 3: Golden State Area – Increased Density		Alternative 4: Centers & Corridors - 2006 Land Use Element	
	Number	Number	Relative to *Burbank2035*	Number	Relative to *Burbank2035*	Number	Relative to *Burbank2035*	Number	Relative to *Burbank2035*
Dwelling Units	50,219	55,707	+5,488	50,219	+0	50,219	+0	53,846	+3,627
Nonresidential Development (million square feet)	52.0	58.2	+6.2	52.7	+0.7	55.6	+3.6	49.0	-3.0
Cumulative Office-Equivalent Development (million square feet)	48.2	55.0	+6.8	48.9	+0.7	52.7	+4.5	44.5	-3.7
Population	116,516	123,461	+6,945	116,516	+0	116,516	+0	119,155	+2,639
Employment	125,461	143,152	+17,691	125,104	-357	134,533	+9,072	116,589	-8,872



Source: City of Burbank 2010

Exhibit 6-1 **Existing (1988) Land Use Element Map**

ALTERNATIVE 2. DISTRIBUTED LAND USE

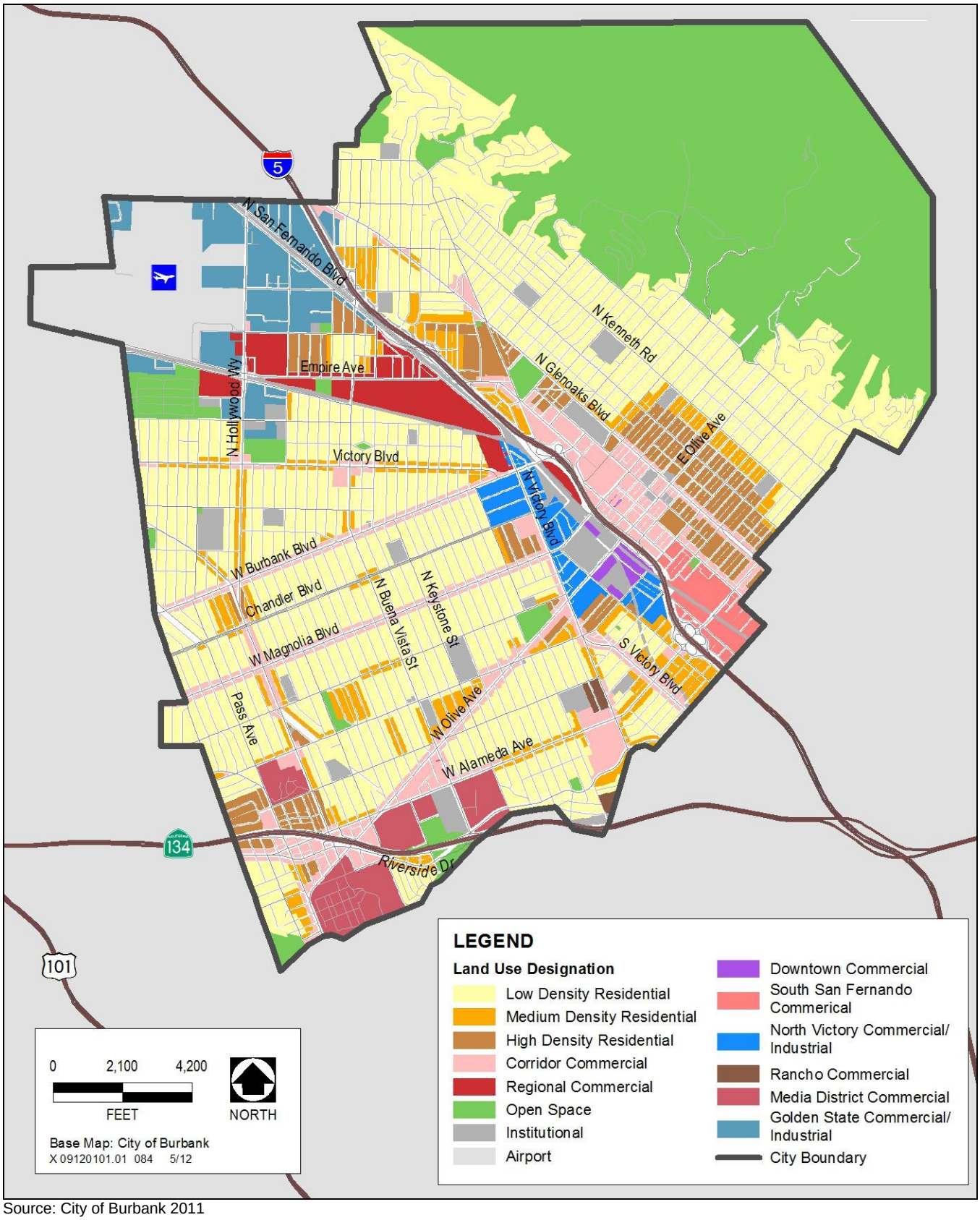
This alternative was selected to demonstrate how additional development could be accommodated in a distributed fashion throughout the City, rather than concentrating new development in key corridors or locations to reduce impacts that are typically associated with concentrated development. This alternative would spread the anticipated increases in non-residential square footage anticipated under *Burbank2035* evenly across the city as a whole, rather than concentrating new growth in Downtown Burbank, the Media District, and the Golden State area. The land use diagram and development footprint for Alternative 2 would be identical to that proposed for *Burbank2035* (see Exhibit 3-3 in Chapter 3, "Project Description"), but non-residential development capacity limits would be placed on the Downtown Burbank, Media District, and Golden State areas to ensure that non-residential growth is spread evenly throughout the city. It should be noted that a proportional growth increase in all parts of the city may not be feasible, as some neighborhoods do not have the ability to grow at the same rates as others.

Alternative 2 would allow for 50,219 dwelling units, 52.7 million square feet of nonresidential development, 48.9 million square feet of cumulative office-equivalent development, an estimated population of 116,516, and estimated employment of 125,104. The same number of dwelling units and population are anticipated under Alternative 2 as are anticipated under *Burbank2035*. However, future development under Alternative 2 would result in approximately 700,000 more square feet of nonresidential development, 700,000 more square feet of cumulative office-equivalent development, and 357 fewer employees than would be allowed under *Burbank2035*.

For the circulation network and improvements, the proposed Mobility Element would be implemented under this alternative. The proposed Mobility Element plans for improvements to overburdened intersections throughout the city and promotes reductions in vehicle trips and an increase in biking, walking, and use of public transit. Alternative 2 assumes all other proposed *Burbank2035* elements and the GGRP would be adopted and implemented.

ALTERNATIVE 3. GOLDEN STATE AREA – INCREASED DENSITY

The Golden State Commercial/Industrial area, located to the south and east of the Bob Hope Airport, has traditionally served as the City's industrial hub. However, in more recent years this area has been developed with a variety of commercial uses complimentary to the airport and media related businesses. In *Burbank2035*, The City seeks to introduce additional commercial uses that serve the airport, protect remaining industrial spaces, and introduce the possibility of niche residential (e.g., lofts, live-work spaces) that are compatible with the industrial character of the area. This alternative would encourage increased density in the Golden State Area relative to the *Burbank2035* land use diagram by changing uses in the Golden State area from the Airport and Golden State designations to Regional Commercial and Corridor Commercial designations, thereby converting industrial land to commercial use (see Exhibit 6-2). Alternative 3 would allow for 50,219 dwelling units, 55.6 million square feet of nonresidential development, 52.7 million square feet of cumulative office-equivalent development, an estimated population of 116,516, and estimated employment of 134,533. The same number of dwelling units and population are anticipated under Alternative 3 as are anticipated under *Burbank2035*. However, future development under Alternative 3 would result in approximately 3.6 million more square feet of nonresidential development, 4.5 million more square feet of cumulative office-equivalent development, and 9,072 more employees than would be allowed under *Burbank2035*.



Source: City of Burbank 2011

Exhibit 6-2 **Alternative 3. Golden State Area – Increased Density**

For the circulation network and improvements, the proposed Mobility Element would be implemented under this alternative. The proposed Mobility Element plans for improvements to overburdened intersections throughout the city and promotes reductions in vehicle trips and an increase in biking, walking, and use of mass public transit. Alternative 3 assumes all other proposed *Burbank2035* elements and the GGRP would be adopted and implemented.

ALTERNATIVE 4. CENTERS & CORRIDORS – 2006 DRAFT LAND USE ELEMENT

Alternative 4 corresponds to the Draft Land Use Element prepared by City staff in 2006. This alternative is designed to concentrate commercial development in downtown Burbank and in designated neighborhood centers throughout the city, with more limited growth occurring in the Golden State area and Media District relative to *Burbank2035* (see Exhibit 6-3), to reduce impacts typically associated with geographic concentration of development in specific areas. In addition, this alternative assumes greater redevelopment of commercial uses to residential uses along key transportation corridors throughout the city.

Alternative 4 would allow for 53,846 dwelling units, 49.0 million square feet of nonresidential development, and an estimated population of 119,155. Future development under Alternative 4 would result in approximately 3,627 more dwelling units, 3.0 million less square feet of nonresidential development, 3.7 million less square feet of cumulative office-equivalent development, 2,639 more people and 8,872 fewer employees than would be allowed under *Burbank2035*.

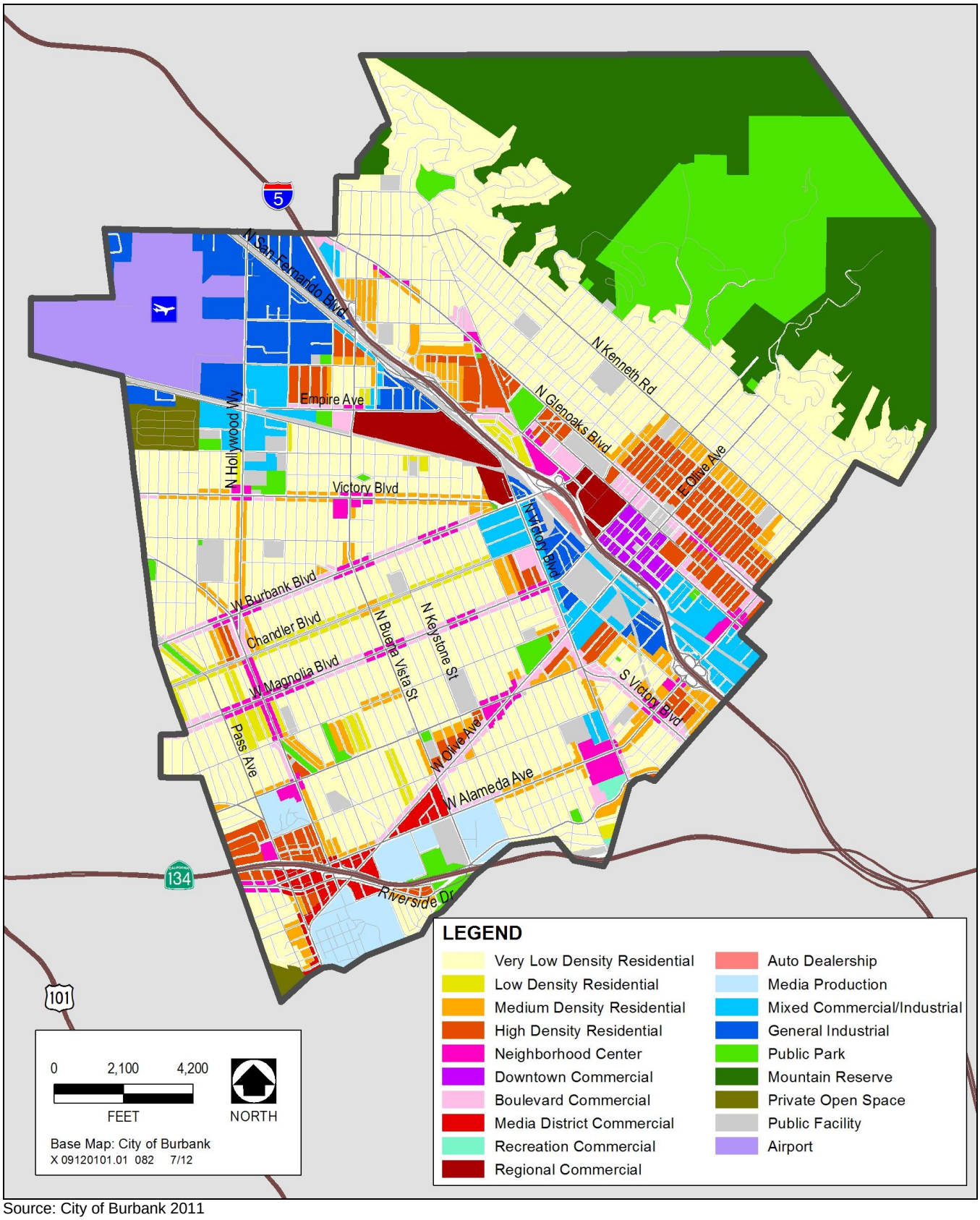
For the circulation network and improvements, the proposed Mobility Element would be implemented under this alternative. The proposed Mobility Element plans for improvements to overburdened intersections throughout the city and promotes reductions in vehicle trips and an increase in biking, walking, and use of public transit. Alternative 4 assumes all other proposed *Burbank2035* elements and the GGRP would be adopted and implemented.

6.3 COMPARISON OF THE ALTERNATIVES

In the following discussion, the impacts of *Burbank2035* for each environmental topic area considered in this EIR are summarized. This summary is followed by a description of how impacts for each alternative would differ from *Burbank2035*, including whether any significant impacts would be reduced or avoided, and whether any new significant impacts would result. Table 6-2 summarizes the impact comparison.

6.3.1 AESTHETICS

Impacts of *Burbank2035* related to adverse effects on scenic vistas, degradation of existing visual character, creation of shadows, and creation of new sources of light or glare that would adversely affect nighttime views are less than significant. No designated scenic highways are located in the planning area, so there is no impact to scenic highways. *Burbank2035* would result in new urban development that would substantially alter views, the visual character, and add new sources of shadow, light and glare within the planning area. However, *Burbank2035* policies and programs applicable to new development would reduce these impacts to a less-than-significant level.



Source: City of Burbank 2011

Exhibit 6-3 **Alternative 4. Centers & Corridors – 2006 Draft Land Use Element**

ALTERNATIVE 1

Alternative 1 would generally have similar effects on degradation of existing visual character, creation of shadows, and creation of new sources of light or glare to *Burbank2035*. The existing General Plan has similar policies related to preservation of aesthetic resources, especially the Verdugo Mountains; however, the existing General Plan does not identify specific scenic vistas associated with the Verdugo Mountains and Santa Monica Mountains. In the absence of these specified vistas, impacts to scenic vistas would be greater under Alternative 1 than with implementation of *Burbank2035*, and this would potentially be a new significant impact. ***[Greater.]***

ALTERNATIVES 2, 3, AND 4

Alternatives 2, 3, and 4 would have substantially the same development footprint and include the same policies and programs as *Burbank2035*. Therefore, aesthetics impacts would be similar under these alternatives. ***[Similar.]***

6.3.2 AGRICULTURAL AND FOREST RESOURCES

Implementation of *Burbank2035* would not result in the direct or indirect conversion of Important Farmland or forest land, nor would it conflict with an existing Williamson Act contract. Therefore, implementation of *Burbank2035* would have no impact on agricultural resources or forest land.

ALTERNATIVES 1, 2, 3, 4

Because the planning area contains no Important Farmland, forest land, or land under Williamson Act contracts, implementation of any of the project alternatives would have no impact on agricultural resources or forest land, similar to the proposed project. ***[Similar.]***

6.3.3 AIR QUALITY

Impacts of *Burbank2035* related to consistency with air quality plans, CO_2 hotspots, toxic air contaminants, and odors are less than significant. *Burbank2035* would result in potentially significant impacts related to short-term construction emissions, long term operational emissions, and toxic air contaminants; these impacts would remain significant and unavoidable even after implementation of *Burbank2035* policies, programs, and all feasible mitigation.

ALTERNATIVES 1, 2

Because of the greater number of new residential units and larger amount of nonresidential development in Alternatives 1 and 2, these alternatives would result in greater impacts related construction and operational air quality emissions and toxic air contaminants compared to the proposed project. Similarly, impacts related to consistency with air quality plans, CO_2 hotspots, and odors would all be greater under these alternatives because of the greater amount of additional development. ***[Greater.]***

ALTERNATIVE 3

Because of the larger amount of nonresidential development in Alternative 3, this alternative would result in greater impacts related to construction and operational air quality emissions and toxic air contaminants compared to the proposed project. Similarly, impacts related to consistency with air quality plans, CO_2 hotspots, and odors

would all be greater under this alternative because of the greater amount of additional nonresidential development. ***[Greater.]***

ALTERNATIVE 4

This alternative would have more residential units than the proposed project, but substantially less new non-residential and office-equivalent development, resulting in substantially lower employment. This alternative would result in lesser impacts related to construction and operational air quality emissions and toxic air contaminants compared to the proposed project. Similarly, impacts related to consistency with air quality plans, CO_2 hotspots, and odors would all be less under this alternative because of the lower amount of additional nonresidential development. ***[Lesser.]***

6.3.4 GREENHOUSE GAS EMISSIONS

Impacts of *Burbank2035* related to short-term GHG emissions during construction are potentially significant, but would be reduced to a less-than-significant level with mitigation. *Burbank2035* would result in less-than-significant impacts related to long term operational GHG emissions with implementation of *Burbank2035* policies and programs and GGRP measures and actions. *Burbank2035* would also have less-than-significant impacts related to consistency with applicable GHG reduction plans.

ALTERNATIVE 1

Alternative 1 would not include the GGRP or the policies and programs to reduce GHG emissions that are included in *Burbank2035*, resulting in greater impacts related to consistency with GHG reduction plans. This alternative would also have a greater number of new residential units and a larger amount of nonresidential development, and would therefore result in greater construction and operational GHG emissions impacts compared to the proposed project. ***[Greater.]***

ALTERNATIVE 2

Because of the larger amount of nonresidential development in Alternative 2, this alternative would result in greater construction GHG emissions impacts compared to the proposed project. Operational GHG emissions impacts would be similar; although there would be relatively fewer employees in this alternative, the larger square footage of nonresidential uses would result in higher emissions per service population. Impacts related to consistency with GHG reduction plans would be similar under this alternative. ***[Greater.]***

ALTERNATIVE 3

Because of the larger amount of nonresidential development in Alternative 3, this alternative would result in greater construction and operational GHG emissions impacts compared to the proposed project. Impacts related to consistency with GHG reduction plans would be similar under this alternative. ***[Greater.]***

ALTERNATIVE 4

This alternative would have more residential units than the proposed project, but substantially less new non-residential and office-equivalent development, resulting in substantially lower employment. This alternative

would result in lesser construction and operational GHG emissions impacts compared to the proposed project. Impacts related to consistency with GHG reduction plans would be similar under this alternative. ***[Lesser.]***

6.3.5 BIOLOGICAL RESOURCES

Impacts of *Burbank2035* related to special status species, sensitive natural communities, wetlands, and wildlife movement would be less than significant. The majority of the planning area is urbanized, and areas of habitat and natural vegetation are generally focused in the Verdugo Mountains, where no change in the developed footprint is planned.

ALTERNATIVE 1

Although the existing General Plan lacks some of the specific policies and programs requiring consideration of biological resources in development decisions, the existing General Plan does not envision development or changes to existing open space areas in the Verdugo Mountains which would potentially affect biological resources. Therefore, biological resources impacts would be similar. ***[Similar.]***

ALTERNATIVES 2, 3, AND 4

Although the distribution of land uses would vary, Alternatives 2, 3, and 4 would include the same overall development footprint, policies and programs as *Burbank2035*. Therefore, impacts to biological resources in these alternatives would be similar. ***[Similar.]***

6.3.6 CULTURAL RESOURCES

Impacts of *Burbank2035* related to changes in a significance of historical or unique archaeological resources would be potentially significant, and would remain significant and unavoidable even after implementing all feasible mitigation. Impacts related to disturbing human remains would be less than significant. Paleontological resource impacts would be potentially significant, but reduced to a less-than-significant level after mitigation.

ALTERNATIVE 1

Alternative 1 would potentially result in ground disturbing activities within the same footprint (the planning area) as the proposed project, resulting in similar impacts to unique archaeological resources, disturbance of human remains, and paleontological resources. This alternative would also have a greater number of new residential units and a larger amount of nonresidential development, thereby resulting in potentially greater impacts to changes in significance of historical resources compared to the proposed project. ***[Greater.]***

ALTERNATIVE 2

Alternative 2 would potentially result in ground disturbing activities within the same footprint (the planning area) as the proposed project, resulting in similar impacts related to unique archaeological resources, disturbance of human remains, and paleontological resources. This alternative would spread new non-residential development throughout the planning area, rather than focusing these changes in Downtown Burbank, the Media District, and the Golden State area, thereby resulting in potentially greater impacts to changes in significance of historical resources compared to the proposed project. ***[Greater.]***

ALTERNATIVE 3

Alternative 3 would potentially result in ground disturbing activities within the same footprint (the planning area) as the proposed project, resulting in similar impacts related to unique archaeological resources, disturbance of human remains, and paleontological resources. This alternative would increase non-residential development in the Golden State area relative to the proposed project, thereby resulting in potentially greater impacts related to changes in significance of historical resources. ***[Greater.]***

ALTERNATIVE 4

Alternative 4 would potentially result in ground disturbing activities within the same footprint (the planning area) as the proposed project, resulting in similar impacts related to unique archaeological resources, disturbance of human remains, and paleontological resources. This alternative would feature more potential land use change in residential areas relative to the proposed project, but substantially fewer potential land use changes in non-residential areas relative to the proposed project, resulting in potentially lesser impacts to changes in significance of historical resources. ***[Lesser.]***

6.3.7 ENERGY

Burbank2035 would have less than significant impacts related to wasteful, inefficient, and unnecessary consumption of energy; siting, orientation, and design that does not provide an opportunity to minimize energy consumption; features that would increase peak energy demand; providing for alternative fuels or energy systems; and providing for recycling of non-renewable resources.

ALTERNATIVE 1

Alternative 1 lacks *Burbank2035* policies and programs and GGRP measures and actions that would reduce operational energy consumption, encourage energy efficient siting and design, reduce peak energy demand, provide for alternative fuels, and provide for recycling of non-renewable resources. Alternative 1 would also have more new dwelling units and non-residential development that would demand additional energy relative to the proposed project. These impacts would therefore be greater under Alternative 1 than for the proposed project. ***[Greater.]***

ALTERNATIVES 2, 3

Alternatives 2 and 3 would have the same *Burbank2035* policies and programs and GGRP measures and actions to reduce operational energy consumption, encourage energy efficient siting and design, reduce peak energy demand, provide for alternative fuels, and provide for recycling of non-renewable resources. These alternatives would have more non-residential development that would demand additional energy relative to the proposed project. These impacts would therefore be greater under Alternative 2 or 3 than for the proposed project. ***[Greater.]***

ALTERNATIVE 4

Alternative 4 would have the same *Burbank2035* policies and programs and GGRP measures and actions to reduce operational energy consumption, encourage energy efficient siting and design, reduce peak energy

demand, provide for alternative fuels, and provide for recycling of non-renewable resources. Alternative 4 would feature less non-residential development than the proposed project, resulting in lower overall energy use. These impacts would therefore be lesser under Alternative 4 than for the proposed project. ***[Lesser.]***

6.3.8 GEOLOGY AND SOILS

Implementation of *Burbank2035*, including future land uses consistent with the Land Use Diagram, would provide for construction of new uses in areas potentially subject to fault rupture, seismic ground shaking, soil liquefaction and ground failure, and earthquake induced landslides. New land uses would also potentially be exposed to erosion hazards, and expansive and collapsible soils. However, implementation of *Burbank2035* policies and programs requires enforcement of regulations, programs, and building code requirements. All geology and soils impacts of *Burbank2035* would be less than significant.

ALTERNATIVE 1

Alternative 1 would increase the density and intensity of development in the planning area, thereby increasing the number of people and structures subject to potential geological hazards. The same regulations and building code requirements would work to reduce geology and soils impacts. Impacts to geology and soils would be greater than under *Burbank2035*, but there would be no new significant impacts. ***[Greater.]***

ALTERNATIVE 2

Alternative 2 would have a similar number of new residents as *Burbank2035*, and a slightly lower number of new jobs in a slightly larger square footage of job-generating land uses. The number of people and structures subject to geologic and soils hazards would be similar to *Burbank2035*, and the same regulations and building code requirements would work to reduce geology and soils impacts. Impacts to geology and soils would be similar under Alternative 2. ***[Similar.]***

ALTERNATIVE 3

Alternative 3 would have a similar number of new residents as *Burbank2035*, and a larger number of new jobs. The number of people and structures subject to geologic and soils hazards would be greater than under *Burbank2035*. Although the same regulations and building code requirements would work to reduce geology and soils impacts, the increased population and employment under Alternative 3 would expose more people to geologic risks than under *Burbank2035*. Therefore, impacts to geology and soils would be greater under Alternative 3. ***[Greater.]***

ALTERNATIVE 4

Alternative 4 would have a greater number of new residents as *Burbank2035*, and a similar number of new jobs. The number of people and structures subject to geologic and soils hazards would be greater than *Burbank2035*. Although the same regulations and building code requirements would work to reduce geology and soils impacts, the increased population under Alternative 3 would expose more people to geologic risks than under *Burbank2035*. Therefore, impacts to geology and soils would be greater under Alternative 4. ***[Greater.]***

6.3.9 HAZARDS AND HAZARDOUS MATERIALS

Implementation of *Burbank2035* would result in increased routine use, transport, and disposal of hazardous materials, including the potential for hazardous materials handling near schools and development on Cortese-listed sites. Construction of residential, commercial, and industrial land uses resulting from implementation of *Burbank2035* would place people in proximity to Bob Hope Airport. Implementation of the Land Use Diagram would also place people and structures in wildfire hazard zones. However, compliance with existing hazardous materials regulations and *Burbank2035* policies and programs would result in less-than-significant hazards and hazardous materials impacts.

ALTERNATIVE 1

Alternative 1 would increase the density and intensity of development in the planning area, thereby increasing the volume of material used and transported, as well as the number of people subject to potential hazards through routine use and transport as well as potential upset or accidental conditions. The same existing hazardous materials regulations and *Burbank2035* policies and programs would work to reduce hazards and hazardous materials impacts. More people would be exposed to safety hazards from Bob Hope Airport than under *Burbank2035*. Impacts to hazards and hazardous materials impacts would be greater than under *Burbank2035*, but there would be no new significant impacts. ***[Greater.]***

ALTERNATIVE 2

Alternative 2 would have a similar number of new residents as *Burbank2035*, resulting in a similar number of people subject to potential hazards when compared to *Burbank2035*. Alternative 2 would distribute the intensity of nonresidential development throughout the planning area, reducing the proportion of nonresidential growth in the Golden State area and thereby potentially reducing conflicts with Bob Hope Airport. The same existing hazardous materials regulations and *Burbank2035* policies and programs would work to reduce hazards and hazardous materials impacts. Impacts to hazards and hazardous materials impacts would be less than under *Burbank2035*. ***[Lesser.]***

ALTERNATIVE 3

Alternative 3 would have a similar number of new residents as *Burbank2035*, and a larger area of nonresidential uses, thereby increasing the potential hazards material use and transport. Alternative 3 would also increase intensity of development in the Golden State area, thereby potentially increasing conflicts with Bob Hope Airport. The same existing hazardous materials regulations and *Burbank2035* policies and programs would work to reduce hazards and hazardous materials impacts. Impacts to hazards and hazardous materials impacts would be greater than under *Burbank2035*, but there would be no new significant impacts. ***[Greater.]***

ALTERNATIVE 4

Alternative 4 would increase the number of new residents in the planning area, but less employment and nonresidential development compared to *Burbank2035*. Because there would be less nonresidential development, including less commercial and industrial development, a smaller volume of hazardous materials could be used and transported. The same existing hazardous materials regulations and *Burbank2035* policies and programs would

work to reduce hazards and hazardous materials impacts. Impacts to hazards and hazardous materials impacts would be similar to those of *Burbank2035*. ***[Lesser.]***

6.3.10 HYDROLOGY AND WATER QUALITY

Development under *Burbank2035* would result in infill development and a slight increase in impervious surfaces in a largely built-out environment. Development in the Verdugo Mountains would not occur and would not result in increased erosion. Development under *Burbank2035* would not significantly affect water quality or flooding potential and hazards. Implementation of *Burbank2035* policies and programs and compliance with existing regulations would result in less-than-significant impacts to water quality, groundwater recharge, stormwater drainage patterns related to erosion and flooding, stormwater capacity, flood hazards, and hazards related to inundation from seiche or mudflow.

ALTERNATIVE 1

Compliance with the existing plan and enforcement of existing regulations would result in similar water quality and flood hazard impacts, including impacts related to flooding, and seiche or mudflow. Alternative 1 includes a similar development footprint, resulting in similar impacts related to stormwater flows (including erosion and flooding) and groundwater recharge. Therefore, Alternative 1 would have similar impacts related to hydrology and water quality. ***[Similar.]***

ALTERNATIVES 2, 3, AND 4

Alternatives 2, 3, and 4 would include the same Burbank2035 policies and programs concerning water quality, groundwater recharge, flooding prevention, and stormwater capacity. These alternatives would have the same development footprint as Burbank2035. Therefore, Alternatives 2, 3, and 4 would have similar impacts related to hydrology and water quality. ***[Similar.]***

6.3.11 LAND USE AND PLANNING

Implementation of Draft General Plan policies and programs would result in less-than-significant impacts related to division of existing communities and conflicts with other plans.

ALTERNATIVE 1

Implementation of the existing General Plan would not divide existing communities. The existing General Plan is generally consistent with the 2008 RTP, ALUP, and air quality plans. Although the existing General Plan's policies and programs meet many of the goals of the SCAG Compass Blueprint, the existing General Plan does not contain the same emphasis on mixed-use development as *Burbank2035*. As a result, this alternative would therefore have a greater impact related to consistency with other plans. ***[Greater.]***

ALTERNATIVES 2 AND 3

Alternatives 2 and 3 each propose adjustments to the type and intensity of non-residential land uses and would not divide existing communities. These alternatives would include the same policies and programs as *Burbank2035* and therefore have similar compatibility with other plans. Therefore, land use impacts would be similar. ***[Similar.]***

ALTERNATIVE 4

Alternative 4 proposes adjustments to the type and intensity of land uses along corridors and at commercial centers. Because of the intensity of nonresidential land uses that could be permitted along commercial corridors within neighborhoods, this alternative would have some potential to divide existing communities. This alternative would include the same policies and programs as *Burbank2035* and therefore have similar compatibility with other plans. Because of the potential to divide existing communities, land use impacts would be greater under this alternative. ***[Greater.]***

6.3.12 MINERAL RESOURCES

For a large portion of the planning area, data shows mineral resources may be present. This area extends from the Bob Hope Airport in the north toward the southeastern border of the city. No mining has historically occurred in this area, and conservation of aggregate resources in the city is no longer feasible because the area is urbanized. Therefore, implementation of *Burbank2035* would have no impact on mineral resources. Similarly, none of the four alternatives would affect mineral resources because these resources can no longer be feasibly extracted. ***[Similar.]***

6.3.13 NOISE

Burbank2035 would have significant and unavoidable impacts related to construction noise, traffic noise, rail noise, aircraft noise, construction vibration, and vibration associated with operation of new land uses, even after implementation of *Burbank2035* policies and programs to reduce noise levels. Impacts by stationary sources would be less-than-significant.

ALTERNATIVE 1

Alternative 1 would provide more residential units, and a larger area of new non-residential uses than *Burbank2035*, increasing construction noise and vibration impacts and impacts related to stationary and area source noise. Alternative 1 would likely result in higher traffic volumes at some locations in the planning area based on the increased density and intensity of development, likely resulting in greater traffic noise impacts. Therefore, this alternative would generally increase noise impacts compared to the proposed project. ***[Greater.]***

ALTERNATIVE 2

Alternative 2 would have a slightly smaller amount of new non-residential square footage than *Burbank2035*, marginally reducing construction noise and vibration impacts on sensitive residential receptors, although impacts related to stationary and area source noise could increase slightly because these uses would be distributed throughout the city, including in closer proximity to sensitive residential uses. Alternative 2 would likely result in lower traffic volumes at some locations in the planning area based on the increased distribution of development. Therefore, this alternative would generally reduce noise impacts compared to the proposed project. ***[Lesser.]***

ALTERNATIVE 3

Alternative 3 would have a larger amount of new non-residential square footage than *Burbank2035*, potentially increasing construction noise and vibration impacts to sensitive residential receptors, along with stationary and

area source noise. Alternative 3 would likely result in slightly higher traffic volumes at some locations in the planning area based on the increased amount of development, potentially increasing traffic noise at some locations. Therefore, this alternative would generally increase noise impacts compared to the proposed project. ***[Greater.]***

ALTERNATIVE 4

Alternative 4 would have more new residents but a smaller amount of new non-residential square footage than *Burbank2035*, resulting in similar construction noise and vibration impacts, but potentially increasing stationary and area source noise impacts because more sensitive residential uses would be in proximity to non-residential, noise-generating uses. Alternative 4 would likely result in slightly higher traffic volumes at some locations in the planning area based on the increased amount of development, potentially increasing traffic noise at some locations, though other areas might see smaller increases than would occur under *Burbank2035*. Therefore, this alternative would generally increase noise impacts compared to *Burbank2035*. ***[Greater.]***

6.3.14 POPULATION, EMPLOYMENT, AND HOUSING

Implementation of *Burbank2035* would have a significant and unavoidable impact related to inducement of population growth, and less-than-significant impacts related to displacement of people or housing.

ALTERNATIVE 1

The existing General Plan provides for a larger increase in population and employment (6,945 more people and 17,691 more new jobs) than *Burbank2035*, and therefore, a greater growth inducement impact. This alternative would have similar impacts related to displacement of people or housing. ***[Greater.]***

ALTERNATIVE 2

Alternative 2 would provide for the same increase in population and a slightly smaller increase in employment (357 fewer new jobs) than *Burbank2035*, resulting in a slightly smaller growth inducement impact. This alternative would have similar impacts related to displacement of people or housing. ***[Lesser.]***

ALTERNATIVE 3

Alternative 3 would provide for the same increase in population and a larger increase in employment (9,072 more new jobs) than *Burbank2035*, resulting in a greater growth inducement impact. This alternative would have similar impacts related to displacement of people or housing. ***[Greater.]***

ALTERNATIVE 4

Alternative 4 would provide for a larger increase in population and a smaller increase in employment (2,639 more people and 8,872 fewer new jobs) than *Burbank2035*, resulting in a greater direct growth inducement impact. This alternative would have similar impacts related to displacement of people or housing. ***[Greater.]***

6.3.15 PUBLIC SERVICES AND UTILITIES

Burbank2035 would have less-than-significant impacts related to provision of public safety, fire, school, park, library, wastewater conveyance and treatment, stormwater drainage, and solid waste generation facilities and services. Because of uncertainties associated with statewide water supply conditions in California, water supply impacts would be significant and unavoidable.

ALTERNATIVE 1

Similar to *Burbank2035*, the existing General Plan establishes policies and performance standards related to the provision of public facilities. With implementation of the existing General Plan and regulations, public facilities and utilities improvements necessary to support the planned level of development would be made. Because of the larger population and employment growth in Alternative 1 compared to *Burbank2035*, public services and utilities impacts would be greater. ***[Greater.]***

ALTERNATIVE 2

Alternative 2 would include the same policies and performance standards for provision of public facilities as *Burbank2035*, requiring that public facilities and utilities improvements necessary to support the planned level of development be made. Because of the slightly reduced employment growth in Alternative 2 compared to *Burbank2035*, public services and utilities impacts would be less. ***[Lesser.]***

ALTERNATIVE 3

Alternative 3 would include the same policies and performance standards for provision of public facilities as *Burbank2035*, requiring that public facilities and utilities improvements necessary to support the planned level of development be made. Because this alternative would replace some industrial and manufacturing uses with less water-intensive commercial uses, this alternative could reduce water supply impacts compared to *Burbank2035*. Because of the increased employment growth in Alternative 3 compared to the proposed project, public services and utilities impacts would generally be greater. ***[Greater.]***

ALTERNATIVE 4

Alternative 4 would include the same policies and performance standards for provision of public facilities as *Burbank2035*, requiring that public facilities and utilities improvements necessary to support the planned level of development be made. Although population growth would be greater under Alternative 3 compared to *Burbank2035*, employment growth would be less, and overall public services and utilities impacts would be less. ***[Lesser.]***

6.3.16 TRAFFIC AND TRANSPORTATION

Burbank2035 would have significant impacts related to the City's LOS D performance standard at 16 out of 35 signalized intersections, with significant and unavoidable impacts at seven (7) intersections. Five (5) intersections would have LOS F conditions during peak hour conditions. Impacts related to conflict with the congestion management program; air traffic patterns; design hazards; emergency access; and public transit, bicycle, and pedestrian facilities would all be less than significant.

ALTERNATIVE 1

As described in Appendix F, "*Burbank2035* Traffic Study," Alternative 1 would have significant impacts related to the City's LOS D performance standard at 19 out of 35 signalized intersections, a greater impact than the 16 impacted intersections under the proposed project. Nine (9) intersections would have LOS F conditions during peak hour conditions, compared to five (5) under the proposed project. Impacts related to conflicts with the congestion management program; air traffic patterns; design hazards; emergency access; and public transit, bicycle, and pedestrian facilities would be similar to those of the proposed project. ***[Greater.]***

ALTERNATIVE 2

As described in Appendix F, "*Burbank2035* Traffic Study,*"* Alternative 2 would have significant impacts related the City's LOS D performance standard at 18 out of 35 signalized intersections, a greater impact than the 16 impacted intersections under the proposed project. Six (6) intersections would have LOS F conditions during peak hour conditions, compared to five (5) for the proposed project. Impacts related to conflicts with the congestion management program; air traffic patterns; design hazards; emergency access; and public transit, bicycle, and pedestrian facilities would be similar to those of the proposed project. ***[Greater.]***

ALTERNATIVE 3

As described in Appendix F, "*Burbank2035* Traffic Study,*"* Alternative 3 would have significant impacts related the City's LOS D performance standard at 17 out of 35 signalized intersections, a greater impact than the 16 impacted intersections under the proposed project. Eight (8) intersections would have LOS F conditions during peak hour conditions, compared to five (5) for the proposed project. Impacts related to conflicts with the congestion management program; air traffic patterns; design hazards; emergency access; and public transit, bicycle, and pedestrian facilities would be similar to those of the proposed project. ***[Greater.]***

ALTERNATIVE 4

As described in Appendix F, "*Burbank2035* Traffic Study,*"* Alternative 4 would have significant impacts related the LOS D performance standard at 18 out of 35 signalized intersections, a greater impact than the 16 impacted intersections under the proposed project. Three (3) intersections would have LOS F conditions during peak hour conditions, compared to five (5) for the proposed project. Impacts related to conflicts with the congestion management program; air traffic patterns; design hazards; emergency access; and public transit, bicycle, and pedestrian facilities would be similar to those of the proposed project. ***[Greater.]***

6.4 SUMMARY OF COMPARATIVE EFFECTS OF THE ALTERNATIVES

Table 6-2 compares the environmental impacts of the alternatives to the environmental impacts of *Burbank2035*.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In addition to the discussion and comparison of impacts of the alternatives to *Burbank2035*, CEQA requires that an "environmentally superior" alternative among the alternatives considered be selected and that the reasons for such selection be disclosed. In general, the environmentally superior alternative represents the alternative that would generate the fewest or least severe adverse impacts.

Table 6-2 Comparison of Environmental Impacts of Alternatives to *Burbank2035*					
Environmental Topic	***Burbank2035***	**Alternative 1. No Project/ Existing General Plan**	**Alternative 2. Distributed Land Use**	**Alternative 3. Golden State Increased Density**	**Alternative 4. Centers and Corridors**
Aesthetics	LS	Greater	Similar	Similar	Similar
Agricultural and Forest Resources	NI	Similar	Similar	Similar	Similar
Air Quality	SU	Greater	Greater	Greater	Lesser
Greenhouse Gas Emissions	LS	Greater	Greater	Greater	Lesser
Biological Resources	LS	Similar	Similar	Similar	Similar
Cultural Resources	SU	Greater	Greater	Greater	Lesser
Energy	LS	Greater	Greater	Greater	Lesser
Geology and Soils	LS	Greater	Similar	Greater	Greater
Hazards and Hazardous Materials	LS	Greater	Lesser	Greater	Lesser
Hydrology and Water Quality	LS	Similar	Similar	Similar	Similar
Land Use and Planning	LS	Greater	Similar	Similar	Greater
Mineral Resources	NI	Similar	Similar	Similar	Similar
Noise	SU	Greater	Lesser	Greater	Greater
Population, Employment and Housing	SU	Greater	Lesser	Greater	Greater
Public Services and Utilities	SU	Greater	Lesser	Greater	Lesser
Traffic and Transportation	SU	Greater	Greater	Greater	Greater

SU = Significant and Unavoidable – if any impact was identified as significant and unavoidable in the technical analysis.
LS = Less than Significant – if all impacts were identified as less than significant in the technical analysis.
NI = No impacts were identified in the technical analysis.
Similar = Level of significance is similar to *Burbank2035*.
Greater = Level of significance is greater than *Burbank2035*.
Lesser = Level of significance is less than *Burbank2035*, but the impact is not necessarily reduced to a less-than-significant level.
Source: AECOM 2012

For the purposes of this EIR, Alternative 4 is considered the environmentally superior alternative. This alternative would reduce impacts in the greatest number of environmental resource areas compared to *Burbank2035*. Alternative 1 is the no project alternative and must be analyzed, despite the potential for greater impacts than *Burbank2035*. Although Alternatives 2 and 3 were each designed to reduce one or more of the significant and unavoidable impacts of the proposed plan, the overall impacts of these alternatives would each be greater compared to *Burbank2035*.

6.6 COMPARISON OF ALTERNATIVES AND PROJECT OBJECTIVES

The project objectives, for the purposes of this EIR, are contained in Chapter 3, "Project Description." Each of the alternatives could fulfill most project objectives.

The proposed project (*Burbank2035*) and Alternative 4 fulfill all project objectives, although Alternative 4 would place a substantial amount of residential units in primarily commercial areas, compared to the proposed project. The inclusion of substantial amounts of housing in primarily commercial areas could dilute commercial property values thereby less effectively supporting the retail and commercial base vital to Burbank's economy, as measured against the economic vitality objective. While both *Burbank2035* and Alternative 4 would place residential units within commercial areas, *Burbank2035* would do so to a lesser extent and would better meet the economic vitality objective.

Alternative 1 would not meet the balanced development or complete streets objectives, as a larger amount of both residential and job-generating development would increase traffic pressure and could affect the small-town character of Burbank.

Alternative 2 would not meet the balanced development or economic vitality objectives. Because all areas of the city do not necessarily have the capacity to intensify similarly, balanced growth and economic expansion would be hindered compared to *Burbank2035*.

Alternative 3 would not meet the economic vitality objective. Changes in the development pattern in the Golden State area would not maximize the unique advantages of the proximity to airport, highway, and rail transportation, or the existing mix of job-generating operations.

7 REFERENCES

Chapter 1, "Introduction"

No references are cited.

Chapter 2, "Executive Summary"

No references are cited.

Chapter 3, "Project Description"

City of Burbank. 2008. *2008 – 2014 Housing Element*. Adopted October 21, 2008. City Council Resolution No. 27298.

Chapter 4.1, "Aesthetics"

No references are cited.

Chapter 4.2, "Agricultural Resources"

No references are cited.

Chapter 4.3, "Air Quality"

ARB. *See* California Air Resources Board.

California Air Resources Board. 2005 (March). *Air Quality and Land Use Handbook: A Community Health Perspective*. Sacramento, CA. Available: http://arb.ca.gov/ch/handbook.pdf. Accessed April 2010.

EPA. *See* U.S. Environmental Protection Agency.

Fehr & Peers. 2012 (April). Draft Transportation Analysis Report: Burbank2035 General Plan. Santa Monica, CA.

SCAQMD. *See* South Coast Air Quality Management District.

South Coast Air Quality Management District (SCAQMD). 1976 (May). Rule 402 Nuisance. Available: http://aqmd.gov/rules/reg/reg04/r402.pdf. Accessed March 27, 2012

———. 2007 (June). Final 2007 Air Quality Management Plan: Executive Summary. Available: http://aqmd.gov/aqmp/07aqmp/aqmp/Executive_Summary.pdf. Accessed May 31, 2012.

———. 2011 (March). SCAQMD Air Quality Significance Thresholds.

U.S. Environmental Protection Agency. 2010c. Envirofacts Warehouse (Burbank Query for SIC Codes beginning with "49"). Available: http://www.epa.gov/enviro/html/fii/fii_query_java.html. Accessed April 2010.

Chapter 4.4, "Greenhouse Gas Emissions"

BAAQMD. *See* Bay Area Air Quality Management District.

Bay Area Air Quality Management District. 2010 (May). *California Environmental Quality Act Air Quality Guidelines*. Available: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/Draft_BAAQMD_CEQA_Guidelines_May_2010_Final.ashx?la=en

California Department of Water Resources. 2006 (July). *Progress on Incorporating Climate Change into Management of California's Water Resources*. Technical Memorandum Report.

California Energy Commission. 2006a (July). *Our Changing Climate: Assessing the Risks to California*. Publication CEC-500-2006-077. Available: http://www.energy.ca.gov/2006publications/CEC-500-2006-077/CEC-500-2006-077.PDF. Accessed May 2010.

CEC. *See* California Energy Commission.

DWR. *See* California Department of Water Resources.

Intergovernmental Panel on Climate Change. 2007 (February). *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC.* Geneva, Switzerland. Available: http://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html. Accessed May 2010.

IPCC. *See* Intergovernmental Panel on Climate Change.

Kiparsky and Gleick. 2005. *Climate Change and California Water Resources: A Survey and Summary of the Literature*. California Energy Commission, PEIR Energy-Related Research.

SCAQMD. *See* South Coast Air Quality Management District.

South Coast Air Quality Management District. 2005 (May). Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning: A Reference for Local Governments Within the South Coast Air Quality Management District. Available: http://www.aqmd.gov/prdas/aqguide/doc/aq_guidance.pdf. Accessed April 2010.

———. 2009 (November 19). *Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group #14*. Diamond Bar, CA. Available: http://www.aqmd.gov/ceqa/handbook/GHG/2009/nov19mtg/ghgmtg14.pdf. Accessed March 2010

Chapter 4.5, "Biological Resources"

No references are cited.

Chapter 4.6, "Cultural Resources"

Galvin Preservation Associates. 2009. *City of Burbank, Citywide Historic Context Report.* Prepared for City of Burbank Planning Division. Burbank, CA.

Lander. 2000. Lander, E.B. 2000. *Los Angeles Metro Red Line Project Segments 2 and 3, paleontologic resource impact mitigation program final technical report of findings.* Los Angeles County Metropolitan Transportation Authority.

Society of Vertebrate Paleontology. 1996. Conditions of receivership for paleontological salvage collections: Society of Vertebrate Paleontology *News Bulletin*, no. 166, p. 31-32.

Chapter 4.7, "Energy"

Burbank Water and Power. 2006. *2006 Integrated Resource Plan Electric System*. Available: http://www.burbankwaterandpower.com/download/2006-IRP-for-BWP-Final-Report.pdf. Accessed June 28, 2010.

———. 2010. *2009-2010 Annual Report*. Burbank, CA.

BWP. *See* Burbank Water and Power.

California Energy Commission. 2009. State of California Energy Action Plan. Available: http://www.energy.ca.gov/energy_action_plan/index.html. Updated November 16, 2009. Accessed February 22, 2010.

CEC. *See* California Energy Commission.

City of Burbank. 2009 (December). City of Burbank Bicycle Master Plan. Available: http://www.ci.burbank.ca.us/Modules/ShowDocument.aspx?documentid=5370. Accessed May 10, 2012.

———. 2011(November). Revised Preliminary Draft *Burbank2035* General Plan.

Chapter 4.8, "Geology and Soils"

California Geological Survey. 2010. Cities and Counties Affected by Alquist-Priolo Earthquake Fault Zones as of January 2010. California Department of Conservation. Available: http://www.consrv.ca.gov/cgs/rghm/ap/Pages/affected.aspx. Accessed April 12, 2012.

CGS. See California Geological Survey.

City of Burbank. 1997. Safety Element of *The City of Burbank General Plan.* Adopted July 1, 1997. Prepared by the City of Burbank Community Development Department, Advanced Planning Section, Burbank, CA.

ESCI EnviroServices. 2007 (September). *Hazardous Materials Area Plan for the City of Burbank*. Long Beach, CA.

Chapter 4.9, "Hazards"

No references are cited.

Chapter 4.10, "Hydrology and Water Quality"

California Department of Water Resources (DWR). 2012. Dams Within the Jurisdiction of the State of California. Available: http://www.water.ca.gov/damsafety/docs/Jurisdictional2010.pdf. Accessed April 24, 2012.

City of Burbank. 2008 (June 24). *Water Conserving Fixtures and Fittings Ordinance for New Construction*. City of Burbank Community Development Department, CA. Letter memorandum to Mary J. Alvord, City Manager, Burbank, CA.

———. 2012. Burbank Reservoir No. 1 Reconstruction Project website. Available: http://burbankreservoir1.com. Accessed April 24, 2012.

DWR. *See* California Department of Water Resources.

LACDPW. *See* Los Angeles County Department of Public Works.

Los Angeles County Department of Public Works. 2002 (September). A Manual for the Standard Urban Storm Water Mitigation Plan (SUSMP) Los Angeles County Department of Public Works. Los Angeles, CA.

———. 2012. Los Angeles River Watershed website. Available: http://ladpw.org/wmd/watershed/la/. Accessed April 30, 2012.

Los Angeles RWQCB. *See* Los Angeles Regional Water Quality Control Board.

Los Angeles Regional Water Quality Control Board. 1995. *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*. Los Angeles Region 4. Amended in 2008.

Chapter 4.11, "Land Use and Planning"

SCAG. *See* Southern California Association of Governments.

Southern California Association of Governments. 2011. Regional Transportation Plan: 2012-2035 RTP and Sustainable Communities Strategy. Los Angeles, CASCAG.

Southern California Association of Governments. 2004. *Southern California Compass Growth Vision Report.* Los Angeles, CASCAG.

Chapter 4.12, "Mineral Resources"

Miller, Russell V. 1994. Designated Areas Urbanized, Mineral Land Classification of the Greater Los Angeles Area, San Fernando Valley Production-Consumption Region, Mineral Resource Classification Zones and Resource Sectors. Open-file report 94-14, 1:24,000 scale, Plate 4. Prepared in cooperation with the California Department of Conservation, Division of Mines and Geology. Sacramento: California Geological Survey.

Chapter 4.13, "Noise"

Airport Authority. *See* Burbank-Glendale-Pasadena Airport Authority.

Bolt Beranek and Newman Inc. (BBN). 1981. *Noise Control for Buildings and Manufacturing Plants.* Cambridge MA.

Burbank-Glendale-Pasadena Airport Authority. 2009 (April). Revised Document in Support of a NEPA Categorical Exclusion Determination for a Proposed Curfew at Bob Hope Airport. Burbank, CA. Prepared by Jakobs Consultancy. Prepared for Burbank-Glendale-Pasadena Airport Authority.

California Department of Transportation. 2004 (June). *Transportation- and Construction-Induced Vibration Guidance Manual.* Sacramento, CA.

———. 2010 *Average Annual Daily Truck Traffic on the California State Highway System*. Sacramento, CA.

Caltrans. *See* California Department of Transportation.

City of Burbank. 1987 (February 21). Title 9 Building Regulations, Chapter 3 Environmental Protection, Article 2 Noise Control of the Burbank Municipal Code. Burbank, CA.

City of Burbank. 1992. *Noise Element of the City of Burbank General Plan*. Burbank, CA.

EPA. *See* United States Environmental Protection Agency

Federal Transit Administration. 2006 (May). *Transit Noise and Vibration Impact Assessment.* Washington, DC. Prepared by: Harris Miller Miller & Hanson Inc., Burlington, MA.

Federal Highway Administration (FHWA). 1978 (December). *Federal Highway Traffic Noise Prediction Model* FHWA RD 77-108. Washington DC.

Fehr and Peers. 2012 (March). Draft Traffic Impact Report: Burbank 2035 General Plan. Santa Monica, CA.

FHWA. *See* Federal Highway Administration

FTA. *See* Federal Transit Administration.

Los Angeles County Airport Land Use Commission. 2004 (December). *Los Angeles County Airport Land Use Plan*. Los Angeles, CA.

Los Angeles County ALUC. *See* Los Angeles County Airport Land Use Commission.

U.S. Environmental Protection Agency (EPA). 1974 (March). *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. Washington, DC.

Chapter 4.14, "Population, Employment and Housing"

California Department of Finance. 2010. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2010. Sacramento, California.

California Department of Housing and Community Development. 2000. *Raising the Roof: California Housing Development Projections and Constraints, 1997–2020. Statewide Housing Plan Update*.

City of Burbank. 2010. City of Burbank Economic Development Annual Report Fiscal Year 2010-2011. Burbank, CA.

Census. *See* U.S. Census Bureau.

DOF. *See* California Department of Finance.

HCD. *See* California Department of Housing and Community Development.

SCAG. *See* Southern California Association of Governments.

Southern California Association of Governments. 2011 (May). *Profile of the City of Burbank*. Available: http://www.scag.ca.gov/resources/pdfs/ 2011LP/LosAngeles/Burbank.pdf. Accessed February 23, 2012.

———. 2012. 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy. Available: http://rtpscs.scag.ca.gov/Pages/2012-2035-RTP-SCS.aspx. Accessed July 19, 2012.

U.S. Census Bureau. 2010a. 2010 Census Interactive Population Search. Available: http://2010.census.gov/2010census/popmap/ipmtext.php?fl=06. Accessed February 23, 2012.

———. 2010b. DP-1 Profile of General Population and Housing Characteristics: 2010. Available: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1 &prodType=table. Accessed February 26, 2012.

———. 2011a. State & County QuickFacts for Burbank City. Available: http://quickfacts.census.gov/qfd/states/ 06/0608954.html. Accessed February 23, 2012.

———. 2011b. State & County QuickFacts for Los Angeles County. Available: http://quickfacts.census.gov/qfd/ states/06/06037.html. Accessed February 23, 2012.

Chapter 4.15, "Public Services and Utilities"

BFD. *See* Burbank Fire Department.

Burbank Fire Department. 2011 (May). *Standards of Cover*. Burbank, CA.

Burbank Unified School District. 2008. *Level I Developer Fee Justification Study*.

———. 2012. *Enrollment Report 2010-11*. Burbank, CA.

Burbank Water and Power. 2011 (June). *2010 Urban Water Management Plan*. Approved June 7, 2011. Burbank, CA.

BUSD. *See* Burbank Unified School District.

BWP. *See* Burbank Water and Power.

California Department of Resources Recycling and Recovery. 2009. Construction/Demolition and Inert Debris Tools and Resources. Available: http://www.calrecycle.ca.gov/swfacilities/CDI/Tools/Calculations.htm# DESCRIPTION OF MATERIALS. Accessed April 5, 2012.

———. 2010. Jurisdiction Solid Waste Disposal Rates. Available: http://www.calrecycle.ca.gov/LGCentral/ Reports/jurisdiction/diversiondisposal.aspx. Accessed April 6, 2012

CalRecycle. *See* California Department of Resources Recycling and Recovery.

City of Beverly Hills. 2008. Utilities and Service Systems Section of General Plan EIR Update. Beverly Hills, CA.

City of Los Angeles. 2006. City of Los Angeles Thresholds Guide. Los Angeles, CA.

Cruz, Alvin. Senior civil engineer. Department of Public Works, City of Burbank, CA, February 6, 2012—e-mail to Tracy Steinkruger of City of Burbank providing wastewater infrastructure information.

Dietrich. 2012. Personal correspondence with Krista Dietrich, Senior Administrative Analyst at the City of Burbank. April 5, 2012.

Frank. 2012. Personal correspondence with Jonathan Frank, PRCSD. April 5, 2012.

Lenahan. 2012. Personal correspondence with Thomas Lenahan, Battalion Chief at City of Burbank. April 3, 2012.

LARWQCB. *See* Los Angeles Regional Water Quality Control Board.

LAUSD. *See* Los Angeles Unified School District.

Los Angeles Unified School District. 2010 (September). *Residential Development School Fee Justification Study*. Los Angeles, CA.

Metropolitan. *See* Metropolitan Water District of Southern California.

Rynn. 2012. Personal correspondence with Daniel Rynn, City of Burbank Public Works Department. April 30, 2012.

State of California. 2012. The Office of Public School Construction. Building Blocks January 2012 Newsletter. Available: http://www.documents.dgs.ca.gov/opsc/Publications/Newsletters/12_01JanBB.pdf. Accessed March 30, 2012.

Statton. 2012. Personal correspondence with Christine Statton, Assistant Superintendent – Administrative Services at BUSD. March 30, 2012.

Chapter 4.16, "Transportation"

BurbankBus. 2010. Maps and Schedules. Available: http://www.burbankbus.org/index.aspx?page=866

City of Burbank. 2009 (December 15). *Bicycle Master Plan.* Burbank, CA.

———. 2012 (July 9). Cory Wilkerson. Assistant Transportation Planner, Community Development Department, Planning & Transportation Division. Personal communication.

Fehr & Peers. 2011. (November). Final Existing Conditions Report – Burbank General Plan. Santa Monica, CA.

———. 2012. Final Transportation Analysis Report – Burbank2035 General Plan. Santa Monica, CA.

Los Angeles County Metropolitan Transportation Authority. 2004 (July 22). *Congestion Management Program for Los Angeles County*. Los Angeles, CA.

———. 2011. *2010 Congestion Management Program for Los Angeles County*.

Metro. *See* Los Angeles County Metropolitan Transportation Authority.

Transportation Research Board. 1980. *Interim Materials on Highway Capacity*, Circular No. 212, Washington, DC.

Chapter 5, "Other CEQA Required Considerations"

SCAG. *See* Southern California Association of Governments.

Southern California Association of Governments. 2008. 2008 RTP Growth Forecast.

———. 2012. 2012 RTP Draft Growth Forecast. Available: http://www.scag.ca.gov/forecast/index.htm. Accessed April 4, 2012.

Chapter 6, "Alternatives"

No references are cited.

8 LIST OF PREPARERS

AECOM

Jeff Goldman, AICP ..... Project Director

Jeff Henderson, AICP ..... Project Manager

Christina Erwin ..... Assistant Project Manager

Pete Choi, Drew Sutton, AICP ..... Aesthetics

Christina Erwin ..... Agricultural and Forest Resources

George Lu ..... Air Quality

George Lu, Jeff Henderson, AICP ..... Greenhouse Gas Emissions

Drew Sutton, AICP ..... Biological Resources

Madeline Bowen, Mark Bowen ..... Cultural Resources

Jason Paukovits ..... Energy

Pete Choi ..... Geology and Soils

Pete Choi ..... Hazards and Hazardous Materials

Kara Friedman ..... Hydrology and Water Quality

Emily Green, Nicholle Wright ..... Land Use and Planning

Pete Choi ..... Mineral Resources

Jake Weirich, Chris Mundhenk ..... Noise

Drew Sutton, AICP ..... Population, Employment and Housing

Emily Green ..... Public Services and Utilities

Nicholle Wright ..... Transportation

Brian Perry ..... Graphics

Eryn Pimentel ..... GIS

Charisse Case, Kristine Olsen ..... Publishing

This page intentionally left blank.