Weekly Management Report
May 2, 2014

1. **Report –** March 2014 Operating Results – Burbank Water & Power

2. **Report** – City of Burbank Dodger Night Event – Park, Recreation and Community Services Department

3. **Letter –** Letter of Support to Senator Carol Liu and Assembly Member Michael Gatto, AB2577 (Cooley/Pan) Medi-Cal: Ground Emergency Medical Transportation Services: Supplemental Reimbursement (SUPPORT) – Burbank Fire Department

4. **Memo** – Citizen Complaint at Alley North of Victory Boulevard at Buena Vista Street and at Brighton Street – Public Works Department

5. **Memo –** Damage to Pedestrian Railing at the Buena Vista Street Rail Crossing – Public Works Department

6. **Synopsis** – Burbank Water & Power Board Meeting of May 1, 2014 – Burbank Water & Power

7. **Synopsis** – Metro's Northern Corridors Cities Meeting of April 28, 2014 – Community Development Department

8. **Synopsis –** Burbank Channel Bikeway Community Meeting of May 1, 2014 – Community Development Department

9. **Synopsis** – Traffic Commission Meeting of April 24, 2014 – Public Works Department

10. **Synopsis** - Park, Recreation and Community Services, Senior Citizen Board Annotated Agenda/Meeting of April 23, 2014

7A.

CITY OF BURBANK
BURBANK WATER AND POWER
STAFF REPORT

DATE: May 1, 2014
TO: BWP Board
FROM: Ron Davis, General Manager, BWP
SUBJECT: March 2014 Operating Results

Water Results of Operations
For the month of March, Potable Water Revenues were $409,000 better than budgeted and Recycled Water Revenues were $31,000 better than budgeted. March Water Revenues were impacted by higher landscaping demand related to dry weather. The March Gross Margin was $241,000 better than budgeted; and estimated Income before Aid in Construction was a loss of $136,000, which was $325,000 better than budgeted.

Fiscal-year-to-date (FYTD) March Potable Water Revenues were $713,000 better than budgeted and Recycled Water Revenues were $490,000 lower than budgeted. FYTD Recycled Water Revenues were impacted by delays hooking-up new customers to the Recycled System and a cooler than normal summer. The FYTD Gross Margin was $191,000 better than budgeted. Estimated Operating Expenses were $410,000 better than budgeted; and estimated Income before Aid in Construction was $1,117,000, which was $786,000 better than budgeted.

Electric Results of Operations
For the month of March, estimated electric loads were 9% lower than budgeted primarily due to conservation and warmer than average weather; and Retail Sales were $1,238,000 lower than budgeted. March Power Supply expenses were $472,000 better than budgeted due to lower loads in part offset by higher energy prices than planned. The March Gross Margin was $238,000 lower than budgeted. Other income includes an adjustment to true-up the utility's Public Benefits liability that was based on expensing 2.85% of net electric revenues; the City provided back-up for qualifying Public Benefits expenditures of $3,620,000, reducing the liability and recovering electric fund accrued expenses. Estimated Income before Aid in Construction was $2,908,000 which was $3,753,000 better than budgeted.

FYTD March electric loads were 8% lower than budgeted primarily due to conservation and a cooler than normal summer; and Retail Sales were $10,989,000 lower than budgeted. FYTD Power Supply Expenses were $7,278,000 better than budgeted due to lower loads and larger than planned power supply true-up credits, partially offset by higher than planned energy prices. The FYTD Gross Margin was $3,366,000 lower than budgeted. Estimated FYTD Operating Expenses were $4,082,000 lower than budgeted. Other Income includes the aforementioned Public Benefits adjustment of $3,620,000 and $3,100,000 from the release of project funds by SCPPA. Estimated Income before Aid in Construction was $13,406,000, which was $8,855,000 better than budgeted.

SAFETY

Burbank Water and Power had no reportable lost time injuries during March 2014.

WATER DIVISION

State Water Projects and Burbank Operating Unit (BOU) Water Production

The State Natural Resources Agency has completed the release of preliminary draft chapters of the Bay Delta Conservation Plan (BDCP). This has caused an increased volume of conversation and proposals of alternate plans that tend to transfer impacts to others or, not so subtly, create conditions that would stop the proposed BDCP solution. The State Natural Resources Agency released a revise plan/tunnel alignment for the BDCP that would reduce the impact of the project to private property both during and after construction. The BDCP is very much in the news with supporters and detractors active on a daily basis. Governor Brown supports the approval of the BDCP. The Public Draft of the plan was released December 13 with the final documents available in spring 2014. A significant public outreach effort supporting the BDCP is underway. A Study Session with the City Council on the BDCP was held January 28. Public comments on the draft were originally due on April 14, but are now due on June 13 as the result of a 60 day extension of the comment period.

The Legislature is busy working on the deferred water bond from 2010 and 2012. There are multiple proposals in both the Assembly and Senate. A lot of the earmarked items from the original bond proposal have been removed but other items are being added re-inflating the total. Acceptance by both houses will be necessary to amend the proposed bond. The Governor has not weighed in seemingly letting the Legislature narrow down the options. The negotiations regarding the bond package will likely go to the deadline for putting an amended measure on the ballot. It is highly probably that an amended bond proposal will be on the 2014 ballot because of the severity and impact of the drought.

The initial State Water Project (SWP) Allocation for 2014 was released on December 1 at 5%. The Governor issued a Drought State of Emergency Proclamation on January 17. The proclamation calls on all Californians to conserve water in every way possible. The voluntary actions called for could forestall future mandatory restrictions. The proclamation also gives state water officials more flexibility to manage supply throughout California under drought conditions. The 2014 SWP allocation was subsequently reduced to 0% on January 31. Due to late winter storms, the allocation was revised to 5% on April 18. Discussions are ongoing about committing any available water to health and safety priorities. Any final allocation will surely be historically low. A Study Session on Drought Management/Response was held April 22 with City Council.

BWP and The Metropolitan Water District (MWD) are calling on all residents and member agencies to conserve water and MWD has pledged to assist other areas of the state where possible. Investments by MWD, ($5B) since 1992, have built storage facilities and programs which now provide relief from immediate mandatory rationing as occurred in the past. MWD began a media ad campaign on March 28 amplifying its message urging voluntary water conservation. BWP started a similar campaign in late

February. Water supply and supplemental draws on storage will be reviewed again at the beginning of May.

MWD has been reconfiguring system operations to maximize use of Colorado River water to serve those agencies to which Colorado River water can be delivered and conserve the stored SWP water to serve the Member Agencies (Las Virgenes, Calleguas, and Eastern MWD) that can only be served by SWP water. Burbank is receiving treated Colorado River water as of the beginning of April. Notice to customers as to the increase of water hardness due to the change of supply source was posted on the BWP web site and went out in the last issue of Currents.

As of the end of January, 7,000 acre feet of water were spread as budgeted for this fiscal year. During the meetings with MWD regarding serving Burbank with treated Colorado River water, MWD staff was made aware that next winter BWP would need 7,500 acre feet of SWP water for spreading at Pacoima and that this should be figured into the supply plan.

The BOU was 92.27% available for service in March. No GAC filters were offline for carbon change out. All wells were available for service. BOU production was limited by low system seasonal demand.

Availability	**Production**	**Average Flow Rate (gallons per minute)**
92.27%	57.36%	5,162

California Department of Health Issues Draft Chromium 6 MCL

The California Department of Public Health (CDPH) issued a draft Maximum Contaminant Limit (MCL) of 10 parts per billion (ppb) for Chromium 6 on August 22. BWP currently blends Chromium 6 to 5 ppb. BWP submitted comments in support of the draft MCL. The majority of the comments submitted at the Los Angeles site of the public hearing (MWD Offices) were in support of a higher limit and were submitted by Public Water Agencies and Water Industry Associations. The MCL will be finalized within a year of the release of the draft MCL. The BWP Board was briefed on the history of the development of the draft MCL and what it means to Burbank in relation to Chromium 6 in our raw water and the policy of blending to 5 ppb. A study session with City Council was conducted on December 10. A letter, signed by Council, was sent to the Governor requesting full consideration of the best and latest research in setting a final MCL, on January 14. The final MCL was released on April 15 by CDPH. This date is tied to a Court Order and may be subject to other judicial action. Reasonable timelines for compliance and impacts on water supply in view of the drought are current elements of discussion regarding the MCL.

Project Updates:

Some adjustments and relocations of a valve and hydrant were done at the airport due to grade changes during current construction. This is work, in addition to the original scope, that is reimbursable by the airport. The Airport Regional Intermodal Transportation Center (RITC) work is complete.

Work began in February on installing 1,300 l.f. of 8-inch ductile iron potable water main in Naomi Street from Empire Avenue to Thornton Avenue. The existing 6-inch water main is being converted to recycled water use to serve Lundigan Park and the Fire Station. The main was disinfected and put into service the first week of April. Services are now being tied over to the new main. The existing main will then be put into recycled water service. Work should be complete early May.

Internal and external painting of the Twin tanks is complete and the tanks were returned to service in April. Maintenance painting at the Reservoir #4 Head House, Recycled Pump Station #3, Stough Pumping Station and the Reservoir #5 Head House were complete in March.

The Restland portion of Valhalla Cemetery went live with recycled water in late March as well as Burbank Village Walk and parts of Izay Park. The remainder of Izay Park, the Burbank Avalon Media Center (Oak & Pass), the Airport RITC, and Disney Elementary are scheduled to go live in April.

BWP continues to work with Valhalla Memorial Park to coordinate their conversion of the larger portion to recycled water for irrigation and with the School District to move them forward in converting additional schools to recycled water.

Work on the BWP/LADWP Recycled Water Connection at the Woodbury University meter vault was completed in March. LADWP is now working with Woodbury University to modify their irrigation system to go live with recycled water.

New 8-inch recycled water main is being installed on Naomi Street across Empire Ave to convert Lundigan Park from potable water to recycled water.

Water service lateral is being transferred to a new 8-inch potable water main on Naomi N/O Empire Ave using boring equipment, which minimizes street excavation.

DISTRIBUTION

ELECTRIC RELIABILITY
Outages

BWP experienced one sustained feeder outage in March 2014. In the past twelve months, automatic reclosing has reduced customer outage time by approximately 1,353,044 customer minutes.

Reliability Measurement	Apr 2012-Mar 2013	Apr 2013-Mar 2014
Average Outages Per Year (SAIFI)	0.1890	0.2764
Average Outage Duration (CAIDI)	94.09 minutes	56.89 minutes
Average Service Availability	99.9966%	99.9970%
Average Momentary Outages Per Year (MAIFI)	0.2208	0.3396
No. of Sustained Feeder Outages	17	16
No. of Sustained Outages by Mylar Balloons	3	3
No. of Sustained Outages by Animals	0	1
No. of Sustained Outages by Palm Fronds	1	1

BWP is replacing its older generation of substation relays and meters with modern relays that have automatic reclosing and metering features. These relays will enable BWP to further reduce customer outage duration caused by temporary faults such as balloons, wind, and animals. The relay replacement on 12 kV feeders at the Clybourn Substation started in November. Work at Clybourn was completed in mid-April.

The status of the reclosing capability is shown in the table below:

DISTRIBUTION CIRCUITS

Location	Total Circuits	Reclosing Implemented
Burbank	8	7
Clybourn	5	3
Flower	12	12
Golden State	6	6
Hollywood Way	10	8
Keystone	8	2
McCambridge	12	12
Naomi	12	12
San Jose	6	6
Town	13	13
Victory	12	12
Winona	14	14
System Total	**118**	**107**

Some circuits from Keystone, Hollywood way, San Jose and Golden State are not equipped with reclosing or the reclosing function has been blocked because these circuits largely consist of underground cable, which is in accordance to current BWP standards.

Project Updates:

Alameda/Hollywood Way Substation Restoration
Staff has placed on hold further design development of the landscape restoration and graphic branding project at the outmoded Alameda/Hollywood Way Substation until public improvements surrounding the neighboring Talaria project are determined.

Naomi-18 12kV Conversion
Construction was completed on March 24. The conversion to 12kV is anticipated by May. The 4 kV to 12 kV conversion provides benefits to our customers given that the 12 kV system requires fewer substations, develops less line losses, and improves reliability as compared to in-kind replacement.

Naomi-1 12kV Conversion
Engineering is complete and a work order was issued to the field on February 27. The conversion to 12kV is anticipated to take place this August.

Naomi-15 12kV Conversion
Engineering is complete and the work order will be issued by June. The circuit is anticipated to be converted to 12kV in July of 2015.

CUSTOMER SERVICE

Plug-In Electric Vehicle (PEV) Charging Program.

Eleven PEV charging stations are in service. Burbank citizens and visitors enjoyed the Burbank City Council approved rate holiday until July 2012. PEV charging is $2 per hour. Staff is monitoring usage. The 201 North Magnolia location recorded the most sessions (126) and 149 hours of usage. The 120 East Orange Grove location recorded the fewest sessions (57) with 97 total hours of usage.

Month of usage	KWh	GHG savings in kilograms (kg)	Occupied time (hours)
December 2012	1,341	1,906	441
January 2013	1,173	1,667	396
February	1,136	1,615	366
March	1,158	487	367
April	1,443	2,050	420
May	1,780	2,503	486
June	2,217	935	612
July	2,576	1,080	706
August	2,788	1,171	781
September	2,594	1,090	719
October	2,983	1,253	823
November	2,627	1,103	741
December	2,395	1,006	712
January 2014	2,524	1,060	681
February	2,323	976	632
March	2,725	1,145	746

* GHG has been adjusted based on revised US EPA data.

TECHNOLOGY

Broadband Services (One & Fiber)

	March New Orders	Revenues for March 2014	FYTD 2013-14 Revenues	FYTD Budget
Lit	2	69,651	586,868	562,500
Dark	10	220,395	1,828,028	1,687,500
Total	12	290,046	2,414,896	2,250,000

POWER SUPPLY

Project Updates:

Power Supply Engineering

Lake Cooling Tower Project

This project has an approved budget to procure and install a forced circulation counter-flow cooling tower, two (2) circulating water pumps that will draw water from the Reclaimed Water Tank, and a chemical addition system for circulating water treatment for the Lake Power Plant. This new cooling tower system will be located at the oily water containment area adjacent to the Fuel Gas Compressor Building. Activities include process and structural engineering of the system and support structures. When the Olive Plants were placed in dry-layup, a cooling tower was rented to address cooling requirements for the Lake Power Plant. The new cooling tower system will cool the Lake Power Plant turbine lube oil, generator lube oil, and fuel gas compressor, eliminate current ongoing cooling tower rental costs, and provide the power plant with a dedicated cooling tower to promote power system reliability.

The cooling tower was delivered on March 19 and it is being stored until the tower's support structure is completed. Plan check approval was secured February 20. The cooling tower support structure footings were inspected and approved on March 12 and poured on March 13. Staff is coordinating its in-house and external resources to fabricate, furnish, and install underground electrical and piping infrastructure, the chemical injection system, and the cooling tower support structure. Purchasing collected bids on March 21 from four (4) steel fabrication shops for the cooling tower support and chemical tote support structures. These initial bids were all rejected for failing to meet various bid process protocols. Purchasing permitted BWP to obtain informal bids from qualified steel fabrication shops and four (4) bids were obtained on April 4. A purchase order (PO) was issued the week of April 21 to the low bidder, and the structures are expected to be delivered within seven (7) weeks of PO issuance. Commissioning acceptance is expected prior to the start of the 2014 peak power generation season.

Variable Frequency Drive Project

This project has an approved budget to engineer, procure, and install a Variable Frequency Drive (VFD) system on the Fuel Gas Compressors (FGCs) at the Magnolia Power Plant (MPP) to save energy and improve the system's reliability. The existing

FGC equipment consists of two (2) fully redundant reciprocating gas compressor skids that operate at a fixed motor speed and are configured with a gas recirculation control valve to accommodate fluctuations in service demand. This recirculation loop normally transfers about one-third of the compressed fuel volume flow, which represents a significant amount of wasted energy that can effectively be mitigated through implementation of the proposed VFD system.

Five (5) proposals were received on December 23, 2013 from the following manufacturers: Eaton, Siemens, Toshiba, Rockwell (Allen-Bradley), and Mitsubishi. BWP and Black & Veatch evaluated the proposals in a multi-step process, using pre-established selection criteria, and selected Siemens, Toshiba, and Rockwell as meeting the technical requirements. BWP staff will be recommending Rockwell as they represent the lowest cost and have the preferred cooling system for a VFD system. Staff's recommendation was presented at the April 3 BWP Board Meeting and approved. Details for the final warranty with Rockwell were completed and the purchase order was issued during the week of April 21.

Fire Protection System Upgrades

This project upgrades the fire protection systems within portions of the Magnolia Service Building (MSB) and at the Steam Turbine Generator (STG). A new clean agent (inert gas) fire suppression system, interlocked with a new dry-pipe sprinkler (pre-action) system, will replace the existing wet fire sprinkler pipes inside the Cable Termination (Co-Locate) Room and the Telecommunications Room on the first floor of the MSB. This new system will be the first response to a fire followed by activation of the sprinkler system, if required after a pre-determined delay, to mitigate the risk of damaging expensive electrical equipment in these rooms. Six (6) new heat detectors will be installed around the steam turbine generator bearings at MPP to augment and improve the existing fire prevention system's activation response time by immediately triggering the deluge water spray system; this will satisfy a recommendation from the insurance engineer.

A purchase order for Cosco Fire Protection, in the amount of $81,500, was issued on March 24 for the MSB fire protection system upgrades. Cosco Fire Protection was also the only proposal received for the heat detector scope for the STG bearings. This proposal was evaluated and deemed responsive and equitable. A purchase order in the amount of $13,200 for this effort was also issued during the week of March 24.

A kickoff meeting with the project team and Cosco was held on April 2. A formal "notice to proceed", for Cosco to commence work on the overall effort, was issued on April 3. Development of a project schedule and engineering drawings are underway. BWP will complete its smoke seal work efforts for the Co-Locate and Telecommunication Rooms during the schedule and drawing development period.

Materials Handling Area Project

The Material Handling Area (MHA) project is comprised of segregated areas for material storage and waste handling. One portion of this facility has four (4) discrete storage compartments to meet BWP's need for temporary handling and storage of dirt, asphalt, gravel, and rubbish. This covered storage area will eliminate the current use and cost of off-site storage containers, improve logistical control and efficiencies in deploying and removing temporary materials, prevent material migration and storm water

contamination due to weather conditions, and generally improve site cleanliness and organization.

An adjacent portion of this facility is dedicated for temporary covered storage of oil-filled electrical equipment that contains waste by-products. This area will include two separate recessed concrete containment pits with sumps to control any potential waste material releases. The covered areas with secondary containment will mitigate potential soil and storm water contamination, as this semi-enclosed space will provide a higher level of protection from adverse weather conditions to meet regulatory requirements and best practices.

In February, BWP staff resolved the 480 VAC power feed solution with a substantially more cost-effective means to meet the project's specific power requirements and secured BWP management approval to implement this approach. Staff estimated the cost to be approximately $38,905. BWP will coordinate the new electrical design interface requirements for implementation by the design team as part of the back-check submission and review process.

The Fire Department recently provided approval of the fire suppression system and the projected waste storage quantities in conformance with the Occupancy "S" design classification. Development of the bid schedule is underway for this project (combined with the Central Laboratory Project in the same bid schedule) and is projected to go out to bid in June.

Central Laboratory Project

This project has an approved budget to design, bid, and build a 760 gross square foot water quality testing laboratory within the MPP boundaries to support operations required to verify proper water chemistry. This new facility provides space for determining water quality control, storage for operator's safety gear, separate restrooms for use by staff and outside service providers, an operator work station, and all furniture, fixtures and equipment (FF&E) to support stand-alone operations. The new Central Laboratory will improve operator safety and productivity and can be used to augment the ZLD water quality laboratory as needed. A PEMB approach will be implemented as a cost-effective alternative to traditional building construction. The bidding for this project is being combined with the Material Handling Area Project to promote contractor interest and reduce overall projected construction costs through economy of scale.

Construction documents were submitted to Building & Safety on December 23, 2013 for plan check review. The Burbank Fire Department provided its plan check approval, including acceptance of the projected chemical use, quantities, and storage, on March 5. Staff picked up plan check comments on March 24 and submitted the comments to the design team for incorporation into the plans on March 26. Staff anticipates back-check submission, review, and final City approval in June.

The FF&E program is complete and has been accepted by BWP Power Supply Operations. Development of the bid schedule documents is underway (combined with the MHA Project in the same bid schedule) and is projected to go out to bid June.

Power Resources

Intermountain Power Project (Delta, UT) Renewal Progress

The Intermountain Power Project (IPP) participants, including BWP, continue to discuss post-coal repowering (called "renewal") for IPP. The current contracts expire in 2027. BWP staff believes the renewal proposal fails to address renewable energy issues. The proposal is under consideration in Burbank's Integrated Resource Planning (IRP) process. The IRP process is important, given that conservation continues to be the least cost resource and the increasing penetration of intermittent renewable energy on the grid and an accompanying need for: 1) fast-ramping, gas-fired generation to integrate that energy and 2) available transmission to transmit it to load, in each case in a way that ensures reliable operations, balanced with concerns of over-reliance on natural gas.

BWP staff has seen an increasing agreement of its view by many of the other IPP participants, from both California and Utah, and a resulting desire to thoughtfully assess and consider developing alternatives at IPP. These alternatives might include a combination of different generation (and perhaps energy storage) technologies and the facilitation of renewable technologies at the site, as well as a better optimized allocation of transmission rights. This increasing agreement was confirmed, in BWP's view, by the results of a participant survey by LADWP; this view of the survey results was not shared by LADWP.

In the meantime, IPP's owner, the Intermountain Power Agency (IPA), has, in concert with LADWP, issued a formal request for renewal, including proposed renewal contracts for approval by each participant. BWP staff, along with legal counsel from the City Attorney's office, is carefully reviewing these proposed renewal contracts and assessing BWP's strategic options. BWP has held preliminary discussions with LADWP to discuss these proposed renewal contracts. In addition, LADWP has also proposed a separate agreement with the other Southern California participants, which BWP is also reviewing.

On a related note, BWP has submitted a proposal to the Western Electricity Coordinating Council (WECC), which oversees the Western U.S. electrical grid, to study the development of large-scale compressed air energy storage (CAES) at the IPP site. A number of other market participants joined BWP in this proposal, including Wyoming wind project developer Pathfinder Wind, transmission developer Duke American Transmission Company (DATC), salt cavern developer Magnum Resources, and technology provider ABB.

This study would focus on the use of CAES at the IPP site to firm and shape cost-effective Wyoming wind energy, brought to IPP by DATC's Zephyr transmission project and transmitted to Southern California by the existing Southern Transmission System; the transmission line that brings IPP's output to our area. BWP and its partners are currently working to support this study proposal during WECC's study proposal decision-making process. On March 11, the WECC released its draft study program, including the BWP-submitted study. This study program is now subject to a public comment period prior to finalization in early May. In anticipation of final approval, BWP

and its partners are organizing the planning models and assumptions necessary for the study.

As noted above, BWP is also pursuing a comprehensive IRP process. The IRP will assist BWP in determining the appropriate solution for BWP at IPP.

Power Resources

Balancing Authority Services

LADWP has cancelled the Southern California Utility Power Pool (SCUPP) agreement, which governs the participation of LADWP, BWP, and Glendale Water and Power (GWP) in LADWP's balancing authority, and proposed, in its stead, a new agreement. It is not clear what effect this cancellation has had. Operations do not appear to have been affected by the cancellation of the SCUPP agreement.

What BWP and Glendale have seen of LADWP's proposed new agreement does not meet BWP's (or GWP's) needs, either from a structural or a pricing standpoint. In addition, the contract structure proposed by LADWP did not yet conform to modern standards for balancing authority agreements.

In August 2013, LADWP issued a proposed Open Access Transmission Tariff (OATT). An OATT is issued by a utility, such as LADWP, to set the terms and conditions, under which any electric market participant may purchase access to that utility's transmission system and associated resources. Under industry practice, a utility issues a proposed OATT for stakeholder review and comment; an OATT is then finalized and implemented only after stakeholders have had an opportunity to gain a detailed understanding of the technical, commercial, and financial assumptions underlying the proposed OATT and to challenge those assumptions through a public process, during which the issuing utility defends those assumptions and the proposed OATT.

LADWP, BWP, and GWP have agreed in principle to consider negotiating a balancing authority agreement on the basis of an LADWP OATT. BWP staff and a team of outside specialists, in conjunction with GWP, are working to understand the proposed OATT and assure it is consistent with current rate-making public policy. This requires a detailed understanding of the assumptions underlying the OATT, as well as participation in LADWP's OATT stakeholder process, and then comparing that understanding with the policies and practices established by the Federal Regulatory Energy Commission. To-date, neither the substance of the proposed OATT, nor the stakeholder process has been consistent with current rate-making public policy. In addition, the relationship between the proposed OATT and a balancing authority agreement has not been clarified. BWP and GWP continue to discuss these matters with LADWP.

In the meantime, BWP has reopened discussions with LADWP, proposing a modern, equitable balancing authority framework for LADWP's consideration. These discussions are at an early stage, but BWP is hopeful that LADWP will seriously consider BWP's proposal. In this connection, BWP is also beginning discussions with the California

Independent System Operator, which operates the electrical grid and acts as the balancing authority for most of California, to understand the full range of balancing authority options for BWP and its fellow Southern California municipal utilities (potentially including LADWP).

In the end, the need for such a balancing authority agreement must be clearly demonstrated to be based on a rational basis, and be consistent with current rate-making practices and policy.

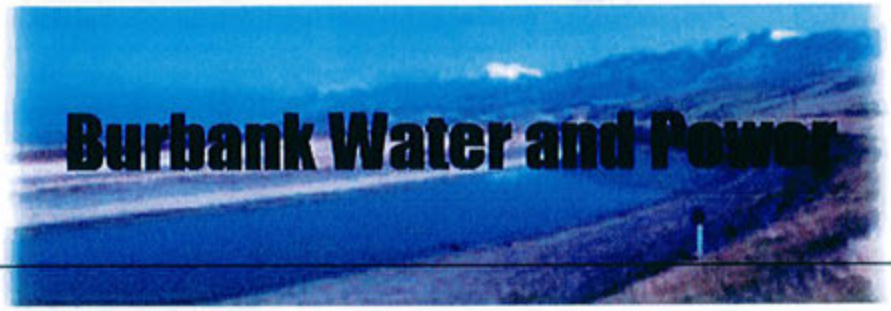
Power Resources
Integrated Resource Planning (IRP) Process

BWP has embarked on a comprehensive IRP process. An IRP is a comprehensive planning process by which a utility communicates with its stakeholders about the opportunities and challenges associated with the community's projected energy demands and the alternative power supply and conservation demand management resources, as well as the environmental issues related to reliably meeting the demand for energy.

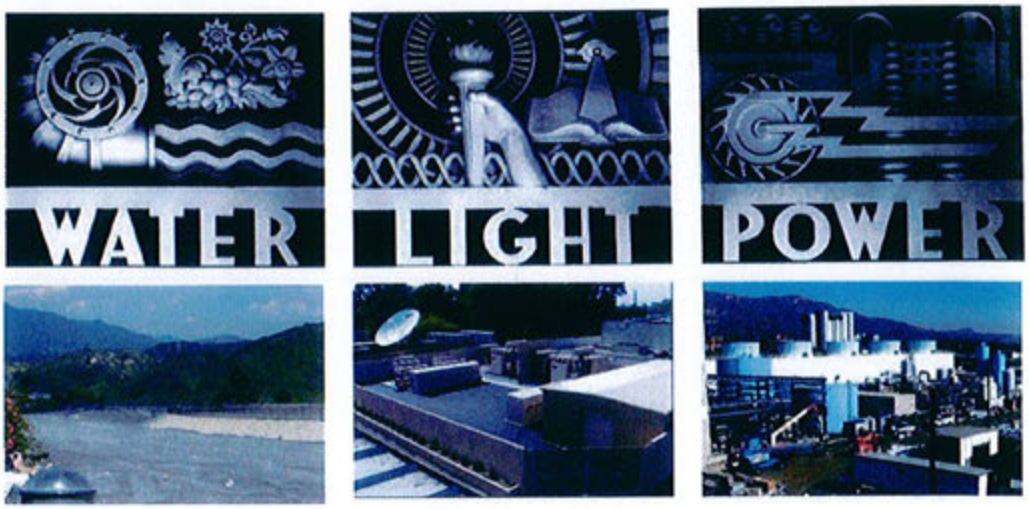
BWP's IRP team has worked to shape an IRP process to meet Burbank's needs, with a significant emphasis on public outreach. In this regard, BWP's IRP process consists of three phases: 1) preliminary public outreach, focused on helping the public understand BWP's business and the issues it faces, and to seek public feedback (Phase One); 2) intensive scenario modeling around those issues, followed by additional results to communicate observations and conclusions and seek public feedback; and 3) documentation of the IRP process, observations, conclusions and public feedback. In this connection, BWP has engaged Liedos (formerly SAIC and R.W. Beck), a major power industry engineering and consulting firm, to assist in detailed scenario modeling.

Phase One was presented to the BWP Board on March 6 and community and stakeholder meetings are underway, including town hall meetings on April 5 and 16. In addition, staff held a Study Session for City Council on April 8 which included its IRP presentation. These meetings include cost impacts of the IRP and related elements as power resources continue to be the primary driver of the cost of providing electric service.

Attachments



Burbank Water and Power



Financial Report

March-14

Burbank Water and Power
Electric Fund (496)
Statement of Changes in Net Assets
MTD and FYTD March 2014
($ in 000's except MWh Sales)

MTD Actual FY 13-14	MTD Budget FY 13-14	$ Variance	% Variance		YTD Actual FY 13-14	YTD Budget FY 13-14	$ Variance	% Variance
87,731	96,057	(8,326)	(8.7%) [a]	NEL MWh	866,923	938,331	(71,408)	(7.6%) [A]
76,930	92,762	(15,832)	(17.1%) [b]	Retail Sales MWh	850,058	906,146	(56,088)	(6.2%) [B]
				Retail				
$ 12,157	$ 13,395	$ (1,238)	(9.2%) [c]	Retail Sales	$ 125,043	$ 136,032	$ (10,989)	(8.1%) [C]
444	478	(34)	(7.1%)	Other Revenues	3,431	4,300	(869)	(20.2%)
9,188	9,660	472	4.9% [d]	Retail Power Supply & Transmission	81,332	88,610	7,278	8.2% [D]
3,413	4,213	(800)	(19.0%)	**Retail Margin**	47,142	51,722	(4,580)	(8.9%)
				Wholesale				
4,492	4,275	217	5.1%	Wholesale Sales	28,269	57,750	(29,481)	(51.0%)
3,860	4,204	344	8.2%	Wholesale Power Supply	26,093	56,788	30,694	54.1%
633	71	562	788.4%	**Wholesale Margin**	2,176	963	1,213	126.1%
4,046	4,284	(238)	(5.6%)	**Gross Margin**	49,318	52,684	(3,366)	(6.4%)
				Operating Expenses				
795	769	(25)	(3.3%)	Distribution	6,933	8,702	1,768	20.3% [E]
115	123	8	6.6%	Administration/Safety	1,183	1,238	54	4.4%
145	247	102	41.4% [e]	Finance, Fleet, & Warehouse	1,628	2,281	653	28.6% [F]
385	379	(6)	(1.7%)	Transfer to General Fund for Cost Allocation	3,467	3,409	(58)	(1.7%)
363	220	(143)	(65.3%) [f]	Customer Service, Marketing & Conservation	1,988	2,095	108	5.1%
323	416	94	22.5%	Public Benefits	2,995	3,640	645	17.7% [G]
114	103	(11)	(10.7%)	Security/Oper Technology	1,025	961	(63)	(6.6%)
62	83	22	26.2%	Telecom	559	600	41	6.9%
140	116	(25)	(21.4%)	Construction & Maintenance	1,080	1,041	(39)	(3.7%)
1,384	1,527	143	9.4%	Depreciation	12,459	13,431	972	7.2% [H]
3,825	3,983	158	4.0%	Total Operating Expenses	33,316	37,398	4,082	10.9%
$ 221	$ 301	$ (81)	(26.7%)	**Operating Income/(Loss)**	$ 16,002	$ 15,286	$ 715	4.7%

Burbank Water and Power
Electric Fund (496)
Statement of Changes in Net Assets
MTD and FYTD March 2014

($ in 000's)

MTD Actual FY 13-14	MTD Budget FY 13-14	$ Variance	% Variance			YTD Actual FY 13-14	YTD Budget FY 13-14	$ Variance	% Variance	
$ 221	$ 301	$ (81)	(26.7%)		**Operating Income/(Loss)**	$ 16,002	$ 15,286	$ 715	4.7%	
					Other Income/(Expenses)					
69	63	6	9.3%		Interest Income	774	567	207	36.5%	(I)
3,852	83	3,769	4522.6%	(g)	Other Income/Expense	8,650	1,327	7,323	552.0%	(J)
431	431	-	0.0%		Bond Interest Expense	3,876	3,876	(1)	(0.0%)	
3,490	(284)	3,775	1327.9%		Total Other Income/(Expenses)	5,547	(1,982)	7,529	379.9%	
3,711	17	3,694	21720.9%		**Income before Contributions & Transfers**	21,549	13,305	8,245	62.0%	
617	670	53	7.9%		In Lieu	6,345	6,802	457	6.7%	
186	192	6	3.2%		Street Lighting	1,798	1,952	154	7.9%	
803	862	59	6.8%		Total Contributions & Transfers	8,143	8,753	611	7.0%	
2,908	(845)	3,753	444.2%		**Income Before AIC**	13,406	4,551	8,855	194.6%	
27	564	(537)	(95.2%)		Capital Contributions (AIC)	357	5,073	(4,717)	(93.0%)	(K)
$ 2,935	$ (281)	$ 3,216	1143.7%		**Net Change in Net Assets (Net Income)**	$ 13,763	$ 9,625	$ 4,139	43.0%	

- ( ) = Unfavorable
- This report may not foot due to rounding.

Burbank Water and Power
Electric Fund (496)
Statement of Changes in Net Assets - Footnotes
FYTD March 2014
($ in 000's)

Foot-note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
A.	NEL MWh	866,923	938,331	(71,408)	- FYTD NEL is 7.6% below budget primarily due to conservation and a cooler than normal summer. Summer months July to October CDD were 909 versus the 30 year average of 1,040. Weather normalized NEL was 880,775.
B.	Retail Sales MWh	850,058	906,146	(56,088)	- Retail sales in MWh are estimated and correspond to lower NEL (demand).
C.	Retail Sales	125,043	136,032	(10,989)	- Retail sales correspond to lower NEL (demand).
D.	Retail Power Supply & Transmission	81,332	88,610	7,278	- The favorable variance is attributable to lower retail load, higher than planned true-up credits primarily from IPP, MPP, STS, and prepaid gas, and is partially offset by higher energy prices.
E.	Distribution	6,933	8,702	1,768	- The favorable variance is attributable to unfilled and underfilled positions, and related benefits, and to higher than planned labor credits for capital and work for others.
F.	Finance, Fleet & Warehouse	1,628	2,281	653	- The favorable variance is attributable primarily to amortizating savings related to the refinancing of the 2002 Series Bonds, and lower than planned professional services.
G.	Public Benefits	2,995	3,640	645	- Lifeline discounts of $459k YTD are recorded as a reduction to retail sales but are budgeted as an expense. The balance of the variance is attributable to lower than planned electric retail sales.
H.	Depreciation	12,459	13,431	972	- The favorable variance is attributable primarily to lower than planned capital spending and to the timing of capitalizing assets.
I.	Interest Income	774	567	207	- The favorable variance is attributable primarily to higher cash on hand than planned due to lower than planned capital spending, the deferral of the Utility Solar Demonstration Project and the ECC Renovation Rebuild, and the release by SCPPA of $3.1m in restricted bond cash from the Mead Phoenix and Mead Adelanto transmission projects.
J.	Other Income/Expense	8,650	1,327	7,323	- The favorable variance is attributable to the release by SCPPA of $3.1m in restricted bond cash from the Mead Phoenix and Mead Adelanto transmission projects and a true-up of the City's outstanding Public Benefits obligation balance ($3.6m), for qualifying City expenditures expended prior to this fiscal year.
K.	Capital Contributions (AIC)	357	5,073	(4,717)	- The unfavorable variance is attributable to delays to aid-in-construction activity for the I-5 improvement project and on new customer stations.

Burbank Water and Power
Electric Fund (496)
Statement of Changes in Net Assets - Footnotes
MTD March 2014 ($ in 000's)

Foot-note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
a.	NEL MWh	87,731	96,057	(8,326)	- MTD NEL is 8.7% below budget primarily due to conservation and warmer than average weather. MTD HDD were 130 versus the 30 year average of 195. Weather normalized NEL was 87,889.
b.	Retail Sales MWh	76,930	92,762	(15,832)	- Retail sales in MWh are estimated for the month of March. The unfavorable variance is attributable to timing and billing cycles.
c.	Retail Sales	12,157	13,395	(1,238)	- Retail sales correspond to lower NEL (demand).
d.	Retail Power Supply & Transmission	9,188	9,660	472	- The favorable variance is attributable to lower retail load, O&M savings, and is partially offset by higher energy prices.
e.	Finance, Fleet, & Warehouse	145	247	102	- The favorable variance is attributable primarily to amortizating savings related to the refinancing of the 2002 Series Bonds, and lower than planned professional services and insurance expense.
f.	Customer Service, Marketing & Conservation	363	220	(143)	- The unfavorable variance to budget is attributable to the timing of software and license maintenace and support fees for the new CC&B billing system, an estimate of doubtful debt, more overtime than budgeted, and less capital labor than planned.
g.	Other Income/Expense	3,852	83	3,769	- The favorable variance is attributable to a true-up of the outstanding Public Benefits obligation balance ($3.6m), for qualifying City expenditures expended prior to this fiscal year.

Burbank Water and Power
Electric Fund (496)
Statement of Cash Balances
($ in 000's)

	Mar-14	Dec-13	Sep-13	Jun-13	Mar-13	Recommended Reserves	Minimum Reserves
Cash and Investments							
General Operating Reserve	$ 45,580	$ 47,736	$ 43,534	$ 41,664	$ 49,769	$ 54,060	$ 36,340
Capital & Debt Reduction Fund	10,000	10,000	10,000	10,000	10,000	15,000	3,000
BWP Projects Reserve Deposits at SCPPA	16,657	16,601	16,657	13,507	13,485		
Sub-Total Cash and Investments	72,237	74,337	70,191	65,171	73,255	69,060	39,340
Remaining Capital Commitments	(14,436)	(19,655)	(23,462)	(21,045)	(27,771)		
Public Benefits Obligation	(2,777)	(3,137)	(2,873)	(2,726)	(3,161)		
Cash and Investments (less Commitments)	**55,025**	**51,544**	**43,857**	**41,401**	**42,322**	**69,060**	**39,340**
Restricted Cash							
Debt Service Fund & Other Restricted Cash (a)	4,213	4,931	2,488	622	4,149	4,213	4,213
Parity Reserve Fund (b)	4,175	4,175	4,081	4,081	3,989	4,175	4,175
Sub-Total Restricted Cash	8,388	9,105	6,569	4,703	8,138	8,388	8,388
Total Cash	$ 80,625	$ 83,442	$ 76,760	$ 69,874	$ 81,393	$ 77,448	$ 47,728

- Statement of Cash Balances may not foot due to rounding.

(a) Debt Service Funds are funds used to pay principal and interest on Fund 496 Bonds. This balance increases monthly to cover the semi-annual bond interest payments, which are paid in December and June of each year, and the annual bond principal payments, which are paid in June of each year.

(b) Parity Reserve Funds are funds restricted for debt service payments in case revenues are insufficient to satisfy debt service requirements. The reserve requirement was lowered with the 2012 Electric bond refunding.

Burbank Water and Power
Electric Fund (496)
STATEMENT OF CASH FLOWS
($ in 000's)

	MAR FY 13/14 Year to Date ACTUALS	DEC FY 13/14 Year to Date ACTUALS	SEP FY 13/14 Year to Date ACTUALS	JUN FY 12/13 Year to Date ACTUALS	MAR FY 12/13 Year to Date ACTUALS
Cash flows from operating activities:					
Cash received from customers	172,787	113,518	60,465	218,761	162,464
Cash paid to suppliers	(127,618)	(76,574)	(43,552)	(159,255)	(113,049)
Cash paid to employees	(14,828)	(10,061)	(4,807)	(18,758)	(14,151)
Cash received for miscellaneous purposes	-	-	-	-	-
Net cash provided by (used in) operating activities	30,342	26,883	12,107	40,748	35,264
Cash flows from noncapital financing activities:					
Proceeds from other governmental agencies	-	-	-	1,881	1,880
Due to City of Burbank	-	-	-	-	-
Transfers from other funds	-	-	-	-	-
Other income (expense)	968	590	314	1,529	750
Payment in lieu of taxes to City	(8,143)	(5,750)	(3,196)	(10,904)	(8,304)
Net cash provided by (used in) noncapital financing activities	(7,174)	(5,160)	(2,882)	(7,494)	(5,674)
Cash flows from capital and related financing activities:					
Proceeds from salse of capital assets	-	-	-	-	-
Other income-net of sale proceeds of capital assets	-	-	-	-	-
Proceeds from debt issuance	-	-	-	-	-
Principal payments - bond	(3,450)	(3,450)	(3,450)	(3,450)	(3,460)
Interest paid	(2,585)	(2,584)	0	(4,584)	(3,266)
Contributed capital	357	203	54	524	409
Acquisition and construction of assets	(10,619)	(8,560)	(2,323)	(27,737)	(13,528)
Principal payments - loan payable	-	-	-	-	-
Net cash used in capital and related financing activities	(16,297)	(14,391)	(5,719)	(35,247)	(19,845)
Cash flows from investing activities:					
Interest received	730	560	229	926	1,361
Sales of restricted investments	(3,685)	(1,819)	(1,866)	587	(3,481)
Net cash provided by investing activities	(2,956)	(1,259)	(1,637)	1,513	(2,120)
Net increase (decrease) in cash and cash equivalents	3,915	6,072	1,869	(480)	7,625
Beginning Cash and cash equivalents	51,664	51,664	51,664	52,144	52,144
Ending Cash and cash equivalents	55,580	57,736	53,534	51,664	59,769

Burbank Water and Power
Electric Fund (496)
DETAIL OF CASH PROVIDED BY OPERATING ACTIVITIES
($ in 000's)

	MAR FY 13/14 Year to Date ACTUALS	DEC FY 13/14 Year to Date ACTUALS	SEP FY 13/14 Year to Date ACTUALS	JUN FY 12/13 Year to Date ACTUALS	MAR FY 12/13 Year to Date ACTUALS
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities :					
Operating income (loss)	16,002	17,488	11,132	25,993	23,906
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:					
Depreciation	12,459	8,308	4,129	17,358	13,108
GASB 31 market value adjustment	-	-	-	(375)	-
Gain/(loss) on sale of fixed assets	123	49	64	109	136
Other income (expense), net	968	590	314	(880)	(1,661)
Changes in assets and liabilities:					
(Increase) decrease in accounts receivable	651	(3,535)	(5,646)	10	905
Increase (decrease) in due to/from City of Burbank	(3)	(3)	(2)	3	1
(Increase) decrease in inventories	2,515	2,051	2,280	(3,412)	(3,426)
(Increase) decrease in prepaid items	(2,811)	(1,622)	(1,561)	(2,430)	793
(Increase) decrease in advances receivable	17	17	17	445	356
Increase (decrease) in interfund payable	(79)	(66)	1	45	(39)
(Increase) decrease in deferred bond discount	280	232	1	5	5
(Increase) decrease in regulatory assets - deferred charg	-	-	-	-	-
Increase (decrease) in accounts payable and accrued expenses	98	3,230	1,286	1,062	(2,092)
Increase (decrease) in compensated absences	-	-	-	77	(0)
Increase (decrease) in unearned revenue	-	-	-	1,691	1,691
Increase (decrease) in interfund payable	-	-	-	-	-
Increase (decrease) in customer deposits	123	143	92	1,046	1,582
Other proceeds	-	-	-	-	-
Total adjustments	14,340	9,395	975	14,755	11,358
Net cash provided by (used in) operating activities	30,342	26,883	12,107	40,748	35,264
Noncash investing, capital, and financing activities:					
Increase (decrease) in fair value of investments	-	-	-	(375)	-

Burbank Water and Power
Electric Fund (496)
Statement of Net Assets
($ in 000's)

	MAR FY 13/14 Year to Date ACTUALS	DEC FY 13/14 Year to Date ACTUALS	SEP FY 13/14 Year to Date ACTUALS	JUN FY 12/13 Year to Date ACTUALS	MAR FY 12/13 Year to Date ACTUALS
Assets					
Current assets:					
Cash and cash equivalents					
General operating	42,570	44,726	40,524	38,654	41,532
Restricted bond proceeds for capital improvements	-	-	-	-	5,228
Capital and debt reduction	10,000	10,000	10,000	10,000	10,000
General plant	800	800	800	800	800
Fleet replacement	2,210	2,210	2,210	2,210	2,210
Total cash and cash equivalents	55,580	57,736	53,534	51,664	59,769
Accounts receivables, net	14,412	18,597	20,708	15,062	14,167
Inventories	6,296	6,759	6,530	8,810	8,824
Deposits and prepaid expenses	26,978	25,683	25,515	23,848	23,910
Interest receivable	183	170	172	138	174
Due from City of Burbank	3	3	2	-	2
Restricted nonpooled investments	8,388	6,522	6,569	4,703	8,771
Total current assets	**111,839**	**115,470**	**113,030**	**104,226**	**115,618**
Noncurrent assets:					
Advances receivable	(0)	(0)	(0)	17	106
Prepaid OPEB asset	9,277	9,383	9,489	9,596	6,311
Deferred bond issuance and acquisition costs	968	1,015	1,247	1,248	1,248
Total noncurrent assets	**10,245**	**10,399**	**10,736**	**10,860**	**7,666**
Capital assets:					
Land	2,734	2,734	2,734	2,734	2,734
Rights to purchase power	718	729	740	751	761
Utility plant and equipment	409,545	409,247	405,502	405,125	392,245
Machinery and equipment	52,015	51,798	51,177	50,789	46,588
Construction in progress	30,643	25,424	24,574	19,931	29,488
Total utility plant and equipment	**495,656**	**489,932**	**484,728**	**479,330**	**471,816**
Less accumulated depreciation	(209,068)	(204,916)	(201,163)	(197,035)	(193,448)
Total capital assets, net	**286,588**	**285,016**	**283,565**	**282,294**	**278,368**
Total assets	**408,671**	**410,884**	**407,330**	**397,381**	**401,651**

Burbank Water and Power
Electric Fund (496)
Statement of Net Assets
($ in 000's)

	MAR FY 13/14 Year to Date ACTUALS	DEC FY 13/14 Year to Date ACTUALS	SEP FY 13/14 Year to Date ACTUALS	JUN FY 12/13 Year to Date ACTUALS	MAR FY 12/13 Year to Date ACTUALS
Liabilities					
Current Liabilities:					
Accounts payable	48	1,055	794	1,787	(786)
Accrued expenses	12,708	14,833	13,150	10,871	10,290
Bond interest payable	1,733	441	1,733	441	1,077
Interfund payable	400	413	481	480	396
Due to the City of Burbank	1	1	0	-	-
Customer deposits	6,625	10,266	10,215	10,122	10,658
Current portion of revenue bonds payable, net	3,450	3,450	3,450	3,450	3,460
Current portion of loan payable	-	-	-	-	-
Current portion of compensated absences	407	407	407	407	367
Unearned revenue	7,189	7,189	7,189	7,189	7,189
Total current liabilites	32,562	38,056	37,420	34,749	32,651
Noncurrent liabilities:					
Revenue bonds payable, net	92,499	92,689	93,020	93,081	97,225
Compensated absences	4,506	4,506	4,506	4,506	4,469
Total noncurrent liabilities	97,005	97,195	97,526	97,587	101,694
Total liabilities	129,567	135,251	134,946	132,335	134,345
Net Position					
Net Position:					
Net investment in capital assets	190,639	188,877	187,094	185,763	177,683
Restricted for debt service	8,388	6,522	6,569	4,703	8,771
Unrestricted	80,077	80,235	78,721	74,579	79,388
Total net position	279,104	275,633	272,384	265,045	265,842

Burbank Water and Power
Water Fund (497)
Statement of Changes in Net Assets
MTD and FYTD March 2014
($ in 000's except CCF's)

MTD Actual FY 13-14	MTD Budget FY 13-14	$ Variance	% Variance			YTD Actual FY 13-14	YTD Budget FY 13-14	$ Variance	% Variance	
585,926	503,118	82,808	16.5%	(a)	Water put into the system in CCF's	6,230,343	5,990,807	239,536	4.0%	(A)
524,796	489,525	35,272	7.2%	(b)	Domestic Sales in CCF's	6,166,324	5,827,674	338,650	5.8%	(B)
68,903	57,105	11,799	20.7%	(c)	Metered Recycled Water in CCF's	738,303	932,930	(194,627)	(20.9%)	(C)
					Operating Revenues					
$ 1,869	$ 1,460	$ 409	28.0%	(d)	Potable Water	$ 20,219	$ 19,506	$ 713	3.7%	(D)
170	139	31	22.2%	(e)	Recycled Water	1,787	2,277	(490)	(21.5%)	(E)
39	50	(11)	(21.2%)		Other Revenue	712	450	262	58.2%	
2,079	1,649	429	26.0%		Total Operating Revenues	22,718	22,233	485	2.2%	
968	780	(188)	(24.1%)		Water Supply Expense	9,577	9,282	(294)	(3.2%)	
1,111	870	241	27.7%		**Gross Margin**	13,141	12,950	191	1.5%	
					Operating Expenses					
422	510	88	17.3%		Operations & Maintenance - Potable	4,521	4,788	267	5.6%	
133	87	(46)	(53.1%)	(f)	Operations & Maintenance - Recycled	956	859	(97)	(11.3%)	(F)
114	169	55	32.5%		Allocated O&M	1,348	1,643	295	18.0%	
69	69	-	0.0%		Transfer to General Fund for Cost Allocation	622	622	-	0.0%	
330	309	(21)	(6.7%)		Depreciation	2,829	2,774	(55)	(2.0%)	
1,068	1,145	(76)	(6.7%)		Total Operating Expenses	10,276	10,686	410	3.8%	
43	(275)	318	115.5%		**Operating Income/(Loss)**	2,865	2,265	601	26.5%	
					Other Income/(Expenses)					
9	10	(1)	(11.7%)		Interest Income	134	93	42	44.9%	(G)
106	46	61	132.5%		Other Income/Expense	546	412	134	32.5%	
156	164	(8)	(4.9%)		Bond Interest Expense	1,427	1,479	53	3.6%	
137	78	(60)	(77.0%)		Transfers In/(Out) - (In Lieu)	1,002	958	(43)	(4.5%)	
(178)	(186)	8	4.1%		Total Other Income/(Expenses)	(1,748)	(1,933)	185	9.6%	
(136)	(461)	325	70.6%		**Income Before AIC**	1,117	331	786	237.1%	
69	0	69	0.0%		Aid in Construction	267	243	25	10.1%	
$ (67)	$ (461)	$ 394	85.5%		**Net Change in Net Assets**	$ 1,384	$ 574	$ 810	141.2%	

- ( ) = Unfavorable
- This report may not foot due to rounding.

Burbank Water and Power
Water Fund (497)
Statement of Changes in Net Assets-Footnotes
FYTD March 2014
($ in 000's)

Foot-note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
A.	Water put into the system in CCF's	6,230,343	5,990,807	239,536	- Dry weather has increased demand for landscaping and irrigation use. FYTD total precipitation has been 2.4 inches versus the FYTD normal precipitation of 16.0 inches.
B.	Domestic Sales in CCF's	6,166,324	5,827,674	338,650	- Dry weather has increased demand for landscaping and irrigation use.
C.	Metered Recycled Water in CCF's	738,303	932,930	(194,627)	- Recycled water sales are lower than planned primarily related to lower than planned demand for landscaping irrigation due to delays in hooking up new customers and cooler than normal summer temperatures. Summer months July to October CDD were 909 versus the 30 year average of 1,040.
D.	Fotable Water Revenue	20,219	19,506	713	- The WCAC impact increased potable water revenues by 226k FYTD. Without this adjustment, potable water revenues would be favorable by 2.5%.
					FYTD Actual
					WCAC revenue 9,843
					WCAC Expenses:
					Purchased water, chemicals, and electricity 9,577
					WCAC In-lieu 492
					Total WCAC Expenses 10,069
					WCAC revenue deferral (increased revenues) $ (226)
E.	Recycled Water Revenue	1,787	2,277	(490)	- Recycled water sales are lower than planned primarily related to lower than planned demand for landscaping irrigation due to delays in hooking up new customers and cooler than normal summer temperatures. Summer months July to October CDD were 909 versus the 30 year average of 1,040.
F.	Operations & Maintenance - Recycled	956	859	(97)	- The unfavorable variance is attributable primarily to performing more maintenance work than budgeted on the Recycled Water System.
G.	Interest Income	134	93	42	- The favorable variance is attributable primarily to higher cash on hand than planned due to lower than planned capital spending and due to funds received from the State Water Resource Board for construction of the Valhalla Recycled Water Project.

Burbank Water and Power
Water Fund (497)
Statement of Changes in Net Assets-Footnotes
MTD March 2014
($ in 000's)

Foot-note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
a.	Water put into the system in CCF's	585,926	503,118	82,808	- A dry March increased demand for landscaping and irrigation use. March had 0.87 inches of precipitation and the average precipitation for the month is 3.88 inches.
b.	Domestic Sales in CCF's	524,796	489,525	35,272	- A dry March increased demand for landscaping and irrigation use.
c.	Metered Recycled Water in CCF's	68,903	57,105	11,799	- Recycled water sales are higher than planned primarily related to higher than planned demand for landscaping irrigation due to dryer weather than normal.
d.	Potable Water Revenue	1,869	1,460	409	- The WCAC impact increased potable water revenues by 134k MTD. Without this adjustment, potable water revenues would be favorable by 18.8%.
					MTD Actual
					WCAC Revenue $ 878
					WCAC Expenses:
					Purchased water, chemicals, and electricity 968
					WCAC In-lieu 44
					Total WCAC Expenses 1,012
					WCAC revenue deferral (increased revenues) $ (134)
e.	Recycled Water Revenue	170	139	31	- Recycled water sales are higher than planned primarily related to higher than planned demand for landscaping irrigation due to dryer weather than normal.
f.	Operations & Maintenance - Recycled	133	87	(46)	- The unfavorable variance is attributable to the painting of steel tanks budgeted as capital, and to performing more maintenance work than budgeted on the Recycled Water System.

Burbank Water and Power
Water Fund (497)
Statement of Cash Balances
($ in 000's)

	Mar-14	Dec-13	Sep-13	Jun-13	Mar-13	Recommended Reserves	Minimum Reserves
Cash and Investments							
General Operating Reserves	$ 9,077	$ 12,085	$ 12,356	$ 12,086	$ 7,146	$ 9,760	$ 5,240
WCAC	884	1,055	990	1,110	1,157	2,000	1,000
Capital Reserve Fund	2,220	2,220	2,220	2,220	2,220	4,000	1,000
Sub-Total Cash and Investments	12,181	15,360	15,567	15,416	10,523	15,760	7,240
Remaining Capital Commitments	(1,077)	(1,747)	(3,553)	(1,231)	(2,588)		
Public Benefits Obligation	(518)	(608)	(614)	(577)	(553)		
Cash and Investments (less commitments)	**10,587**	**13,005**	**11,400**	**13,608**	**7,382**	**15,760**	**7,240**
Restricted Cash							
Debt Service Funds (a)	834	1,173	599	150	542	834	834
Sub-Total Restricted Cash	834	1,173	599	150	542	834	834
Total Cash	$ 13,015	$ 16,533	$ 16,166	$ 15,566	$ 11,065	$ 16,594	$ 8,074

- Statement of Cash Balances may not foot due to rounding.

(a) Debt Service Funds are funds used to pay principal and interest on Fund 497 Bonds. This balance increases monthly to cover the semi-annual bond interest payments, which are paid in December and June of each year, and the annual bond principal payments, which are paid in June of each year.

Burbank Water and Power
Water Fund (497)
STATEMENT OF CASH FLOWS
($ in 000's)

	FYTD Ending Mar-14	FYTD Ending Dec-13	FYTD Ending Sep-13	FYTD Ending Jun-13	FYTD Ending Mar-13
Cash flows from operating activities:					
Cash received from customers	22,194	15,695	9,942	26,878	21,601
Cash paid to suppliers	(14,283)	(7,782)	(5,991)	(14,795)	(13,106)
Cash paid to employees	(4,019)	(2,740)	(1,282)	(5,024)	(3,615)
Net cash provided by (used in) operating activities	**3,892**	**5,173**	**2,669**	**7,059**	**4,881**
Cash flows from noncapital financing activities:					
Other income (expense)	517	300	147	401	455
Payment in lieu of taxes to City	(1,002)	(728)	(412)	(1,252)	(949)
Net cash provided by (used in) noncapital financing activities	**(484)**	**(428)**	**(265)**	**(851)**	**(494)**
Cash flows from capital and related financing activities:					
Proceeds from debt issuance	-	-	-	6,949	-
Principal payments - bond	-	-	-	(490)	-
Interest paid	(958)	(951)	-	(1,514)	(825)
Contributed capital	267	134	38	208	59
Acquisition and construction of assets	(5,376)	(3,827)	(1,874)	(11,984)	(8,938)
Principal payments - loan payable	-	-	-	(650)	-
Net cash used in capital and related financing activities	**(6,067)**	**(4,645)**	**(1,836)**	**(7,482)**	**(9,703)**
Cash flows from investing activities:					
Interest received	109	79	32	117	125
Sales of restricted investments	(684)	(235)	(449)	3	(856)
Net cash provided by investing activities	**(575)**	**(156)**	**(417)**	**120**	**(731)**
Net increase (decrease) in cash and cash equivalents	(3,234)	(56)	151	(1,154)	(6,047)
Cash and cash equivalents, July 1, 2012	15,416	15,416	15,416	16,570	16,570
Cash and cash equivalents, June 30, 2013	12,182	15,361	15,567	15,416	10,523

Burbank Water and Power
Water Fund (497)
DETAIL OF CASH PROVIDED BY OPERATING ACTIVITIES
($ in 000's)

	FYTD Ending Mar-14	FYTD Ending Dec-13	FYTD Ending Sep-13	FYTD Ending Jun-13	FYTD Ending Mar-13
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities :					
Operating income (loss)	2,865	2,869	2,352	3,120	2,608
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:					
Depreciation	2,829	1,844	907	3,564	2,669
GASB 31 market value adjustment	-	-	-	(106)	-
Gain/(loss) on sale of fixed assets	28	22	-	(158)	(53)
Other income (expense), net	517	300	147	(12)	455
Changes in assets and liabilities:					
(Increase) decrease in accounts receivable	524	719	(664)	151	951
(Increase) decrease in inventories	(1,227)	591	1.165	24	(659)
(Increase) decrease in prepaid items	51	34	17	(522)	23
(Increase) decrease in advances receivable	3	3	3	71	54
Increase (decrease) in interfund payable	(11)	(7)	13	-	(6)
(Increase) decrease in deferred bond discount	97	65	20	-	61
(Increase) decrease in regulatory assets - deferred charges	18	9	4	(108)	13
Increase (decrease) in accounts payable and accrued expenses	(1,597)	(1,231)	(1,240)	455	(1,377)
Increase (decrease) in compensated absences	-	-	-	131	-
Increase (decrease) in customer deposits	(205)	(44)	(55)	292	142
Other proceeds	-	-	-	159	-
Total adjustments	1,027	2,304	317	3,940	2,273
Net cash provided by (used in) operating activities	3,892	5,173	2,669	7,059	4,881
Noncash investing, capital, and financing activities:					
Increase (decrease) in fair value of investments	-	-	-	(106)	-

Burbank Water and Power
Water Fund (497)
Statement of Net Assets
($ in 000's)

	MAR FY 13/14 Year to Date ACTUALS	DEC FY 13/14 Year to Date ACTUALS	SEP FY 13/14 Year to Date ACTUALS	JUN FY 12/13 Year to Date ACTUALS	MAR FY 12/13 Year to Date ACTUALS
Assets					
Current assets:					
Cash and cash equivalents					
General operating	7,515	10,566	10,830	10,559	(2,692)
Restricted bond proceeds for capital improvements	427	427	427	427	8,738
Capital and debt reduction	2,220	2,220	2,220	2,220	2,220
WCAC	920	1,047	990	1,110	1,157
Distribution Mains	1,100	1,100	1,100	1,100	1,100
Total cash and cash equivalents	12,181	15,360	15,567	15,416	10,523
Accounts receivables, net	2,669	2,473	3,856	3,193	2,393
Inventories	2,937	1,119	545	1,710	2,393
Deposits and prepaid expenses	12	12	12	12	1
Interest receivable	44	43	37	19	24
Due from City of Burbank	-	-	-	-	-
Restricted nonpooled investments	834	385	599	150	1,008
Total current assets	**18,677**	**19,392**	**20,617**	**20,500**	**16,342**
Noncurrent assets:					
Advances receivable	-	-	-	3	20
Prepaid OPEB asset	889	906	923	940	407
Deferred bond issuance and acquisition costs	434	443	447	451	456
Total noncurrent assets	**1,323**	**1,349**	**1,370**	**1,394**	**882**
Capital assets:					
Land	309	309	309	309	309
Utility plant and equipment	133,193	132,869	118,890	118,715	114,569
Machinery and equipment	5,295	5,225	5,214	5,194	5,041
Construction in progress	2,979	2,309	14,620	13,295	13,758
Total utility plant and equipment	**141,776**	**140,712**	**139,033**	**137,513**	**133,676**
Less accumulated depreciation	(52,808)	(51,823)	(50,896)	(50,156)	(49,258)
Total capital assets, net	**88,968**	**88,889**	**88,136**	**87,357**	**84,418**
Total assets	**108,968**	**109,630**	**110,123**	**109,251**	**101,643**

Burbank Water and Power
Water Fund (497)
Statement of Net Assets
($ in 000's)

	MAR FY 13/14 Year to Date ACTUALS	DEC FY 13/14 Year to Date ACTUALS	SEP FY 13/14 Year to Date ACTUALS	JUN FY 12/13 Year to Date ACTUALS	MAR FY 12/13 Year to Date ACTUALS
Liabilities					
Current Liabilities:					
Accounts payable	1,688	2,055	1,807	2,757	1,608
Accrued expenses	1,186	1,184	1,423	1,714	903
Bond interest payable	625	156	625	156	793
Interfund payable	44	48	68	55	49
Due to the City of Burbank	-	-	-	-	-
Customer deposits	1,295	1,456	1,445	1,500	1,478
deposits - water	51	51	51	51	51
Current portion of revenue bonds payable, net	471	470	470	470	514
Current portion of loan payable	280	485	507	507	-
Current portion of compensated absences	30	30	30	30	28
Unearned revenue	-	-	-	-	-
Total current liabilites	**5,619**	**5,885**	**6,376**	**7,189**	**5,374**
Noncurrent liabilities:					
Revenue bonds payable, net	35,404	35,435	35,480	35,501	36,036
Loan payable	6,753	6,754	6,754	6,754	714
Compensated absences	803	803	803	803	674
Total noncurrent liabilities	**42,960**	**42,992**	**43,037**	**43,057**	**37,424**
Total liabilities	**48,579**	**48,876**	**49,413**	**50,246**	**42,798**
Net Position					
Net Position:					
Net investment in capital assets	46,296	46,182	45,365	44,578	47,093
Restricted for debt service	834	385	599	150	1,008
Unrestricted	13,259	14,187	14,747	14,277	10,731
Total net position	**60,389**	**60,753**	**60,711**	**59,005**	**58,832**

Burbank Water and Power
Street Lighting Fund (129)
Statement of Changes in Net Assets
MTD and YTD March 2014
($ in 000's)

MTD Actual FY 13-14	MTD Budget FY 13-14	$ Variance	% Variance		FYTD Actual FY 13-14	FYTD Budget FY 13-14	$ Variance	% Variance
				Operating Revenues				
$ 177	$ 228	$ (51)	(22.2%)	Revenue	$ 1,705	$ 2,052	$ (347)	(16.9%) (A)
$ 177	$ 228	$ (51)	(22.2%)	Total Operating Revenues	$ 1,705	$ 2,052	$ (347)	(16.9%)
				Operating Expenses				
110	108	(2)	(1.6%)	Utilities	987	973	(14)	(1.4%)
86	115	29	25.4%	Street Lighting Maintenance and Improvement	688	1,034	347	33.5% (B)
$ 196	$ 223	$ 27	12.3%	Total Operating Expenses	$ 1,674	$ 2,007	$ 333	16.6%
$ (18)	$ 5	$ (23)	(463.2%)	**Operating Income/(Loss)**	$ 31	$ 45	$ (14)	(31.0%)
				Other Income/(Expenses)				
0	0	(0)	(38.7%)	Interest Income	2	4	(2)	(45.3%)
0	(3)	3	(112.2%)	Other Revenues/(Expenses)	(39)	(26)	(13)	48.7%
$ 1	$ (3)	$ 3	(124.4%)	Total Other Income/(Expenses)	$ (37)	$ (23)	$ (14)	64.4%
$ (18)	$ 3	$ (20)	(802.0%)	**Income before Contributions & Transfers**	$ (6)	$ 23	$ (28)	(126.4%)
-	8	(8)	(100.0%)	Aid in Construction	-	68	(68)	(100.0%) (B)
$ (18)	$ 10	$ (28)	(275.5%)	**Net Change in Net Assets**	$ (6)	$ 90	$ (96)	(106.6%)

( ) = Unfavorable

(A) Lower than budget as a result of lower than planned electric retail sales due to conservation and cooler than normal summer temperatures.

(B) The variance is primarily attributable to the timing of street lighting maintenance and improvement projects.

Burbank Water and Power
Street Lighting Fund (129)
Statement of Cash Balances
($ in 000's)

	Mar-14	Dec-13	Sep-13	Jun-13	Mar-13
Unrestricted Cash	$ 361	$ 374	$ 316	$ 274	$ 266
Total Cash Balances	$ 361	$ 374	$ 316	$ 274	$ 266

Burbank Water and Power
Communications Equipment Rental Fund (535)
Statement of Changes in Net Assets
MTD and FYTD
March 2014
($ in 000's)

MTD Actual FY 13-14	MTD Budget FY 13-14	$ Variance	% Variance		FYTD Actual FY 13-14	FYTD Budget FY 13-14	$ Variance	% Variance
				Operating Revenues				
$ 223	$ 224	$ (0)	(0.1%)	Revenue from Other Funds	$ 2,011	$ 2,013	$ (2)	(0.1%)
$ 223	$ 224	$ (0)	(0.1%)	Total Operating Revenues	$ 2,011	$ 2,013	$ (2)	(0.1%)
				Operating Expenses				
66	56	(11)	(19.1%)	Salaries & Fringe Benefits	599	501	(98)	(19.7%) (A)
20	23	4	15.3%	Utilities	256	210	(46)	(21.9%) (B)
15	15	1	4.3%	Supplies	85	137	52	37.7% (C)
97	101	4	3.7%	Depreciation	873	908	35	3.9%
20	34	14	41.6%	Other Expenses	199	310	111	35.9% (D)
$ 218	$ 230	$ 12	5.1%	Total Operating Expenses	$ 2,013	$ 2,066	$ 54	2.6%
$ 5	$ (6)	$ 11	192.6%	**Operating Income/(Loss)**	$ (2)	$ (53)	$ 51	96.3%
				Other Income/(Expenses)				
3	4	(1)	(20.5%)	Interest Income	34	33	1	4.6%
5	34	(29)	(86.0%)	Other Revenues/(Expenses)	5	308	(303)	(98.4%) (E)
$ 8	$ 38	$ (30)	(79.7%)	Total Other Income/(Expenses)	$ 39	$ 341	$ (302)	(88.6%)
$ 13	$ 32	$ (19)	(58.9%)	**Net Change in Net Assets**	$ 37	$ 288	$ (251)	(87.1%)

( ) = Unfavorable

(A) The unfavorable variance is primarily attributable to lower than planned labor credits for capital and work for others.

(B) The unfavorable variance is primarily attributable to the timing of the purchase of the emergency notification system.

(C) The favorable variance is attributable to the timing of payments for radio maintenace.

(D) The favorable variance is attributable to lower than planned professional and contractual services.

(E) The unfavorable variance is attributable to the timing of grant revenue.

Burbank Water and Power
Communications Equipment Rental Fund (535)
Statement of Cash Balances ($ in 000's)

	Mar-14	Dec-13	Sep-13	Jun-13	Mar-13
Unrestricted Cash	$ 256	$ 596	$ 1,017	$ 950	$ 877
Radio Equipment Replacement Cash	3,115	4,127	4,015	3,902	3,790
Phone Equipment Replacement Cash	288	295	268	354	319
Voicemail Replacement Cash	295	289	282	276	270
Total Cash Balances	$ 3,953	$ 5,307	$ 5,582	$ 5,482	$ 5,256

Burbank Water and Power
MPP Joint Power Authority Expenses
Actual MTD and FYTD March 2014

($ in 000's)

MTD Actual FY 13-14	MTD Budget FY 13-14	$ Variance	% Variance		YTD Actual FY 13-14	YTD Budget FY 13-14	$ Variance	% Variance
$ 2,043	$ 2,043	$ -	0.0%	Debt Service - 427	$ 18,385	$ 18,385	$ -	0.0%
172	200	28	13.8%	Natural Gas Transport - 547	1,759	1,800	41	2.3%
708	806	97	12.1%	Generation Expense - 548	6,640	7,250	610	8.4% (A)
36	36	(0)	(0.0%)	Site Lease - 550	323	323	(0)	(0.0%)
507	902	395	43.8%	Maintenance - 553	6,905	8,119	1,214	15.0% (B)
10	22	12	55.2%	System Control & Load Dispatching - 556	116	196	80	40.6%
7	6	(1)	(15.0%)	Station Expense - 565	28	52	24	46.6%
49	126	77	61.5%	General and Administrative - 920-935	1,201	1,134	(67)	(5.9%)
30	84	54	64.4%	Capital - 999	449	756	307	40.6% (C)
$ 3,562	$ 4,224	$ 662	15.7%	**Total Operating Costs**	$ 35,805	$ 38,014	$ 2,209	5.8%

(A) The favorable variance to budget is attributable to timing of environmental compliance expenses, emission credit permit expenses, and consultants.
(B) The favorable variance to budget is attributable to the timing of payments for GE Service Agreement and Repairs, and to less maintenance related labor than planned.
(C) The favorable variance to budget is attributable to the timing of capital projects.

( ) = Unfavorable

Burbank Water and Power
MPP Operating Reserve Balances
($ in 000's)

	Mar-14	Dec-13	Sep-13	Jun-13	Mar-13
Reserves:					
Long-Term Maintenance Reserve	$ 7,618	$ 6,614	$ 5,611	$4,607	$4,434
BWP Fuel Reserve	$ 2,565	$ 2,565	$ 2,565	$2,565	$2,565

Burbank Water and Power
Tieton Hydro Joint Power Authority Expenses
Actual MTD and FYTD March 2014

($ in 000's)

MTD Actual FY 13-14	MTD Budget FY 13-14	$ Variance	% Variance		YTD Actual FY 13-14	YTD Budget FY 13-14	$ Variance	% Variance
$ 8	$ 18	$ 10	56.6%	Operation Supervision and Engineering - 535	$ 72	$ 166	$ 94	56.6% (A)
-	2	2	100.0%	Electric Expenses - 538	(0)	15	15	100.3%
3	20	17	86.7%	Misc. Hydraulic Power Generation Expenses - 539	116	180	64	35.7% (B)
19	11	(8)	(73.1%)	Maintenance of Misc. Hydraulic Plant - 545	105	101	(3)	(3.3%)
-	8	8	100.0%	Transmission Expenses - 561	57	68	11	16.1% (C)
14	41	26	65.0%	General and Administrative - 920-935	363	365	2	0.7%
-	8	8	100.0%	Capital - 999	81	75	(6)	(8.3%)
$ 44	$ 108	$ 63	58.8%	**Total Operating Costs**	$ 793	$ 970	$ 177	18.2%

Reserve Balance (cash)	$ 970
Total Reserve Balance	$ 970

( ) = Unfavorable

(A) Miscellaneous labor for plant oversight is recorded in Maintenance of Misc. Hydraulic Plant instead of Operation Supervison and Engineering.

(B) The favorable variance to budget is attributable to the timing of payments for substation maintenance, and is partially offset by miscellaneous labor for plant oversight being recorded in Maintenance of Misc. Hydraulic Plant instead of Operation Supervison and Engineering.

(C) The favorable variance to budget is attributable to the timing of payments for transmission expenses.

CITY OF BURBANK
OFFICE OF THE CITY MANAGER
(818) 238-5800
FAX (818) 238-5804

DATE: May 2, 2014

TO: Honorable Mayor and City Council

FROM: Mark Scott, City Manager MS

SUBJECT: **CITY OF BURBANK DODGER NIGHT EVENT**

For your information only, I wanted to make City Councilmembers aware that the attached memo has been included in the Parks, Recreation and Community Services Board agenda packet for their next meeting. The memo highlights changes in the Los Angeles Dodgers' policies concerning community "Dodger Night" events. Staff is asking the Board's input prior to seeking City Council direction on how to proceed.

275 E. Olive Avenue • P.O. Box 6459
Burbank, California 91510-6459

CITY OF BURBANK

Park, Recreation and Community Services Department

STAFF REPORT

DATE: May 8, 2014

TO: Park, Recreation and Community Services Board Members

FROM: Judie Wilke, Park, Recreation and Community Services Director

SUBJECT: CITY OF BURBANK DODGER NIGHT EVENT

RECOMMENDATION

Per the Park, Recreation and Community Services (PRCS) Board's (Board) recommendation at the November 14, 2013 meeting, staff recommends the Board consider the options presented and provide input regarding the Burbank Dodger Night event. However, the Board may take any action it deems necessary and appropriate.

BACKGROUND

Since 1992, the City of Burbank (City) has partnered with the Los Angeles Dodgers (Dodgers) to host the annual Burbank Dodger Night event. The Burbank Sunrise Kiwanis collaborated with the City, supporting promotions and sharing ticket proceeds. Throughout the event's history, the Dodgers provided the City with multiple promotional opportunities such as advanced tickets without direct up-front costs and allowing the return of unsold tickets two weeks prior to the event to minimize potential revenue loss to the City.

Staff successfully coordinated past events largely due to the Dodgers' flexibility, individual community focus, and assurance that City opportunities were maximized. In previous years, the Dodgers have been able to grant the City promotions including:

- Ceremonial first pitch and catch;
- On-field introduction of the City Council;
- One on-field guest to accompany each City Council Member;
- On-field recognition to top-selling youth teams along the warning track;
- Team/group names in lights on the scoreboard; and
- One youth member from each the top four selling teams to take the field with a Dodger and receive an autographed baseball.

In anticipation of a 2014 event and per the request of the Park, Recreation and Community Services (PRCS) Board (Board) at the November 14, 2013 meeting, staff presented a report encompassing potential opportunities to increase community participation; enhance ticket sales through creating new event partnerships with youth focused organizations; and increase the presence of Burbank youth being recognized

on the field. The concept of creating new partnerships could have provided partner community organizations the ability to set independent ticket sales goals to meet the overall community-wide goal. In addition to fundraising for respective organizations, partners could be highlighted through marketing efforts leading up to the event and on Burbank Dodger Night. Dependent on the long-time relationship with the Dodgers, it was anticipated that these new ideas could be incorporated into a future Burbank Community Dodger Night.

DISCUSSION

In 2013 and 2014, staff discussed the Burbank Community Dodger Night event concept with Dodgers representatives on various occasions. During these discussions, the Dodgers noted that the event concept aligned with their community relations goals including working with the City to implement new ideas to enhance youth engagement. Unfortunately, with baseball season recently initiating, changes were established with the Dodger organization's structure and focus. Under the recent changes, new guidelines delineate group and community ticket sales as well as promotional opportunities. Therefore, the Dodgers identified that the focal priority for the organization is season ticket sales versus community partnership recognitions.

One of the most notable changes made by the Dodgers for the 2014 season is the group ticket process. Historically, the Dodgers advanced tickets to the City and created an invoice at the conclusion of ticket sales. However, the Dodgers are now requiring tickets to be purchased up-front at group rates, thus holding the City responsible for selling the allotted tickets to recover costs. The Dodgers grant one opportunity for the City to return any unsold tickets, 30 days prior to the event with no exceptions. Any tickets still in possession at the 30-day mark must either be sold by the City, or incurred as a loss. The Dodgers have also eliminated hard-copy tickets, switching to an online ticketing system entirely. Patrons wishing to purchase tickets must access a group specific link created by the Dodgers to obtain the aforementioned tickets purchased by the City. Patrons will also incur a $1 per ticket service charge, as well as a $5 one-time transaction fee. The Dodgers do acknowledge that the new online ticketing system may create challenges in tracking individual group sales for the event.

Guidelines set forth by the Dodgers will also impact promotional opportunities available to the City:

- Below 500 Tickets Sold – Group name in lights and camera pan over group in stands during the game.
- 500 to 999 Tickets Sold – The aforementioned promotion plus four (4) individuals acknowledged on-field prior to the game.
- 1,000 to 1,499 Tickets Sold – The aforementioned promotions plus a number of individuals selected by staff acknowledged on-field prior to the game from the center field warning track (exact number to be determined depending on game selected).
- Over 1,500 Tickets Sold – Group name in lights; camera pan over group in stands during the game; a number of individuals selected by staff acknowledged

on-field during pre-game activities (exact number to be determined depending on game selected); and taking part in the ceremonial first pitch.

Staff met with longtime partner, the Burbank Sunrise Kiwanis, to update their leadership on the changes presented by the Dodgers. Although the new financial parameters established are strict, the Burbank Sunrise Kiwanis noted they are willing to continue a partnership with the City in 2014 by addressing upfront costs for the 500 ticket minimum.

Given the policies and benchmarks set forth by the Dodgers, options to consider for 2014 include:

Option 1: *Continue to coordinate an annual Dodger Night event.*
The City would need to fund the cost of game tickets up-front; thus, assuming the risk of recovering costs through ticket sales to the community. To meet a 1,500 ticket sales benchmark (based upon ticket price and seating location), $25,000 in advanced funding would be required. In the past five years, ticket sales for this event averaged 1,138 (Exhibit A). Notably, youth hap minor baseball and ponytail softball sold the majority of event tickets. Last year, the aforementioned teams accounted for 70% of tickets sold. A primary driving factor in the number of tickets purchased by youth teams were promotions that are no longer offered by the Dodgers as in previous years. The recent changes to ticketing and promotional opportunities could dramatically affect event tickets sales.

Based on 1,500 tickets sold, the following promotions would be offered: group name in lights; camera pan over group in stands during the game; a number of individuals selected by staff acknowledged on-field during pre-game activities (exact number to be determined depending on game selected); and taking part in the ceremonial first pitch.

Option 2: *Continue to coordinate an annual Dodger Night event.*
The City can consider purchasing the minimum of 500 tickets totaling approximately $8,000 (based upon ticket price and seating location). However, the only promotions offered with this option would be the acknowledgement of four individuals (selected by staff) on-field prior to the game, group name in lights, and a camera pan over the group in the stands.

If either Options 1 or 2 are considered, timelines are important to note. Should Burbank Dodger night be scheduled in June, funds would need to be allocated as soon as possible, allowing staff to commence marketing and ticket sales. Given that Burbank youth baseball and softball teams have historically accounted for the majority of ticket sales, any event to be held after the conclusion of their season (June 21st), could also result in a dramatic decline in event ticket sales. Based upon the 30-day ticket return policy set forth by the Dodgers, a realistic timeframe of ticket sales for an event in June would last only from the time of allocated funds to approximately mid-May, thus providing a minimal window to recover upfront costs. Dodger Night could also potentially be scheduled in July and August which would allow staff more of a marketing

timeframe. However, notwithstanding the date selected, the loss of youth teams' support is likely due to the minimal offerings presented by the Dodgers.

Option 3: *No longer coordinate an annual Dodger Night event.*
Due to the Dodgers' new policies, it may not be feasible or in the City's best interest to allocate funding for this special event particularly when staff event coordination is highly time intensive and up-front costs are high risk. As an alternative, staff could focus efforts to enhance existing partnerships or create new ones with local professional sports organizations. For example, since 2011, PRCS staff has fostered a relationship with the Los Angeles Clippers. This past March, staff successfully partnered with the Clippers to hold the 1st City of Burbank Clippers Night. The Clippers also support the City's youth instructional basketball league. Another viable option is to establish a new partnership with the LA Galaxy. As a Department that prides itself in presenting quality community programming throughout the year, these different partnerships provide Burbank with alternative community focused options with strong support from and for local organizations.

FISCAL IMPACT

Historically, Dodger Night has been low risk particularly in connection to City costs. This was mainly due to the flexibility presented by the Dodgers and their allowance of selling tickets with no up-front costs to the City. Moving forward with new guidelines established, PRCS (and/or potential partners) will need to fund the cost of tickets up-front, thus assuming the risk of recovering costs through ticket sales to the community. As previously mentioned, any unsold tickets that remain in the City's possession less than 30 days from the event will be a loss.

Tickets would be purchased from the Dodgers at a special group rate ranging from $17 to $42 per ticket, depending on the stadium section. Tickets would then be sold through a City of Burbank specific link on the Dodger website at a mark-up ranging from $2 per ticket to face value ($20 to $65). Given new Dodger policies, funding would be necessary to cover up-front ticket costs (amount varying dependent on ticket numbers delineated above). At this time, PRCS does not have an existing budget to support this event as it was not necessary in the past.

CONCLUSION

The City established a longtime relationship with the Dodgers. For many years the organization prioritized Burbank's community focus and the maximization of promotional opportunities. However, the Dodgers recently set new guidelines that aim to address all potential partners equally. The Dodgers want to be consistent with all organizations they interface with and special concessions on promotional opportunities and arrangements are no longer plausible.

Understanding the recent shift in the Dodgers' focus and direction, the City has options of not hosting a Dodger Night altogether, or hosting the event and committing to a specific ticket sales level. Promotional opportunities are no longer individually crafted.

As such, should the City proceed with a Dodger Night event, it would have to do so with the understanding that it is now a high-risk event with limited avenues for recognition and promotion. Moreover, the financial arrangement for the event is different; presenting the City with a need to propose a new funding request should the desire be to move forward with a 2014 event.

At this time, about 90 percent of remaining games are available with the exception of certain giveaway nights. Staff anticipates presenting the Burbank Sunrise Kiwanis and Board's feedback to the City Manager's Office as soon as possible to best determine the viability of a 2014 event.

EXHIBIT:
A – City of Burbank Dodger Night 2009-2013 Overview

EXHIBIT A

Event Year	Tickets Sold	Amount Collected	Amount Disbursed to the Dodgers	Net Profit*
2009	1,160	$22,272	$19,920	$2,352
2010	1,381	$26,674	$23,469	$3,205
2011	716	$16,108	$15,116	$992
2012	1,074	$19,645	$17,218	$2,427
2013	1,362	$25,867	$22,097	$3,770
Average	**1,138**	**$22,113**	**$19,564**	**$2,549**

*The City splits the net profit, 50/50, with the Burbank Sunrise

CITY OF BURBANK
311 E. ORANGE GROVE AVENUE, BURBANK CALIFORNIA 91502-1221
(818) 238-3473
FAX (818) 238-3483

FIRE DEPARTMENT

April 24, 2014

The Honorable Senator Carol Liu
California State Senate
State Capitol Building, Room 5097
Sacramento, CA 95814

RE: AB 2577 (Cooley/Pan) – Medi-Cal: ground emergency medical transportation services: supplemental reimbursement. **(SUPPORT)**

Dear Senator Liu:

The Burbank Fire Department supports AB 2577 (Cooley/Pan) – Medi-Cal: ground emergency medical transportation services: supplemental reimbursement.

Assembly Bill 678, otherwise known as GEMT, was signed into law by Governor Brown in October 2011. This bill allowed governmentally owned or operated ambulance providers the ability to draw down federal financial matching funds to offset the uncompensated cost incurred by local government for providing ambulance transport to Medi-Cal beneficiaries. This bill passed unopposed through all committees, both Houses and was signed into law in a short eight month period.

The resulting passage of AB 678 will bring over $100 million dollars into local public safety at no cost to California tax payers. When developed, the bill intended to capture **ALL** Medi-Cal beneficiaries. However, through the federal approval process it was determined that CMS could not allow Medi-Cal Managed Care to participate as part of a CPE program. As the state moves more and more beneficiaries from Fee for Service into Managed Care, the intended benefit of GEMT is being lost.

AB2577 will allow current GEMT providers to capture the reimbursements from Medi-Cal Managed Care through the use of Inter-Governmental Transfers (IGT) as these patients transition into the Managed Care/HMO coverage. Once AB 2577 is passed, local government will be able to draw down federal monies for all Medi-Cal transports as the original bill intended. Again, at no cost to the California tax payer. California's ambulances will provide over 3 million transports annually. Roughly 300,000 of those are Medi-Cal patients. Historically, Medi-Cal has not kept up with the cost of inflation or healthcare and current Medi-Cal rates do not cover the operating cost of a typical ambulance transport.

These non-reimbursed costs are subsequently absorbed into an agency's General Fund and paid for by the taxpayers. Because AB 2577 would allow these entities to access much needed fiscal relief and continue providing critical safety net services, we are pleased to support/sponsor this bill.

We urge an "AYE" vote on AB 2577 (Cooley/Pan) when it comes before you.

Sincerely,

Tom Lenahan
Fire Chief

C: Members Assembly Health Committee
Assembly Member Cooley
Emily Gabel-Luddy, Mayor
Mark Scott, City Manager
Jennifer Quan, League of California Cities

CITY OF BURBANK
311 E. ORANGE GROVE AVENUE, BURBANK CALIFORNIA 91502-1221
(818) 238-3473
FAX (818) 238-3483

FIRE DEPARTMENT

April 24, 2014

The Honorable Assembly Member Michael Gatto
California State Assembly
State Capitol Building
PO Box 942849
Sacramento, CA 94249-0043

RE: AB 2577 (Cooley/Pan) – Medi-Cal: ground emergency medical transportation services: supplemental reimbursement. **(SUPPORT)**

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Tom Lenahan
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C: Members Assembly Health Committee
Assembly Member Cooley
Emily Gabel-Luddy, Mayor
Mark Scott, City Manager
Jennifer Quan, League of California Cities

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
MEMORANDUM

DATE: April 23, 2014

TO: Mark Scott, City Manager

FROM: Bonnie Teaford, Public Works Director
By: Ken Johnson, Traffic Engineer

SUBJECT: City Manager Tracking List No. 1566 – Citizen complaint at alley north of Victory Boulevard at Buena Vista Street and at Brighton Street

---

Staff investigated the driver sight distance from the alley north of Victory Boulevard between Buena Vista Street and Brighton Street. It is difficult to determine the exact intersection from the information presented by the citizen, so we investigated three locations. See attached pictures for each location.

Location 1 - The alley intersection eastbound at Buena Vista Street has a 2.5 foot wall to the left and a building with indented wall (corner cut-off) to the right. A wheelchair user is visible to drivers and vehicles are visible to a wheelchair user at this approach prior to the pedestrian entering the alley intersection at Buena Vista Street. All potential obstructions are on private property. Since driver sight distance is appropriate, no remediation is recommended.

Location 2 – The alley intersection westbound at Buena Vista Street has low (2.5 feet high) walls to the left and to the right of a driver exiting the alley. Drivers can see wheelchair user and wheelchair users can see westbound vehicles in the alley prior to pedestrians entering the alley intersection. All obstructions are on private property. Sight distance is appropriate, so no remediation is recommended for this location.

Location 3 – The eastbound alley exit at Brighton Street has a high wall (approximately 5 feet high) to the left and a building wall to the right that are located next to the sidewalk. Driver and pedestrian sight distance are obscured by these obstructions. A STOP legend will be painted on the alley prior to the sidewalk.

SUBJECT: Ms. Espinoza public comment regarding alley at Buena Vista

Observations

LOCATION 1

ALLEY, LOOKING TO BUENA VISTA

LOCATION 2

ALLEY, LOOKING TO BUENA VISTA

LOCATION 3

ALLEY, LOOKING FROM BRIGHTON

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
MEMORANDUM

DATE: April 23, 2014

TO: Mark Scott, City Manager

FROM: Bonnie Teaford, Public Works Director B Teaford
By: Ken Johnson, Traffic Engineer

SUBJECT: City Manager Tracking List No. 1568 – Damage to Pedestrian Railing at the Buena Vista Street Rail Crossing

---

See attached correspondence. The pedestrian railing is within Union Pacific right-of-way; however, Southern California Regional Rail Authority (SCRRA) also operates on the track and owns the southern portion of the right-of-way. SCRRA is aware of the damage and will determine which agency will fix the problem. Public Works staff will monitor the situation and continue to remind SCRRA about the needed repair.

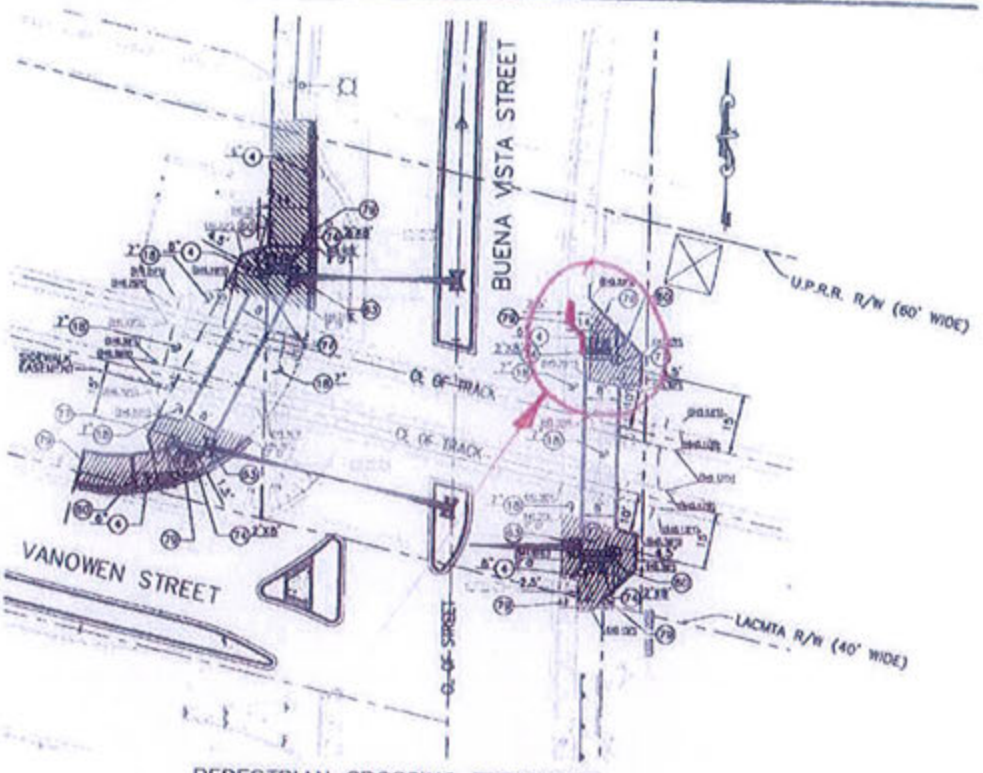
Attachment:
Correspondence with SCRRA

Johnson, Kenneth

From: Johnson, Kenneth
Sent: Wednesday, April 23, 2014 2:32 PM
To: 'Chan, Kim'
Cc: Molinar, John; Corrigan, Sean
Subject: Buena Vista Ral Crossing
Attachments: Buena Vista Crossing.pdf

Expires: Monday, October 20, 2014 12:00 AM

Kim
See the attached drawing. The pedestrian railing on the northeast corner of the rail crossing at Buena Vista Street has been hit by an automobile. The rail is well within SCRRA right-of-way. The damage does not pose an immediate hazard to drivers or pedestrians, but it should be repaired. Since the damage is on the north side of the rail easement, it is technically within Union Pacific right-of-way, but I do not know who has maintenance responsibility. If SCRRA is responsible, would you please transmit this request to your maintenance group. If UP is responsible, can you provide a contact person?
Thanks for your help
Ken



PEDESTRIAN CROSSING TREATMENT
1"=20'

PEDESTRIAN RAILING IMPACTED BY VEHICLE

CROSSING NO. 101 VE-461.50/DOT-746010T

Johnson, Kenneth

From: Chan, Kim <Chank@scrra.net>
Sent: Wednesday, April 23, 2014 2:38 PM
To: Johnson, Kenneth
Cc: Molinar, John; Corrigan, Sean; Watkins, Patricia
Subject: RE: Buena Vista Ral Crossing

Hi Ken,

SCRRA is aware of this issue. However, I have not heard who will be responsible for fixing this. If railroad is responsible then it will be SCRRA's job to fix it not UPRR.

As soon as I hear of a clear determination, I will let you know.

Thank you,
Kim Chan, SCRRA

Kim Chan
Rail Corridor Crossing Engineer
909-394-3280 office| 213-435-1827 mobile

METROLINK. CONNECT WITH US

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From: Johnson, Kenneth [mailto:KJohnson@burbankca.gov]
Sent: Wednesday, April 23, 2014 2:32 PM
To: Chan, Kim
Cc: Molinar, John; Corrigan, Sean
Subject: Buena Vista Ral Crossing

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Thanks for your help
Ken

MEMORANDUM

DATE: May 2, 2014

TO: Mark Scott, City Manager

FROM: Ron Davis, General Manager, BWP

SUBJECT: SYNOPSIS OF BWP BOARD MEETING

Following is a synopsis of the May 1, 2014 BWP Board meeting:

BWP OPERATIONS AND FINANCIAL REPORTS
Mr. Liu presented BWP's financial update for March.

STREETLIGHT MASTER PLAN UPDATE
Mr. Lippert presented the updated Streetlight Master Plan as well as the ongoing maintenance and capital improvements to Burbank's street lighting system. The Plan calls for a major change to the Street Lighting standard, and describes the LED as the new standard for new streetlight construction. LED bulbs will be used to replace 100W and 250W high pressure sodium bulbs as they need to be replaced.

DROUGHT MANAGEMENT/DROUGHT RESPONSE UPDATE
Mr. Mace presented an update on the water conditions in California. He noted that since the Council Study Session on April 22 conditions have worsened. Two dry seasons in the Northern Sierra Nevada Mountains has considerably affected California's water supply. Southern California has been supplemented by storage which has avoided the most severe impacts. Water quality is also being affected with the increase of salts. Water use as well as water quality issues are being tracked and will be reported back to Council as directed.

LEGISLATIVE UPDATE
Ms. McGinley updated the Board on the 2014 Water Bonds presently in legislation.

city of burbank
community development department

memorandum

DATE: April 30, 2014

TO: Mark Scott, City Manager

FROM: Joy R. Forbes, Community Development Director

SUBJECT: **Metro's Northern Corridors Cities Meeting Synopsis – APRIL 28, 2014**

- Council Member Talamantes attended this meeting and asked questions throughout the lengthy agenda. Ara Najarian from Glendale represents Burbank and other Northern County cities on the Metro Board of Directors.

- Mike Kodama gave an update on the Amtrak station repaving and stated the California Transportation Commission approved the pedestrian bridge on Empire Avenue. He also stated the Airport's RITC project would open in late June/early July.

- An update from Metrolink indicated the ridership in the north county area has slipped.

- Metro gave an update on their draft 2015 Short Range Transportation Plan. Council Member Talamantes requested a copy of this be distributed to all council members (attached draft and PowerPoint summary).

- Metro indicated they are now accepting applications for their Transit Oriented Development planning grant program. Applications are due July 15, 2014. Staff is determining if there are appropriate projects to which we can apply.

- Metro discussed their First/Last Mile Strategic Plan and Pilot Project and they stated next they will look at North Hollywood and Universal Metro stations.

- Metro discussed the transition of transportation funds to the Active Transportation Program. Burbank has funds that will need to be transferred.

- Metro is still working on a Congestion Mitigation Fee study to determine if a fee based program is best or another option. Staff will follow this closely.

What is the Short Range Transportation Plan

Ten-Year Action Plan that:

> Implements next 10 years of the Board-adopted 2009 LRTP

> Updates financial assumptions through 2024

> Identifies transportation priorities within available resources from 2014 - 2024

> Identifies how we will keep our system in a state of good repair

> Identifies our progress in sustainability efforts

> Measures the benefits of the Plan projects

> Lays out a path to accelerate projects

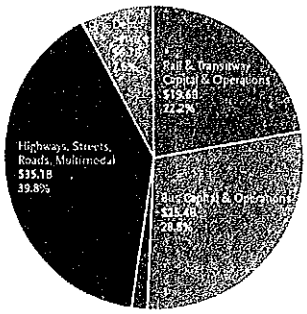
2

The Financial Picture

- > $88.2 Billion assumed through FY 2024
- > Plan is funded with more than 45 sources of federal, state and local revenue
- > Almost $27 billion is projected to operate bus and rail service countywide
- > $35 billion available for highway, roadway, signal, bicycle and pedestrian programs

Countywide Uses of Funds

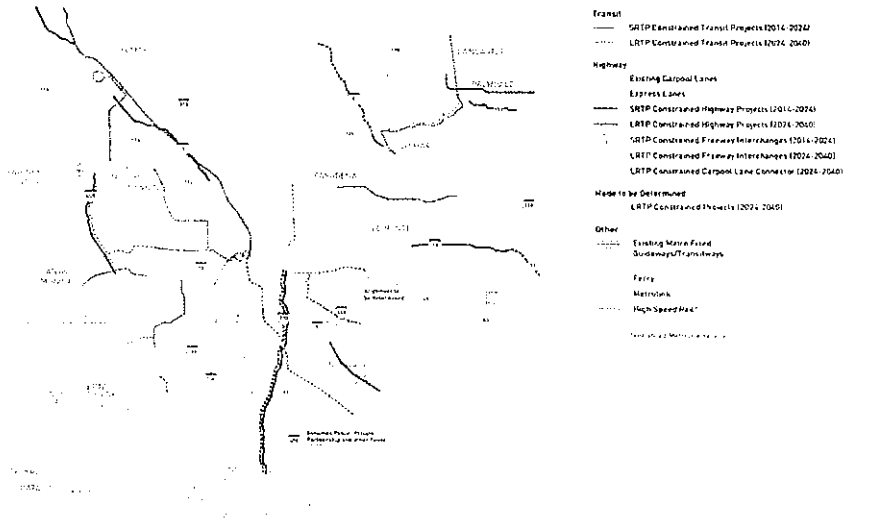
$ IN BILLIONS



Total Plan $88.2 Billion
FY 2014-2024

3

Future Projects



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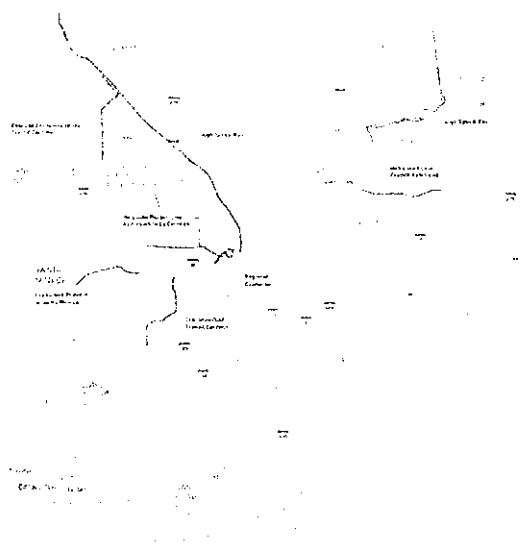
Public Transportation Recommended Plan



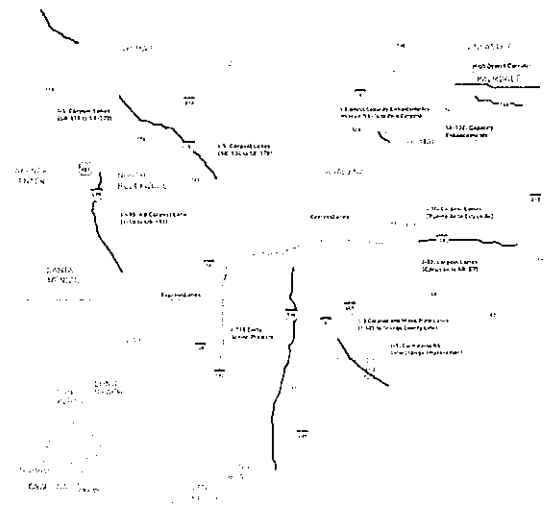
> 6 major transit corridor projects will be completed

> Metro Rail will expand by 32 miles of track, 110 stations and over 120 miles of service

> Funds are provided for our regional transit partners (Access Services, Metrolink, Immediate Needs Program)

5

Highways Recommended Plan



> 76 carpool lane miles will be completed on the I-5, I-10, I-405 and the High Desert Corridor

> Funds are identified for interchange and highway operational improvements

> Funds biennial Call for Projects through 2024

6

State of Good Repair

> We coordinated with Operations to analyze the needs for a system that has been growing since 1991

> Needs fall into three categories
  – Safety, Service Delivery and Quality of Service

> Plan looks beyond annual needs to ensure funds are set aside to cover the cost of rehabilitating and replacing assets

> Plan dedicates $4.8 billion for State of Good Repair

7

Sustainability

> Plan highlights Metro's role in Sustainability
  – Managing Metro Resources
  – Planning with Others Countywide

> Plan reduces Greenhouse Gas Equivalent Emissions by 1,741 tons per day

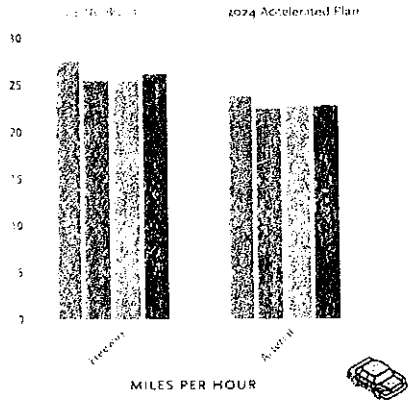
> Invest majority of funds (87%) in transit, carpool lanes, ridesharing programs, bikeways and pedestrian linkages

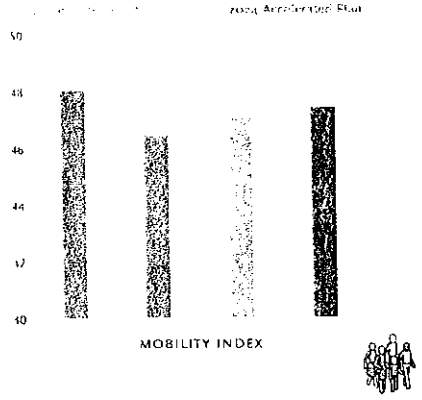
8

Measuring the Benefits

> We will hold the line on freeway and arterial speeds

> More people will move more quickly through our system





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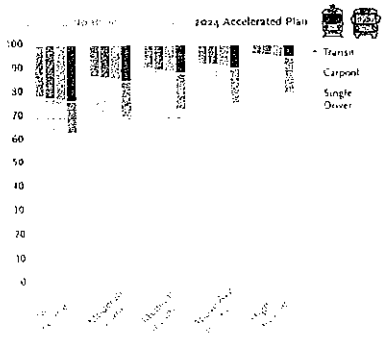
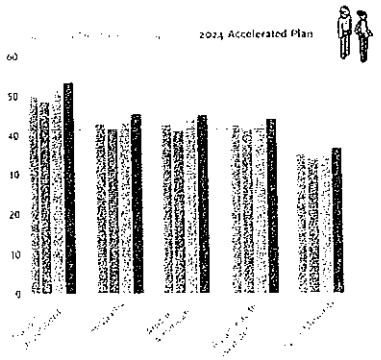
Measuring the Benefits – cont.

> All income groups, including low-income, are expected to use transit to work more often

> All segments of the population, including the transit dependent, will enjoy more transit access to work



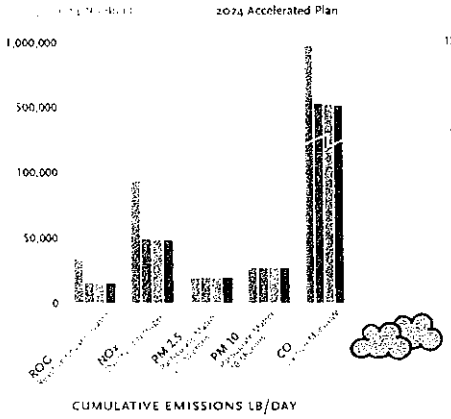


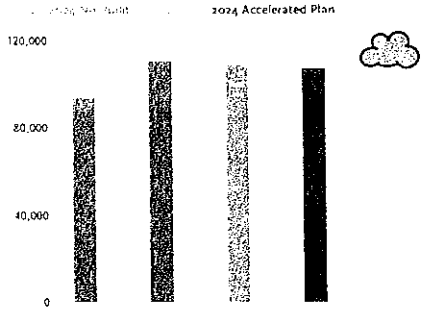
10

Measuring the Benefits — cont.

> The air will have less pollutants

> The air will have less greenhouse gas emissions



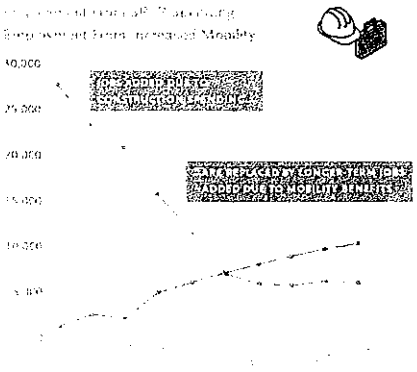


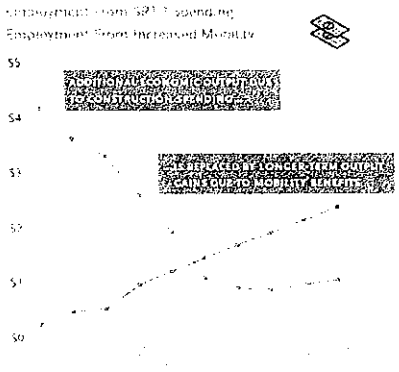
11

Measuring the Benefits — cont.

> Nearly 200,000 jobs will be created

> $33 billion will be pumped into the local economy





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Future Funding Strategies

Possible new funding strategies include:

> America Fast Forward Transportation Bonds

> Additional New Starts grants

> Public-Private Partnerships

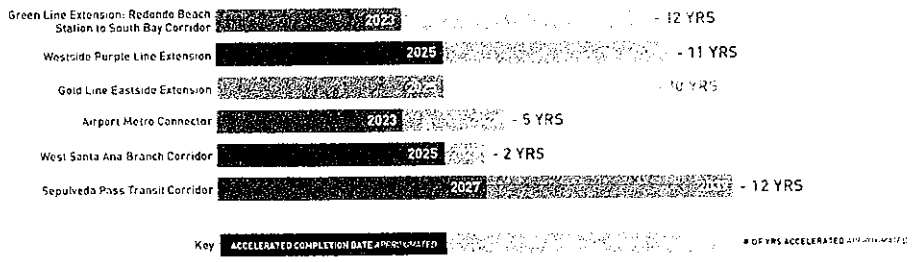
> Sales Tax Measure

– Extension of existing measure

– Additional measure

13

Possible Transit Project Acceleration



14

Next Steps

April 12 to May 12, 2014

> Release Draft Plan for 30-day Public Comment Period

- COG Outreach
- Community Outreach

> Two ways to submit public comment:

- email: metroplan@metro.net or
- in writing: MTA attention: Robert Calix
  One Gateway Plaza, MS 99-23-2
  Los Angeles California 90012

June 26, 2014

> Metro Board Consideration

15

How to Access the Plan

http://www.metro.net/srtp2014

16

metro.net/srtp2014

We're delivering on our promise.

2014 Short Range Transportation Plan

DRAFT

TECHNICAL DOCUMENT

Metro

Board of Directors

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Eric Garcetti, *First Vice Chair, Mayor,* Los Angeles

Mark Ridley-Thomas, *Second Vice Chair, Los Angeles County Supervisor,* Second Supervisorial District

Michael D. Antonovich, *Los Angeles County Supervisor,* Fifth Supervisorial District

Mike Bonin, *City Council Member,* Los Angeles

John Fasana, *City Council Member,* Duarte

Don Knabe, *Los Angeles County Supervisor,* Fourth Supervisorial District

Paul Krekorian, *City Council Member,* Los Angeles

Gloria Molina, *Los Angeles County Supervisor,* First Supervisorial District

Ara Najarian, *City Council Member,* Glendale

Pam O'Connor, *Mayor,* Santa Monica

Zev Yaroslavsky, *Los Angeles County Supervisor,* Third Supervisorial District

Jacquelyn Dupont-Walker, City of Los Angeles Appointee

Carrie Bowen, *Caltrans District 7 Director,* Non-Voting, Appointed by the Governor of California

On the cover:
Construction continues on Metro's Expo Line extension.

Table of Contents

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Travel Demand Model and Assumptions	24

The 2014 Short Range Transportation Plan (Plan) Technical Document is a companion document to the Los Angeles County Metropolitan Transportation Authority's 2014 Short Range Transportation Plan.

The 2014 Short Range Transportation Plan (Plan), available under separate cover, lays out an action plan for funding and implementing Los Angeles County transportation programs and projects over the ten-year period from Fiscal Year (FY) 2014 through FY 2024. This document, the 2014 Short Range Transportation Plan Technical Document (Technical Document), provides additional information regarding various technical components of the Plan, including sustainability, financial modeling and assumptions, travel demand modeling and assumptions, and performance analysis.

Plan Overview

Metro is responsible for planning and programming in Los Angeles County, in accordance with California Government Code Section 130051. In October 2011, the Board directed Metro staff to prepare a Plan to lay out a realistic framework for the transportation needs and challenges that Los Angeles County will face in the short term to 2024. The Plan is a key element of Metro's planning process, serving to implement the near-term strategies of Metro's Long Range Transportation Plan (LRTP), adopted by the Metro Board in October 2009.

The Plan focuses on the various pieces of Los Angeles County's transportation system, identifying which projects and programs can be put into place within existing financial sources in the near term. The following highlights what the Plan will do:

> Establish a coordinated blueprint for transportation
> Keep our existing system in a State of Good Repair
> Grow LA County greener
> Respond to our financial challenges
> Measure the benefits

Sustainability

The legislature has implemented policies designed to promote sustainability in the state. Legislation such as AB 32 (Global Warming Solutions Act) and SB 375 (Sustainable Communities Strategy and Climate Change Protection Act) are designed to reduce greenhouse gas emissions. Metro has implemented sustainability measures designed to ensure compliance with these state policies. Further information regarding this is found in the Sustainability chapter.

Community Outreach, Environmental Justice, and Title VI Analysis

In developing the Plan, Metro is coordinating with a wide range of interests. Metro is conducting community outreach meetings for the Plan at locations throughout the County, and is providing an opportunity for public review through a 30-day comment period from April 2014 through May 2014. Metro is also coordinating with its transportation partners, including the subregional agencies, the Southern California Association of Governments (SCAG), Caltrans, Metrolink, and municipal and local transit operators. Finally, Metro regularly consults with the Metro Technical Advisory Committee and its subcommittees.

Metro complies with federal environmental justice and Title VI requirements to include transit-dependent and minority communities in its community outreach and to analyze the benefits and impacts of the Plan on the transit-dependent and minority communities. Metro meets these programs through the following: 1) through many community meetings on the Plan; 2) through coordination with nine subregions comprising local elected officials and staff; 3) through media awareness of the Plan; 4) through presentations on the Plan to the Metro Board; 5) through the 30-day public review period; and 6) through demographic analysis of the Plan's recommendations, in particular looking at performance measures for mobility and transit access. Extensive community involvement also occurs on major transportation projects at the project-level and through planning and environmental review activities. The Plan has performed well in meeting the needs of transit dependent and minority communities. In fact, the analysis indicates that transit services are available at a higher service level in these communities than in the County at large. Further information regarding this analysis is found in the Travel Demand Model chapter.

Relationship to Other Plans

The Plan identifies how Metro is advancing toward the long-term goals outlined in the LRTP for the ten-year window from FY 2014 through FY 2024. The projects recommended for funding in the Plan were initially proposed in the LRTP and are also included in SCAG's 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Technical Document Contents

This document includes the following sections, as described below:

> **Chapter 1 – Introduction**
> **Chapter 2 – Sustainability**
This chapter takes a look at how Metro is addressing sustainability issues.
> **Chapter 3 – Financial Model and Assumptions**
This chapter describes the financial model and analysis that supports the Plan.
> **Chapter 4 – Travel Demand Model and Assumptions**
This chapter describes the travel demand model and assumptions used to assess the performance of the Plan.

Sustainability

The projects and programs included in this Plan reflect Metro's continued commitment to sustainability in both its capacities as a major business and employer as well as the leading transportation planning and funding agency in the county. At the broadest level, this commitment to sustainability challenges us to meet the needs of the present without compromising the ability of future generations to meet their own needs.

Under the leadership of the Ad Hoc Sustainability Committee, the agency has generally focused its response to this challenge through policies and programs in two primary areas:

> Countywide Planning and Programming and

> Agencywide Facilities and Operations.

This chapter focuses on the progress and actions that are currently being undertaken in these areas.

Planning a Sustainable Transportation System

Through collaboration with the Southern California Association of Governments (SCAG), subregional agencies and cities on the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and development of the Countywide Sustainability Planning Policy (CSPP), Metro is providing the leadership and a framework for advancing sustainability across the county in the context of transportation planning.

The CSPP led to the development of a joint Metro/SCAG First/Last Mile Strategic Plan. The First/Last Mile Strategic Plan seeks to increase ridership and improve customer safety through a series of infrastructure and technological innovations in and around Metro Rail, Metro Bus, Metrolink, and municipal bus line stations. The First/Last Mile Strategic Plan embodies the three overarching CSPP principles of Connect (improving station access; reducing transportation costs; promoting green modes), Create (enhancing community development; urban greening and public health) and Conserve (context sensitive solutions; making the transit system more productive and promoting green modes).

Principles and Priorities

Metro's Countywide Sustainability Planning Policy seeks to better define and articulate Metro's role in achieving a sustainable transportation system through principles and priorities. It aims to facilitate greater coordination and collaboration across transportation modes, planning disciplines, and government agencies. The principles align with the areas of responsibility within which Metro's planning practices can influence sustainability outcomes—as a regional mobility provider (Connect), a project manager (Create), and a steward of public funds (Conserve). Three priorities are associated with each principle that highlight key social, economic and environmental dimensions of sustainability to be advanced through the transportation planning process (Figure 2.1).

Plan Performance

To integrate the sustainable principles and practices into planning activities, the Countywide Planning Policy promotes the use of performance metrics to assess the sustainability benefits of plans and projects. Consistent with this policy, the following section uses a set of evolving sustainability performance metrics and project examples to report on the impact of the Plan on Metro's sustainability priorities.

These metrics compare a No Build scenario with a 2020 scenario in which the Plan has been implemented. The 2020 scenario assumes implementation of the 2012-2035 RTP/SCS, which includes land use changes and pricing strategies that will complement Metro's assumptions made in the Plan. The RTP/SCS overlays a growth forecast, which compiles local land-use data, with the transportation network to achieve a per capita reduction in greenhouse gas emissions from passenger vehicle-use.

FIGURE 2.1

Principles and Priorities

Connect People and Places

Access. Better integrate land-use and transportation planning to reduce trip lengths and increase travel choices.

Prosperity. Reduce transportation costs for residents and provide the mobility necessary to increase economic competitiveness.

Green Modes. Promote clean mobility options to reduce criteria pollutants, greenhouse gas emissions, and dependence on foreign oil.

Create Community Value

Healthy Neighborhoods. Improve public health through traffic safety, reduced exposure to pollutants, and design and infrastructure for active transportation.

Community Development. Design and build transportation facilities that promote infill development, build community identity, and support social and economic activity.

Urban Greening. Enhance and restore natural systems to mitigate the impacts of transportation projects on communities and wildlife, and ecosystems.

Conserve Resources

Context Sensitivity. Build upon the unique strengths of Los Angeles County's communities through strategies that match local and regional context and support investment in existing communities.

System Productivity. Increase the efficiency and ensure the long-term viability of the multimodal transportation system.

Environmental Stewardship. Plan and support transportation improvements that minimize material and resource use through conservation, re-use, re-cycling, and re-purposing.

= Principle that highlights the social dimension of sustainability.

= Principle that highlights the economic dimension of sustainability.

= Principle that highlights the environmental dimension of sustainability.

The performance metrics track countywide outcomes, influenced by Metro's activities as well as factors beyond the agency's direct control. While the majority of the priorities have associated quantitative metrics, due to data limitations, some of the priorities highlight innovative programs and future endeavors that provide more of a qualitative assessment.

The performance metrics, except where noted otherwise, are outputs of the Rapid Fire Model used in SCAG's 2012 RTP/SCS. The 2020 scenario reflects a model year in SCAG's Travel Demand Model. It will be updated to 2024 in the Final Technical Document, to be released in the summer of 2014.

Connect

Access – By better integrating land use and transportation planning, Vehicle Miles Traveled (VMT) and trip lengths will be reduced and greater transportation options will be made available. Additionally, annual transit boardings will increase with further investments in transit, bicycle and pedestrian infrastructure, providing greater mobility options to county residents.

	VMT[1]	Annual Boardings[2]
NO BUILD	21,201 mi per HH	703,547,000
2020	18,959 mi per HH	737,477,000

Prosperity – The plan will increase economic competitiveness by linking jobs to the county rail network and providing for improved mobility of the region's workforce. New and improved transportation infrastructure and an expanded network of alternative transportation modes will help to reduce household transportation costs including fuel use and automotive expenditures.

	Jobs Accessible via Rail[3]	Household Costs[1]
NO BUILD	855,000 jobs	$12,924 per HH
2020	1,340,000 jobs	$12,073 per HH

Green Modes – By investing in cleaner mobility options such as walking, biking, transit, and carpooling, criteria pollutant emissions and GHG emissions associated with fuel combustion will be reduced. The Plan will also reduce our region's dependence on foreign oil by advancing and supporting green modes that rely less on traditional fuel sources.

	Criteria Pollutants[1]	GHG Emissions[1]	Fuel Consumption[1]
NO BUILD	192,195 tons	24.3 MMT	3,037 mil gal
2020	171,870 tons	21.8 MMT	2,716 mil gal

Create

Healthy Neighborhoods – Through traffic safety improvements and design for walking and bike, public health will benefit by reducing the number of annual health incidences and decreasing overall health costs for LA County.

	Annual Health Incidences[1]	Health Costs[1]
NO BUILD	179,090	$3.14B
2035	134,752	$2.37B

Community Development – The RTP/SCS promotes infill development while maintaining and enhancing community identity and supporting social and economic activity. Fewer square miles will be consumed, open space will be preserved and infrastructure costs will fall. Land consumption will decline substantially and infrastructure costs (including local roads, water supply, and parks) will decrease. At Metro, the Transit-Oriented Development (TOD) Grant Program advances community development by supporting local regulatory changes that spur targeted investments near transit.

	Land Consumption[1]	Infrastructure Costs[1]
NO BUILD	133 sq mi	$4,526M
2020	89 sq mi	$3,750M

[1]Data for VMT, Household Costs, Criteria Pollutants, GHG Emissions, Fuel Consumption, Annual Health Incidences, Health Costs, Land Consumption and Infrastructure Costs are outputs of the Rapid Fire Model used in SCAG's 2012 RTP/SCS.

[2]Data for Annual Boardings are outputs of Metro's Travel Demand Model.

[3]Data for Jobs Accessible via Rail derived from maps developed by Reconnecting America in 2011 as part of the Los Angeles Equity Mapping Project.

Urban Greening – As part of ongoing internal and external efforts, Metro will be promoting urban greening by planning for transportation improvements that mitigate impacts on local communities while advancing efforts to preserve and enhance the natural environment. On a regional scale, Metro will be working with SCAG to create an Open Space Conservation Strategy and at the county level, Metro will be developing an Urban Greening Plan to optimize environmental systems, enhance placemaking, and build a sense of community at our stations.

As part of the 2012 RTP/SCS, SCAG recommended creating an Open Space Conservation Strategy to optimize the use of transportation mitigation funds for land conservation and habitat preservation. Metro will be participating in the development of this Strategy to ensure that the impacts of future transportation projects appropriately enhance and restore natural systems.

Conserve

Context Sensitivity – The Plan moves forward strategies that match local and regional context and support investments in existing communities. Through our Countrywide Sustainability Policy, Metro has established an Accessibility Index that groups locations by accessibility characteristics to help define implementation needs and potential strategies for advancing sustainability priorities among communities. This approach recognizes that "one-size fits all" solutions are not appropriate in a county as large and diverse as Los Angeles.

The Eastside Access Program is a Measure R funded project with a $30 million allocation. Using urban design tools including art, lighting and landscaping, multi-modal linkages from the Metro Gold Line Eastside stations to the surrounding neighborhoods will be created. The project aims to strengthen neighborhood identity, pedestrian/bicycle activity and way finding.

System Productivity – The Plan will increase the efficiency and ensure the long-term viability in technology and innovative programs that enhance the regional

transportation system and optimize the use of existing and planned facilities. Such programs include signal synchronization, transit priority systems, ExpressLanes, Freeway Service Patrol, and Transportation Demand Management.

Metro ExpressLanes is a pilot, one-year demonstration program to develop a package of solutions to improve traffic flow and provide enhanced travel options on the 10 and 110 freeways. The program includes introducing congestion pricing by converting High Occupancy Vehicle (HOV) lanes to High Occupancy Toll (HOT) lanes; improving transit service; upgrading transit facilities; and improving parking in downtown Los Angeles.

Environmental Stewardship – Minimizing material and resource use through conservation, re-use, recycling and re-purposing is an essential component of making transportation projects and improvements more sustainable. Metro has already incorporated environmental stewardship into many of the programs it supports, manages, and funds. For example, nearly two thirds of all projects funded through Measure R Local Return have included green design features and/or implemented SCS strategies.

Metro recently received a grant to develop an Urban Greening Plan that serves as an inter-agency blueprint for strategic investment of resources based on environmental and social needs across the transit system. As part of this plan, a Greening Toolkit will be created to address the environmental challenges of station areas including parking lots to reduce water and air pollutants and mitigate the impacts of climate change.

Next Steps

Metro will continue to advance sustainability through the execution of the Countywide Sustainability Planning Policy and its associated implementation activities. Metro will monitor and track regional performance and work with partners throughout the county to identify opportunities and strategies to create a more sustainable transportation system. Under the direction and leadership of the Ad Hoc Sustainability Committee, Metro will report regularly on local and regional government actions, programming and planning efforts, as well as interagency initiatives that showcase the impact and effectiveness of the Countywide Sustainability Planning Policy.

Countywide Planning objectives include:

> Advance and more thoroughly integrate sustainability principles into Metro's plans and programs to enhance the quality, efficiency and effectiveness of agency investments.
> Integrate a monitoring and evaluation process that will track countywide performance outcomes and be reported to the Metro Board on an annual basis.
> Provide regional leadership for the implementation of the RTP/SCS to meet federal/state requirements and increase regional competitiveness for federal/state/private transportation funds.
> Identify and implement pilot projects that further Metro's approach to sustainability in external activities and internal projects and practice.
> Expand outreach and sustainability communications and programmatic initiatives to increase visibility and build community support.
> Pursue Federal, State and local funding opportunities to advance the sustainability principles outlined in the RTP/SCS, LRTP and CSPP.

AGENCYWIDE FACILITIES AND OPERATIONS

The Need for Agency Sustainability

Metro is an essential part of the solution to achieving sustainability at the regional level in Los Angeles. Transit is a core component to a sustainable region; it enables a variety of improved efficiencies in goods distribution, people movement, infrastructure, natural resource consumption, and fuel consumption. Metro is improving and expanding transit options for the region that will create opportunities for millions of people to make more sustainable transportation choices. However, providing more services also means that Metro uses more resources —and that's why Agency Sustainability, or sustainability within Metro, is so important. As we expand our system and services through planned transit lines, new TODs and the further integration of active modes of transportation into our system, we're simultaneously working to improve our efficiency when it comes to fuel, water, energy, and waste; Metro is doing more with less and improving its operational capacity everyday.

Metro has adopted aggressive policies related to energy consumption, water conservation, construction activities, green building, and climate change management (*www.metro.net/ecsd*). While a majority of agency sustainability strategies are voluntary, they help Metro address the need to comply with various state and federal policies including AB 32: Global Warming Solutions Act, the California Environmental Quality Act (CEQA) and SB 375 among others.

Guiding Policies

Several policies adopted over the last few years have outlined the path forward for agency sustainability. The Metro Sustainability Implementation Plan (MSIP), adopted by the Board in June 2008, provides general guidelines for both short-term and long-term sustainability project development. As part of the MSIP, Metro publishes an annual report on environmental sustainability performance. The first report, written in 2009, establishes an agency-wide baseline for a number of indicator areas including ridership, fuel use, electricity consumption, water use, greenhouse gas and other emissions, and waste. Each year, Metro releases a new Energy and Resource Report (formerly known as the Sustainability Report) to track the agency's efforts relating to operational sustainability. The MSIP is undergoing revisions and is slated for an update in FY15.

The Environmental Policy, adopted in April 2009, reinforces the agency's commitment to provide multi-modal public transit services in a manner that both protects and enhances the environment and community that they serve. The Environmental Policy outlines Metro's commitment to planning and constructing projects, operating and maintaining facilities and vehicles, and procuring products and services consistent with state and federal laws and regulations in a manner that protects human health and the environment, while still prioritizing the efficient delivery of quality public transit services.

Facilities and Operations

A primary consideration of Metro's operations are the agency's facilities—the maintenance yards, administrative offices, and wayside facilities. These are the support system for the agency's transportation services, and are also responsible for a significant portion of the agency's resource consumption. Each of these facilities has a specific role within the transit network and most are responsible for carrying out tasks unique to that facility. To help manage and track the operations and safety of this wide range of facilities, Metro has embraced the adoption of an agency-wide Environmental Management System (EMS)—a series of best practices and procedures that seek to reduce Metro's impact on the environment, and to seek continual improvement to its environmental performance. In addition to environmental compliance, Metro's EMS has also assumed the overarching role of managing Metro's energy, water, waste and recycling, and climate and resiliency initiatives to streamline our efforts. EMS is currently employed at eight of Metro's divisions, with six divisions already certified to the International Standards Organization (ISO) 14001:2004 standard for upholding an exemplary EMS program. The EMS program has continued to prove effective in reducing division operating costs, employee risks, and environmental liabilities. All Metro facilities are slated to be enrolled in the EMS program by 2016.

The agency is also taking steps to reduce resource consumption as directed by additional strategies such as those contained in the Sustainability and Energy Policy (2007), Water Action Plan (2010), Energy Conservation and Management Plan (2011), and Renewable Energy Policy (2011). These policies have led to actions that have resulted in significant environmental benefits and agency cost savings. The Metro Headquarters building achieved Leadership in Energy and Environmental Design (LEED) Existing Building Operations and Management (EB O&M) certification in 2011. This has resulted in water savings of 48%, energy savings of 6% and a reduction in harmful chemicals used on-site for cleaning and other activities.

A total of six Metro buildings and facilities has already been certified by the United States Green Building Council (USGBC) as meeting the requirements for LEED Certified or higher. Metro has made a commitment to build future facilities over 10,000 square feet to LEED Silver standards.

The agency is also undergoing an aggressive campaign to conduct energy audits at existing facilities and upgrade building energy systems to increase operating efficiency.

In addition to facility energy projects, Metro is planning, developing, and implementing projects to reduce water consumption. These water conservation projects include: 1) installing recycled water for irrigation along a portion of the Metro Orange Line, which is estimated to reduce potable water usage by 12 million gallons per year; 2) incorporating a cistern in the new Division 13 Bus Maintenance Facility to capture and use storm water for irrigation and bus washing (an estimated 2.8 million gallon reduction in potable water use); and 3) providing a water recycling system to clean discharged water for reuse in the Division 9 Steam Bay (an estimated 2.0 million reduction in potable water use). Metro is also exploring pilot projects to install Linear Kinetic Cell (LKC) water conditioning systems for the bus wash final rinse at Bus Divisions 5 and 18 to eliminate the potable water waste associated with reverse osmosis water systems. The LKC system is estimated to conserve 3.8 million gallons and 6.1 million gallons at Division 2 and 18, respectively.

These targeted efficiency measures have not only reduced resource consumption, but also lowered facility expenses. Our green building efforts complement the alternatively fueled fleet we operate. Since 1993 Metro has only added buses to its fleet that run on alternative, clean air fuels. The last diesel bus was retired from service in 2011, and Metro is now proud to operate a fleet of over 2,000 compressed natural gas buses. These buses have helped the agency reduce GHG emissions by 16%, and criteria air pollutants by 93% from 1990 to 2010.

Metro's renewable energy portfolio currently includes approximately 2.5 megawatts of solar photovoltaic energy at six facilities. Coupled with ongoing energy efficiency retrofits, these renewable energy projects are reducing Metro's demand for mostly coal-based power.

Metro is exploring other renewable energy sources through grants received from the Federal Transit Administration and the South Coast Air Quality Management District. Flywheel technology will be used at the Red Line/Purple Line MacArthur Park Station as energy storage. The same technology will be used as a voltage regulator at the Gold Line, near Avenue 31. Metro is reviewing other ideas to expand its renewable energy capabilities and options.

Our Board has approved in 2013 our Biomenthane Implementation Plan. This plan outlines options for Metro to use biomethane in its fleet while further reducing Metro's carbon footprint. Biomethane is a natural gas that originates from dairy waste, wastewater treatment plant processing, and landfill material decomposition. As such, biomethane is classified as a renewable fuel. As technologies improve, Metro will continue to assess options to further reduce our emissions.

Construction

Metro has recently been focusing efforts on increasing the sustainability of our construction activities as we deliver major Measure R funded capital projects that keep the region moving. The Construction Demolition Debris Recycling and Reuse Policy (2007) ensures consideration be given to recyclable and recycled products in the selection of construction materials used for Metro or Metro-funded capital projects, like rail lines, bus and rail maintenance facilities or TODs. The policy also requires Metro to verify that materials are disposed at, or diverted to, licensed or permitted facilities. Metro's Green Construction Policy, adopted in 2011, addresses emissions associated with construction activities, by requiring that construction equipment used on Metro projects meet emissions requirements that meet or exceed current air quality standards. Best Management Practices outlined in the policy provide additional specifications for construction equipment to ensure that emissions and traffic congestion caused by construction activities are minimized.

Climate Change Management

Climate change is an increasingly important issue, and Metro is in a position to impact the volume of greenhouse gas emissions (GHG) in the Los Angeles region. The agency is moving quickly to reduce direct greenhouse gas emissions and prepare for increased weather impacts. The Greenhouse Gas Emissions Cost Effectiveness Study, completed in 2010, analyzes a variety of short- and long-term options for GHG reduction at the agency. This study has been a key document aiding in the development of the agency-wide Climate Action and Adaptation Plan (CAAP). The completed CAAP is the agency's guiding document for GHG reduction actions and climate adaptation. It provides the necessary foundation as we move forward and begin to transition from climate adaptation planning to physical adaptive measures to make our transit system more sustainable and resilient.

Metro has partnered with the FTA in an exploratory effort for implementing climate adaptation. Metro's climate adaptation pilot program provides a series of steps for how climate adaptation planning can be integrated into Metro's EMS. The pilot also provides a more generalized tool kit for other transportation agencies to adopt if they choose to utilize an EMS to approach climate adaptation.

Next Steps

When it comes to sustainability, Metro is an industry leader. The policies we have developed and the projects we have implemented allow us to do more for transit users with less, and we are always looking to new technologies and exploring new ideas to further these efforts.

Current studies and projects underway include assessing different methods to reduce energy consumption used for rail propulsion, and exploratory efforts to harvest wind in subway tunnels for energy. We are quantifying and valuing our carbon emissions in all of our operations as well as the derived benefits of our system from vehicle miles traveled, congestion reduction, and land use to produce carbon credits that will be tradeable in the California and similar markets. We are expanding our EMS to create more efficiency in the way we operate our systems. We are incorporating electric vehicle charging stations initially at our outlying stations to encourage electric vehicle owners to use our expanding transit network. We are also producing design requirements and guidelines to incorporate sustainability into new projects from the onset.

As Metro expands its facilities and services over the next few years by providing more options for transit riders, we will seek to reduce our environmental impact while simultaneously providing social value to our stakeholders, an avenue to further grow local and regional economic activity, and a mutually beneficial transportation experience —where our riders are part of the solution.

Financial Model and Assumptions

The Plan financial forecast provides a fiscally sound baseline for decision-making and is a key strategic financial planning element of Metro's LRTP. The Plan financial forecast seeks to maximize resources by leveraging state and federal funds and minimizing the amount and cost of Metro borrowing. This strategy supports Metro's state and federal legislative advocacy program by providing a focus for those efforts and a common plan for our delegations.

The Plan includes a multi-modal, publicly funded capital and operating program estimated at $88.2 billion through FY 2024. The forecast reflects the best available estimate of revenues (sources) and costs (uses) and is constrained to the financial resources that can reasonably be expected to be available. The forecast assumes continuation of state and federal formula funds and assumes the need for state and federal discretionary funds. It allocates available resources to priorities established by the Board, reflecting Board and voter-adopted sequencing to ensure consistency with Measure R and the LRTP.

MAJOR REVENUE ASSUMPTIONS

Revenues come from many federal and state grants, and local taxes, as well as from passenger fares, advertising, real estate rentals, and other miscellaneous sources.

Local Sales Tax Revenues

Sales Tax Revenues

State and local sales taxes account for 48 percent of forecasted revenues (excluding Measure R Highway Program Strategy Funds) through FY 2024. Growth is based on the July 2013 University of California at Los Angeles (UCLA) Anderson Forecast. The average sales tax growth rate is 4.19 percent through FY 2024. The actual percentage growth varies each year to capture fluctuations in the economic market as the independent forecast depicts. The sales tax projection is based on FY 2012 audited values of $648.7 million for Proposition A, $648.8 million for Proposition C, and $645.0 million for Measure R.

Proposition A*

A half-cent sales tax, passed by Los Angeles County voters in 1980, is to be used to improve public transit throughout Los Angeles County. A portion of the revenues is returned to local jurisdictions, based on population, for use in public transit projects. Revenues, after 5 percent administration, are divided as follows:

Local Return (direct to cities and county)	25%
Rail development and operations	35%
Discretionary (bus operations only per Metro Board policy)	40%

All Proposition A 40 percent discretionary funds are used for bus operations in accordance with established formulas. Proposition A local return revenues are spent on bus operations expenditures that are based on the Short Range Transit Plans of the local municipal operators and plans of the cities.

Proposition C*

A half-cent sales tax, passed by Los Angeles County voters in 1990, is to be used for public transit purposes in Los Angeles County. Revenues, after 1.5 percent administration, are divided as follows:

Rail and bus security	5%
Commuter rail/transit centers/park and ride lots	10%
Transit-related street, state highway, and rail right-of-way improvements	25%
Local return (direct to cities and county)	20%
Discretionary	40%

The 40 percent discretionary funds are assumed split among rail capital and operations and bus capital and operations. Allocations between bus and rail capital and operating requirements shift over time as capital projects are built and operations begin. These funds are also used for planned replacement and rehabilitation of capital items including buses, facilities, and rail vehicles.

An allocation to Municipal Operators for bus expansion to offset Metro's usage of Proposition C 40 percent was directed by the Metro Board of Directors. This Municipal Operators Service Improvement Program (MOSIP) is assigned Proposition C 40 percent discretionary funds of $21.4 million in FY 2014 and escalates annually at 3 percent. Further allocations are also given to regional operators for Foothill Transit mitigation, transit service expansion and discretionary base restructuring.

Most of the Proposition C 25 percent transit-related highway funds are programmed for transit-related highway projects such as carpool or high occupancy vehicle (HOV) lanes. These funds are also eligible for portions of transit projects that are on a state highway or freeway and for public mass transit improvements to railroad rights of way.

The Proposition C 10 percent funds are used for Metrolink commuter rail operations and capital, debt service, and regional park-and-ride capital facilities and transit centers through the Call for Projects. Metrolink operations receives 65-70 percent of the Proposition C 10 percent funds directly through the annual budgetary process.

*Propositions A and C cannot be used for underground improvements of services, such as transit or highway tunneling.

Measure R

A half-cent sales tax effective July 1, 2009, passed by Los Angeles County voters in 2008, is used for projects and programs as specified in the Measure R Expenditure Plan. Revenues, after 1.5 percent administration, are divided as follows:

Specified New Rail and/or Bus Rapid Transit Capital	35%
Metrolink Capital Improvements within LA County	3%
Metro Rail Capital System Improvements	2%
Specified Highway Capital Improvements	20%
Local Return	15%
Rail Operations	5%
Bus Operations	20%

In January 2011, the Metro Board of Directors approved a Unified Cost Management Process and Policy for Measure R Projects which requires a step-by-step evaluation of project costs against possible resources to address project shortfalls. Shortfalls that cannot be addressed at the project level by value engineering or other measures, such as changes in the scope of the project, will be subject to a stepwise evaluation process which will require the Metro Board to review and consider approval of project cost estimates against funding resources at key milestone points throughout the environmental, design, and construction phases of Measure R transit and highway projects. Measure R funds allocated to each project shall not exceed the Measure R amount shown on the Measure R Expenditure Plan.

In May 2011, the Metro Board approved a Fiscal Responsibility Policy for Measure R Capital Project

Contingency Funds which establishes guidelines for the use of the Measure R Transit and Highway Capital Project Contingency line items on the Measure R Expenditure Plan. The goal of the policy is to ensure that all Measure R capital projects can be completed as scheduled in the adopted LRTP. The uses of the Measure R Transit and Highway Contingency lines items are described in the Measure R Ordinance. The Contingency line items may be used for Measure R debt service (excluding principal) but such debt service may not exceed the levels forecasted to be necessary in the 2009 LRTP. The policy was amended in April 2012 to stipulate that it applies to net bond interest costs after adding Measure R interest earnings and exempting the 2010 bonds that pre-dated the policy.

Transportation Development Act (TDA Article 4)

Revenues are derived from one-quarter cent of the 7.25 percent statewide base retail sales tax. The funds are apportioned to each county by the State Board of Equalization according to the amount of tax collected in the county. Each year, the actual funds are allocated according to the Metro Formula Allocation Procedure (FAP), but generally Metro receives approximately 74 percent and the Municipal Operators and non-Metro operators receive 26 percent. TDA Article 4 funds are available for bus and rail capital and operations.

Other Local Revenues

Metro Fare Revenues

Planned Metro action to change the transit fare structure is an important assumption in the efforts to continue the improved bus service that Metro has developed. The changed fare structure will pair user benefits with fares paid, resulting in a fair and efficient allocation of passenger revenues. The passenger fare forecast is adjusted in FY 2015 and reflects changes in the cash fares, monthly passes and other fare media based on customer usage data and review of selected fare media sources. Fare recovery is adjusted annually based in part on the Consumer Price Index (CPI) for Southern California, estimated changes in ridership, opening of new transit projects and corridors, and revised fare media projections. Fare restructurings are assumed in FY 2015 and every two years starting in FY 2018. The adopted 2009 LRTP states that fare recovery would be adjusted to reflect cost increases associated with operations through the planning period. The same assumption applies to the Plan.

The current baseline farebox recovery ratio of 26 percent comes from the FY 2014 Metro budget. The Plan assumes that the recovery ratio will rise to 32 percent by FY 2022 and remain in the 30-33 percent range thereafter. If this does not occur, it will impact Metro's ability to fund projects and/or operate service assumed in this plan. Maintaining the fare recovery ratio between 30 and 33 percent will require a combination of strategies such as reducing unproductive service, achieving operating efficiencies, reducing costs, and increasing operating revenues.

Municipal Operators Fare Revenues

Passenger fare revenues for the Municipal Operators are based on projections in their Short Range Transit Plans and 2011 National Transit Database reports. The farebox recovery ratio for the Plan period is approximately 26.2 percent. For FY 2014 and beyond, fare revenues are escalated by inflation as approved by the Bus Operations Subcommittee (BOS) during review of these assumptions as part of the LRTP.

Metrolink Fare Revenues

Passenger fare revenues are based on SCRRA's FY 2014 budget and the percentage of passenger boardings taking place in Los Angeles County. Fare revenues for fiscal years 2015 and 2016 are escalated by 3.5 percent per year and thereafter by CPI.

Lease Revenues

Metro may lease property and equipment receiving payments as the financial market dictates. These funds become general revenues and are used to fund agency operations in most instances. While these are limited in scope, they can offer offsets to supplement and increase existing funding sources. Much of this funding emanates from the innovative financial marketing of Metro assets. Such items as cross border leases and funds held as reserves and later released are the primary source of these funds.

Local Agency Funds (City of Los Angeles and other cities)

These funds represent each affected city's contribution of 3 percent of the cost of Metro rail lines as contemplated in the Measure R Expenditure Plan. Over the Plan period, these contributions total $323.8 million and are reflected in the forecast on an annual basis.

State Repayment of Capital Project Loans

Metro established the State Repayment of Capital Project Loans (fund 3562) to account for capital reimbursements from the State for advances that Metro made in lieu of capital project funding that the State could not provide on the originally programmed schedule. The adopted LRTP assumed that these funds must be used for capital purposes only and are allocated at the discretion of the Metro Board. In the Plan period, $90.8 million of these funds are assumed used for major transit projects.

In April 2012, the Metro Board amended the Fiscal Year 2011 Budget Policy to Reimburse Funding Sources Used as Advance Funding to Accelerate Measure R Projects. The amendment permits reimbursement at the end of the Measure R scheduled funding period for each project. The amendment also permits the planned use of the funds reimbursed to the State Repayment of Capital Program Loans fund for subsequent project segments included in the LRTP, but requires that such planned uses be brought to the Metro Board for specific approval when a life-of-project budget including such funds is adopted.

Bonds/Financing Mechanisms

Propositions A and C and Measure R Bonds

Senior lien bonds have a senior claim on a Metro pledged revenue source that is superior to the claim of any other bonds or debt. The Plan assumes that senior lien bonds will be issued as needed to support bus, rail and highway capital requirements. Bonds are projected for issuance each year they are needed to meet capital requirements. The financial forecast assumes bond payments based on an issuance interest rate initially at 4.0 percent, then increasing to 4.5 percent in FY 2016. Bond issuances, assumed in the forecast, do not substitute for specific Board action required to issue bonds.

Capital Grant Receipt Revenue Bonds

Capital Grant Receipt Revenue Bonds of $1,039.6 million are assumed in anticipation of receipt of $1,250 million of FTA Section 5309 New Starts funds for the Westside Purple Line Extension, Section 1. Because the appropriation schedule of $65 million in FY 2014, $100 million from FY 2015 to FY 2025, and $85 million in FY 2026 is not consistent with the project's cash flow requirements during the construction period, Metro will issue a total of $1,039.6 million in Capital Grant Receipt Revenue Bonds between FY 2014 and FY 2023. Financing charges for the bonds will total $162.6 million assuming a 3.5 percent interest rate.

State Revenues

Regional Improvement Program (RIP) Funds

The State Transportation Improvement Program (STIP) is a five-year state-regional program, adopted every two even years, of capital improvements on and off the State Highway System that increase the capacity of the transportation system. The STIP is funded from the State Highway Account (SHA), the primary funds of which are the $0.18 cents per gallon state gasoline tax and Federal (primarily STP) funds. The STIP is divided into a 75 percent Regional Improvement Program (RIP) and a 25 percent Interregional Improvement Program. The 75 percent RIP share allows Metro to select projects for funding upon approval by the California Transportation Commission (CTC). Revenues anticipated through the RIP program are programmed by the Metro Board for capital improvements to highway, bus, rail, fixed guideway and other capital projects. Metro programs RIP funds to specific projects through either the Call for Projects or the County Transportation Improvement Programming (CTIP) processes. The financial forecast reflects Metro's projects in Caltrans' Adopted 2012 State Transportation Improvement Program.

State Transit Assistance (STA)

Funds are used for bus and rail operations and capital throughout the plan period. Metro's regional allocation is based on Los Angeles County's shares of population and transit operator revenue compared to the rest of the state. The 50 percent population portion of STA is used for Metro rail operations and the 50 percent operator revenue share is used for Metro and Municipal Operators bus capital and operating needs. Previously funded from 50 percent of the State Public Transportation Account, effective July 1, 2011, it is funded from 75 percent of the 6.5 percent diesel fuel sales tax. Per the provisions of this State's "Fuel Tax Swap", the STA program now relies upon actual consumption of diesel fuel rather than an annual budget appropriation. Consequently, actual allocations, which are paid quarterly by the State, will likely fluctuate and the actual annual total may be more or less than the estimate made at the beginning of a fiscal year.

Proposition 1A

In November 2008, California voters approved the Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century to authorize $9.95 billion in State general obligation bond funds to initiate construction of a high-speed passenger rail system. This proposition provides $950 million for capital improvements to intercity rail lines, commuter rail lines, and urban rail systems that provide direct connectivity to the high-speed train system and its facilities, or that are part of the construction of the high-speed train system. The connectivity portion has two categories: Intercity Rail Program ($190 million statewide) and Commuter and Urban Rail Program ($760 million statewide) allocated to eligible recipients based on a defined formula. Los Angeles County's $178 million share of the Commuter and Urban Rail Program is included in the financial forecast with $114.9 million for the Regional Connector and $63.5 million for Metrolink.

Proposition 1B

In November 2006, California voters approved the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 to authorize $19.925 billion of state general obligation bonds for specified capital purposes. Bond categories are discretionary or are allocated by formula and each category has specific formulas and/or guidelines. Funding for categories must be included in the annual State Budget. Such appropriations may vary each year and are expected for six to ten years. The Plan includes remaining expenditures of $556 million from the Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA) category, $388.3 million from the Corridor Mobility Improvement Account (CMIA) category, $100.3 million from the State-Local Partnership Program (SLPP) category, and $105.4 million from the Transit System Safety and Security category.

Excise Tax Replacement for Proposition 42 Funds

In 2010, Proposition 42 gasoline sales taxes were eliminated and swapped with a new excise tax on gas of which 44 percent is allocated to local jurisdictions for local roads.

State Gas Tax Subventions to Cities

These revenues reflect 6.46 cents per gallon of the State gas tax which is paid directly by the State Controller to the cities in Los Angeles County for local streets and roads. No growth is assumed as the gas tax is not indexed to inflation and revenues tend to remain flat.

Federal Revenues

Moving Ahead for Progress in the 21st Century (MAP-21) Funding

All federal funding for highway, transit and transportation programs authorized in the MAP-21 legislation which expires in September, 2014, is assumed to continue. The amounts assumed vary annually based on the guaranteed levels in the MAP-21 legislation or a specified percentage of the national authorization. Based on these assumptions, approximately $9.0 billion in federal funds is projected to be available through FY 2024. However, most of this money is not discretionary but restricted for highway or transit capital. Certain federal funding programs can be transferred between transit and highway capital usage. This flexible funding is assumed to be used by Metro to assist transit capital. Only limited funding from federal sources is available for operating uses.

Federal Flexible Funding Categories

The Surface Transportation Program (STP) and the Congestion Mitigation and Air Quality Improvement Program (CMAQ) allow for funds to be exchanged between highway and transit modes (often called flexible funds). Portions of these funds have been assumed in the financial forecast to be flexed to transit capital and transit operating needs in accordance with the published federal regulations, for either bus purchases or for the first three years of new operating transit segments. Generally Metro Board policy directs usage of CMAQ for the first three years of operations for all new rail lines.

Surface Transportation Program (STP)

STP funds are flexible but appropriated by Congress for highway improvements. Eligible uses include transit capital projects, Transportation Demand Management (TDM), and improvements to highways and arterial roads. Approximately half of the STP allocation to the State goes to the State of California Highway Account with the remainder divided by formula to the regions [Regional Surface Transportation Improvement Program (RSTP)] in accordance with Section 182.6 of the State Streets and Highway Code. RSTP funding is used primarily for Access Services paratransit.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The CMAQ program is designed to fund projects that contribute to attainment of national ambient air quality standards. CMAQ funds cannot be used to construct facilities providing additional capacity for single-occupancy vehicles. The CMAQ program funding has been adjusted downward in FY 2019 and again in FY 2020 to reflect improvements in air quality standards in Los Angeles County. Metro Board of Directors action will be required through the Call for Projects and TIP programming processes to program funds to specific projects. It is assumed that new transit corridors will receive CMAQ funding for the first three years of operation. Los Angeles County's share of CMAQ funds could be reduced if other air quality attainment areas throughout the country are allowed to be at higher levels.

Federal Transit Administration (FTA) Section 5307 Urbanized Area Formula

Federal regulations allow Section 5307 funds to be used for preventive maintenance costs as well as capital costs. Funding is assumed at the guaranteed level of MAP-21 as determined by the federal formula and Southern California Association of Governments (SCAG) implementing formulas. This funding source was decreased slightly this year and into the future based on the 2010 Census results which factor into the formulas. The financial forecast reflects this funding decrease. The annual amount is assumed to increase by 1.4 percent after MAP-21 expires in September 2014. The forecast assumes that these funds will be allocated to all eligible bus operators by formula for identified capital projects, pursuant to the current Metro Capital Allocation Procedure [84 percent allocation prescribed by formula and 16 percent discretionary]. For forecasting purposes, an average of the last five years is used to determine the split between the Municipal Operators and Metro. The actual allocation of the 16 percent discretionary funds will occur annually and may vary from the financial forecast.

Metro is using its share of these flexible funds for eligible bus and rail preventive maintenance costs in the operating budget. Approximately ten percent of the Metro bus operation preventive maintenance is forecasted for funding using this source through FY 2024. The financial forecast assumes the continued usage by Metro of Section 5307 funds for preventive maintenance purposes that appear in Metro's operating budget. The Municipal Operators allocate their share of the Section 5307 formula funds for capital facilities and purchasing replacement buses on a 12-year cycle. Municipal Operators are planning the purchase of new vehicles in addition to capital facilities as part of their expansion program. The capital expansion program also provides for alternative fueling facilities in the event the Municipal Operators convert from diesel fuel to cleaner burning fuels. Several operators have initiated this conversion. Implementation of the new buses and facilities will occur incrementally over the Plan period.

FTA Section 5309 New Starts

These funds are for major fixed guideway capital investment competitive grants. The funding comes from the United States General Fund and the Federal Mass Transit Account of the Federal Highway Trust Fund, which is generated from two cents of the 18.4-cent federal excise tax on gasoline. The FTA awards multi-year Full Funding Grant Agreements (FFGA) to specific projects and Congress allocates Section 5309 New Starts Funds generally following the annual payment schedule in the FFGA. In 2014, Metro received FTA FFGAs for $669.9 million in Federal New Starts funds for the Regional Connector and $1.25 billion for the Westside Purple Line Extension, Section 1. The forecast assumes that the Regional Connector and Westside Purple Line Extension, Section 1 projects each receive $65 million in FY 2014 and $100 million per year thereafter until each project's New Starts funding total is reached. The Plan

assumes an additional $100 million New Starts funding per year for the Westside Purple Line Extension, Section 2 from FY 2020 through FY 2024.

FTA Section 5337 State of Good Repair

Section 5337 State of Good Repair funds are used in the financial forecast for rail rehabilitation and other minor rail state of good repair capital expenses. The amount assumed annually reflects the guaranteed level in MAP-21 and eligible route-miles that become seven years old during the forecasting period. After the expiration of MAP-21, the program is estimated to expand at 1.4 percent annually. Some additional miles will be included annually as Metrolink and Metro Gold and Expo Lines' service miles become eligible for the funding category and are applied to the federal formula. The forecast assumes this added revenue based on current formulas.

Measure R Highway Program Strategy Funds

As Measure R will fund only about 25 percent of the Measure R highway project cost, the Plan assumes that $12.9 billion of additional non-Measure R funds will be leveraged to support the Measure R highway program. This includes user tolls and new federal and state funds. If the assumed new revenues are not secured, projects may be delayed until full funding is secured.

No New Revenue Sources

Other than the Measure R Highway Strategy funds, no new revenue sources are assumed to be available over and above the local, state, and federal revenue sources that are currently obtainable or identified by law to become available. The financial forecast assumes that Metro will maintain the historical growth level of funding provided by current revenue sources, except in specific fund sources such as fares. If projected levels of funding are not maintained, projects and programs will be reduced or delayed accordingly unless comparable cost savings measures or alternative revenues are implemented.

MAJOR EXPENDITURE ASSUMPTIONS

Most of Metro's available revenues are committed to maintaining and operating the transportation system, and the projects and programs already approved by the Metro Board (FY 2014-2024)]. Through FY 2024, $27 billion, 36 percent of total commitments (excluding those funded with Measure R Highway Program Strategy Funds), is projected for countywide bus and rail operations. The high priority capital projects are the Exposition Transit Corridor Phase II, Gold Line Foothill Extension, East San Fernando Valley Transit Corridors, Crenshaw/LAX Transit Corridor, Regional Connector, Westside Purple Line Extension, Section 1, and the state of good repair program. Through FY 2024, $12.9 billion will be spent on these projects, other rapid transit corridors, and Metrolink capital.

The share of highway and multimodal programs funded through Metro (which does not include the additional amount provided directly by Caltrans, Los Angeles County, and local cities) is projected at $10.2 billion. Sales tax revenues returned directly to local governments account for $5.8 billion and Debt Service totals $6.7 billion. A more detailed breakdown is shown in Figure J of the Plan, Phasing of Forecasted Funds.

The financial forecast includes estimates developed and submitted to the Federal Transit Administration (FTA) for Full Funding Grant Agreement applications for the Regional Connector and Westside Purple Line Extension, Section 1 projects.

Metro will program billions of dollars in funds over the Plan period. In addition, Metro administers the local sales tax initiatives receiving the collected funds from the State of California. By having such programming and management of funds authority, it is not uncommon for large fund balances to be available in Metro accounts. Balances, however, are not to be confused with those funds actually available to Metro for bus and rail capital and operations. For example, balances in Metro accounts such as Proposition C 25 percent, Transit-Related Highway funds, are awaiting disbursement to sponsors from prior years' Call for Projects. Other accounts may have balances wherein the funds can only be used for specific purposes such as security (Proposition C 5 percent), or commuter rail, transit centers, and park-and-ride lots (Proposition C 10 percent).

It is important to note that the delivery and implementation of all projects and programs are dependent on the availability of local, state, and federal revenues at the projected levels. Major changes in local, state, or federal policies, or unanticipated shifts in the state/national economy would impact the implementation of the proposed projects and programs.

The financial forecast forms the fiscal basis of the Plan through FY 2024. The financial forecast is a tool used to evaluate the fiscal capacity of Metro to implement the Plan. The assumptions do not replace Metro Board action or policies. These assumptions, financial policies and the financial forecast itself will be updated periodically to reflect separate, specific Metro actions. All the financial policies, assumptions and financial forecast are intended as management tools to assist in evaluating the impacts of contemplated actions involving transportation programs or projects on the overall financial capacity of Metro as the regional transportation planning agency for Los Angeles County.

The following are some of the major expenditure assumptions:

New Buses and Added Service

By the end of the Plan, it is forecasted that an additional 88,400 revenue service hours will be added to base Metro bus service compared to FY 2014 levels. The additional service will be added toward the end of the Plan to accommodate expected ridership increases due to population growth. Funding for the added service is included and is based on existing marginal costing

approaches used for added bus service in the financial forecast. An annual average purchase of 200 new Metro replacement buses is assumed in the Plan. When averaging the Metro replacement buses with the Municipal Operators' fleet, a countywide bus fleet with an average age of 6 years is established.

Opening of Six Transit Corridors

The financial forecast assumes that six transit corridors will be completely constructed by FY 2024 and will operate daily. The five corridors are as follows:

Gold Line Foothill Extension	opens 11/2016
Exposition Transit Corridor Phase II	opens 12/2016
East San Fernando Valley Transit Corridors	opens 6/2018
Crenshaw/LAX Transit Corridor	opens 4/2019
Regional Connector	opens 5/2021
Westside Purple Line Extension, Section 1	opens 5/2024

Current federal funding programs continue

The forecast assumes the implementation of MAP-21 at the guaranteed transit funding levels. Highway formula funds are assumed to be available at the level estimated by Caltrans. If federal funds do not occur at the estimated levels, planned highway, rail, automated bus guideway and Call for Projects capital projects may be delayed accordingly unless comparable project cost savings measures are implemented. In the event federal funds increase, projects and services will be brought on-line in accordance with the available revenue.

Leveraging State and Federal Funds

The forecast assumes that local funds are bonded for capital needs if necessary to match state and federal funds consistent with the project and program priorities established by the Metro Board of Directors.

Use of Long Term Debt

The forecast assumes that senior lien bonds will be issued each year as necessary to fund major capital projects. It is further assumed that such bonding will be in conformance with the Metro debt policy adopted in October 1998 and subsequently amended annually with the most recent occurring in March 2013. Debt service on the bonds is assumed paid annually with Propositions A and C and Measure R cash revenues. Actual bond issuances must be analyzed separately from the financial forecast assumptions and approved by separate Metro Board action.

In May 2011, the Metro Board approved a Fiscal Responsibility Policy for Measure R Capital Project Contingency Funds which establishes guidelines for the use of the Measure R Transit and Highway Capital Project Contingency line items on the Measure R Expenditure Plan. Any Measure R Contingency funds used for Measure R debt service (excluding principal) may not exceed the levels forecasted to be necessary in the 2009 LRTP. The policy was amended in April 2012 to stipulate that it applies to net bond interest costs after adding Measure R interest earnings and exempting the 2010 bonds that pre-dated the policy.

Operating and Capital Inflation

Based upon the August 2013 annual economic forecast for Los Angeles County from the UCLA Anderson Forecast, the average CPI inflation rate is estimated to be 2.04 percent. The financial forecast applies the annual inflation rate from the forecast to various operating cost items. The capital inflation rate is estimated to be 3.0 percent. The financial forecast applies the annual inflation rate to various capital cost items. In the Call for Projects application review process, all projects are escalated annually by 3 percent.

BUS PROGRAM ASSUMPTIONS

Bus Capital

Transit Operators – The financial forecast covers funding for clean fuels, vehicle replacement schedule, facilities and support equipment, and bus bonds as described below.

Clean Fuels – Air Quality Management District (AQMD) requirements are met by:

> converting vehicles and facilities to clean fuels (e.g., alternative fuel vehicles);
> increasing transit service so that work trips on transit as a percentage of all regional trips increases by the year 2019 (year compliance is achieved for air quality in the South Coast Air Basin); and
> local bus operators (Municipal Operators) currently using diesel fuel have been programmed to receive funds for converting fueling facilities and transitioning buses to cleaner burning fuels in the event such decisions are made. Such funding emanates from the Section 5307 funds allocated to the Municipal Operators and the new bus expansion allocation to the Municipal operators enacted by the Metro Board.

Vehicle Replacement Schedule – Vehicle replacement is based on the following retirement schedule:

> Transit Buses (35, 40 foot and Articulated)	Metro 13 years
Metro/Municipal Operators fleets average 6+ years old	Muni 12 years
> Heavy-Duty Smaller Buses	10 years
> Dial-A-Ride Vehicles	
(light-duty, mid-sized buses, approx. 25-35 feet long)	5 years
(light-duty, small buses, cutaways, or modified vans less than 25 feet in length)	4 years

Vehicle Costs – Based on Metro's recent procurements of compressed natural gas buses, the price in 2014 was $554,000 per standard 40-foot bus (includes extra parts from plant assembly, sales tax and labor force account of Metro expenses) and is escalated annually by CPI after FY 2014. The financial forecast assumes the same price for Metro and Municipal Operators for bus purchases. Municipal Operators purchase buses separately using criteria unique to their own needs and standards and the actual price may vary from the forecast assumptions. It is assumed that 200 buses will be purchased annually to replace the basic active bus fleet of Metro. The Municipal

Operators plan on purchasing approximately 100 buses annually, some of which may be articulated buses. The actual number may vary on a year to year basis based on actual purchases but as a planning average provides for the optimum efficient delivery of new buses and allows for equally spreading the age of the basic bus fleet over time. A decision has not been made on the technology of future bus procurements.

Facilities and Support Equipment – The financial forecast assumes that costs for bus capital projects are based on the existing capital program, new projects expected to be approved, state of good repair needs and any expansion needs. Funding for a new Bus Division has been assumed in FY 2020 through 2023. The financial forecast includes the adopted Metro Capital Program costs through FY 2018. These cost projections include expenditures for: bus maintenance overhaul and rehabilitation, CNG fueling facilities, bus maintenance facilities improvements, non-revenue vehicles and communications support. The Municipal Operators' Plan costs have been extrapolated from the capital facilities and bus purchase assessment completed previously for the LRTP.

Bus Capital Bonds – The forecast assumes that bonds will be issued as needed to support bus capital requirements if compliance with the Metro debt policy can be achieved. The forecast assumes bond payments based on a 4.0 percent interest rate in FY 2014, which will increase to 4.5 percent in FY 2016 and thereafter. The debt incurred is paid over periods of up to 30 years depending on asset life cycles.

Bus State of Good Repair (Rehabilitation and Replacement) – Projected rehabilitation and replacement costs are based on a State of Good Repair study undertaken in response to a request from the Metro Board of Directors and a national policy effort on the part of the Federal Transit Administration to improve industry practices by carefully studying rehabilitation and replacement needs and identifying their anticipated costs and funding. The study identified state of good repair needs and costs for the existing system out to 2040. The financial forecast incorporates the anticipated funding for both Metro bus and rail modes. More than half of the nearly $4.8 Billion for State of Good Repair will be spent on the Metro Bus system. The bus rehabilitation and replacement costs through 2024 are:

Metro Bus	Amount
Replacement Bus Acquisition	$1.4 billion
Bus Vehicle State of Good Repair	$524 million
Bus Facilities State of Good Repair	$608 million
Total Cost	**$2.5 billion**

Bus Operations

Metro Bus Operations – The financial forecast assumes the following for Metro bus operations:

> Operating and maintenance cost projections are extrapolated off of the current budget and modified by Metro Operations' projections of service levels in the Plan time period.
> Hourly service costs grow slightly faster than inflation to mimic recent past experience.
> TDA Article 4, Proposition A, and STA will continue to be allocated through the FAP in future years.
> Articulated and extended length buses are assumed phased out over the Plan time frame. Metro is standardizing on 40-foot buses as the maximum vehicle size. While this will increase operating costs, it is expected to be offset by a reduction in acquisition and maintenance costs.

Municipal Operators – Operations and maintenance costs were based on projections in their Short Range Transit Plans and 2011 National Transit Database reports. These cost estimates are used as the basis for future years' cost projections and escalated at CPI. The forecast assumes TDA Article 4, Proposition A, and STA funds will continue to be allocated via the FAP. Proposition C 40 percent for expansion buses has likewise been assumed for the entire planning period. Municipal transit operators receiving formula funding include:

> Antelope Valley Transit Authority
> Arcadia
> Claremont
> Commerce Municipal Bus Lines
> Culver City Municipal Bus Lines
> Foothill Transit
> Gardena Municipal Bus Lines
> La Mirada Transit
> Long Beach Transit
> Los Angeles Department of Transportation (LADOT)
> Montebello Municipal Bus Lines
> Norwalk Transit
> Redondo Beach
> Santa Clarita Transit
> Santa Monica Municipal Bus Lines
> Torrance Transit

Expansion Services – A new transit corridor and Metro Rapid line in the East San Fernando Valley is included in the Measure R transit program and funded in the Plan. It is assumed that Transportation System Management (TSM) program and other techniques to ensure rapid movement of buses along the highways will occur as technology improvements and funding emerge in years ahead. Funds for overall system upgrades are provided.

Access Services – The forecast assumes the continued usage of Regional Surface Transportation Program (RSTP) funds programmed for Access Services as the countywide paratransit provider. Allocating RSTP funds for Access Services allows Metro to make Proposition C 40 percent Discretionary funds available for other uses.

RAIL PROGRAM ASSUMPTIONS

Rail Capital

Rail Projects Capital Cost Estimates – Costs, including rail cars, which have been approved by the Metro Board, are based on the adopted FY 2014 budget. Costs for rail projects with no existing Board-approved life-of-project budgets are based on Metro's cost estimation guidelines from the Metro Construction Division and specialized consultants. The cost estimation process considers factors such as the projected construction cost in current dollars, construction start date, construction duration and timing, and escalation based on experience with past and current projects. The following five rail projects will be completed in the Plan period:

Expo Phase II
Gold Line Foothill Extension
Crenshaw/LAX
Regional Connector
Westside Purple Line Extension Section 1

> Exposition Light Rail Transit Project Phase II to Santa Monica (assumed to open FY 2016) – This light rail line will extend Phase I approximately 6.9 miles from Culver City to Santa Monica. The Exposition Metro Line Construction Authority is constructing Phase II with funding from Metro and Metro will operate and maintain the line. The capital cost is $1,511.2 million.

> Gold Line Foothill Extension (assumed to open FY 2016) – This light rail line will extend the Metro Gold Line approximately 11.3 miles from Pasadena east to Azusa/Glendora. The project is being built by the Metro Gold Line Foothill Extension Construction Authority with funding from Metro and Metro will operate and maintain the line. The capital cost is $851.1 million.

> Crenshaw/LAX Transit Corridor (assumed to open FY 2019) – This light rail line is approximately 8.5 miles with seven stations, one of which will be aerial. From a northern terminus at the Exposition/Crenshaw station, the alignment will follow Crenshaw Blvd south to the South Bay Metro Green Line Extension and then follow the South Bay Metro Green Line Extension to a connection at the Metro Green Line Aviation/LAX station. The capital cost is $2,058.0 million.

> Regional Connector (assumed to open in 2021) – This 1.8-mile light rail line will create a transit link between the Metro Gold and Blue lines through downtown Los Angeles and also will connect the Metro Expo Line and Metro Gold Line Eastside Extension. By providing continuous through-service between these lines, the Regional Connector Transit Corridor will improve access to both local and regional destinations and help create a true transportation network for the region. The cost is $1,399.5 million.

> Westside Purple Line Extension, Section 1 (assumed to open in 2024) – This heavy rail line will extend the Metro Purple Line 3.9 miles from Wilshire/Western to La Cienega and will add three stations. The cost is $2,485.7 million.

Light Rail Vehicles – The light rail car procurement consists of a $342.35 million base order of 78 cars and $396.65 million for two options for 97 vehicles. The base order cars are for the Gold Line Foothill Extension and the Exposition Phase I and Phase II projects and are funded with state and local funds. The option cars are for replacements and the Crenshaw/LAX project and are funded with Measure R 35 percent, Proposition A 35 percent, and federal funds.

Future Rail Vehicle Procurement – As part of the State of Good Repair program, approximately 35 additional light rail cars are forecasted to be purchased from FY 2021 through FY 2024 for a total of $149 million. Sixteen additional Metro Red Line heavy rail cars are forecast for purchase in FY 2016 through FY 2018.

High Speed Rail – Proposition 1A, the Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century, approved by California voters in November 2008, provides $9 billion in bonding capacity to build a high-speed train network from San Francisco to San Diego. The California High-Speed Rail Authority has identified Union Station as one of the major stops for the new high-speed rail line. The Plan assumes $225 million through FY 2024 for the high speed rail line. Proposition 1A funds assumed include $63.5 million for Metrolink and $114.9 million used for the Regional Connector.

Planning for Future Transit Projects – $71.1 million for short-term planning is included for FY 2014-21.

Red/Purple Line System Improvements not included in the Purple Line Extension Project Budget – $251.1 million of traction power and ventilation improvements on the Red and Purple lines and upgrades to the Division 20 maintenance facility will be needed to accommodate the Purple Line Extension. Funding sources assumed are Measure R 2 percent, Proposition A 35 percent, and Proposition C 40 percent.

Rail Yards – Two new maintenance facilities (Eastern Light Rail Yard and Southwestern Light Rail Yard) are included costing $561.8 million funded partly by new rail projects and partly with Proposition A 35 percent and Measure R 2 percent.

Metrolink Commuter Rail – The Southern California Regional Rail Authority (SCRRA) is a Joint Powers Agency that plans, constructs, and operates Southern California's commuter rail system. Metro funds a portion of the capital and operating costs for commuter rail lines and projects located within Los Angeles County, including:

Los Angeles /San Bernardino & Los Angeles/Riverside
Los Angeles /Oxnard
Los Angeles /Santa Clarita /Palmdale /Lancaster
Los Angeles /Oceanside & Fullerton/LAUPT
Los Angeles /Riverside (Union Pacific)
Shared maintenance facility

The current SCRRA system includes 512 unduplicated route miles, 186 of which are in Los Angeles County, and 55 stations, 26 of which are in Los Angeles County. The financial forecast assumes continued funding for the current commuter rail system. SCRRA staff has provided operating cost projections. Los Angeles County's share of commuter rail costs is funded with Proposition C 10 percent revenues. The Metro funding assumptions in the Plan period for Metrolink are:

> $642.5 million for operating subsidy;
> $196.0 million for capital maintenance; and
> $292.8 million of Measure R 3 percent for capital improvements in Los Angeles County.

Rail State of Good Repair (Rehabilitation and Replacement) – Projected rehabilitation and replacement costs are based on an internal State of Good Repair study undertaken in response to a request from the Metro Board of Directors and a national policy effort on the part of the Federal Transit Administration to improve industry practices by carefully studying rehabilitation and replacement needs and identifying their anticipated costs and funding. The study identified state of good repair needs and costs for the existing system out to 2040. The financial forecast incorporates the anticipated funding needs and adds in any expected state of good repair needs for new lines that open in the Plan time frame. The rail rehabilitation and replacement costs (and major asset types included in each category) through 2024 are:

Metro Rail	Amount
Vehicle-related Rehabilitation/Replacement Rail Vehicle Spare and Replacement Parts Rail Vehicle Rebuilds Train Control Communications	$1.2 billion
Rail Vehicle Acquisition Replacement Light Rail Vehicles Replacement Heavy Rail Vehicles	$546 million
Maintenance of Way and Facilities Operating Divisions Passenger Stations Traction Power Substations Power Distribution Systems Bridges and Tunnels Track Rail Operations Center	$567 million
Total Cost	**$2.3 billion**

Rail capital state of good repair is funded with a combination of local TDA Article 4 revenues, Propositions A and C, including bond proceeds, and federal Section 5337 State of Good Repair funds.

Previous Rail Projects which require rehabilitation and replacement – shown for information only

Metro Red Line Subway, Segment 1 (Opened in January 1993) – This heavy rail subway line extends 4.4 miles with five stations through downtown Los Angeles, from Union Station/Gateway Transit Plaza to the Westlake/MacArthur Park station. Costs totaled $1.4 billion.

Metro Red Line, Segment 2 (Opened in two phases in July 1996 and June 1999) – Totaling 6.7 miles, this heavy rail subway segment consists of two rail corridors, the costs of which totaled $1.8 billion:

> Wilshire Corridor (now known as the Metro Purple Line) Opened in July 1996, this corridor extends from the Westlake/MacArthur Park station northwest to Wilshire Boulevard and Vermont Avenue intersection, and west along Wilshire Boulevard, terminating at the Wilshire/Western station.
> Vermont/Hollywood Corridor (the Metro Red Line) Opened in June 1999, this corridor extends north from Wilshire/Vermont intersection along Vermont Avenue, turning west along Hollywood Boulevard to the Hollywood/Vine station.

Metro Red Line Segment 3, North Hollywood (Opened in June 2000) – This heavy rail subway segment is 6.3-miles with three stations beginning just west of the Segment 2 Hollywood/Vine station and continuing west under Hollywood Boulevard to the Hollywood/Highland station and north under the Santa Monica mountains to the Universal City station, finally terminating in North Hollywood. The costs were $1.3 billion.

Metro Green Line (Opened in November 1995) – This light rail line extends 20 miles with 14 stations along the center of the 105 Freeway from Studebaker Road and the I-605 Freeway in Norwalk to Marine Ave. in Redondo Beach. The total cost was $718 million.

Metro Blue Line (Opened in July 1990) – This light rail line extends 22 miles, with 22 stations, from the Downtown Los Angeles station (Metro/7th Street station) to Long Beach. The construction cost was $877 million. The Blue Line was expanded to three-car train lengths in 2002, funded through Metro's annual budgetary process.

Metro Gold Line – Pasadena (Opened in July 2003) – This light rail line extends 13.7 miles from Sierra Madre Villa in the City of Pasadena to Union Station in downtown Los Angeles and has 14 stations. State law created the "Pasadena Metro Blue (renamed "Gold Line") Line Construction Authority" (PMBLCA) to construct the project. Metro funded the construction and Metro operates it. The cost was $859 million.

Metro Gold Line – Eastside Extension (Opened in November 2009) – This is a six-mile light rail transit project running from Union Station to the intersection of Pomona and Atlantic Boulevards in East Los Angeles. The line includes eight stations plus the main station at Union Station, which is also the station stop for the Pasadena Gold Line. The cost was $898.8 million.

Exposition Light Rail Transit Project Phase I to Culver City (Opened in April 2012) – This light rail line phase extends 8.6 miles from 7th and Flower streets in downtown Los Angeles to Venice Boulevard/Robertson Boulevard in Culver City and includes ten stations. State law created the "Exposition Metro Line Construction Authority" to construct the project. Metro funded the construction and Metro operates it. The cost was $923.8 million.

Rail Operations

Rail operating cost projections are extrapolated off of the current budget and modified by Metro Operations' projections of service levels in the Plan time period. Hourly service costs grow slightly faster than inflation to mimic recent past experience. The forecast is consistent with the methodology specified by the FTA for Alternatives Analysis studies. Staffing requirements, labor costs, and non-labor expenses are calculated based on the projected quantity of service supplied (e.g., peak vehicles, revenue vehicle service hours) and the physical size of the system (e.g., route-miles, number of stations). Operating costs for new lines are included as those lines enter revenue service. The Gold Line Foothill Extension (November 2016), Expo Line Phase II (December 2016), Crenshaw/LAX Line (April 2019), Regional Connector (May 2021) and Westside Purple Line Extension Section 1 (May 2024) lines are all scheduled to open to the public during the Plan time frame.

HIGHWAY, MULTIMODAL, AND CALL FOR PROJECTS

The highway/multimodal component of the forecast includes funding for projects such as carpool lanes and other highway and multimodal programs. Local funding sources (Proposition C 25 percent, Proposition C 10 percent, and Measure R 20 percent) are forecasted on as cash flow basis. State and federal funding sources are forecasted on a programming basis.

Environmental Enhancement & Mitigation (EEM)

The financial forecast assumes that Los Angeles County will receive $0.7 million annually from the non-Active Transportation Program portion for eligible projects. Caltrans administers the program.

Freeway Carpool Lanes [High Occupancy Vehicle Lanes (HOV)]

Funding for these projects totals $3.0 billion through 2024. Funding sources consist of Proposition C 25 percent, Measure R 20 percent, State Proposition 1B funds, State STIP and SHOPP funds, CMAQ, and RSTP funds. Unidentified additional funding of $4.48 billion is necessary during the Plan period for the I-710 South.

Freeway Gap Closures, Interchanges, and Arterial Widenings

Funding for these projects totals $1.6 billion through FY 2024. Funding sources consist of Proposition C 25 percent, Measure R 20 percent, and STIP RIP funds. Unidentified additional funding of $6.8 billion is necessary during the Plan period for the High Desert Corridor, the SR-710 North Extension, and the I-605 Hot Spot Interchanges.

Freeway Service Patrol

Continued funding for this program is assumed funded with Proposition C 25 percent, State Highway Account Funds, and HOV violation funds. The Proposition C 25 percent funding is assumed to grow annually by CPI.

Freeway Traffic Systems Management (TSM) & Traffic Operations System (TOS)

The financial forecast assumes Caltrans will continue providing the operating costs for these measures.

Regional Integration of Intelligent Transportation System (RIITS)

This program aims to efficiently utilize advanced technologies in Southern California's transportation systems. The financial forecast assumes $1.7 million of Proposition C 25 percent funds beginning in FY 2014, escalating by CPI thereafter. No Federal funds are assumed.

Local Streets and Roads

Estimated State Gas Tax subventions and excise tax replacement for Proposition 42 funds of $4.78 billion are assumed received by the County and the cities in Los Angeles County through FY 2024.

Operations, Caltrans

Estimated State Highway Account funds of $1.9 billion are assumed for highway operations and maintenance by Caltrans District 7.

Retrofit Soundwalls

The Retrofit Soundwalls program encompasses freeways previously constructed without necessary soundwalls. This program and its $2.4 billion backlog of projects has been a Metro responsibility since Senate Bill 45 took effect in 1998. The program has two phases: three priorities in Phase I and unprioritized Phase II. Completion of Phase I for a total of $186.9 million is assumed funded with Proposition C 25 percent funds. Phase II, for soundwalls on freeways without carpool lanes and therefore not eligible for Proposition C 25 percent, is funded with Measure R 20 percent funds for $96 million during the Plan period. Unidentified additional funding of $530 million is necessary during the Plan period.

Rideshare/Vanpool Program

Since FY 2003, Metro has directly operated countywide rideshare services with over 100,000 registrants currently. In May 2007, the Vanpool Program was added, providing lease and fare incentives to new and existing vanpools. Proposition C 25 percent funding of $147.4 million is assumed in the Plan period.

Service Authority for Freeway Emergencies (SAFE)

A separate legal entity that is housed within Metro, SAFE operates call boxes along the freeways, the #399 Mobile Call Box program, and the 511 Traveler Information System. It is funded by a $1 surcharge on each of the seven million registered vehicles in the County. Cost estimates and assumptions are based on the SAFE Ten-Year Financial Plan and include capital requirements and operations and maintenance expenses. An increase in the number of registered vehicles in the county would be the only mechanism, other than legislation, to increase revenues.

State Highway Operation and Protection Program (SHOPP) – Freeway Rehabilitation

Every four years, Caltrans prepares a SHOPP plan that identifies needed projects for maintenance and safety repairs. Caltrans administers this program and allocates funding throughout California as-needed. An estimated amount allocated to Los Angeles County is assumed for reference and comparison to other counties.

Traffic Congestion Relief Program (TCRP)

In 2008, the CTC adopted an Allocation Plan which gives priority to Tier 1 projects and allocates funding to Tier 2 projects on a first-come, first-served basis. Tier 1 includes projects with approved Letters of No Prejudice which Metro received for certain projects that allowed Metro to advance its own local funds to maintain project schedules and be reimbursed later by the State. The financial forecast assumes that all approved Letters of No Prejudice are reimbursed and all remaining unallocated highway projects are allocated by FY 2017.

Freeway Incident Management

The forecast assumes continued funding for the Freeway Incident Management program, known as Freeway Service Patrol (FSP) and Major Incident Response Program. This program is funded through Proposition C 25 percent, State Highway Account Funds, and HOV violation funds. The program is assumed to grow at CPI annually.

MULTIMODAL PROGRAM ASSUMPTIONS

Alameda Corridor East

This project is included in the Plan for $806.4 million of which $477 million is from Metro Proposition C 25 percent and Measure R 20 percent. The project is located in the San Gabriel Valley to install railroad grade separations to reduce traffic congestion after completion of the Alameda Transportation Corridor.

Call For Projects

The Call for Projects is Metro's process every two odd years for allocating discretionary regional capital funds to local jurisdictions, transit operators, and other public agencies for regionally significant, non-freeway, multimodal transportation projects in six modes. After completion of a competitive, merit-based evaluation, projects are selected and approved by the Metro Board of Directors. Approved projects are awarded funding (i.e. programmed) for specific year(s), with a time limit to expend the funds of 3-4 or more years depending on the situation. Accordingly, expenditures can occur beyond the years in which the funds were programmed.

Funding is projected for completion of projects from Calls prior to the 2013 Call. For the 2013 and future Calls, $1,581 million regional funding is assumed, beginning in FY 2015. Each mode's share will be determined through the Call process. Funding sources are Proposition C 25 percent, Proposition C 10 percent, STIP RIP, CMAQ, and RSTP funds. Also, recipients must provide matching funds which are not included in the forecast, as they are assumed funded from cities' Local Return funds.

The program is divided into multimodal categories. As part of the application review process, all projects are escalated annually by 3 percent.

Call For Projects Multimodal Categories

Regional Bikeways and Pedestrian Improvements – Funding sources are CMAQ, RIP STIP funds, local agency matching funds, and TDA Article 3 funds.

Regional Surface Transportation Improvements (RSTI) and Goods Movement – Generally arterial street projects. Funding sources are Proposition C 25 percent, local agency matching funds, RIP STIP funds, and RSTP.

Signal Synchronization and Bus Speed Improvements – Funding sources are Proposition C 25 percent, local agency matching funds, CMAQ funds, and RIP STIP Funds.

Transit Capital (Park and Ride Facilities/Transit Centers) – Funding sources are primarily Proposition C 10 percent, local matching funds, and CMAQ.

Transportation Demand Management (TDM) – Funding sources consist of CMAQ, RSTP, and local agency matching funds.

Travel Demand Model and Assumptions

The development of the 2014 Plan was preceded by a rigorous assessment of the analytical tools, assumptions and performance criteria that would be employed in the evaluation of potential Plan alternatives. The primary analysis tool is the Metro Travel Demand Simulation Model.

This chapter provides a technical summary of the travel demand modeling process and performance measure analyses conducted as part of the 2014 Plan effort.

MODEL STRUCTURE

The Metro Travel Demand Simulation Model uses the traditional four-step process generally employed by travel forecasting modelers throughout the United States. The four steps are trip generation, trip distribution, mode choice, and network assignment. Figure 4.1 is a conceptual representation of the four-step modeling process. The implementation of the travel demand modeling process is achieved through a series of 17 computer simulation modules. Figure 4.2 is a flowchart that illustrates the process.

Each module has been calibrated from observed data, typically from a sample of household interviews from which detailed demographic and travel characteristics are collected through written questionnaires. The current Metro Travel Demand Simulation Model is the Year 2014 Model that was developed for the 2014 Plan. The 2014 Model is the latest and most sophisticated evolution of the Metro Model originally developed in the early 1970s.

The trip generation component of the Metro Model is primarily based on the 1967, 1976, 1991, and 2000 home interview surveys for the Los Angeles metropolitan area that were conducted by the California Department of Transportation (Caltrans) and the Southern California Association of Governments (SCAG). The trip distribution and mode choice modules were updated using the 2000 and 2010 Census, the Year 2000 Post-Census Regional Travel Survey, the 2001 on-board surveys on light-rail, heavy-rail and bus patrons, the 2002 on-board survey of commuter-rail patrons, and the 2006/7 survey of Orange Line and Rapid Bus patrons.

The 2014 Model was validated for its ability to replicate 2013/4 travel patterns and conditions using the survey data from which it was calibrated as well as transit ridership statistics. The model performed within standard limits for all components including average trip length, mode shares, and comparisons of transit boardings.

For the 2014 Plan, the 2004 Model has been updated to reflect 2014 as the base year and 2024 as the forecast year. The process includes updating the input socioeconomic data and the modification of highway and transit networks for the years 2014 and 2024.

The Metro modeling area is identical to the SCAG modeling area which encompasses six counties, namely Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial counties. It is illustrated in Figure 4.3A. The area is represented by a total of 3,720 transportation analysis zones (TAZs), of which 3,010 are in the internal modeling area, 40 represent cordons, and 670 are transit station zones. 2,261 TAZs are located in Los Angeles County and illustrated in Figure 4.3B. They are aggregated into nine subregions and are also illustrated in Figure 4.3B.

FIGURE 4.1
Travel Demand Modeling Process

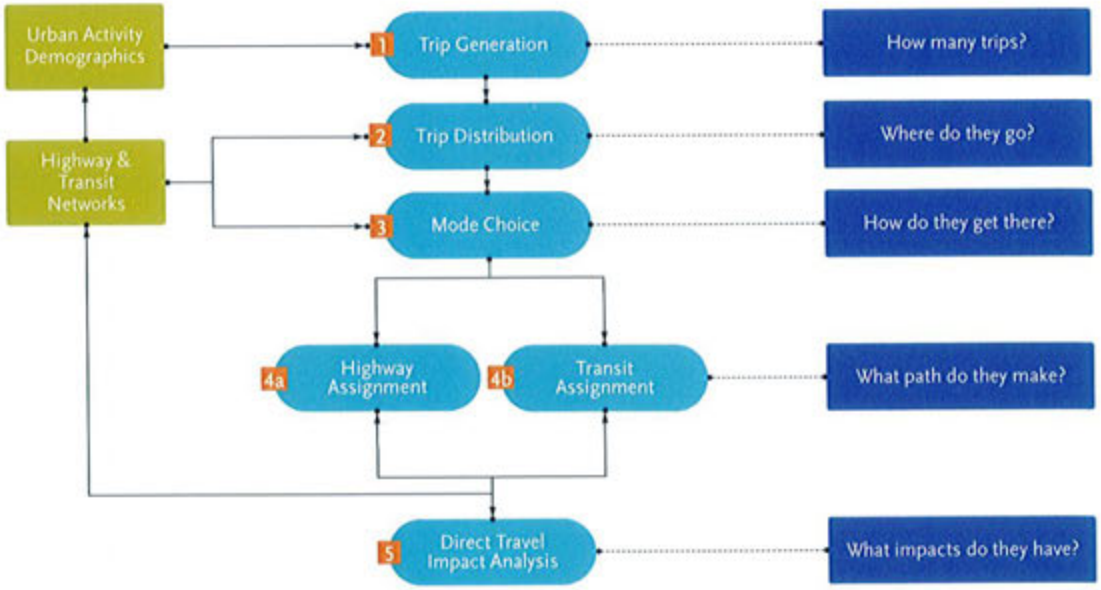


FIGURE 4.2

Metro Short Range Transportation Plan Base Year (2014) Model Flowchart

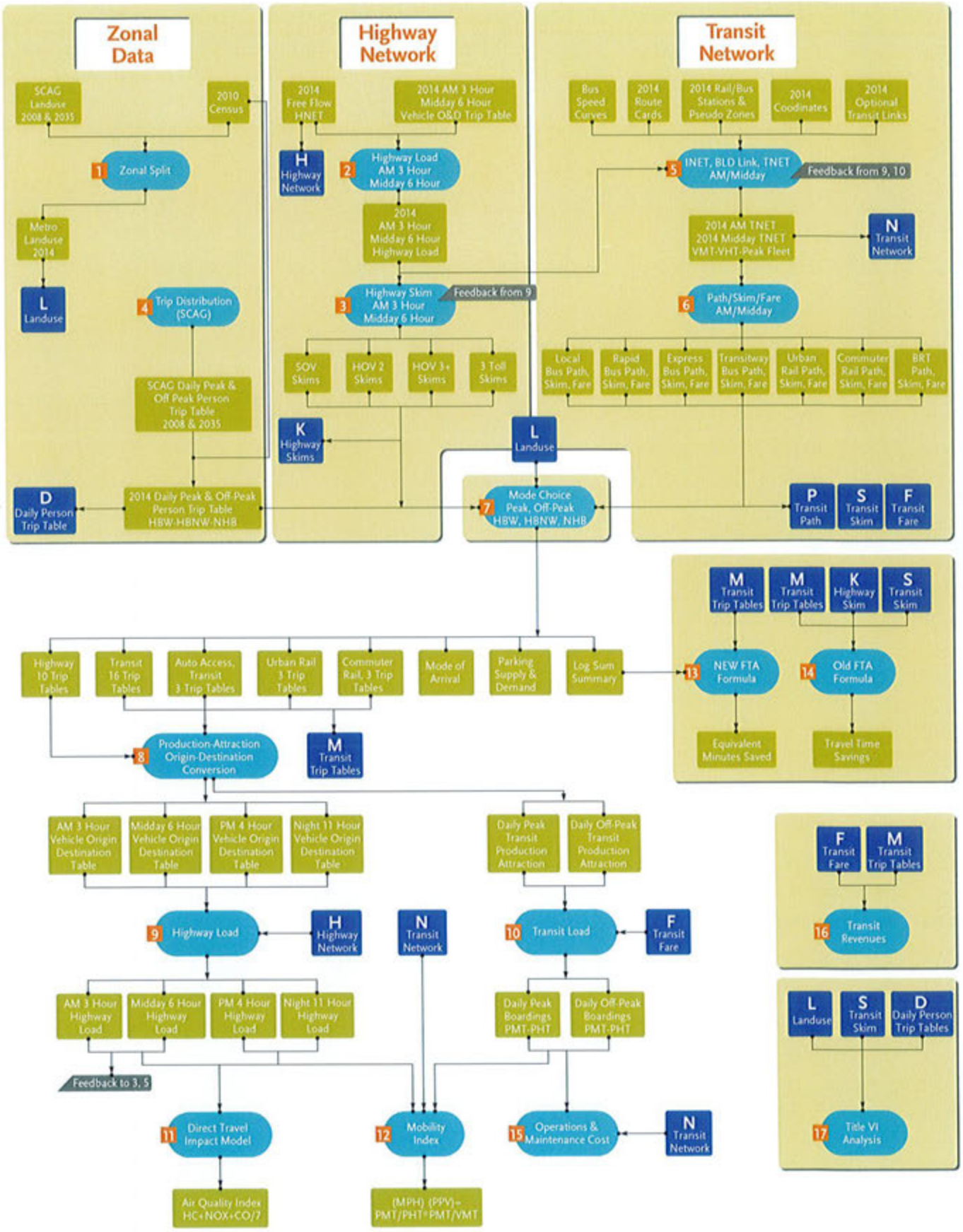


FIGURE 4.3A

Travel Demand Model Area

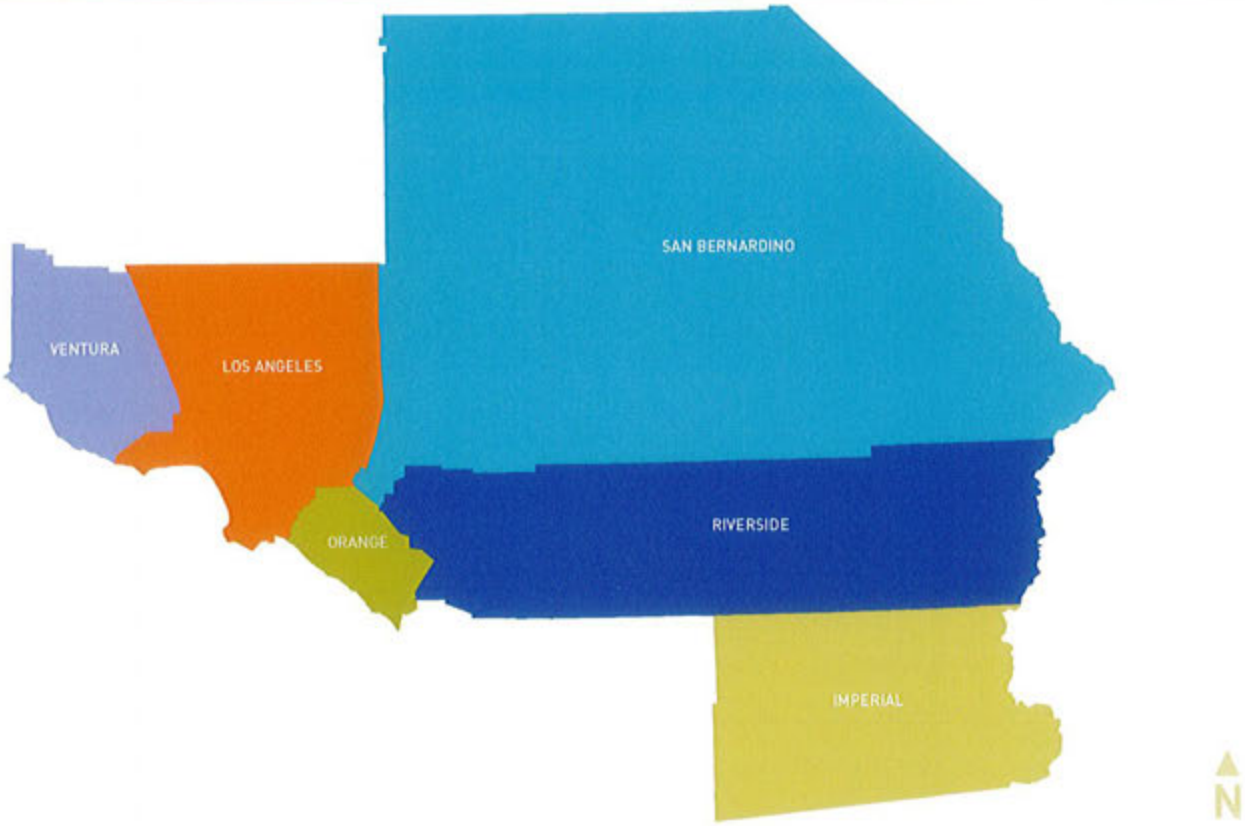
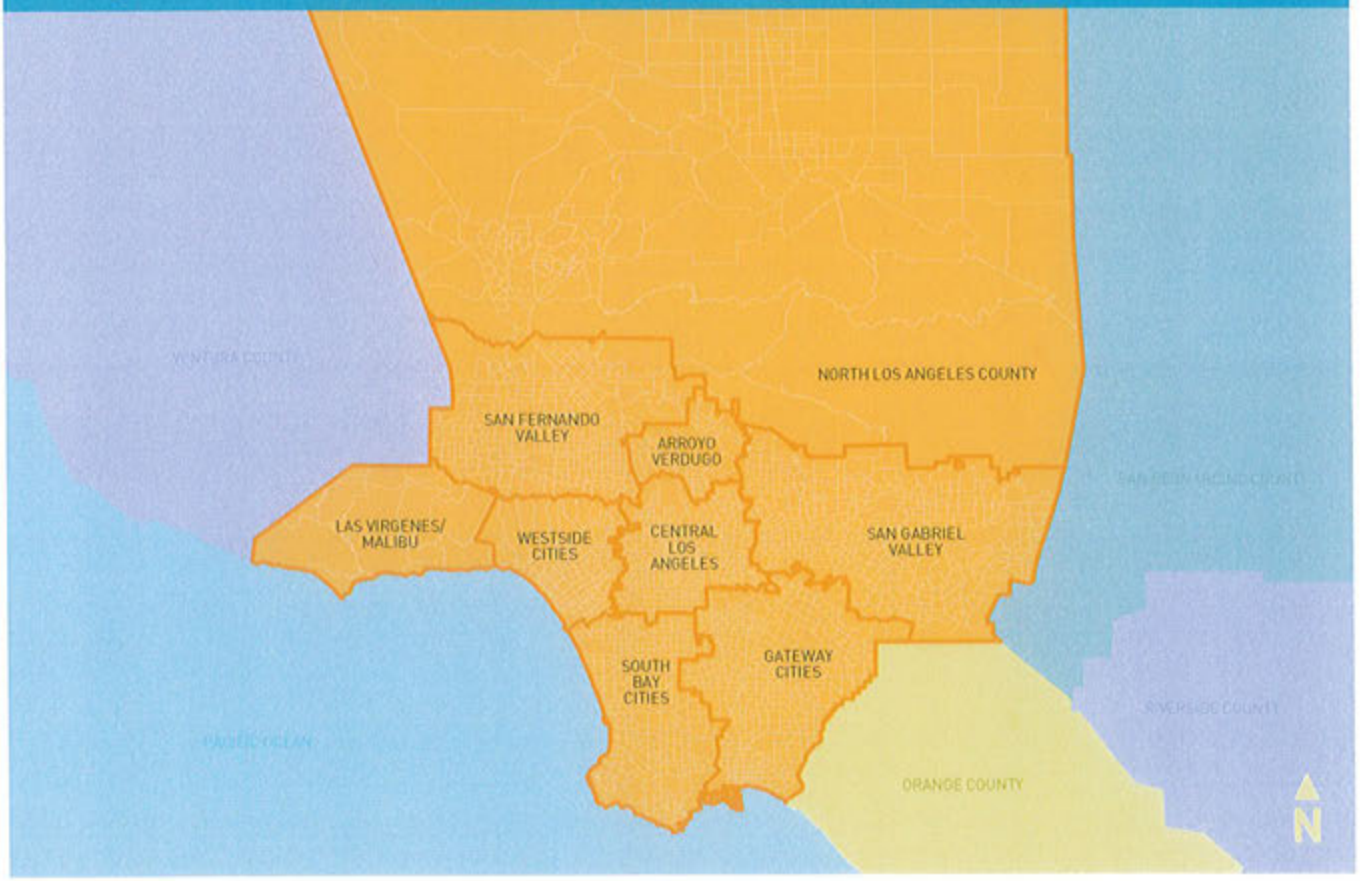


FIGURE 4.3B

Los Angeles County Subregions



MODEL ASSUMPTIONS

Each input to the Metro Model is a representation of the characteristics of the trip, the trip maker or the transportation system. This information is usually employed at the census tract level, but may include some distributions of characteristics within the census tract. All inputs for the 2014 validation used empirical data compiled from a variety of sources as described in Figure 4.4.

Projections for the planning horizon year 2014 were obtained from many of the same sources. The model then uses its econometric and behavioral formulations to project travel response and transportation system impacts under a variety of transportation system environments and conditions. However, there are several major assumptions that either reflect a continuation of existing trends or fall into the policy arena. If the future varies from these assumptions, the projected future year results will likely be different from those projected by the model. These assumptions are:

> The growth and distribution in population, employment, income, and vehicle ownership will occur in accordance with the projection adopted by SCAG in 2012;
> The per-mile vehicle operating cost will not change in constant dollars (i.e., changes in fuel prices and fuel economy offset one another but rise with inflation);
> The May 2011 transit fare structure was fully implemented and the regular inflationary adjustments will be made;
> Parking costs will rise with inflation and the location and application of parking costs will not change significantly from today (that is, the location of free versus pay parking and employer subsidies);
> The need or distribution of travel will not change dramatically due to a major movement to a round-the-clock business day or a major displacement of work trips by telecommuting; and,
> The current highway and transit levels-of-service will not change dramatically from today (except for planned system improvements and the projected congestion effects) due to potential large scale Intelligent Transportation System implementation.

ALTERNATIVES MODELED

Four model runs were conducted for the 2014 Plan. These include:

1. 2014 Base Year;
2. No Build (2024) – the 2024 demand on the base condition (2014), assuming implementation of no further projects;
3. 2014 Plan (2024) – the 2024 demand on the transportation system adopted in this Plan; and
4. Acceleration (2024) – The 2024 demand on an accelerated Measure R transportation system.

Figures 4.5 and 4.6 summarize and illustrate the highway and transit projects that comprise the 2014 Plan. Several of the highway and transit projects in the 2014 Plan have or will have opened by the 2014 base year model and are noted as such in Figures 4.5A and 4.6A. Each run assumes all of the projects from the previous runs.

FIGURE 4.4

Model Validation Data

MODEL COMPONENT	INPUT DATA	DATA SOURCE	OUTPUT DATA
Urban Activity	General Plans, Population, Employment, Licensed Drivers	Municipalities, Census Bureau, Bureau of Labor Statistics, Dept. of Economic Development	Population, Employment, household demographic data by Zone
Highway & Transit Networks	Highway facilities, Transit services	Caltrans, Municipalities, Transit Operators	Zone-to-zone travel time and cost by time period
Trip Generation	Population, employment, household demographics	Southern California Association of Governments	Trip productions and attractions by zone
Trip Distribution	Trip productions and attractions by Zone & Zone-to-zone travel time	Southern California Association of Governments	Zone-to-zone trip volumes by purpose
Mode Choice	Zone-to-zone trip volumes, Zone-to-zone travel time, Zone demographic data, Parking costs, Fuel/auto operating costs, Transit fares	Trip Distribution Model, Transportation Networks, Urban Activity Model, Parking Posted Rate, Surveys Transit Operators	Zone-to-zone trips by purpose and mode of travel
Network Assignment	Transportation Networks, Zone-to-zone trips by purpose and mode	Transportation Networks, Mode Choice Model	Volumes on highway facilities and patronage on transit services

FIGURE 4.5

2014 Plan – Highway Projects Map

FIGURE 4.5A

2014 Plan – Highway Projects List

MAP LABEL	PROJECT TYPE	DESCRIPTION/LIMITS
A	Freeway Improvements and Gap Closures	I-5 North Capacity Enhancements: Phase I from SR-14 to Pico Canyon
B	Freeway Improvements and Gap Closures	SR-138 Widening
C	Freeway Improvements and Gap Closures	High Desert Corridor
D	Freeway Improvements and Gap Closures	SR-138 Capacity Enhancements
E	Freeway Improvements and Gap Closures	I-710 Early Action Projects
F	Carpool Lanes	I-405 NB Carpool Lanes: I-10 to US-101
G	Carpool Lanes	I-5 Carpool Lanes: SR-170 to SR-134
H	Carpool Lanes	I-5 Carpool Lanes: SR-118 to SR-170
I	Carpool Lanes	I-10 Carpool Lanes: Puente Av to Citrus Av
J	Carpool Lanes	I-10 Carpool Lanes: Citrus Av to SR-57
K	Carpool Lanes	I-5 Carpool & Mixed-Flow Lanes: I-605 to Orange County Line
L	Freeway Interchanges	I-5/Carmenita Rd Interchange Improvement
		I-405, I-110, I-105 and SR-91 Ramp and Interchange Improvements in South Bay*
		I-605 Corridor "Hot Spot" Interchanges in Gateway Cities*

*Level of detail not included in Regional Model

FIGURE 4.6

2014 Plan – Transit Projects Map

FIGURE 4.6A

2014 Plan – Transit Projects List

MAP LABEL	PROJECT TYPE	DESCRIPTION/LIMITS
A	Light Rail Transit	Exposition LRT Phase II: Culver City to Santa Monica
B	Light Rail Transit	Metro Gold Line Foothill LRT Extension
C	Transit Corridor	East San Fernando Valley Transit Corridors
D	Light Rail Transit	Crenshaw/LAX Transit Corridor (LRT)
E	Light Rail Transit	Regional Connector
F	Subway	Westside Purple Line Extension
G	Regional Rail	Los Angeles/Palmdale Corridor (Enhanced Metrolink Service)

MODEL INPUTS

The basic inputs to a travel demand simulation model include socioeconomic data and the transportation networks (both highway and transit). This section describes the socioeconomic data and the network information used in the Model for the 2014 Plan.

Socioeconomic Forecast

The socioeconomic input data to the Metro model are consistent with the SCAG forecast. The latest official forecast released by SCAG is the "2012 RTP" version, used to develop the 2012 Regional Transportation Plan adopted by the Regional Council. Population and employment are the main socioeconomic input to a travel demand model. The socioeconomic forecasts were developed by interpolating from the adopted 2008 and 2035 data sets at the zonal level. These forecasts are consistent with the SCAG forecast.

Population Forecasts

The analysis of population growth was conducted regionally by county and at the subregional level for Los Angeles County. Figure 4.7A shows that Los Angeles County's population is expected to grow by 8 percent from 9.8 million in 2014 to 10.5 million in 2024. The region's population is expected to grow by 11 percent during that period, from 17.7 million in 2014 to 19.7 million in 2024. Los Angeles County's share of the regional population is estimated to decrease from 55.1 percent in 2014 to 53.5 percent in 2024.

Figure 4.7B depicts population growth in the subregions in Los Angeles County. In 2014, the Gateway Cities was the most populous subregion with 2 million residents. In 2024, the Gateway Cities is expected to be the most populous subregion with 2.1 million residents. North Los Angeles County is expected to experience the most population growth, growing by 159,000, or 24 percent.

Employment Forecasts

Figure 4.8A shows that Los Angeles County's employment is expected to grow by 5 percent from 4.3 million in 2014 to 4.6 million in 2024. The region's employment is expected to grow by 10 percent during that period, from 7.7 million in 2014 to 8.5 million in 2024. Los Angeles County's share of the regional employment is estimated to decrease from 56.5 percent in 2014 to 54.0 percent in 2024.

Figure 4.8B depicts employment growth in the subregions in Los Angeles County. In 2014, Central Los Angeles had the most jobs, 751,000. In 2024, Central Los Angeles is expected to continue to have the most employment with 790,000 jobs. North Los Angeles County is expected to experience the most employment growth, growing by 21 percent.

FIGURE 4.7A

Population Growth by County (2014-2024)

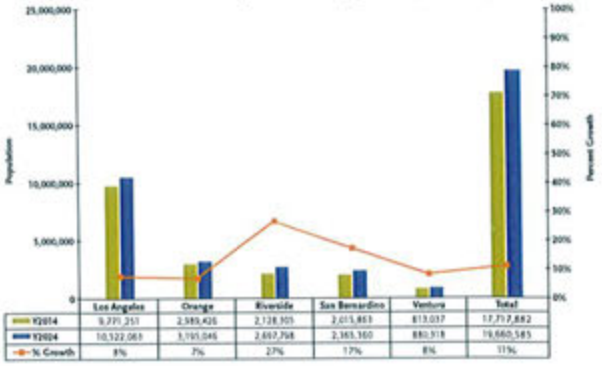


FIGURE 4.7B

Population Growth by Subregion (2014-2024)

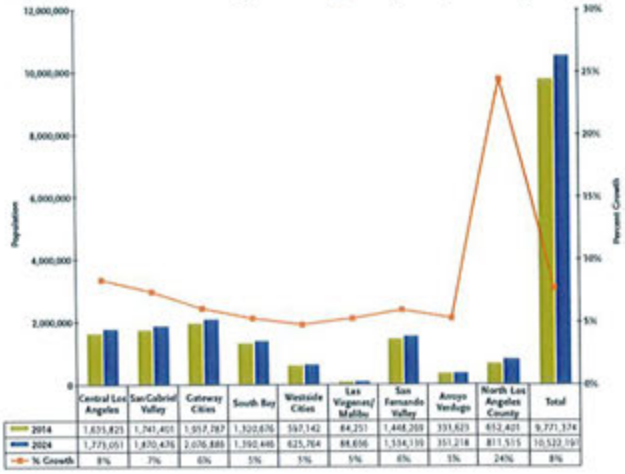


FIGURE 4.8A

Employment Growth by County (2014-2024)

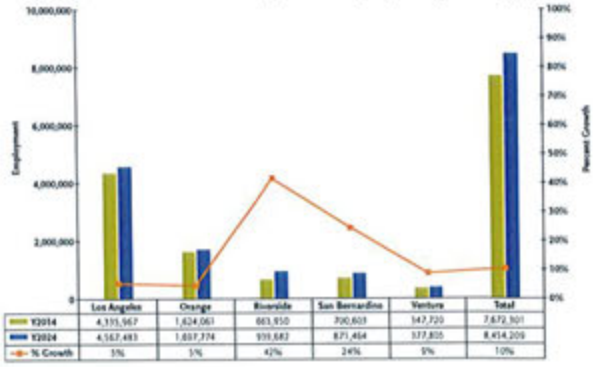
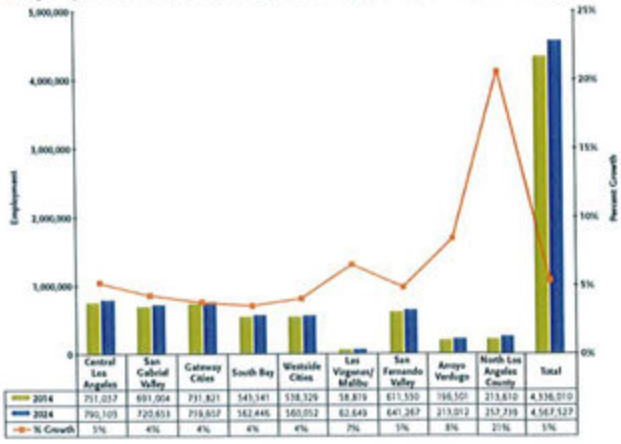


FIGURE 4.8B

Employment Growth by Subregion (2014-2024)



Transportation Networks

The transportation networks in the 2014 Model were updated from representing 2004 conditions to 2014 conditions. Networks representing year 2024 with 2014 Plan improvements, and an acceleration of Measure R projects were also developed.

2014 Base Year Conditions

Figure 4.9 depicts the highway links included in the computer network file representing the year 2014 highway network. The network consists of 20,971 nodes and 66,257 links. They cover all freeways as well as major, primary and secondary arterials within the five-county modeling area.

A summary of the 2014 highway network by facility type for each subregion is provided in Figure 4.10. Countywide, a total of 21,700 lane-miles of roadway are represented in the network. Among them, 5,100 lane-miles, or 23 percent are freeway.

2014 transit service was coded in the computer network to reflect the conditions expected to exist at that time. In Los Angeles County, this included approximately 451,000 vehicle-miles of bus service, 16,000 vehicle-miles of Metro Rail service, and about 9,000 vehicle-miles of commuter rail service in the region.

2024 Future Year Conditions

The 2014 Plan includes highway and transit improvement projects listed in Figures 4.5A and 4.6A. These projects are assumed to be completed by 2024. The 2014 Base Year highway network and transit network were modified to reflect the completion of these projects. A 2024 Acceleration network was coded to represent an accelerated completion of Measure R projects.

The highway projects included in the 2014 Plan will add 110 lane-miles of freeways and 130 lane-miles of new/upgraded arterials. Combined, they represent a 2.1 percent increase in freeway lane-miles and 0.8 percent increase in arterial lane-miles in Los Angeles County.

In addition, the 2014 Plan will add substantial transit infrastructure to the network.

The 2024 transit service was coded in the computer network to reflect the future planned transit network. In Los Angeles County, this included approximately 454,000 vehicle-miles of bus service, 28,000 vehicle-miles of Metro Rail service, and 9,100 vehicle-miles of commuter rail service in the region. These increases over 2014 represent additional lines as well as increased service on existing lines. The 2024 Acceleration network will add approximately 11,400 vehicle-miles (80 route-miles) of Metro Rail service to the 2014 Plan network.

MODEL OUTPUTS

The basic outputs from a travel demand simulation model include trip productions and attractions, trip tables between TAZs, trip tables by mode, and trip assignments. This section describes the outputs of the Model for the 2014 Plan.

Trip Generation

Trip generation is the process of estimating how many daily person trips are generated by households within each TAZ. SCAG's trip generation model generates trips for the following thirteen (13) purposes:

1. Home-Based Work Direct – Low-Income
2. Home-Based Work Direct – Middle-Income
3. Home-Based Work Direct – High-Income
4. Home-Based Work Strategic – Low-Income
5. Home-Based Work Strategic – Middle-Income
6. Home-Based Work Strategic – High-Income
7. Home-Based School
8. Home-Based University
9. Home-Based Shop
10. Home-Based Social/Recreation
11. Home-Based Other
12. Work-Based Other
13. Other-Based Other

Using the population and employment estimates for 2014 and 2024 as input, SCAG's trip production model and trip attraction model are used to estimate the trips produced from and trips attracted to each TAZ.

Trip Productions

The results of trip production are summarized in Figure 4.11A. Figure 4.11A shows that productions in Los Angeles County are expected to grow by 6 percent, from 34.9 million in 2014 to 37.0 million in 2024. Riverside County is expected to experience the highest growth at 30 percent. Figure 4.11B illustrates the growth by subregions in Los Angeles County. North County is expected to experience the highest growth in trip productions at 21.2 percent and 488,000 trips. Central Los Angeles has the second largest growth at 6.9 percent and 386,000 trips.

Trip Attractions

The results of trip attraction are summarized in Figure 4.12A. Figure 4.12A shows that Los Angeles County is expected to be the largest trip attractor in the region in 2024, with 37.3 million trips, a growth of 6 percent over 2014. Riverside County is expected to experience the highest growth at 31 percent. Figure 4.12B illustrates the growth by subregions in Los Angeles County. North County is expected to experience the highest growth in trip attractions, at 20.5 percent and 440,000 trips. Central Los Angeles has the second largest growth at 6.5 percent and 385,000 trips.

Trip Distribution

Trip distribution is the process where person trip productions (for each TAZ) are linked to specific attraction TAZs, thereby creating a "trip table" of trip interchanges between TAZs. The SCAG trip distribution model created trip tables for 2008 and 2035. Those trip tables were interpolated to create the 2014 and 2024 trip tables.

FIGURE 4.9

2014 Highway Network

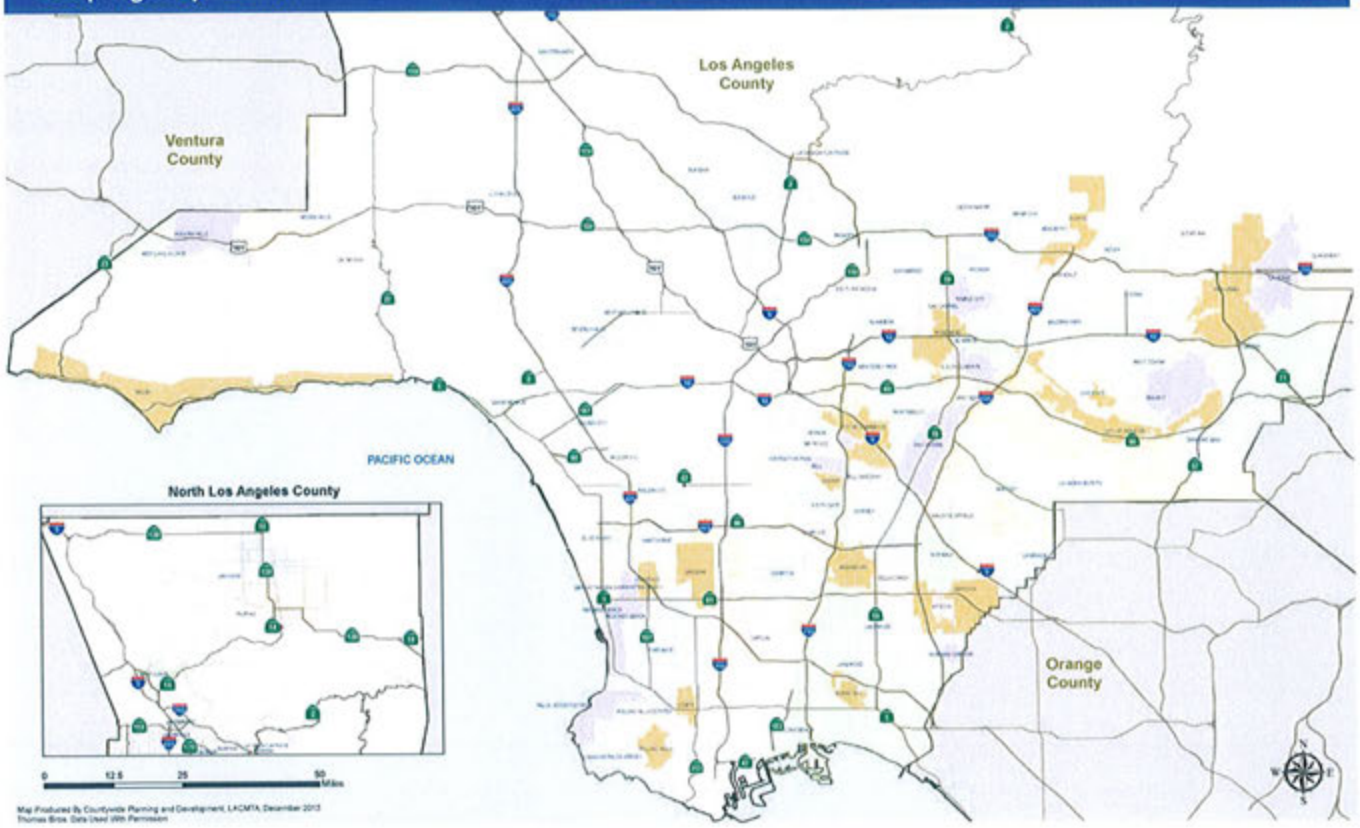


FIGURE 4.10

Summary of Highway Lane-Miles by Facility Type and Subregion in Los Angeles County (2014 and 2024)

	2014			2024		
Subregion	**Freeway**	**Arterial**	**Total**	**Freeway**	**Arterial**	**Total**
Arroyo Verdugo	185	452	637	195	452	647
Central Los Angeles	628	1,963	2,591	645	1,963	2,608
Gateway Cities	799	2,966	3,765	813	2,966	3,779
Las Virgenes/Malibu	94	273	366	94	273	366
North LA County	724	2,673	3,396	741	2,801	3,542
San Fernando Valley	790	2,333	3,123	815	2,333	3,148
San Gabriel Valley	1,144	2,749	3,894	1,165	2,749	3,914
South Bay Cities	507	2,238	2,745	507	2,238	2,745
Westside	216	927	1,143	237	927	1,165
Total	**5,087**	**16,573**	**21,660**	**5,212**	**16,701**	**21,913**

	2014			2024		
County	**Freeway**	**Arterial**	**Total**	**Freeway**	**Arterial**	**Total**
Los Angeles	5,101	16,693	21,794	5,211	16,821	22,032
Orange	1,772	4,711	6,483	1,779	4,711	6,490
Riverside	2,060	4,719	6,779	2,060	4,779	6,839
San Bernardino	2,611	6,533	9,144	2,611	6,533	9,144
Ventura	501	1,749	2,250	501	1,749	2,250
Imperial	419	960	1,379	419	960	1,379
Total	**12,465**	**35,365**	**47,830**	**12,581**	**35,553**	**48,134**

FIGURE 4.11A

Total Daily Trip Production by County (2014-2024)

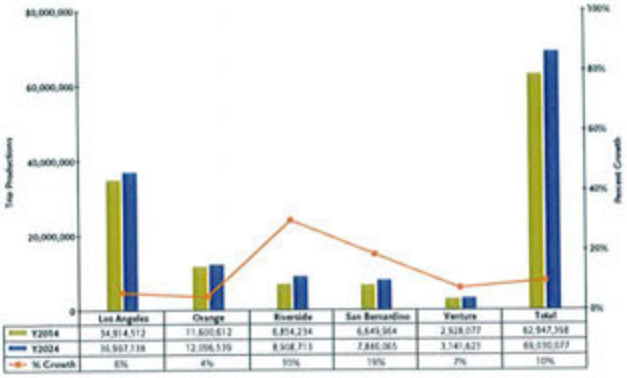


FIGURE 4.11B

Total Daily Trip Production by Subregion (2014-2024)

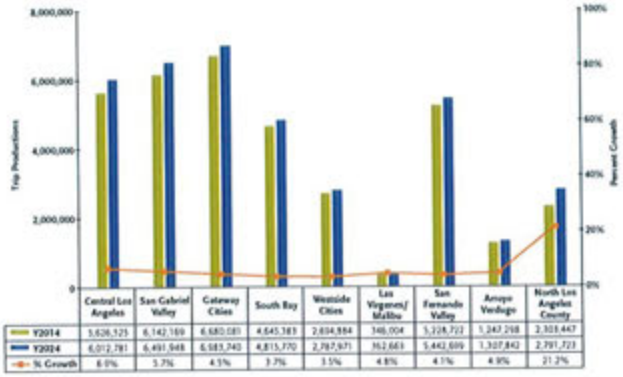


FIGURE 4.12A

Total Daily Trip Attraction by County (2014-2024)

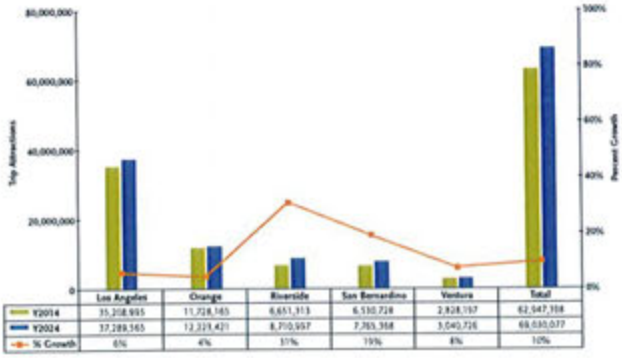
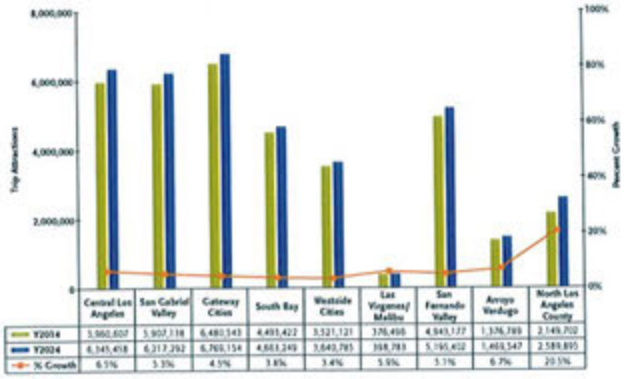


FIGURE 4.12B

Total Daily Trip Attraction by Subregion (2014-2024)



Home-Based Work Travel Patterns In Years 2014 & 2024

Figure 4.13A summarizes the trip production travel patterns for 2014 daily peak period home-based work trips in each subregion of Los Angeles County. The large pie in the lower left corner of the Figure shows the number of home-based work trips produced by each subregion. The Gateway Cities subregion produces the largest number of home-based work trips – 800,700. The San Gabriel Valley subregion produces the next highest number at 792,400.

Figure 4.13A also displays the home-based work trip production activity within each subregion, as represented by the smaller pies. The largest interaction within each subregion occurs intra-subregion; that is, the largest percentage of home-based work trips within each subregion stays internal to that subregion. For the Gateway Cities subregion, the second highest interaction occurs with trips destined outside Los Angeles County (at 17 percent), followed by trips with the South Bay Cities and Central LA, both at 11 percent.

Figure 4.13B summarizes the trip production travel patterns for 2024 daily peak period home-based work trips, produced in each subregion of Los Angeles County. The San Gabriel Valley is expected to produce the largest number of home-based work trips – 839,100. The Gateway Cities subregion is expected to produce the second largest number of home-based work trips – 835,600. The largest interaction within each subregion occurs intra-subregion. For the San Gabriel Valley, the second highest interaction occurs with trips destined to the Central Los Angeles subregion (14 percent), followed by trips destined outside Los Angeles County (13 percent).

Figure 4.14A summarizes the daily peak period home-based work trip attractions within each subregion in year 2014. The Central Los Angeles subregion attracts the largest number of home-based work trips in the County (799,800), followed by the Gateway Cities subregion at 740,900 and San Gabriel Valley subregion at 690,700. Within Central Los Angeles, 14 percent of trips originate in the San Gabriel Valley subregion and 11 percent from the Gateway Cities subregion.

Figure 4.14B summarizes the daily peak period home-based work trip attractions within each subregion in year 2024. The Central Los Angeles subregion is expected to attract the largest number of home-based work trips in the County (841,700), followed closely by the Gateway Cities subregion at 769,400 and the San Gabriel Valley at 724,000.

For the Central Los Angeles subregion, the second highest interaction occurs with trips expected to originate in the San Gabriel Valley (14 percent), followed by trips attracted from the Gateway Cities subregion (11 percent).

FIGURE 4.13A

Peak Period Home to Work Trip Productions by Subregion (2014)

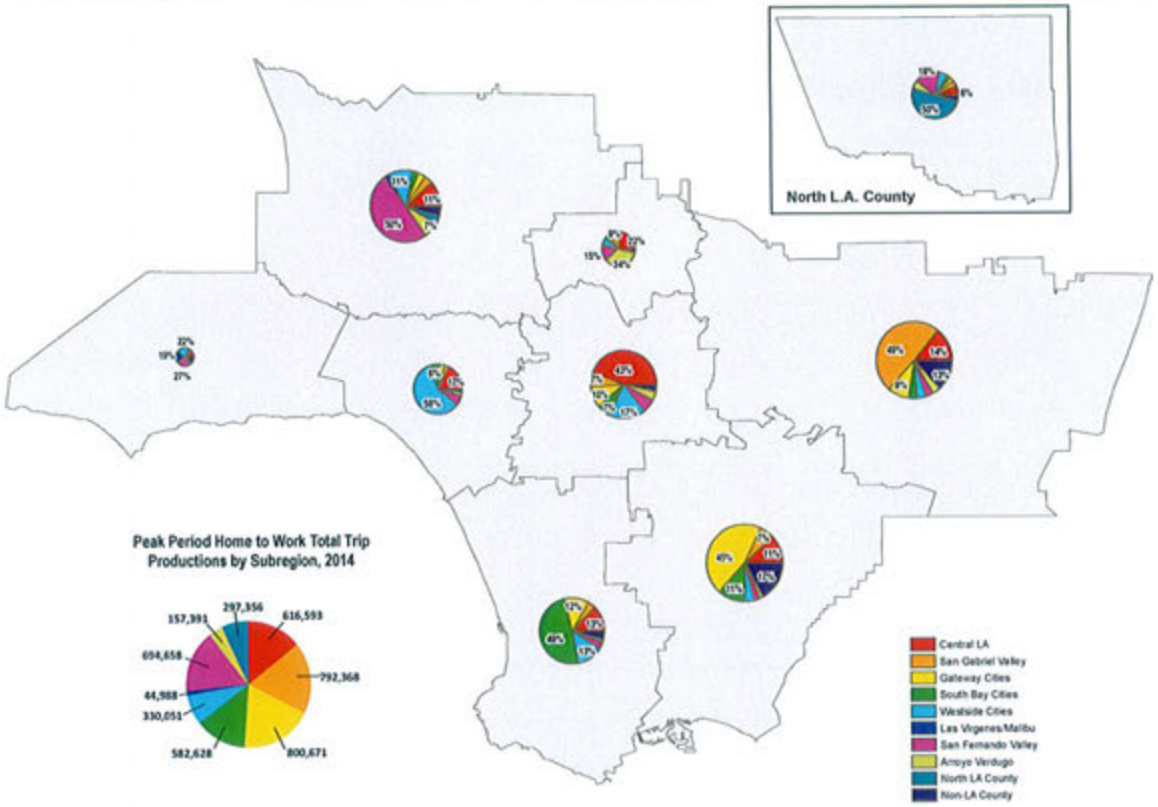


FIGURE 4.13B

Peak Period Home to Work Trip Productions by Subregion (2024)

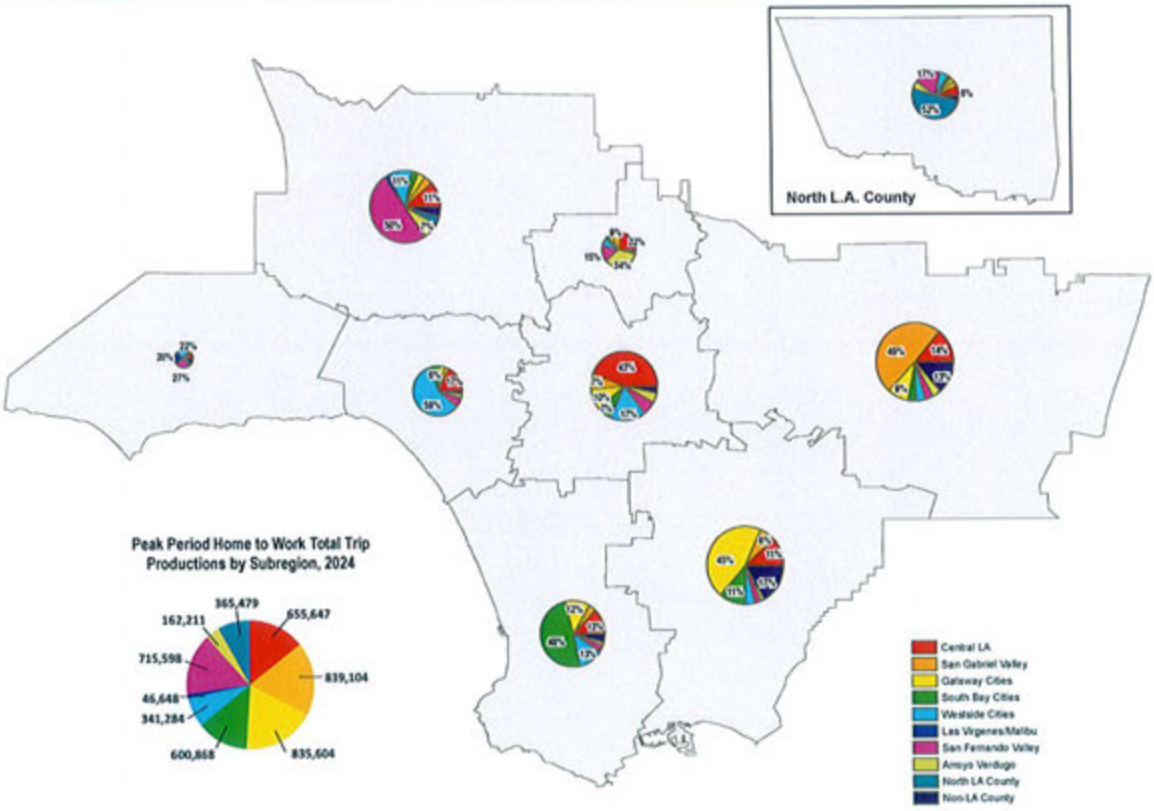


FIGURE 4.14A

Peak Period Home to Work Trip Attractions by Subregion (2014)

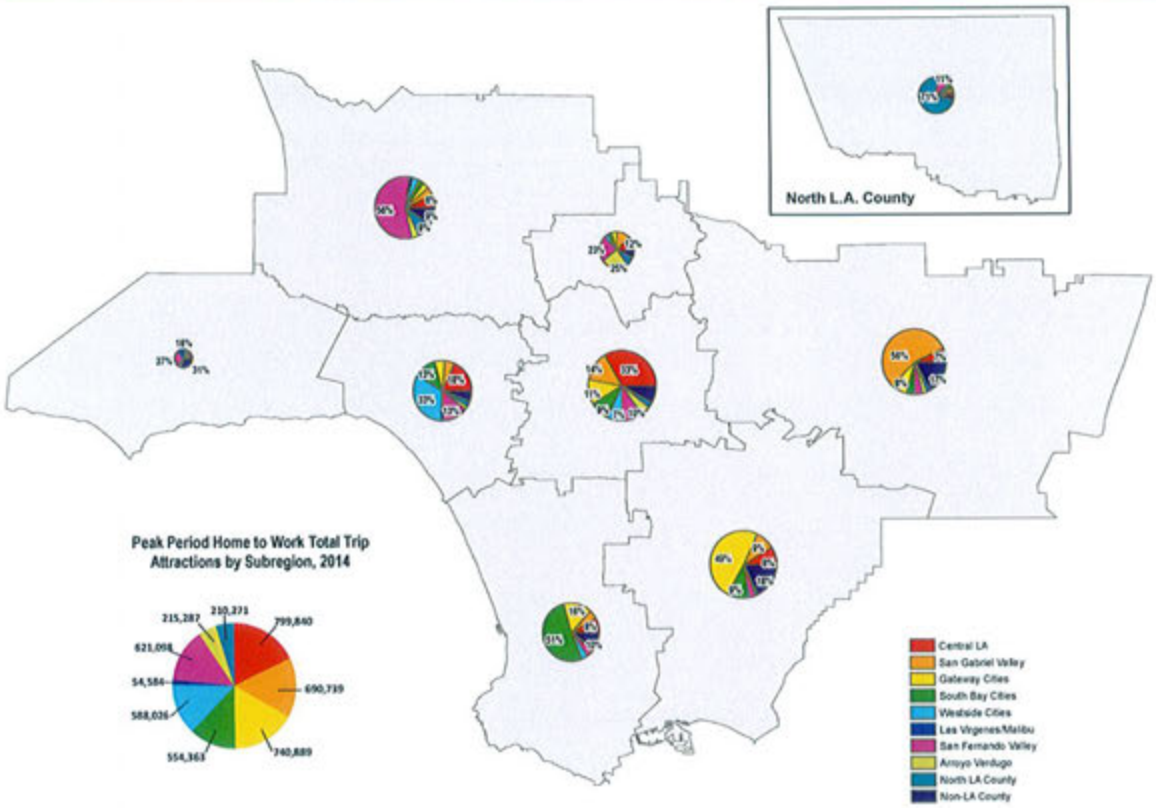
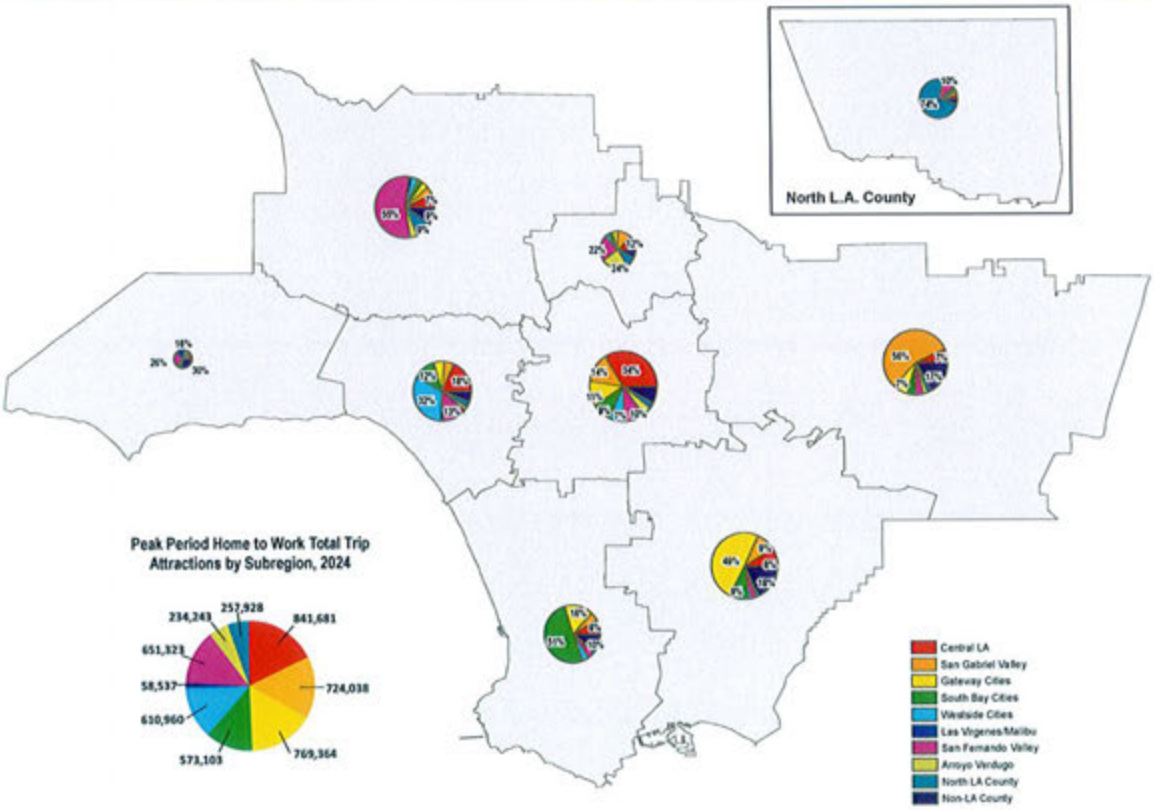


FIGURE 4.14B

Peak Period Home to Work Trip Attractions by Subregion (2024)



All Purposes Travel Patterns in Years 2014 & 2024

Figure 4.15A illustrates the total daily trip productions within each subregion for year 2014. The Gateway Cities subregion produces the highest number of total daily trips at 6.7 million, followed by the San Gabriel Valley subregion at 6.1 million. The largest interaction in each subregion occurs intra-subregion.

Within the Gateway Cities subregion, 10 percent of the trips are destined outside Los Angeles County, followed by 7 percent destined to the South Bay Cities and 7 percent destined to Central LA.

Figure 4.15B summarizes the trip production patterns for 2024 daily trips, in each subregion of Los Angeles County. The Gateway Cities subregion expected to produce the largest number of daily trips – 6,983,700. San Gabriel Valley is expected to produce the second largest number of daily trips – 6,491,900. For the Gateway Cities subregion, the second highest interaction occurs with trips destined outside Los Angeles County (10 percent), followed by trips destined to the Central Los Angeles subregion and South Bay Cities at 7 percent each.

Figure 4.16A illustrates the total daily trip attractions within each subregion for year 2014. The Gateway Cities subregion attracts the highest number of total daily trips, at 6.5 million, followed closely by the Central Los Angeles subregion at 6.0 million. Within the Gateway Cities subregion, the largest number of trips originates outside Los Angeles County (11 percent).

Figure 4.16B summarizes the daily trip attractions within each subregion in year 2024. The Gateway Cities subregion is expected to attract the largest number of home-based work trips in the County (6,769,200), followed closely by the Central Los Angeles subregion at 6,345,500 and the San Gabriel Valley at 6,217,200. For the Central Los Angeles subregion, the second and third highest interactions are with the San Gabriel Valley and Gateway Cities subregions, at 8 percent each.

Mode Choice

The mode choice process determines the share of person trips taking various modes of transportation. The modes in the Metro Travel Demand Model are automobiles and transit. The submodes under automobile include single-occupancy and high-occupancy vehicles (two-person carpools and three persons or more carpools) while the submodes under transit are bus (including local bus, rapid bus, express bus, and transitway bus) and rail (including urban rail and commuter rail).

Traffic Assignment

Traffic assignment is the process of loading vehicle trips onto a highway network and transit trips onto a transit network. This process produces traffic volumes and resulting congested speeds on each road segment represented in the highway network as well as passenger volumes on the transit network.

Metro uses a four time-period equilibrium highway assignment process. Separate vehicle trip tables are generated for the AM peak period, midday period, PM peak period, and night period. These trip tables are assigned to the appropriate highway network, using equilibrium assignment procedures. The assignment results were reviewed for reasonableness and minor adjustments were made when required.

System Performance Measures

Performance measures evaluate the highway and transit systems for the base year and a series of future year alternatives. This analysis is intended to determine the effectiveness of alternative transportation strategies and assist in the development of program and project recommendations.

The System measures assess the performance of the Plan as a whole and how the transportation system benefits from implementation of the Plan, as compared with the existing and No Build scenarios.

The system measures include:

> **Speed** – a measure of mobility and how the Plan improvements impact the average speed of the highway system.
> **Mobility Index** – a measure of system throughput that adjusts speed by factoring in the vehicle occupancy of automobiles and transit. The higher the index number, the more effective the transportation system in moving people.
> **Title VI Analysis** – a series of measures required by federal Title VI that assesses the Plan's impact on mobility benefits for minority and transit-dependent communities.

FIGURE 4.15A

Daily Trip Productions by Subregion (2014)

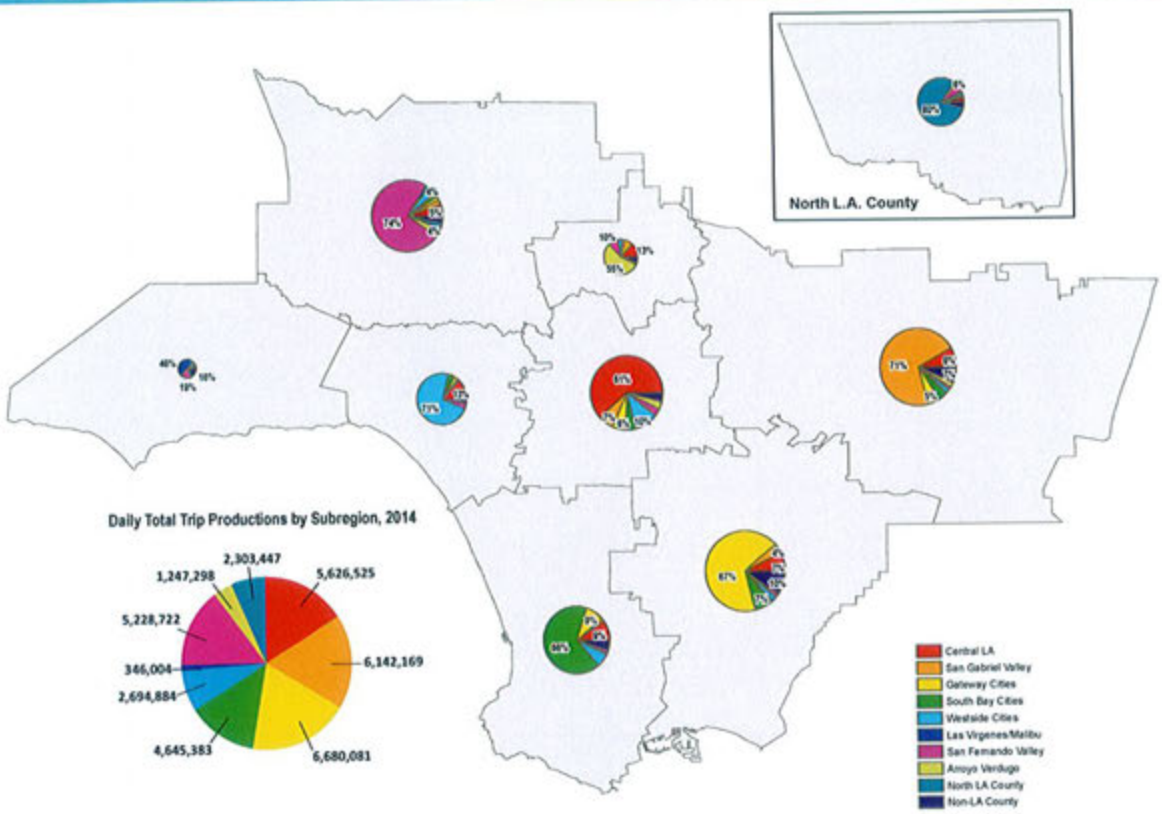


FIGURE 4.15B

Daily Trip Productions by Subregion (2024)

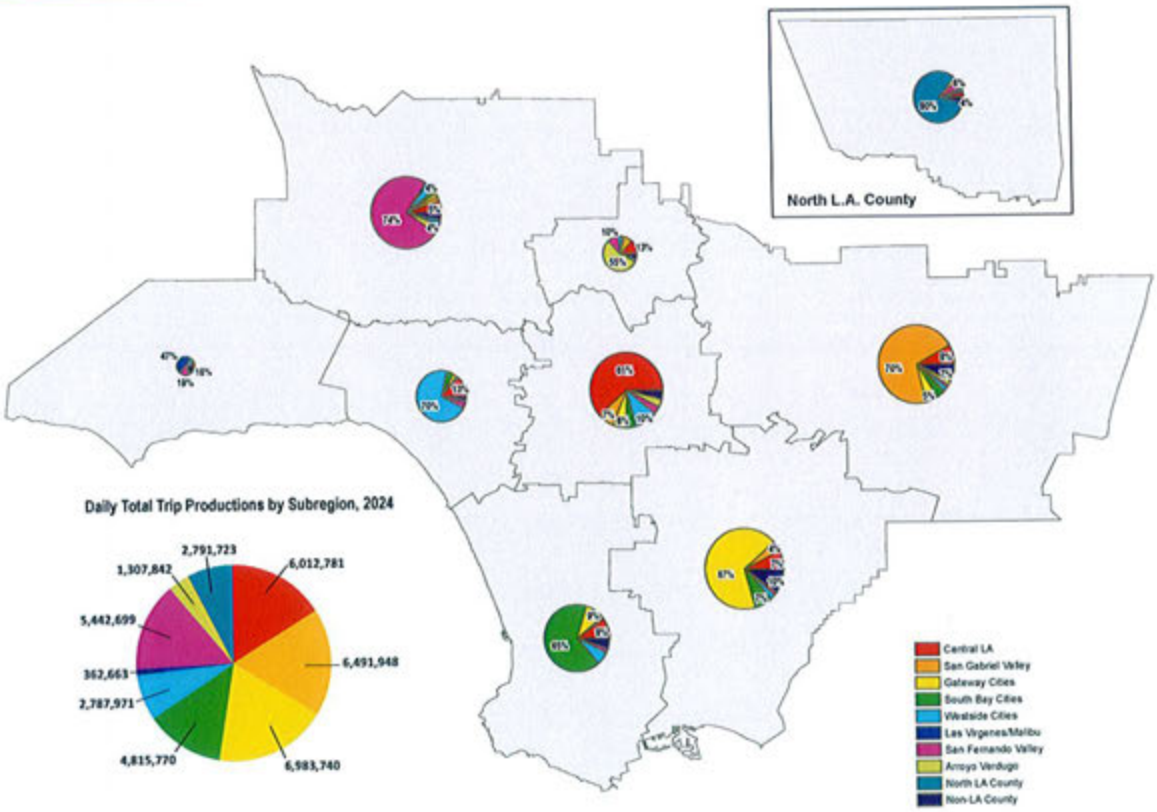


FIGURE 4.16A

Daily Trip Attractions by Subregion (2014)

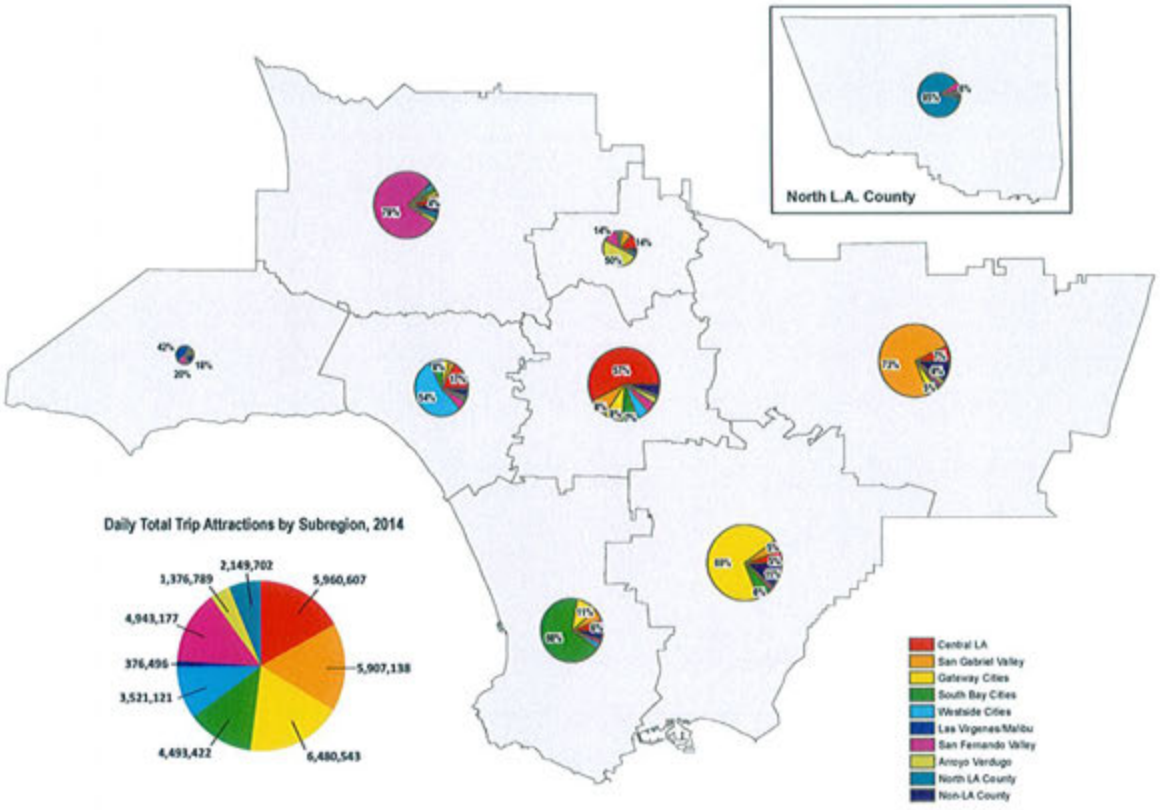
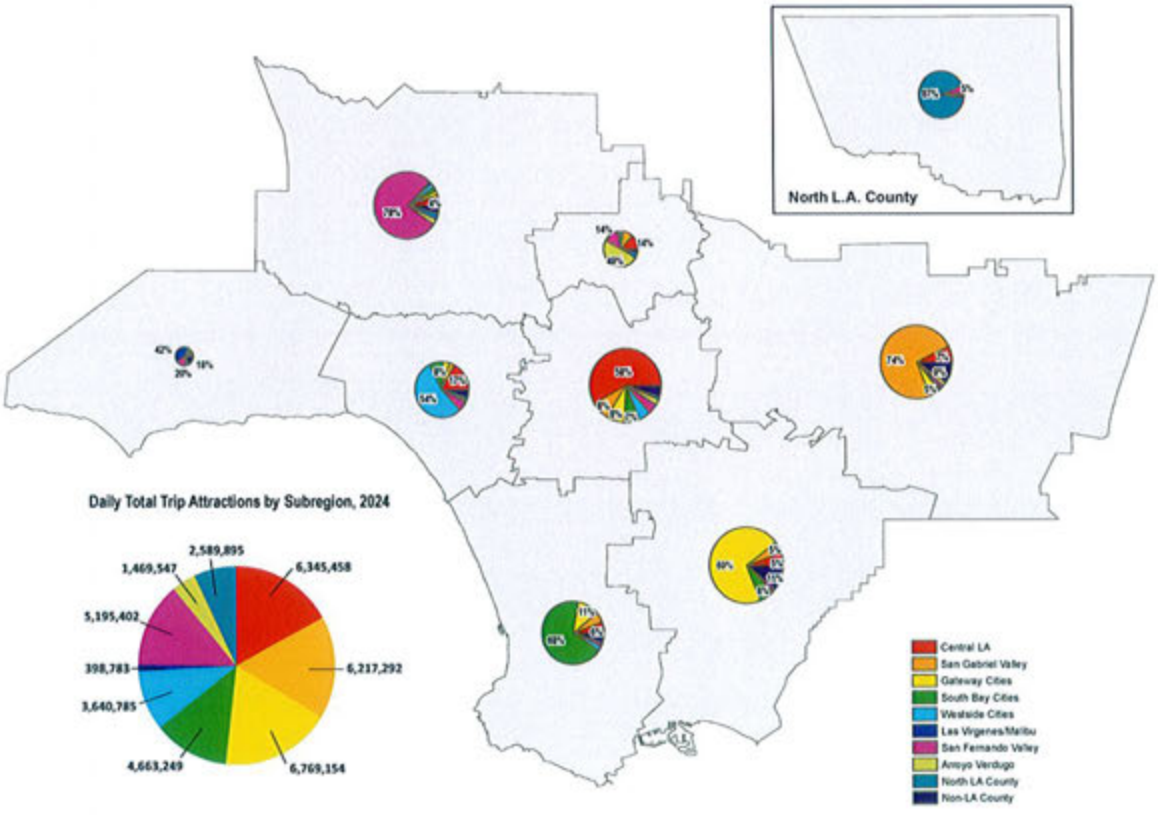


FIGURE 4.16B

Daily Trip Attractions by Subregion (2024)



AM Peak Period Speeds

Figure 4.17A compares the peak freeway and arterial speeds between the base year (2014) and three scenarios for the forecast year of 2024 (No Build and 2014 Plan, and Acceleration). The AM peak period speeds on the freeways are expected to deteriorate from 27.8 MPH in 2014 to 25.6 MPH in the No Build Scenario and improve to 25.8 MPH with the 2014 Plan, and 26.2 with Acceleration. Arterial speeds are expected to deteriorate from 23.9 MPH in 2014 to 22.4 MPH in the No Build scenario and improve to 22.6 MPH in the 2014 Plan and 22.9 with Acceleration.

Mobility Index

The mobility index is a performance measure of the throughput of a multimodal transportation system. It takes into consideration the volume of people moved and their travel speed. It is a function of both speed and vehicle occupancy and focuses on the movement of people rather than vehicles. The higher is the index, the faster the speeds and the higher the vehicle occupancies.

The formula is specified as:
Throughput = (PMT/PHT) X (PMT/VMT)
where
PMT = Person-Miles Traveled for automobile and transit modes
PHT = Person-Hours Traveled for automobile and transit modes and
VMT = Vehicle-Miles Traveled for automobile and transit modes.

Mathematically, the first half of this formula, PMT/PHT, can be expanded to represent the difference between the average personal flow speed and a weighted variance of the speed between all link pairs. PMT/PHT is equal to the average personal flow speed when the weighted variance is zero and all links have the same speed (meaning there is no variation in the speed). Since speed does not stay constant across the highway and transit networks, PMT/PHT is always lower than the average personal flow speed.

Likewise, the second half of the formula, PMT/VMT, can be expanded to represent the difference between the average vehicle occupancy and a weighted variance of the vehicle occupancy of all link pairs. Since the occupancy does not vary much from one link to the next, the weighted occupancy variance is not a large number. Thus, PMT/VMT is similar to the average vehicle occupancy.

Figure 4.17B illustrates the mobility index in Los Angeles County. The mobility index in 2014 is 48.2, dropping to 46.6 in the No Build, and increasing to 47.1 for the 2014 Plan, and 47.7 with Acceleration.

FIGURE 4.17A
AM Peak Period Speeds

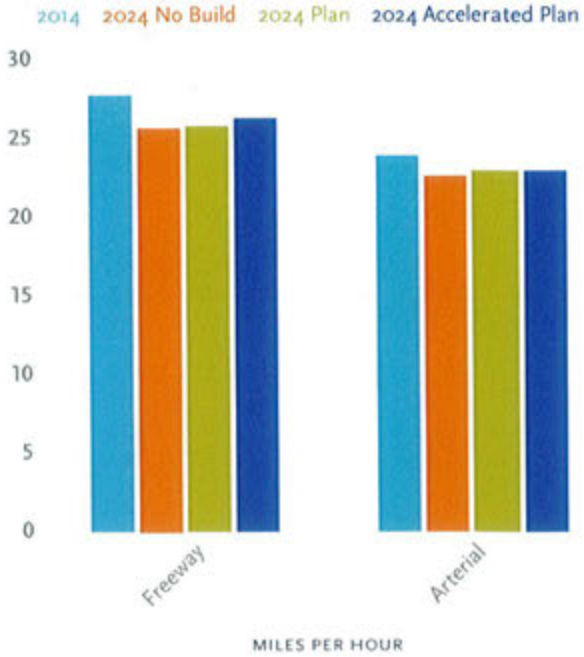
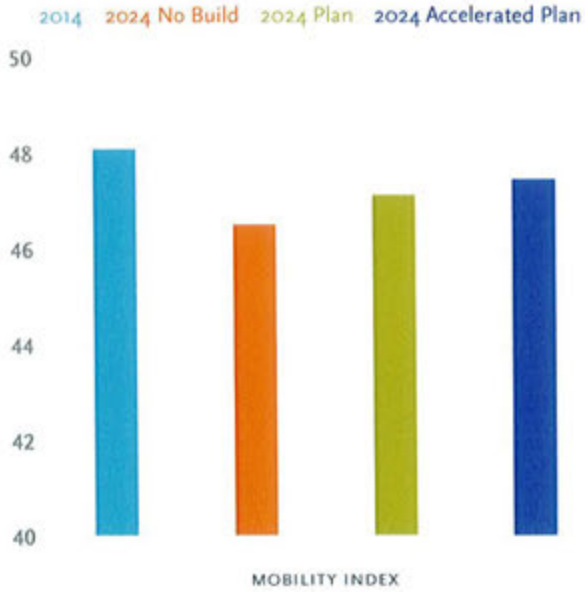


FIGURE 4.17B
Daily Mobility Index



Title VI Analysis

The Title VI analysis was performed to assess the transportation impacts on distinct socioeconomic groups in Los Angeles County. The transportation impacts analyzed include:

> Job accessibility within 60 minutes via transit; and
> Mode choice by income quintile.

The distinct socioeconomic groups include:

> Transit dependent;
> African American;
> Hispanic; and
> Asian/Pacific Islander.

Using information from the 2010 Census and 2010 American Community Survey 5-Year Estimates, a transportation analysis zone (TAZ) was designated as transit-dependent if it met one or more of the following criteria:

> Zero-car ownership – 10 percent or more of the households do not own a car;
> Low-income – 26.7 percent or more of the households have income of $25,000 or less (in 2010 dollars); or
> Senior citizens with medium-low-income – 11 percent or more of the households include individuals aged 65 or older, and median household income is less than $53,762.

TAZs were also designated with a specific socioeconomic group, if its population exceeded the socioeconomic group's average for Los Angeles County (e.g., a TAZ with ten percent of households comprised of African Americans would be deemed an African American TAZ since that exceeded the 8.3 percent of African Americans for Los Angeles County). Figure 4.18 summarizes the ethnic population of Los Angeles County, based on the 2010 Census. Hispanics, at 47.7 percent of the population, comprise the largest minority group in the County.

FIGURE 4.18

Ethnic Population Based on 2010 Census

	POPULATION	PERCENT
African American	815,086	8.3%
Hispanic	4,687,889	47.7%
Asian/Pacific Islander	1,348,135	13.7%
Non-Minority	2,728,321	27.8%
Other Race Alone	44,253	0.5%
Two or More Races	194,921	2.0%
Total	9,818,605	100%

In addition to transit-dependency and socioeconomic group, TAZs were also classified by household income quintiles. The quintiles represent:

> Low income – less than $37,500
> Moderate income –$37,501 to $50,000
> Medium income –$50,001 to $62,500
> Above average income –$62,501 to $80,000
> High income – greater than $80,000

TAZs by income quintiles are illustrated in Figure 4.19.

Geographic Distribution of Socioeconomic Groups

Figures 4.20A, 4.20B, 4.21A, and 4.21B illustrate the distribution of transit dependent, African American, Hispanic, and Asian/Pacific Islander populations throughout Los Angeles County.

FIGURE 4.19

2010 Median Zonal Income in Quintiles

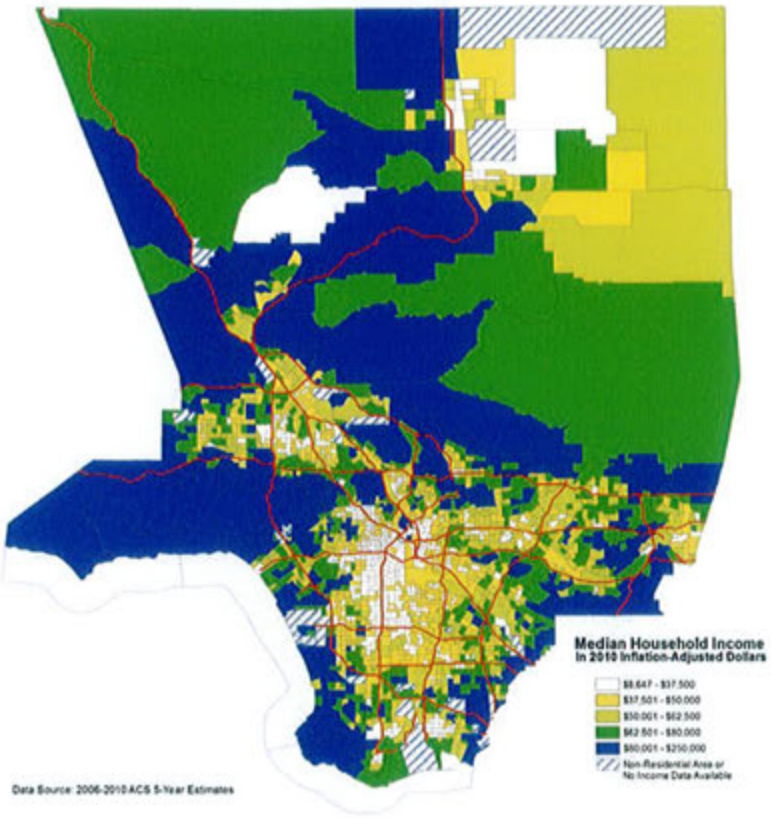


FIGURE 4.20A

Transit Dependent Population

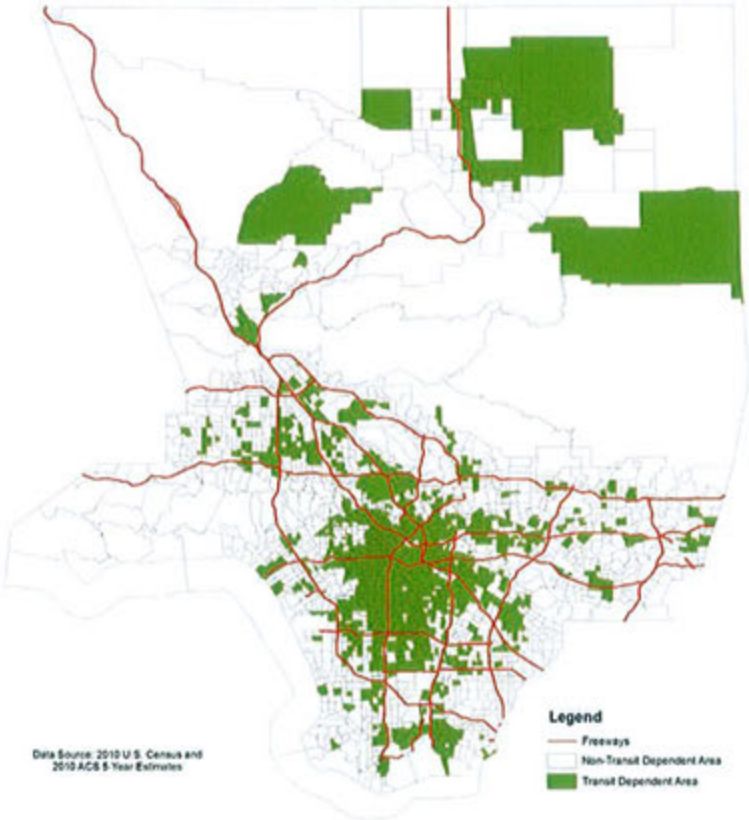


FIGURE 4.20B

African American Population

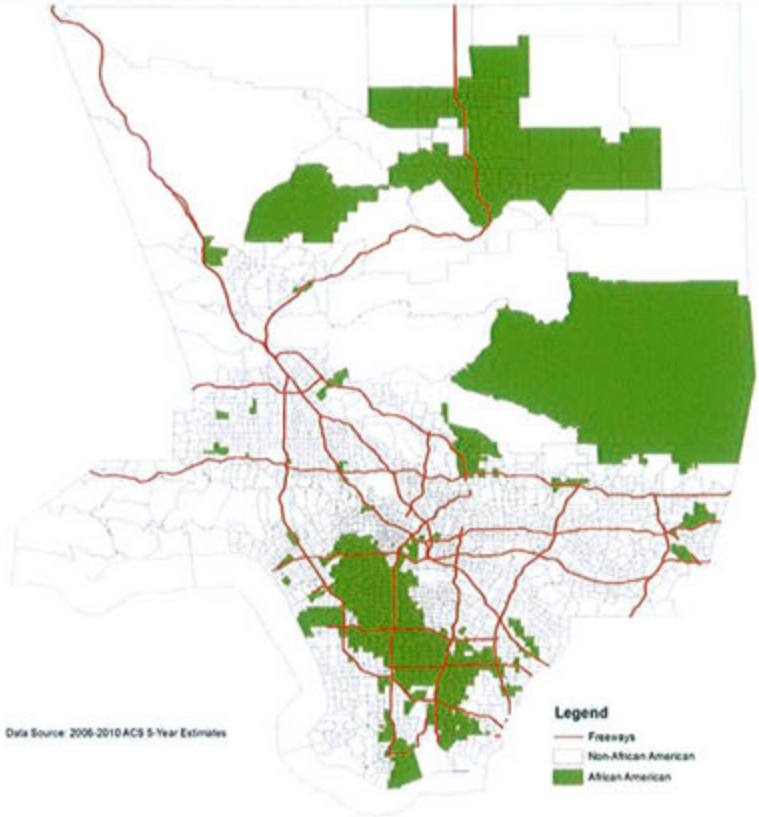


FIGURE 4.21A

Hispanic Population

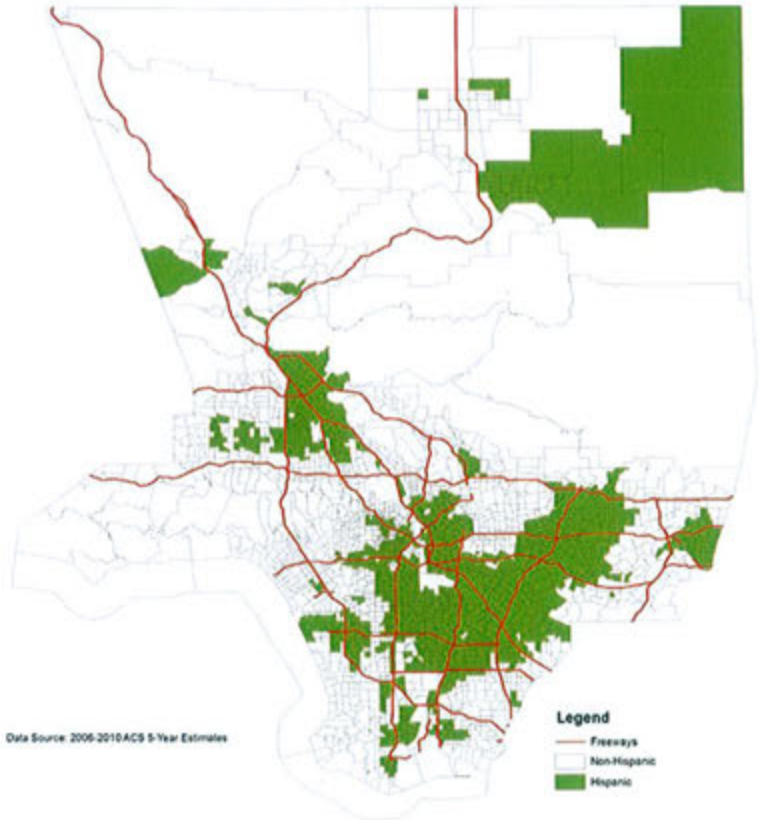
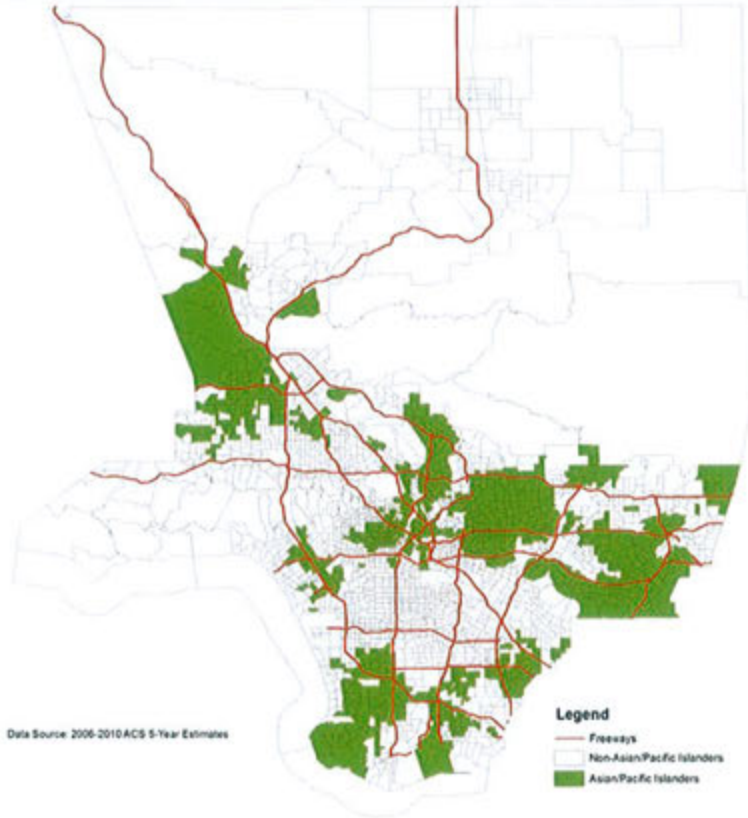


FIGURE 4.21B

Asian/Pacific Islander Population



Job Accessibility

Figure 4.22A displays, by income quintile, the percentage of jobs that can be reached via transit in a sixty-minute period. Low-income TAZs are expected to benefit the most from transit accessibility as 51.3 percent of jobs can be reached via transit in the No Build scenario and 54.6 percent in the 2014 Plan scenario and 56.8 percent in the Accelerate scenario. All income quintiles are expected to see an improvement in transit accessibility with implementation of the 2014 Plan.

Figure 4.22B illustrates the job accessibility by population subgroup. The transit-dependent population is expected to benefit the most from the 2014 Plan with accessibility improving from 48.8 percent of the population to 51.5 percent. All other population subgroups are expected to see an improvement in transit accessibility as well.

Mode Choice

Figure 4.23A displays, by income quintile, the mode split of home-to-work trips. Transit usage is expected to be the heaviest for low-income households in the No Build scenario (22.5 percent), increasing to 23.5 percent in the 2014 Plan scenario. All other income quintiles are also expected to experience an increase in transit usage.

Figure 4.23B illustrates the mode choice by population subgroup. The transit-dependent population is expected to increase transit usage the most, increasing from 18.2 percent in the No Build scenario to 19.2 percent in the 2014 Plan. All other population subgroups are expected to see a modest improvement in transit usage.

FIGURE 4.22A
Job Accessibility by Income Quintile

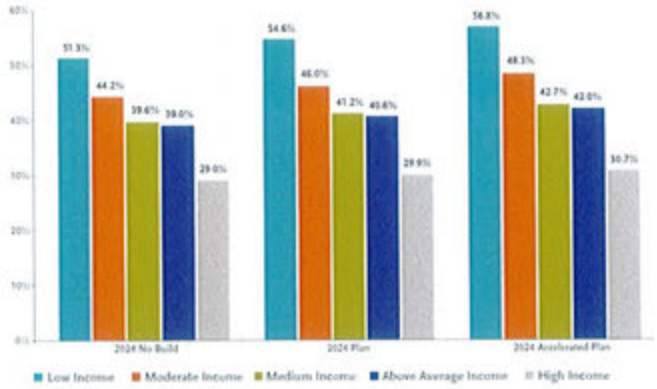


FIGURE 4.22B
Job Accessibility by Population Subgroup

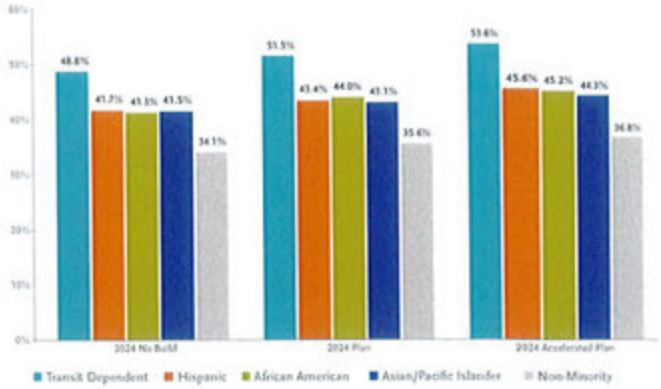


FIGURE 4.23A
Mode Choice by Income Quintile

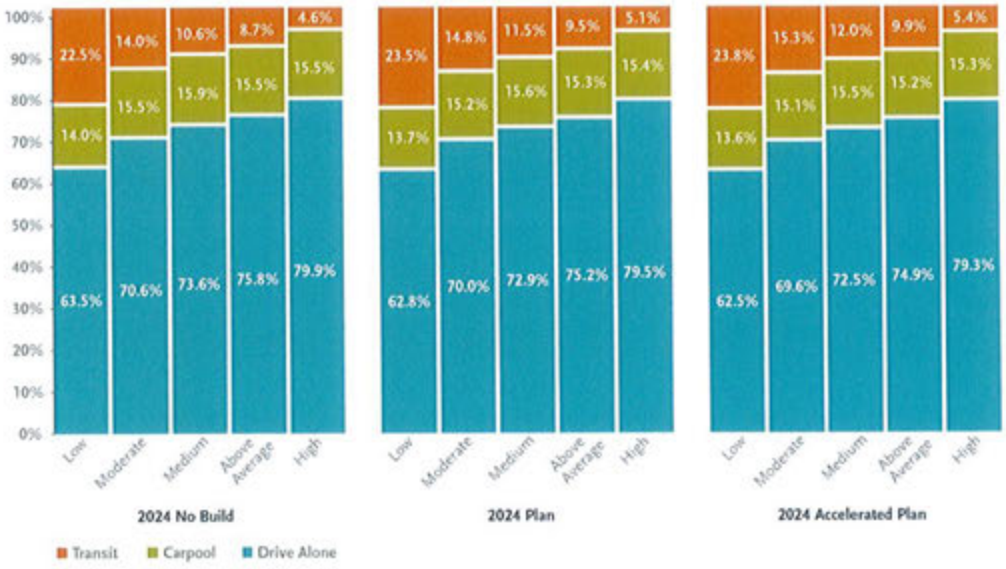
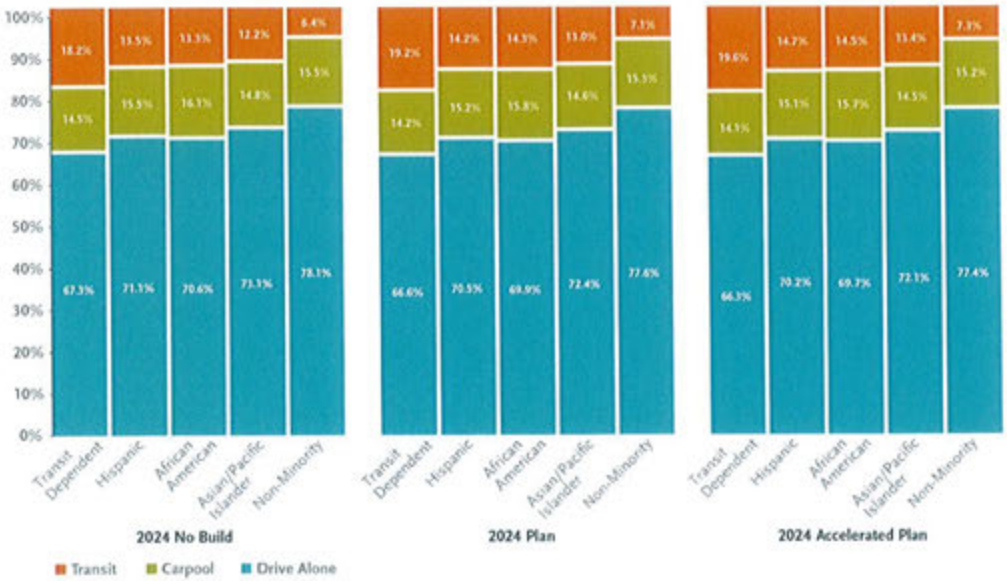


FIGURE 4.23B
Mode Choice by Population Subgroup



Los Angeles County
Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952

Metro

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city of burbank
community development department

memorandum

DATE: May 2, 2014

TO: Mark Scott, City Manager

FROM: Joy R. Forbes, Community Development Director

SUBJECT: **BURBANK CHANNEL BIKEWAY COMMUNITY MEETING SYNOPSIS – May 1, 2014**

- The May 1, 2014 meeting was the third Community Meeting for the Burbank Channel Bikeway Project (Phase II).
- The purpose of the meeting was to present the preliminary plans and alternatives to the neighborhood and to seek input.
- Approximately 11 residents attended the two-hour meeting, as well as Mayor Gordon and Vice-Mayor Frutos. The meeting was recorded for on demand viewing on Burbank's website.
- The majority of attendees confirmed that they were residents in the area of the project.
- Staff provided a description of the proposed project, including the route, funding sources, budget, cost estimates, and schedule.
- The concept route of the path was presented with focused attention given to the single and multi-family neighborhood between Providencia and Alameda Avenues. Staff provided an overview of the various considerations that were taken into account when analyzing the path's route, including:
    - Neighborhood input;
    - Effect on adjacent properties;
    - Obstacles/Lack of Obstacles in Right-of-Way; and
    - Functionality of the path/interface with Phase I.
- Alternative alignments for the neighborhood between Providencia and Alameda Avenues were presented at the meeting, including:
    - Pursue an eastern alignment, but narrow the path and construct larger walls in those areas where private properties are closer to the channel than in other areas along the right-of-way;
    - Pursue an eastern alignment, but cantilever the path over the channel in those areas where private properties are closer to the channel than in other areas along the right-of-way;
    - Pursue a western alignment;
    - Install additional bridge(s) to transition the path from west to east or from east to west and back to avoid obstacles and properties that are closer to the channel; and

    - Move the path away from the channel and install a Class III (signed) bike path on Lake Street south of Providencia.
- Of the 11 residents who attended, three of them expressed support for the project and eight were opposed;
    - The three supporters (two of whom identified as living on a block adjacent to the channel) cited the following reasons for their support:
        - Expansion of Phase I to the Metrolink Station for transit;
        - Improvement of the area and the neighborhood;
        - Improvement of safety in the area and easier to police;
        - Safer alternative than riding in the street; and
        - Safer for families with children who walk or ride.
    - Those who opposed the project (some living directly adjacent to the path and some living in the adjacent area) expressed the following:
        - Concerns about privacy, security, noise, and light;
        - Safety concerns and gang problems;
        - Concerns over existing wildlife and landscaping;
        - Concerns over connectivity to other bikeways;
        - General opposition to bike path projects, primarily for cost reasons; and
        - Additional concerns raised included the potential for traffic problems with the addition of a signalized grade crossing at Alameda Avenue.
- Staff (including a Police Department representative) provided responses to the questions and took note of comments so that the concerns of the neighborhood could be taken into account should the design phase of the project progress. Notes were also taken so that the feedback could be conveyed to Council at the June 3, 2014 Council meeting, where staff will be seeking direction on how best to proceed with the project.

TRAFFIC COMMISSION
APRIL 24, 2014

SYNOPSES OF ITEMS ARE IN BOXES BELOW

Members Present:
Robin Gemmill, David Carletta, Vanessa Rachal, Kevin Harrop, Rebecca Granite-Johnson, Joe Terranova, Brian Malone
Members Absent:
Paul McKenna, Linda Barnes

III. ORAL COMMUNICATIONS:

A. Public Input – None
B. Commission Members – Granite-Johnson requested staff to look at potholes in commercial area north of Empire Avenue; Harrop mentioned Ladies Night Out in Magnolia Park; Malone reminded the commission of chair elections at June meeting.
C. Staff Communications – Staff indicated that Mariposa Street Bridge Council item was scheduled for May 6; Commission decision on taxi permits was appealed and is scheduled for hearing on May 8; staff indicated a review of school area traffic controls is underway and would be discussed at the June meeting

IV. APPROVAL OF MINUTES:

Motion to approve minutes made by Carletta and seconded by Harrop. Motion approved by Malone, Gemmill, Carletta, Rashal, and Harrop. Granite-Johnson and Terranova abstained.

V. PUBLIC HEARING:

None

VI REPORTS:

A. Subcommittee Reports:
Non-Emergency Medical Transport Services Subcommittee

No Update.

School Safety Subcommittee

No Update. Staff requested to agendize discussion on Roosevelt School parking.

Rancho Equestrian Safety Subcommittee

No Update.

Staff Reports:

B. Discussion of Subcommittee Requirements and Tenure

Joe McDougall from the City Attorney's office explained the role and requirements of sub-committees. After discussion, the Commission requested that the agenda be modified to include discussion items and that agendizing procedures be agendized for June meeting.

C. Discussion of Traffic Congestion at Verdugo Avenue and Frederic Street

The Commission unanimously approved the installation of KEEP CLEAR markings on Verdugo Avenue at Frederic Street and on Alameda Avenue at Avon Street. Staff requested that the subject be agendized for a future meeting to discuss adoption of standards for KEEP CLEAR markings.

D. Discussion of IKEA Improvements and Signage

The Commission discussed access routes to and from IKEA, needed wayfinding signage, and the importance of Olive Avenue ramp system to I-5 to minimize impacts on Alameda / San Fernando intersection. Staff will send members information of the IKEA site plan.

E. Traffic Controls Near Schools

Staff completed an inventory of the traffic controls, but has not verified the information. Discussion of traffic controls is postponed until the June meeting.

VII. REVIEW OF FUTURE AGENDA ITEMS:

The May meeting is cancelled because of Council budget meetings. The next meeting is June 26.
The Traffic Commission identified four items for the June meeting: 1) Appointment of new chair and vice-chair, 2) Discussion of procedures for agendizing items, 3) Discussion of parking at Roosevelt School, 4) Discussion of electric vehicle charging stations signage and curbside locations, and Traffic controls near schools.

VIII. ADJOURNMENT:

The meeting was adjourned at 5:38 p.m.

CITY OF BURBANK

PARK, RECREATION AND COMMUNITY SERVICES
ANNOTATED AGENDA/MEETING SUMMARY

Meeting: Senior Citizen Board **Date: 4-23-14**

Members Present: Peter McGrath, Bill Anderson, Doug Halter, Forrest Barker, Marva Murphy, Laurie Patterson, Nanci Nadimi

Members Absent:

Staff Present: Judy Wilke, Gaby Flores, Angela Attaryan

Liaisons Present: None

Item Discussed		Summary	Direction or Action, if any
1	Capital Project Update	Gaby Flores gave an update on the Community Art Room acoustics modification project.	Note and file
2	Older American Month	Bill Anderson announced that four individuals have been selected as the 2014 recipients of the City of Burbank's Older American Volunteer Service Award. The City Council Proclamation for Older American's Month and City Council Awardees Recognition will take place on Tuesday, May 13 at 6:00 p.m. A dessert reception to take place after the recognition at the Elephant Bar.	Note and file
3	Leadership Burbank Project	Jeff Carlon, Fire Engineer discussed the 2014 Leadership Burbank Class Project. Sidewalk is completed, turfs have been placed. Grand opening for the Joslyn Oasis will take place on May 3, at 11:00 a.m.	Note and file
4	Park, Recreation and Community Services Department Scholarship Program	Gaby Flores gave an update on the Park, Recreation and Community Services Scholarship Program. Scholarship Program brochures distributed to the Board.	Note and file
5	Reports	1. Transportation: No Report 2. Senior Legislation: No Report 3. Tuttle Center: No Report	1. Transportation: **Note and file** 2. Senior Legislation: **Note and file** 3. Tuttle Center: **Note and file**

		4. Los Angeles County Commission for Older Adults: Peter McGrath announced that elections for all members will be held on May 5, 2014, 10:00 a.m. at the Los Angeles Commission for Older Adults Meeting.	4. Los Angeles County Commission for Older Adults: **Note and file**
6	Committees & Boards	1. Nutrition: Bill Anderson announced that all staff has completed their CPR/First Aid training and ServSafe certification. Nutrition Advisory Council is looking for a treasurer. Burbank Senior Games luncheon will be provided by the Nutrition Department. The Nutrition Department contributed $635 towards the Joslyn Oasis project. 2. House Committee: Bill Anderson announced that the House Committee donated $500 towards Burbank Senior Games. Additional handicapped parking was discussed. 3. Supporters of Senior Services: No Report 4. Park, Recreation and Community Services: Gaby Flores gave an update on the Community Garden. The City has partnered with Woodbury University; architecture students designed two different community gardens. Experts will work on some changes that need to be made.	1. Nutrition: **Note and file** 2. House Committee: **Note and file** 3. Supporters of Senior Services: **Note and file** 4. Park, Recreation and Community Services**: Note and file**
7	Future Agenda Item	Marva Murphy requested an update on Tuttle Center computer equipment.	