



# WESTSIDE SUBWAY EXTENSION PROJECT

## Accelerated Financial Plan



September 2011



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## 1.0 INTRODUCTION

### 1.1 Purpose of Financial Plan

The purpose of this financial plan is to document the financial capacity of the Los Angeles County Metropolitan Transportation Authority (LACMTA) to construct and operate the Westside Subway Extension Project on an accelerated basis. The plan will assist the LACMTA Board of Directors, Federal Transit Administration (FTA), local officials and the general public in understanding and evaluating LACMTA's financial capacity to implement the Westside Subway Extension while continuing to operate, maintain, expand, and enhance the existing transit system (background transit system). Included in the plan is a review of LACMTA's recent financial history and current financial condition, documentation of the projected capital and operating costs and proposed revenue sources for the Westside Subway Extension and the background transit system, and review of the key assumptions underlying the cost and revenue projections.

The plan also includes a summary of LACMTA's Measure R sales tax expenditure plan and assumes approval within two years of the key legislative strategies that form America Fast Forward (formerly known locally as the 30/10 Initiative). America Fast Forward proposes Federal Qualified Transportation Improvement Bonds (QTIBs) and enhanced Transportation Infrastructure Finance and Innovation Act (TIFIA) provisions. These two key initiatives are necessary to provide funding and financing to accelerate the implementation of twelve transit corridor projects including the Westside Subway Extension. Enabling the acceleration of the construction phases of all 12 Measure R transit corridor projects, including the Westside Subway Extension, is a major priority for LACMTA.

The updated financial information supports LACMTA's request for consideration in the FTA's FY 2013 Annual Report on Funding Recommendations. Specifically, LACMTA is requesting the Westside Subway Extension be listed as a project recommended by the FTA for a Full Funding Grant Agreement in FY 2013. In support of this request two financial plans have been prepared and submitted.

- Accelerated Financial Plan: based on LACMTA's proposed America Fast Forward legislation (formerly known as the 30/10 Initiative)
- Alternative Financial Plan: does not assume enactment of America Fast Forward legislation.

The information and analysis included in this document reflects the Accelerated Financial Plan. The Alternative Financial Plan has been submitted as a separate document.

At this time, LACMTA is requesting a New Starts rating and approval from FTA to enter final design for the entire 9-mile project. If the America Fast Forward legislation is not approved, LACMTA is prepared to move forward with the project on a segmented basis, based on the Alternative Financial Plan. Should the America Fast Forward legislation ultimately succeed, LACMTA may work with FTA to consider adjustments to the annual New Starts funding assumptions. During the ten-year national America Fast Forward program, the QTIBs provision will create 620,000 job-years and the TIFIA provision will create 300,000 job-years for a total of 920,000 job-years. Enabling the acceleration of the construction phases of all 12 Measure R transit corridor projects, including the Westside Subway Extension, is a major priority for LACMTA.

The financial plan is a required component of FTA's New Starts process which provides discretionary federal funding for major fixed guideway transit projects. As a result, this financial plan has been written to meet the requirements of the FTA's June 2000 Guidance for Transit Financial Plans, the FTA's August 2011 Reporting Instructions for Section 5309 New Starts Criteria, and Section 8: Financial Planning for Transit of FTA's Procedures and Technical Methods for Transit Project Planning.

## 1.2 Key Changes Since 2010 Financial Plan

The financial plan that supported LACMTA's request to enter PE was submitted to FTA in October 2010. FTA completed its Financial Assessment Report on March 14, 2011, which included FTA's financial ratings and recommendations for improvement. LACMTA also received a letter from FTA on July 18, 2011 regarding proposed funding assumptions for the project's financial plan. LACMTA has made several changes to the financial plan in response to these comments, and has also updated the plan with more recent information for several key assumptions. These are summarized below:

### Capital Costs:

- The total project cost in constant dollars is the same as the cost submitted in October 2010. For the FY2013 New Starts update, the capital cost estimate was revised to include: 1) project expenditures through FY 2011, 2) current in-progress estimate changes within each SCC category, and 3) additional finance costs.
- The escalation rate for "state of good repair" capital projects has also been increased at the same rate as the consumer price index (CPI) using the July 2010 UCLA Anderson Forecast (referred to hereafter as the UCLA Anderson Forecast).

### Capital Revenue Sources:

- In response to comments raised in FTA's July 18, 2011 letter, LACMTA has reduced the assumed annual amounts of Section 5309 - New Starts funding per year. Under this Accelerated Financial Plan, LACMTA would receive \$150 million in New Starts funding each year from FY 2013 – FY 2028, six years after completion of construction. The total amount of New Starts funding would be \$2,400 million, which equals 42 percent of the total capital costs including financing. In the letter, FTA noted that it would consider adjusting the annual New Starts funding amounts if the program's funding level increases prior to execution of the Full Funding Grant Agreement.
- LACMTA has assumed that a proposed \$640.8 million TIFIA loan would be used to fund the Westside Subway Extension. This reflects USDOT's recent decision to approve LACMTA's request to submit a TIFIA application for the Westside Subway Extension.
- The FY 2010 and FY 2011 sales tax forecast in the LACMTA August 2010 Financial Plan has been validated by actual receipts. For example, the FY 2010 Proposition A sales tax forecast was \$565.8 million while actual receipts were nearly identical at \$565.7 million. The FY 2011 Proposition A forecast was \$591.8 million while actual receipts were \$591.4 million.
- For the sales tax forecast through FY 2040 in the August 2010 Financial Plan, the 2009 UCLA Anderson Forecast was reduced by 5 percent. The escalation rates applied to the local funding sources, including Measure R, have been updated with information from the July 2010 UCLA Anderson Forecast. In addition, LACMTA has applied a 15 percent reduction to the UCLA

Anderson Forecast. For example, the financial plan projects a growth rate of 5.86 percent in 2014. This would correlate to a rate of 6.89 percent in the UCLA Anderson Forecast ( $6.89 \times .85 = 5.86$ .) These forecasted growth rates for local sales tax revenues provide a more conservative set of assumptions for the capital plan.

- The debt financing costs have been updated with new interest rate assumptions to reflect current market conditions.
- In response to FTA comments about the availability of cash reserves or access to short-term lines of credit to fund project construction costs, additional information has been provided on LACMTA's commercial paper program. LACMTA utilizes commercial paper backed by Proposition A and Proposition C revenues as its primary source of short-term financing that can be used to fund capital projects in the event of short-term cash flow needs. As of June 30, 2011, LACMTA has approximately \$237 million in liquid reserves in discretionary accounts. LACMTA has found commercial paper to be a cost-effective tool for managing its cash flow needs on capital projects.

#### **Operating Costs:**

- The O&M cost escalation growth rate for both bus and rail has been increased to reflect CPI. The average annual growth rates for the projected bus O&M costs is now higher than the FY 2001 to FY 2010 rate. The revised O&M cost forecast in this financial plan provides a more conservative assumption.
- Actual O&M costs for 2009 and 2010 have been added, and the plan also provides historic cost per hour for total bus and total rail for the FY 2001 to FY 2010 period.

#### **Operating Revenues:**

- Fare revenues have been revised to reflect a projected fare increase in FY 2014, as opposed to FY 2013.
- In the August 2010 Financial Plan, the farebox recovery ratio for FY10-FY40 was 32.2 percent for Metro bus and rail. For this financial plan, the ratio is 30.2 percent which reflects a more conservative approach in addition to holding forecasted fare increases to a reasonable level when combined with the increase in operating costs.

#### **Risks and Uncertainties:**

- In regard to potential scope risks, the discussion of risks and uncertainties has been updated to reflect the revised configurations that are being reviewed as part of the Final EIS/EIR.
- The financial plan addresses the need for legislative and administrative approvals for the financing instruments outlined in this financial plan. The plan also clarifies the cap on New Starts funding for QTIBs in the proposed legislation, which states that the 30 percent limit can apply to a single project or program of projects. In LACMTA's case, the 30 percent limit would apply to the entire America Fast Forward of projects, and as such, there would be adequate capacity for the amount of QTIBs proposed for the Westside Subway Extension.

- In response to FTA comments about the timing and availability of Section 5309 New Starts funds, this financial plan has addressed the potential lower levels of Federal funding but reducing the annual amounts to no more than \$150 million per year, as described above.

### 1.3 Project Description

The Westside Subway Extension is an 8.9 mile subway heavy rail line that would operate as an extension of the LACMTA Purple Line from its current terminus at Wilshire/Western Station to a new western terminus in West Los Angeles near the Veteran’s Affairs (VA) Hospital in Westwood. The project addresses mobility needs within the Westside Subway Extension Transit Corridor by providing faster and more reliable high-capacity public transportation than existing bus services, which operate in mixed-flow traffic. Figure 1-1 shows the proposed Westside Subway Extension alignment and stations.

Figure 1-1: Westside Subway Extension Locally Preferred Alternative Alignment and Stations



The project results from nearly 30 years of planning and environmental review. In January 2009, LACMTA completed an Alternatives Analysis that evaluated transit mode and alignment alternatives in the Westside Corridor. This resulted in LACMTA’s selection of heavy rail subway extension as the preferred transit mode for the corridor. The LACMTA Board of Directors approved the Draft EIS/EIR on October 28, 2010, and selected the Locally Preferred Alternative (LPA) for the Westside Subway Extension. They also authorized staff to move forward into this final phase of the planning process, preparation of the Final EIS/EIR and PE (PE). On January 4, 2011, LACMTA received approval from FTA to enter PE under the New Starts project development process.

The Westside Subway Extension is included in LACMTA’s Long Range Transportation Plan (LRTP) and is part of the Regional Transportation Plan adopted by the Southern California Association of Governments in 2008.

The Westside Subway Extension traverses three jurisdictions, including the Cities of Los Angeles and Beverly Hills, plus portions of unincorporated Los Angeles County. There are numerous points of interest located throughout the corridor, ranging from major employment centers to world-class tourist attractions, entertainment venues, and medical, cultural and educational institutions. The corridor includes three key employment centers – Beverly Hills, Century City, and Westwood/UCLA, with a total of approximately 147,000 jobs in 2006, which is comparable to many mid-sized downtowns such as Seattle, Denver and Atlanta. Some of Southern California's best known entertainment, educational, and cultural activity centers in the corridor include: Wilshire Center, The Los Angeles County Museum of Art, The Page Museum/La Brea Tar Pits, Miracle Mile, the Grove/Farmer's Market, Beverly Hills/Rodeo Drive, Beverly Center/Cedars Sinai, and Westwood/UCLA.

The project would include seven new underground stations:

- Wilshire/La Brea
- Wilshire/Fairfax
- Wilshire/La Cienega
- Wilshire/Rodeo
- Century City (Century City Santa Monica or Century City Constellation)
- Westwood/UCLA (Westwood/UCLA On-Street or Westwood/UCLA Off-Street)
- Westwood/VA Hospital (Westwood/VA Hospital South or Westwood/VA Hospital North)

Once fully completed, it is assumed that the project would operate in each direction at 3.3-minute headways during peak periods and at 10-minute headways during the off-peak period.

The estimated capital cost of the LPA is \$5,662 million (\$YOE). The total capital cost used as the basis for this financial plan is consistent with the cost estimate provided to FTA in LACMTA's request to enter PE, with the exception of additional financing costs resulting from changes to the debt financing plan. As part of the Final EIS/EIR analysis, LACMTA is currently evaluating eight possible station location and alignment configurations that are possible for the LPA. LACMTA will update the cost estimate upon the completion of PE. The Westside Subway Extension is currently planned to open for revenue operations in June 2022 subject to approval of the America Fast Forward. An overview of key milestone dates for the project is provided in Table 1-1.



Table 1-1: Westside Subway Extension Key Schedule Milestones

| Milestone                                     | Date               |
|-----------------------------------------------|--------------------|
| Board Selects Locally Preferred Alternative   | Oct-10             |
| FTA Approval to Enter into PE                 | 4-Jan-11           |
| FTA Record of Decision                        | Feb 2012           |
| Early System Work Agreement                   | Winter/Spring 2012 |
| FTA Approval to Enter into Final Design       | Jul-12             |
| FTA to issue Full Funding Grant Agreement     | Jul-13             |
| Issue Construction Contract Notice to Proceed | Aug-13             |
| Revenue Operations Date                       | Jun-22             |

## 1.4 Project Sponsor: Los Angeles County Metropolitan Transportation Authority

### 1.4.1 Organization

LACMTA was created by State of California Assembly Bill 152, Los Angeles County Metropolitan Transportation Authority Reform Act of 1992, which became effective on February 1, 1993. LACMTA is the state-chartered Regional Transportation Planning Agency (RTPA) and public transportation operating agency for Los Angeles County. As such, LACMTA is unique among the country's transportation agencies because it serves as the transportation planner and coordinator, designer, builder and operator for the country's most populous county. More than 10.4 million people (about 30 percent of California's residents and 3 percent of the population of the United States) live, work, and play within LACMTA's 4,000 square mile jurisdiction.

### 1.4.2 Service Provided

LACMTA is the second largest transit agency in the country and the largest transit provider in Los Angeles County. It has over 9,200 full-time employees, an annual budget of \$3.8 billion, and a transit service area of 1,433 square miles. LACMTA operates heavy and light rail and bus service and contracts for operation of commuter rail and paratransit service. About 460 million passenger boardings were recorded on the LACMTA transit system in FY 2010, of which approximately 80 percent was on buses.

LACMTA's extensive fixed-route bus service comprises 183 lines and covers over 15,967 bus stops. Over 366 million riders are served annually with a mix of express service (Metro Express), local service (Metro Local), and bus rapid transit (the Orange Line). System-wide, LACMTA's average weekday bus ridership is currently about 1.1 million passenger boardings. On average, about 1.3 million bus revenue miles are recorded per week. LACMTA's in-service bus fleet is comprised of 2,528 wheelchair accessible buses. According to the July 2011 LACMTA Draft Bus Fleet Management Plan, as of June 2011, LACMTA's average bus fleet age was 7.2 years. Close to 100 percent of the bus fleet is powered by compressed natural gas, being the largest CNG-powered bus fleet in the United States. LACMTA has 12 bus maintenance and operations facilities. The Authority also funds mandated complementary paratransit service, which is provided by Access Services. Associated Services is a non-profit public benefit organization that was created to provide

the mandated paratransit service on behalf of the fixed-route operators in Los Angeles County. LACMTA's services are complimented by 16 municipal transit operators in Los Angeles County.

Complementing the bus system is a rail network that is 79.1 miles long, comprising 86 stations distributed along five service lines (Red, Purple, Blue, Green, and Gold). The Metro Red and Purple transit lines are heavy rail, while the other three lines are light rail. The total number of rail cars in service along these lines is currently 280, which are serviced at 4 maintenance yard facilities. According to the 2010 NTD, the average age of LACMTA's heavy rail fleet is 15.0 years and the LRT fleet has an average age of 14.5 years. Each of the rail lines has its own operating division, including its own maintenance and operations center, with the Red Line and Purple Line sharing the same facility. Currently, average weekday rail ridership is slightly over 0.35 million passenger boardings. About 94 million rail boardings were recorded in FY 2010. Working through project-specific joint powers authorities, LACMTA has two light rail projects currently under construction, the Exposition Line and the Metro Gold Line Foothill Extension Phase I.

Over the past years, LACMTA has completed several projects that demonstrate its technical capacity to manage, implement, and operate complex transit projects, such as the proposed Westside Subway Extension project. Noteworthy projects implemented during the last four years include assuming ownership and operation of the Los Angeles to Pasadena Gold Line from the Metro Gold Line Construction Authority; implementing a network of 28 new Metro Rapid lines that provide over 420 miles throughout the region and involve more than 500 vehicles in 35 cities and involving four transit operators; constructing the Metro Orange Line, a 13 mile, 13 station BRT project that opened in late 2005; and constructing the Metro Gold Line Eastside Extension that extended the Metro Gold Line to Pasadena by 5.9 miles to reach East Los Angeles. The FTA awarded LACMTA a Full-Funding Grant Agreement for that project.

#### 1.4.3 Current Financial Condition

As the designated Regional Transportation Planning Agency for Los Angeles County, LACMTA has the authority to program, to itself and other agencies, regional transportation funds in Los Angeles County. LACMTA is legally authorized to administer the three voter-enacted local sales tax initiatives (Proposition A, Proposition C, and Measure R). Each of these initiatives imposed a sales and use tax of 1/2 cent in Los Angeles County to fund transportation investments. While the Measure R sales and use tax has a sunset provision and will expire in 2039, the other two initiatives are permanent. These local sales taxes flow directly to LACMTA for its use or to be programmed to other agencies according to the requirements of the applicable ordinances. The revenue generated by each initiative is expected to be about \$590 million per year in FY 2011 and is projected to increase to \$1.9 billion per year in FY 2039. These funds can be leveraged by bonding for capital projects. As shown in Table 1-2, LACMTA's strength as an issuer is manifested in the high ratings assigned to its bonds by Standard & Poor's, Moody's, and Fitch.

On July 8, 2011, Moody's Investors Service downgraded LACMTA's Prop C Senior Lien Bonds and General Revenue Bonds by one notch each to Aa3 and A1, respectively. LACMTA is disappointed with the downgrades as Moody's cited the 18 percent decline in sales tax collections and the 1.3x coverage legal requirement for issuance of additional bonds as weakened credit considerations. LACMTA is disappointed with the downgrades as sales tax revenue has rebounded and the actual coverage ratios have only gotten better since January 2010 when Moody's upgraded the Prop C Senior Lien and General Revenue Bonds.

Table 1-2: LACMTA Bond Ratings (as of July 2011)

| Bonds Issue Type                                    | Standard & Poor's | Moody's | Fitch |
|-----------------------------------------------------|-------------------|---------|-------|
| Proposition A Combined First Tier Senior Lien Bonds | AAA               | Aa2     | AA-   |
| Proposition C Second Senior Sales Tax Revenue Bonds | AA+               | Aa3     | AA    |
| General Revenue Bonds                               | A                 | A1      | N/A   |
| Capital Grant Recipients Revenue Bonds              | AAA               | Aa2     | N/A   |

In addition to its high bond ratings, LACMTA has a strong current operating ratio (current assets divided by current liabilities). Based on the FY 2010 Financial Statements and Required Supplementary Information, LACMTA's current operating ratio is 3.59. While highly positive, the FY 2010 operating ratio represents a drop from the 4.11 and 4.37 demonstrated in FY 2009 and FY 2008 respectively. The drop in current operating ratio is primarily due to increases in FY 2010 accounts payable and accrued liabilities.

## 1.5 Project Partner: FTA

The Federal Transit Administration is the lead federal agency for the Westside Subway Extension Environmental Impact Statement and a proposed funding partner for the project. Federal funding assistance from the FTA is assumed in the financial plan, both for capital and operating assistance. Approximately \$2,400 million in FTA Section 5309 New Starts funding is anticipated to implement the Westside Subway Extension in year of expenditure dollars. FTA Section 5307 Urbanized Area Formula funds and non-New Starts capital funds are proposed to provide assistance for operations and ongoing capital expenditures, including state of good repair for the background transit system.

## 1.6 Regional Economic Conditions

The regional economy is large and is comprised of a broad-base of industries that provide a relatively stable sales tax base. Similar to most regions in the country, the Los Angeles County economy has been impacted by the recent slowdown in activity and fall in housing prices. The following provides a summary of key local economic conditions.

- The Gross Domestic Product (GDP): A report for the State of California (Los Angeles Economic Development Corporation 2011-2012 Economic Forecast and Industry Outlook) indicated that Los Angeles County reached a GDP of \$505 billion in 2010 which would make it the 20th largest national economy in the world if Los Angeles County were a country.
- Employment base: Based on fourth quarter estimates for 2010 from the Bureau of Labor Statistics (BLS), Los Angeles County is ranked as the top county in the nation with a total employment of 3.9 million. The leading industries in terms of number of employed are: 1) Trade, Transportation and Utilities (730,100); 2) Government (577,700); 3) Education and Health Services (536,700); 4) Professional and Business Services (525,000); 5) Leisure and Hospitality (394,500); 6) Manufacturing (374,300); 7) Financial Activities (206,400); and 8) Information (205,000).
- Unemployment: Los Angeles County unemployment levels averaged 12.4 percent in 2010 and were expected to rise through mid-2010, peaking at over 13.0 percent. Unemployment is projected to decline to 12.1 percent in 2011 and 11.5 percent in 2012.

- Total personal income: This indicator increased by 2.7 percent in 2010 and is projected to continue increasing in the coming years.
- Taxable retail sales: Related Taxable retail sales declined by 9.1 percent in FY 2009 and by 8.9 percent in FY 2010 and are projected to grow by 5.9 percent in FY 2013 and FY 2014.
- Consumer inflation: BLS data indicates that Los Angeles area inflation increased 2.9 percent from June 2010 to June 2011. This was driven primarily by volatile food and energy prices, which increased 3.8 percent and 17.8 percent, respectively. When ignoring the effects of food and energy, inflation for all other items increased 1.2 percent during the same timeframe.
- Housing: According to DQnews.com, since July 2011, monthly total sales volume was down by 4.5 percent. In comparing July 2011 to the same period in 2010, increases in monthly sales volume monthly sales volume decreased by 4.1 percent. This represents the first apples-to-apples year over year comparison since the federal tax credits expired at the end of June 2010.

## 1.7 America Fast Forward Implementation Plan Summary

In November 2008, more than two-thirds of Los Angeles County voters approved Measure R, a third half-cent sales tax lasting thirty years to fund transportation improvements throughout the County. Thirty-five percent of the \$36.1 billion in revenue projected from the Measure will help to fund 12 major transit projects, including the Westside Subway Extension. Measure R will also fund a multimodal program of highway and arterial improvements.

In April 2010, the LACMTA Board passed a motion to accelerate development of all 12 projects in 10 years as part of an initiative known as America Fast Forward (locally known as the 30/10 initiative). America Fast Forward is a novel concept to leverage revenue from the Measure R sales tax with long-term bonds and federal loans allowing LACMTA to build the 12 key mass transit projects in 10 years, rather than 30. Accelerating construction of these 12 key projects will result in the elimination of inflation related costs and will also deliver immediate benefits, including hundreds of thousands of jobs and reductions in greenhouse emissions and traffic congestion. LACMTA is supporting “America Fast Forward”, which is a proposal for federal legislation that will provide innovative financing mechanisms to help accelerate the development of critical national surface transportation infrastructure, such as the transit projects in the America Fast Forward Initiative. The financing mechanisms proposed in the legislation will consist of two methods that can help accelerate capital investment through external financing repayable with future expected revenues: tax code incentives and credit assistance. The two mechanisms in the proposed legislation are Qualified Transportation Improvement Bonds (QTIBS) and Enhanced Transportation Infrastructure Finance and Innovation Act (TIFIA) instruments.

Table 1-3 summarizes the projects in America Fast Forward, the priority of rank of the projects, and the original and accelerated opening dates for the program. Cash Flow shortages relative to the 30/10 funding assumptions would be addressed by deferring projects in reverse order as depicted in Table 1-3. Additional detail regarding America Fast Forward is provided in Section 3.

Table 1-3: America Fast Forward Projects

| Priority | Project                                       | Original Completion (FY) | America Fast Forward Completion (FY) |
|----------|-----------------------------------------------|--------------------------|--------------------------------------|
| 1        | Orange Line Canoga Extension                  | 2013                     | 2013                                 |
| 2        | Exposition - Phase II                         | 2015                     | 2015                                 |
| 3        | Gold Line Foothill Extension (from Pasadena)  | 2017                     | 2015                                 |
| 4        | East San Fernando Valley North-South Corridor | 2018                     | 2018                                 |
| 5        | Crenshaw/LAX Transit Corridor                 | 2018                     | 2018                                 |
| 6        | Regional Connector                            | 2019                     | 2019                                 |
| 7A       | Westside Subway Extension - Segment 1         | 2019                     | 2022                                 |
| 7B       | Westside Subway Extension - Segment 2         | 2026                     | 2022                                 |
| 8        | West Santa Ana Branch                         | 2027                     | 2020                                 |
| 9        | Green Line Extension to LAX                   | 2028                     | 2018                                 |
| 10       | Gold Line Eastside Extension Phase II         | 2035                     | 2020                                 |
| 11       | South Bay Green Line Extension                | 2035                     | 2018                                 |
| 7C       | Westside Subway Extension - Segment 3         | 2036                     | 2022                                 |
| 12       | San Fernando Valley I-405                     | 2039                     | 2020                                 |

## 1.8 Financial Planning Process and Structure

The analysis of LACMTA's long range financial plan provided in this document has two major objectives:

- Describe the capital costs and schedule for implementing the Westside Subway Extension, associated increases in operating and state of good repair costs, and projected annual expenses associated with the existing transit system from the 2011 base year through 2040; and
- Document LACMTA's financial capacity to implement the Westside Subway Extension project while continuing to operate and expand the bus, rail (LRT, heavy rail, and commuter rail), and paratransit services comprising its existing transit system and improve the countywide highway and arterial system.

### 1.8.1 Projected Expenses and Revenues - Countywide

LACMTA's Long Range Financial Model was used to project and analyze annual expenses and revenues over the FY 2011 to FY 2040 period considered in this financial plan. Within the model, costs and revenues are separated among the following activities:

- Operating and Maintenance (O&M) Costs: O&M costs are comprised of four categories:
  - Rail/transit corridors, including transit corridor operations (LRT and heavy rail) and commuter rail (Metrolink) operations;
  - Bus operations, including LACMTA-operated service, municipal (non-LACMTA) operated service, and paratransit service;
  - Highways; and



- Administration.
- O&M Revenues: O&M revenues consist of a variety of sources which are combined and applied to O&M costs including:
  - Sales tax (Proposition A and C, Measure R and Transportation Development Act);
  - Passenger fares;
  - State Transit Assistance;
  - FTA Section 5307 Urbanized Area Formula funds;
  - FTA Section 5309 Fixed Guideway Modernization funds;
  - FTA Section 5340 Growing States and High Density funds;
  - Federal Homeland Security funds;
  - Congestion Mitigation and Air Quality Improvement funds (CMAQ); and
  - Other revenues (advertising and lease revenue).
- Capital Costs: capital costs are comprised of the following cost categories:
  - Rail capital, including projects in America Fast Forward, improvements to existing rail services (LRT and heavy rail) and State of Good Repair projects;
  - Bus capital, including LACMTA-operated service, municipal (non-LACMTA) operated service, paratransit service, and State of Good Repair projects for bus;
  - Highways;
  - Metrolink commuter rail;
  - Other multimodal;
  - Agency-wide capital costs;
  - Debt Service; and
  - Other projects.
- Revenue for Capital and Debt Service: among these sources are the following:
  - Sales tax (Proposition A and C, Measure R and Transportation Development Act);
  - Lease/leaseback;
  - Local agency contributions;
  - State Transit Assistance;
  - Fund 3562, Repayment from State of Capital Project Loans;
  - Southern California Air Quality Management District (SCAQMD)/Assembly Bill (AB) 2766 funds
  - Traffic Congestion Relief funds;
  - Proposition 1B State Infrastructure Bond funds;

- Regional Improvement Program (RIP) funds;
- Proposition 1A State High Speed Rail bond funds;
- FTA Section 5307 Urbanized Area Formula funds;
- FTA Section 5309 Fixed Guideway Modernization funds;
- FTA Section 5309 Bus and Bus Facilities funds;
- FTA Section 5309 Major Fixed Guideway Capital Investment projects (New Starts program);
- FTA Section 5340 Growing States and High Density funds;
- Federal American Recovery and Reinvestment Act (ARRA) funds;
- Federal Homeland Security grants;
- Congestion Mitigation and Air Quality Improvement funds; and
- Debt Financing.

The Westside Subway Extension financial analysis is presented in year-of-expenditure (YOE) dollars so that the differential effects of inflation on LACMTA's costs and revenues can be considered in the assessment of its financial capacity. Year-of-expenditure dollar values are computed by multiplying base year dollar values by an escalation factor that is compounded to reflect the year in which a particular cost or revenue is incurred or collected. For example, in year-of-expenditure dollars, \$1.00 in 2011 is equivalent to \$1.01 in 2012, using an inflation rate of 1.0 percent. Based on the individual project implementation schedules proposed, capital and operating costs are assigned to specific years and/or time periods. Costs are then inflated to year-of-expenditure dollars based on specified annual inflation rates for capital and operating costs which are described in more detail below.

### 1.8.2 Key Evaluation Criteria and Measures

To document LACMTA's financial capacity to implement the Westside Subway Extension, the financial analysis focuses on system-wide financial capacity criteria of concern to local decision-makers and required by the FTA in evaluating candidate New Start fixed guideway projects.

Four key measures were used to reflect LACMTA's financial capacity to implement the Westside Subway Extension Project while continuing to operate, maintain, expand, and enhance the existing transit system over the FY 2011 to FY 2040 period. These measures include consideration of FTA New Starts Financial criteria appropriate for the Westside Subway Extension Project at this stage of project development as a project in PE.

***Adequacy of Annual Funding Available for Capital:*** this measure confirms LACMTA's ability to provide the annual revenues needed to fund capital costs of the project and the overall transit system. Related FTA New Starts financial evaluation criteria include proposed non-New Starts funding share and stability and reliability of the capital plan, assuming the economy avoids a double dip recession;

***Adequacy of Annual Funding Available for Operations and Maintenance:*** this measure confirms LACMTA's ability to provide the annual revenues needed to fund O&M costs of the project and the overall transit system. Related FTA New Starts financial evaluation criteria include stability and reliability of the operating plan;

**Conformance with LACMTA Debt Policies:** this measure reflects LACMTA’s ability to meet or exceed debt policies related to bonds issued with Proposition A, Proposition C, and Measure R funds; and

**Achieved Levels of System Farebox Recovery:** this measure reflects the share of annual operating costs that can be paid through annual system-wide fare revenues.

## 1.9 Financial Plan Summary

Table 1-4 summarizes the uses and sources of funds proposed for the Westside Subway Extension. The total baseline project cost for the Westside Subway Extension is \$5,662 million in year of expenditure dollars (not including environmental / planning costs). It is LACMTA’s intent to fund 42 percent of the baseline costs of the project with FTA Section 5309 New Starts funding and the other 58 percent with state or local sources of revenue. A total of \$534 million in finance charges are expected to be incurred between FY 2013 and FY 2028.

Approximately 53 percent of the funding will be provided by Measure R tax revenue. Measure R is a voter approved half-cent transportation sales tax, of which 35 percent is mandated to be utilized for the delivery of the twelve aforementioned American Fast Forward initiative capital expansion projects, among which, the Westside Subway Extension is a high priority. The Measure R tax revenues will be utilized to fund the project through a combination of pay as you go funding and innovative financing mechanisms. It is important to note that the 35 percent of Measure R tax revenues that are dedicated to the twelve America Fast Forward capital expansion projects must be utilized to deliver those projects and nothing else. Thus the Westside Subway Extension will be delivered without adversely impacting funding for the existing LACMTA system.

Table 1-4: LACMTA Sources and Uses of Funds for the Westside Subway Project (YOE \$M)

|                                                                    | Total          | Percent of Total |
|--------------------------------------------------------------------|----------------|------------------|
| <b>USES OF FUNDS</b>                                               |                |                  |
| Westside Subway Extension Baseline Project Cost <sup>1</sup>       | \$5,129        | 90.6%            |
| Plus Finance Charges (TIFIA & Capital Grant Receipt Revenue Bonds) | \$534          | 9.4%             |
| <b>TOTAL USES OF FUNDS</b>                                         | <b>\$5,662</b> | <b>100.0%</b>    |
| <b>SOURCES OF FUNDS</b>                                            |                |                  |
| FTA Section 5309 New Starts Funds                                  | \$2,400        | 42.4%            |
| Measure R Funding (includes TIFIA, QTIB, and Measure R Cash)       | \$3,009        | 53.2%            |
| Local Agency Funds                                                 | \$155          | 2.7%             |
| Fund 3562, Repayment from State of Capital Project Loans           | \$99           | 1.7%             |
| <b>TOTAL SOURCES OF FUNDS</b>                                      | <b>\$5,662</b> | <b>100.0%</b>    |

<sup>1</sup> Capital costs do not include environmental and planning costs.

Table 1-5 summarizes the uses and sources of funds for the LACMTA background system that will be implemented and/or in operation over the FY 2011 to FY 2040 time period. The table indicates the total capital costs and revenues, debt service costs, as well as total operations and maintenance costs and revenues in YOE dollars. With respect to the Westside Subway Extension project, capital costs and revenues are described in detail in Section 2.1, with O&M costs and revenues described in Section 2.2. Systemwide capital costs and revenues for the background system are described in detail in Section 3.1, with systemwide O&M costs and revenues described in Section 3.2.

Table 1-5: Countywide Sources and Uses of Funds Through 2040 for Rail, Transit Corridors, and Bus (including municipal operators) (YOE \$M)

|                                                                           | FY11           | FY12           | FY13           | FY14           | FY15           | FY16           | FY17           | FY18           | FY19           | FY20           | FY21           | FY22           | FY23           | FY24           | FY25           | FY26           | FY27           | FY28           | FY29           | FY30           | FY31           | FY32           | FY33           | FY34           | FY35           | FY36           | FY37           | FY38           | FY39           | FY40           | Total           |  |
|---------------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|--|
| <b>Sources of Funds: Rail, Transit Corridors, and Bus (All Operators)</b> |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                 |  |
| <b>Rail Capital Sources of Funds</b>                                      |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                 |  |
| Proposition A                                                             | \$172          | \$187          | \$194          | \$207          | \$216          | \$224          | \$229          | \$263          | \$265          | \$259          | \$275          | \$297          | \$223          | \$239          | \$268          | \$285          | \$305          | \$311          | \$317          | \$330          | \$351          | \$373          | \$393          | \$412          | \$449          | \$475          | \$481          | \$504          | \$528          | \$549          | \$9,582         |  |
| Proposition C                                                             | \$153          | \$186          | \$154          | \$230          | \$187          | \$136          | \$113          | \$295          | \$116          | \$193          | \$214          | \$198          | \$172          | \$128          | \$135          | \$138          | \$145          | \$137          | \$164          | \$146          | \$176          | \$152          | \$158          | \$165          | \$186          | \$168          | \$172          | \$179          | \$212          | \$281          | \$5,190         |  |
| Measure R                                                                 | \$232          | \$256          | \$278          | \$282          | \$319          | \$326          | \$344          | \$351          | \$376          | \$384          | \$413          | \$419          | \$447          | \$454          | \$483          | \$493          | \$524          | \$535          | \$566          | \$577          | \$608          | \$618          | \$649          | \$662          | \$696          | \$712          | \$746          | \$760          | \$775          | \$-            | \$14,286        |  |
| Other Local Funds                                                         | \$66           | \$117          | \$41           | \$94           | \$67           | \$126          | \$61           | \$76           | \$209          | \$2            | \$6            | \$6            | \$84           | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$956           |  |
| State Funds                                                               | \$186          | \$252          | \$275          | \$121          | \$237          | \$226          | \$117          | \$189          | \$41           | \$81           | \$6            | \$6            | \$26           | \$26           | \$26           | \$26           | \$7            | \$7            | \$7            | \$11           | \$13           | \$19           | \$32           | \$45           | \$27           | \$14           | \$15           | \$100          | \$143          | \$81           | \$2,362         |  |
| FTA Section 5309 New Starts                                               | \$-            | \$-            | \$250          | \$250          | \$250          | \$250          | \$250          | \$250          | \$212          | \$159          | \$150          | \$150          | \$150          | \$150          | \$150          | \$150          | \$150          | \$150          | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$3,071         |  |
| Other Federal Funds                                                       | \$79           | \$60           | \$2            | \$8            | \$14           | \$129          | \$9            | \$19           | \$51           | \$28           | \$37           | \$39           | \$15           | \$-            | \$-            | \$-            | \$13           | \$30           | \$30           | \$9            | \$18           | \$34           | \$34           | \$34           | \$34           | \$19           | \$35           | \$36           | \$26           | \$32           | \$871           |  |
| Financing                                                                 | \$818          | \$73           | \$1,527        | \$712          | \$3,570        | \$290          | \$1,713        | \$805          | \$741          | \$586          | \$347          | \$413          | \$228          | \$335          | \$608          | \$344          | \$332          | \$382          | \$373          | \$207          | \$409          | \$363          | \$700          | \$437          | \$935          | \$429          | \$337          | \$189          | \$600          | \$440          | \$19,243        |  |
| <b>Total Rail Capital Sources of Funds</b>                                | <b>\$1,705</b> | <b>\$1,131</b> | <b>\$2,721</b> | <b>\$1,904</b> | <b>\$4,861</b> | <b>\$1,708</b> | <b>\$2,835</b> | <b>\$2,247</b> | <b>\$2,011</b> | <b>\$1,693</b> | <b>\$1,448</b> | <b>\$1,528</b> | <b>\$1,346</b> | <b>\$1,332</b> | <b>\$1,671</b> | <b>\$1,437</b> | <b>\$1,475</b> | <b>\$1,552</b> | <b>\$1,457</b> | <b>\$1,281</b> | <b>\$1,575</b> | <b>\$1,559</b> | <b>\$1,967</b> | <b>\$1,755</b> | <b>\$2,327</b> | <b>\$1,816</b> | <b>\$1,787</b> | <b>\$1,768</b> | <b>\$2,284</b> | <b>\$1,381</b> | <b>\$55,562</b> |  |
| Annual Growth Rate (w/out Financing)                                      |                | 19.3%          | 13.0%          | -0.2%          | 8.3%           | 9.8%           | -20.8%         | 28.4%          | -11.8%         | -12.8%         | -0.6%          | 1.3%           | 0.2%           | -10.8%         | 6.6%           | 2.9%           | 4.6%           | 2.3%           | -7.3%          | -1.0%          | 8.6%           | 2.7%           | 5.9%           | 4.0%           | 5.6%           | -0.3%          | 4.5%           | 9.0%           | 6.6%           | -44.1%         | 0.2%            |  |
| <b>Bus Capital Sources of Funds</b>                                       |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                 |  |
| Proposition A                                                             | \$30           | \$32           | \$34           | \$36           | \$38           | \$40           | \$43           | \$45           | \$47           | \$50           | \$52           | \$54           | \$57           | \$59           | \$61           | \$64           | \$66           | \$69           | \$71           | \$74           | \$76           | \$78           | \$81           | \$83           | \$86           | \$88           | \$91           | \$93           | \$96           | \$98           | \$1,892         |  |
| Proposition C                                                             | \$48           | \$59           | \$62           | \$58           | \$43           | \$65           | \$78           | \$71           | \$85           | \$75           | \$56           | \$60           | \$106          | \$81           | \$105          | \$128          | \$123          | \$115          | \$117          | \$136          | \$156          | \$121          | \$122          | \$116          | \$96           | \$190          | \$114          | \$167          | \$193          | \$313          | \$3,259         |  |
| Measure R                                                                 | \$4            | \$6            | \$-            | \$14           | \$-            | \$10           | \$-            | \$10           | \$-            | \$10           | \$-            | \$10           | \$-            | \$10           | \$-            | \$10           | \$-            | \$10           | \$-            | \$10           | \$-            | \$10           | \$-            | \$10           | \$-            | \$10           | \$-            | \$10           | \$-            | \$-            | \$144           |  |
| Other Local Funds                                                         | \$111          | \$80           | \$117          | \$104          | \$140          | \$163          | \$139          | \$198          | \$164          | \$185          | \$190          | \$139          | \$205          | \$193          | \$184          | \$158          | \$177          | \$179          | \$165          | \$156          | \$204          | \$170          | \$189          | \$145          | \$137          | \$183          | \$114          | \$116          | \$152          | \$143          | \$4,699         |  |
| State Funds                                                               | \$37           | \$57           | \$85           | \$95           | \$40           | \$-            | \$-            | \$2            | \$-            | \$-            | \$2            | \$-            | \$-            | \$2            | \$-            | \$-            | \$2            | \$-            | \$-            | \$2            | \$-            | \$-            | \$2            | \$-            | \$-            | \$2            | \$-            | \$-            | \$2            | \$-            | \$330           |  |
| Federal Funds                                                             | \$317          | \$125          | \$119          | \$103          | \$105          | \$99           | \$100          | \$96           | \$112          | \$111          | \$129          | \$141          | \$140          | \$138          | \$165          | \$179          | \$203          | \$191          | \$219          | \$215          | \$229          | \$235          | \$254          | \$262          | \$283          | \$291          | \$316          | \$325          | \$267          | \$165          | \$5,634         |  |
| Financing                                                                 | \$-            | \$-            | \$10           | \$20           | \$-            | \$20           | \$20           | \$40           | \$20           | \$50           | \$50           | \$50           | \$120          | \$20           | \$30           | \$50           | \$30           | \$30           | \$20           | \$20           | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$-            | \$600           |  |
| <b>Total Bus Capital Sources of Funds</b>                                 | <b>\$546</b>   | <b>\$359</b>   | <b>\$426</b>   | <b>\$431</b>   | <b>\$367</b>   | <b>\$397</b>   | <b>\$379</b>   | <b>\$462</b>   | <b>\$428</b>   | <b>\$480</b>   | <b>\$480</b>   | <b>\$454</b>   | <b>\$627</b>   | <b>\$503</b>   | <b>\$546</b>   | <b>\$588</b>   | <b>\$601</b>   | <b>\$593</b>   | <b>\$593</b>   | <b>\$614</b>   | <b>\$665</b>   | <b>\$615</b>   | <b>\$648</b>   | <b>\$616</b>   | <b>\$602</b>   | <b>\$764</b>   | <b>\$635</b>   | <b>\$710</b>   | <b>\$709</b>   | <b>\$719</b>   | <b>\$16,557</b> |  |
| Annual Growth Rate (w/out Financing)                                      |                | -34.4%         | 16.0%          | -1.2%          | -10.9%         | 2.8%           | -4.7%          | 17.5%          | -3.4%          | 5.4%           | -0.2%          | -6.0%          | 25.7%          | -4.7%          | 6.8%           | 4.4%           | 6.1%           | -1.4%          | 1.7%           | 3.7%           | 12.0%          | -7.5%          | 5.4%           | -4.9%          | -2.4%          | 27.0%          | -16.9%         | 11.9%          | -0.2%          | 1.4%           | 0.9%            |  |
| <b>Rail O&amp;M Sources of Funds</b>                                      |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                 |  |
| Proposition A                                                             | \$27           | \$24           | \$29           | \$29           | \$34           | \$42           | \$52           | \$33           | \$47           | \$67           | \$68           | \$61           | \$150          | \$150          | \$137          | \$136          | \$132          | \$143          | \$153          | \$156          | \$150          | \$142          | \$138          | \$135          | \$115          | \$105          | \$115          | \$110          | \$102          | \$98           | \$2,880         |  |
| Proposition C                                                             | \$32           | \$59           | \$60           | \$53           | \$59           | \$67           | \$70           | \$88           | \$135          | \$144          | \$217          | \$292          | \$203          | \$234          | \$264          | \$264          | \$288          | \$280          | \$278          | \$279          | \$295          | \$309          | \$318          | \$324          | \$356          | \$373          | \$374          | \$383          | \$404          | \$511          | \$7,014         |  |
| Measure R                                                                 | \$29           | \$31           | \$33           | \$35           | \$37           | \$39           | \$42           | \$44           | \$46           | \$48           | \$51           | \$53           | \$55           | \$58           | \$60           | \$62           | \$65           | \$67           | \$70           | \$72           | \$74           | \$76           | \$79           | \$81           | \$83           | \$86           | \$88           | \$91           | \$93           | \$-            | \$1,750         |  |
| Fares                                                                     | \$115          | \$122          | \$128          | \$141          | \$144          | \$167          | \$173          | \$184          | \$203          | \$215          | \$235          | \$261          | \$265          | \$277          | \$280          | \$294          | \$298          | \$312          | \$316          | \$328          | \$333          | \$345          | \$350          | \$363          | \$368          | \$382          | \$388          | \$402          | \$408          | \$423          | \$8,221         |  |
| Other Local Funds                                                         | \$2            | \$3            | \$3            | \$8            | \$25           | \$26           | \$26           | \$25           | \$25           | \$26           | \$26           | \$27           | \$27           | \$28           | \$28           | \$29           | \$29           | \$30           | \$31           | \$31           | \$32           | \$32           | \$33           | \$34           | \$34           | \$35           | \$36           | \$36           | \$37           | \$38           | \$801           |  |
| State Funds                                                               | \$53           | \$45           | \$45           | \$45           | \$45           | \$45           | \$46           | \$46           | \$47           | \$47           | \$48           | \$48           | \$49           | \$49           | \$50           | \$50           | \$51           | \$51           | \$52           | \$52           | \$53           | \$53           | \$54           | \$54           | \$55           | \$55           | \$56           | \$57           | \$57           | \$58           | \$1,513         |  |
| Federal Funds                                                             | \$64           | \$80           | \$129          | \$130          | \$106          | \$134          | \$131          | \$131          | \$134          | \$119          | \$100          | \$85           | \$95           | \$66           | \$57           | \$58           | \$58           | \$59           | \$60           | \$61           | \$62           | \$63           | \$64           | \$64           | \$65           | \$66           | \$67           | \$68           | \$69           | \$70           | \$2,514         |  |
| <b>Total Rail O&amp;M Sources of Funds</b>                                | <b>\$322</b>   | <b>\$363</b>   | <b>\$426</b>   | <b>\$442</b>   | <b>\$450</b>   | <b>\$521</b>   | <b>\$539</b>   | <b>\$551</b>   | <b>\$637</b>   | <b>\$667</b>   | <b>\$745</b>   | <b>\$827</b>   | <b>\$843</b>   | <b>\$861</b>   | <b>\$876</b>   | <b>\$893</b>   | <b>\$921</b>   | <b>\$943</b>   | <b>\$959</b>   | <b>\$979</b>   | <b>\$998</b>   | <b>\$1,020</b> | <b>\$1,035</b> | <b>\$1,056</b> | <b>\$1,078</b> | <b>\$1,103</b> | <b>\$1,123</b> | <b>\$1,147</b> | <b>\$1,171</b> | <b>\$1,197</b> | <b>\$24,694</b> |  |
| Annual Growth Rate                                                        |                | 12.6%          | 17.5%          | 3.7%           | 1.9%           | 15.7%          | 3.5%           | 2.2%           | 15.6%          | 4.6%           | 11.8%          | 11.0%          | 2.0%           | 2.2%           | 1.7%           | 2.0%           | 3.1%           | 2.3%           | 1.8%           | 2.0%           | 2.0%           | 2.2%           | 1.4%           | 2.0%           | 2.1%           | 2.4%           | 1.8%           | 2.1%           | 2.0%           | 2.3%           | 4.6%            |  |
| <b>Bus O&amp;M Sources of Funds</b>                                       |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                 |  |
| Proposition A                                                             | \$323          | \$334          | \$346          | \$351          | \$364          | \$377          | \$391          | \$404          | \$417          | \$430          | \$443          | \$456          | \$469          | \$482          | \$495          | \$509          | \$523          | \$537          | \$551          | \$566          | \$579          | \$593          | \$607          | \$622          | \$637          | \$652          | \$668          | \$684          | \$699          | \$715          | \$15,223        |  |
| Proposition C                                                             | \$170          | \$178          | \$182          | \$177          | \$182          | \$190          | \$203          | \$187          | \$216          | \$210          | \$235          | \$207          | \$240          | \$251          | \$300          | \$323          | \$362          | \$366          | \$388          | \$397          | \$469          | \$440          | \$490          | \$451          | \$479          | \$533          | \$506          | \$518          | \$515          | \$690          | \$10,054        |  |
| Measure R                                                                 | \$116          | \$125          | \$132          | \$140          | \$149          | \$157          | \$166          | \$175          | \$184          | \$194          | \$203          | \$212          | \$221          | \$230          | \$240          | \$250          | \$259          | \$269          | \$279          | \$288          | \$297          | \$305          | \$315          | \$324          | \$334          | \$343          | \$353          | \$364          | \$373          | \$-            | \$6,999         |  |
| Fares                                                                     | \$357          | \$351          | \$362          | \$399          | \$412          | \$445          | \$451          | \$481          | \$486          | \$506          | \$511          | \$532          | \$537          | \$558          | \$564          | \$589          | \$595          | \$619          | \$625          | \$646          | \$652          | \$673          | \$680          | \$702          | \$709          | \$733          | \$740          | \$765          | \$772          | \$798          | \$17,248        |  |
| Other Local Funds                                                         | \$280          | \$269          | \$288          | \$270          | \$270          | \$278          | \$296          | \$314          | \$335          | \$341          | \$330          | \$403          | \$361          | \$395          | \$429          | \$479          | \$484          | \$507          | \$545          | \$578          | \$553          | \$609          | \$613          | \$682          | \$715          | \$693          | \$788          | \$812          | \$800          | \$835          | \$14,554        |  |
| State Funds                                                               | \$62           | \$52           | \$52           | \$52           | \$52           | \$53           | \$53           | \$54           | \$55           | \$55           | \$56           | \$56           | \$57           | \$57           | \$58           | \$58           | \$59           | \$60           | \$60           | \$61           | \$61           | \$62           | \$63           | \$63           | \$64           | \$64           | \$65           | \$66           | \$66           | \$67           | \$1,764         |  |
| Federal Funds                                                             | \$120          | \$211          | \$157          | \$161          | \$174          | \$165          | \$169          | \$178          | \$172          | \$184          | \$233          | \$201          | \$240          | \$229          | \$217          | \$191          | \$172          | \$190          | \$168          | \$177          | \$170          | \$169          | \$156          | \$155          | \$140          | \$138          | \$119          | \$117          | \$183          | \$291          | \$5,348         |  |

Table 1-5: Countywide Sources and Uses of Funds Through 2040 for Rail, Transit Corridors, and Bus (including municipal operators) (YOE \$M) (continued)

|                                                                        | FY11    | FY12    | FY13    | FY14    | FY15    | FY16    | FY17    | FY18    | FY19    | FY20    | FY21    | FY22    | FY23    | FY24    | FY25    | FY26    | FY27    | FY28    | FY29    | FY30    | FY31    | FY32    | FY33    | FY34    | FY35    | FY36    | FY37    | FY38    | FY39    | FY40    | Total     |  |
|------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|--|
| Total Bus O&M Sources of Funds                                         | \$1,429 | \$1,521 | \$1,518 | \$1,550 | \$1,603 | \$1,666 | \$1,730 | \$1,794 | \$1,865 | \$1,920 | \$2,011 | \$2,068 | \$2,124 | \$2,202 | \$2,303 | \$2,400 | \$2,454 | \$2,548 | \$2,617 | \$2,713 | \$2,781 | \$2,850 | \$2,923 | \$2,999 | \$3,077 | \$3,157 | \$3,240 | \$3,325 | \$3,408 | \$3,396 | \$71,190  |  |
| Annual Growth Rate                                                     |         | 6.4%    | -0.2%   | 2.1%    | 3.5%    | 3.9%    | 3.8%    | 3.7%    | 4.0%    | 2.9%    | 4.8%    | 2.8%    | 2.7%    | 3.7%    | 4.6%    | 4.2%    | 2.3%    | 3.8%    | 2.7%    | 3.7%    | 2.5%    | 2.5%    | 2.6%    | 2.6%    | 2.6%    | 2.6%    | 2.6%    | 2.6%    | 2.5%    | -0.4%   | 3.0%      |  |
| Total Sources of Funds                                                 | \$4,002 | \$3,372 | \$5,092 | \$4,327 | \$7,281 | \$4,292 | \$5,484 | \$5,054 | \$4,941 | \$4,760 | \$4,683 | \$4,876 | \$4,941 | \$4,899 | \$5,396 | \$5,318 | \$5,452 | \$5,636 | \$5,626 | \$5,586 | \$6,019 | \$6,045 | \$6,573 | \$6,426 | \$7,083 | \$6,839 | \$6,784 | \$6,951 | \$7,572 | \$6,693 | \$168,003 |  |
| Annual Growth Rate (w/out Financing)                                   |         | 3.6%    | 7.7%    | 1.1%    | 3.2%    | 7.3%    | -5.8%   | 12.2%   | -0.7%   | -1.4%   | 3.9%    | 3.0%    | 4.1%    | -1.1%   | 4.7%    | 3.5%    | 3.4%    | 2.6%    | 0.2%    | 2.4%    | 4.7%    | 1.3%    | 3.3%    | 2.0%    | 2.7%    | 4.3%    | 0.6%    | 4.9%    | 3.1%    | -10.3%  | 2.4%      |  |
| <b>Uses of Funds: Rail, Transit Corridors, and Bus (All Operators)</b> |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |  |
| <b>Rail Capital Uses of Funds</b>                                      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |  |
| Westside Subway Extension*                                             | \$31    | \$44    | \$606   | \$656   | \$995   | \$743   | \$470   | \$543   | \$507   | \$343   | \$133   | \$67    | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$5,139   |  |
| Other Capital Costs                                                    | \$1,468 | \$798   | \$1,770 | \$867   | \$3,333 | \$422   | \$1,767 | \$1,089 | \$674   | \$611   | \$496   | \$627   | \$494   | \$392   | \$790   | \$533   | \$533   | \$598   | \$640   | \$491   | \$763   | \$702   | \$1,058 | \$784   | \$1,418 | \$837   | \$621   | \$613   | \$736   | \$925   | \$26,849  |  |
| Financing Costs                                                        | \$251   | \$292   | \$345   | \$381   | \$532   | \$543   | \$598   | \$615   | \$830   | \$739   | \$819   | \$835   | \$853   | \$940   | \$880   | \$904   | \$942   | \$954   | \$817   | \$790   | \$812   | \$858   | \$909   | \$971   | \$909   | \$979   | \$1,166 | \$1,155 | \$1,280 | \$724   | \$23,623  |  |
| Total Rail Capital Uses of Funds                                       | \$1,750 | \$1,135 | \$2,722 | \$1,904 | \$4,861 | \$1,708 | \$2,835 | \$2,247 | \$2,011 | \$1,693 | \$1,448 | \$1,528 | \$1,346 | \$1,332 | \$1,671 | \$1,437 | \$1,475 | \$1,552 | \$1,457 | \$1,281 | \$1,575 | \$1,559 | \$1,967 | \$1,755 | \$2,327 | \$1,816 | \$1,787 | \$1,768 | \$2,015 | \$1,649 | \$55,611  |  |
| Annual Growth Rate (w/out Financing)                                   |         | -43.8%  | 182.0%  | -35.9%  | 184.2%  | -73.1%  | 92.0%   | -27.1%  | -27.6%  | -19.2%  | -34.0%  | 10.1%   | -28.8%  | -20.6%  | 101.7%  | -32.5%  | 0.0%    | 12.2%   | 7.0%    | -23.3%  | 55.4%   | -8.0%   | 50.7%   | -25.9%  | 80.9%   | -41.0%  | -25.8%  | -1.3%   | 20.0%   | 25.8%   | -1.7%     |  |
| <b>Bus Capital Uses of Funds</b>                                       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |  |
| Capital Costs                                                          | \$353   | \$324   | \$424   | \$430   | \$364   | \$392   | \$372   | \$452   | \$414   | \$462   | \$457   | \$428   | \$587   | \$461   | \$499   | \$535   | \$543   | \$534   | \$534   | \$554   | \$608   | \$562   | \$598   | \$566   | \$562   | \$725   | \$599   | \$682   | \$684   | \$698   | \$15,405  |  |
| Financing Costs                                                        | \$-     | \$-     | \$0     | \$1     | \$2     | \$5     | \$7     | \$11    | \$14    | \$18    | \$23    | \$26    | \$40    | \$42    | \$47    | \$54    | \$58    | \$59    | \$59    | \$59    | \$57    | \$53    | \$50    | \$50    | \$39    | \$39    | \$35    | \$29    | \$25    | \$21    | \$923     |  |
| HOT Lanes component transit projects                                   | \$210   | \$40    | \$2     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$252     |  |
| Total Bus Capital Uses of Funds                                        | \$563   | \$364   | \$426   | \$431   | \$367   | \$397   | \$379   | \$462   | \$428   | \$480   | \$480   | \$454   | \$627   | \$503   | \$546   | \$588   | \$601   | \$593   | \$593   | \$614   | \$665   | \$615   | \$648   | \$616   | \$602   | \$764   | \$635   | \$710   | \$709   | \$719   | \$16,580  |  |
| Annual Growth Rate (w/out Financing)                                   |         | -35.3%  | 16.8%   | 1.0%    | -15.2%  | 7.6%    | -5.1%   | 21.4%   | -8.3%   | 11.5%   | -1.2%   | -6.3%   | 37.3%   | -21.5%  | 8.2%    | 7.2%    | 1.6%    | -1.7%   | -0.1%   | 3.9%    | 9.7%    | -7.5%   | 6.3%    | -5.4%   | -0.7%   | 28.9%   | -17.3%  | 13.7%   | 0.4%    | 2.0%    | 0.7%      |  |
| <b>Rail O&amp;M Uses of Funds</b>                                      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |  |
| Westside Subway Extension                                              | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$-     | \$53    | \$54    | \$56    | \$57    | \$58    | \$59    | \$60    | \$61    | \$62    | \$63    | \$65    | \$62    | \$63    | \$65    | \$66    | \$67    | \$69    | \$70    | \$72    | \$1,183   |  |
| Other O&M Costs                                                        | \$335   | \$363   | \$426   | \$442   | \$450   | \$521   | \$539   | \$551   | \$637   | \$667   | \$745   | \$773   | \$789   | \$806   | \$819   | \$836   | \$863   | \$883   | \$898   | \$917   | \$935   | \$956   | \$972   | \$992   | \$1,013 | \$1,037 | \$1,056 | \$1,079 | \$1,101 | \$1,126 | \$23,524  |  |
| Total Rail O&M Uses of Funds                                           | \$335   | \$363   | \$426   | \$442   | \$450   | \$521   | \$539   | \$551   | \$637   | \$667   | \$745   | \$827   | \$843   | \$861   | \$876   | \$893   | \$921   | \$943   | \$959   | \$979   | \$998   | \$1,020 | \$1,035 | \$1,056 | \$1,078 | \$1,103 | \$1,123 | \$1,147 | \$1,171 | \$1,197 | \$24,707  |  |
| Annual Growth Rate                                                     |         | 8.2%    | 17.5%   | 3.7%    | 1.9%    | 15.7%   | 3.5%    | 2.2%    | 15.6%   | 4.6%    | 11.7%   | 11.0%   | 2.0%    | 2.2%    | 1.7%    | 2.0%    | 3.1%    | 2.3%    | 1.8%    | 2.0%    | 2.0%    | 2.2%    | 1.4%    | 2.0%    | 2.1%    | 2.4%    | 1.8%    | 2.1%    | 2.0%    | 2.3%    | 4.5%      |  |
| <b>Bus O&amp;M Uses of Funds</b>                                       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |  |
| O&M Costs                                                              | \$1,522 | \$1,527 | \$1,518 | \$1,550 | \$1,603 | \$1,666 | \$1,730 | \$1,794 | \$1,865 | \$1,920 | \$2,011 | \$2,068 | \$2,124 | \$2,202 | \$2,303 | \$2,400 | \$2,454 | \$2,548 | \$2,617 | \$2,713 | \$2,781 | \$2,850 | \$2,923 | \$2,999 | \$3,077 | \$3,157 | \$3,240 | \$3,325 | \$3,408 | \$3,396 | \$71,290  |  |
| Total Bus O&M Uses of Funds                                            | \$1,522 | \$1,527 | \$1,518 | \$1,550 | \$1,603 | \$1,666 | \$1,730 | \$1,794 | \$1,865 | \$1,920 | \$2,011 | \$2,068 | \$2,124 | \$2,202 | \$2,303 | \$2,400 | \$2,454 | \$2,548 | \$2,617 | \$2,713 | \$2,781 | \$2,850 | \$2,923 | \$2,999 | \$3,077 | \$3,157 | \$3,240 | \$3,325 | \$3,408 | \$3,396 | \$71,290  |  |
| Annual Growth Rate                                                     |         | 0.29%   | -0.55%  | 2.09%   | 3.45%   | 3.92%   | 3.80%   | 3.70%   | 3.96%   | 2.95%   | 4.76%   | 2.82%   | 2.74%   | 3.68%   | 4.58%   | 4.18%   | 2.28%   | 3.83%   | 2.68%   | 3.68%   | 2.52%   | 2.49%   | 2.55%   | 2.60%   | 2.60%   | 2.58%   | 2.63%   | 2.64%   | 2.50%   | -0.37%  | 2.81%     |  |
| Total Uses of Funds                                                    | \$4,170 | \$3,388 | \$5,092 | \$4,327 | \$7,281 | \$4,292 | \$5,484 | \$5,054 | \$4,941 | \$4,760 | \$4,683 | \$4,876 | \$4,941 | \$4,899 | \$5,396 | \$5,318 | \$5,452 | \$5,636 | \$5,626 | \$5,586 | \$6,019 | \$6,045 | \$6,573 | \$6,426 | \$7,083 | \$6,839 | \$6,784 | \$6,951 | \$7,303 | \$6,961 | \$168,187 |  |
| Annual Growth Rate (w/out Financing)                                   |         | -21.0%  | 53.3%   | -16.9%  | 71.0%   | -44.5%  | 30.3%   | -9.2%   | -7.5%   | -2.3%   | -4.0%   | 4.5%    | 0.8%    | -3.3%   | 14.1%   | -2.4%   | 2.1%    | 3.9%    | 2.7%    | -0.3%   | 8.7%    | -0.3%   | 9.3%    | -3.7%   | 13.5%   | -5.1%   | -4.1%   | 3.3%    | 4.0%    | 3.6%    | 1.6%      |  |

\* Includes \$21 million of environmental/planning costs.

### 1.9.1 Uses of Funds - Countywide

As is shown throughout the financial plan, the LACMTA systemwide operating and capital costs over the FY 2011 to FY 2040 period reflect the following:

- Capital Costs:
  - Of the total capital cost for bus and rail combined (\$72.2 billion), Rail and Transit Corridor capital costs comprise 77.0 percent, with Bus-related capital costs accounting for the remaining 23.0 percent;
  - Including projects in America Fast Forward, Major Rail and Transit Corridor Projects comprise 22.9 percent of bus and rail capital costs combined;
  - LACMTA’s State of Good Repair program for existing and future lines represents 11.4 percent of bus and rail capital costs combined; and
  - Debt Service Costs for rail and bus account for 34.0 percent of capital costs. Of this, 32.7 percent is for Rail and Transit Corridor related debt service and 1.3 percent is for Bus-related debt service.
- Operating and Maintenance Costs:
  - Of the total combined bus and rail operating costs (\$96.0 billion), Bus-related costs account for 74.3 percent with Rail costs account for the remaining 25.7 percent;
  - Countywide Bus operations (LACMTA-operated and municipal operators) account for approximately 66.5 percent of total bus and rail operating costs combined;
  - Excluding security costs, existing and planned LACMTA operated rail service comprises 17.6 percent of total bus and rail operating costs combined; and
  - LACMTA’s share of Metrolink commuter rail costs is approximately 3.9 percent of bus and rail operating costs combined.

### 1.9.2 Sources of Funds

As is shown throughout the financial plan, operating and capital revenues over the FY 2011 to FY 2040 period reflect the following:

- Capital Revenues:
  - Of the total combined bus and rail capital revenue (\$72.1 billion), local sources provide the largest share of funding (55.5 percent). Of this, sales tax comprises 54.0 percent, of which Measure R provides 20.0 percent, Proposition C 11.7 percent, Proposition A 15.9 percent, and TDA 6.4 percent;
  - State sources provide 3.7 percent of capital funding;
  - Federal sources, which include FTA Section 5309 New Starts funds, provide 13.3 percent of total capital funding; and
  - Debt proceeds provide 27.5 percent of total rail and bus capital funding.
- Operating and Maintenance Revenues:



- Of the total O&M revenue for bus and rail combined (\$96.0 billion), bus and rail fare revenues comprise 18.0 percent and 8.6 percent respectively;
- Local Sales Tax revenues constitute 63.7 percent of total bus and rail O&M revenue, of which 51.6 percent is for bus and 12.1 percent is for rail;
- State Transit Assistance provides 3.4 percent of total operating revenue, of which 1.8 percent is for bus and 1.6 percent is for rail; and
- Federal sources contribute 8.2 percent of total O&M funding, with 3.1 percent of funding provided from FTA Section 5307 Urbanized Area Formula funds for bus-related preventive maintenance.

### 1.9.3 Summary of Financial Performance Measures

The following provides a summary of key performance measures of the financial plan for the FY 2010 to FY 2040 period. These measures include consideration of FTA New Starts financial criteria appropriate for the Westside Subway Extension at this stage of project development as a project requesting entry into PE. Additional details on the performance measures can be found in Section 4.

***Adequacy of Annual Funding Available for Capital:*** Assuming the U.S. avoids a double-dip recession and returns to annual growth in sales tax receipts, innovative financing mechanisms, and receipt of FTA New Starts funding, LACMTA would have adequate financial capacity to implement the Westside Subway Extension on an accelerated basis while maintaining, operating, and expanding the background transit system. Without innovative financing and with less New Starts funding, the LACMTA can still deliver a phased subway project over the originally planned timeframe. With respect to the related FTA New Starts Financial Performance Criteria:

- Proposed Non-New Starts Share: A 58 percent non-New Starts funding share is proposed for the Westside Subway Extension project (including finance charges).
- Stability and Reliability of the Capital Plan:
  - Overall strengths related to this measure include:
    - LACMTA has strong bond ratings;
    - The capital financial plan is strong, with more than 95 percent of the non-New Starts funds committed;
    - The Westside Subway Extension project capital cost estimate is based on LACMTA experience of implementing similar rail projects and includes a 27 percent contingency; and
    - System-wide capital cost estimates are realistic and include funding for system preservation and state of good repair.
    - LACMTA has access to several forms of short-term credit to help fund capital programs, including a commercial paper program.
  - Offsetting these factors are the following:

- Projections of sales tax revenues required to fund the system assume economic recovery following consecutive years of decline over the FY 2007 to FY 2009 period. This projection is consistent with the 3.6 percent increase in FY 2010 compared to FY 2009 for Proposition A, Proposition C, and Measure R sales tax revenues; and
- Financing the system-wide program calls for extensive use of innovative finance methods that require new Federal legislation that will be proposed over the next year.

***Adequacy of Annual Funding Available for Operations and Maintenance:*** Assuming recovery of the economy and return to annual growth in sales tax receipts in combination with O&M cost management, LACMTA would have adequate capacity to fund the operation and maintenance of the Westside Subway Extension and the maintenance, operation, and system preservation of the background transit system. With respect to the related FTA New Starts Financial Performance criteria:

- **Stability and Reliability of the Operating Plan:**
  - Overall strengths related to this measure include:
    - LACMTA's strong current operating condition and operating ratio of 3.59;
    - LACMTA has historical and projected positive cash flows, with no annual shortfalls;
    - Over 90.0 percent of the funds needed for system-wide O&M are existing and committed. These funds are derived primarily from LACMTA's three existing transit sales taxes (63.7 percent), two of which continue in perpetuity. Additionally projected fare revenue accounts for approximately 26.5 percent of operating revenue;
    - O&M cost growth rates for system-wide bus service are conservatively estimated based on a cost per hour factor lower than that experienced over the past ten years; rail O&M cost growth rate per mile is slightly higher than the past ten years but is still relatively low.
    - As of June 30, 2011, LACMTA has approximately \$1.5 billion of cash on hand, including \$237 million in liquid reserves in discretionary accounts. The liquid reserves can be used for operating or capital costs. Additional information about LACMTA's reserves is included in the supporting documentation.

***Conformance with LACMTA Debt Policies:*** Assuming economic recovery manifest in sales tax revenue growth and ability to secure both existing and newly proposed forms of financing, LACMTA would have the financial capacity demonstrated in the financial plan.

***Achieved Levels of System Farebox Recovery:*** LACMTA's performance relative to this measure assumes that the agency continues to monitor and adjust its fare revenues every two years to achieve and maintain its 30 percent farebox recovery target. The LACMTA Board has taken action toward achieving this target, with approval of fare increases in July 2008, and again in July 2010.

## 2.0 PROJECT FINANCIAL PLAN

### 2.1 Capital Plan for the Westside Subway Extension Project

The Capital Plan for the Westside Subway Extension Project reflects the latest cost estimate and schedule for the Westside Subway Extension Project. It describes anticipated funding sources, amounts anticipated from each source, and the level of commitment of non-federal sources of funds. Contingencies and mitigation measures for cost increases and revenue shortfalls are discussed in Section 5. All revenue and cost assumptions presented are as delineated in the Los Angeles County MTA Countywide Forecasting Model for FY 2010 to FY 2040 prepared for America Fast Forward and dated August 19, 2011, which is attached in the supporting documentation. The forecast is a derivative of the FY 2009 Long Range Transportation Plan and reflects changes to be implemented through America Fast Forward.

#### 2.1.1 Capital Cost by Standard Cost Category Code

The total Westside Subway Extension Project cost is estimated to be \$5,662 million (YOE \$), which includes \$5,129 million (YOE \$) in baseline capital costs and \$534 million (YOE \$) in finance charges. The baseline cost estimate excludes \$30.6 million (YOE \$) in environmental and planning costs. The cost estimate includes over 27 percent in contingencies (measured as a percentage of 2011 base year dollars without contingency). This level of contingency is consistent with the FTA's risk assessment process. Table 2-1 provides the baseline cost estimate broken out into FTA Standard Cost Categories (SCC) in both 2011 base year dollars and year of expenditure dollars. The methodology used for preparing the capital cost estimate is in general conformance with FTA guidelines for estimating capital costs.

Table 2-1: Westside Subway Extension Capital Costs Baseline Cost Estimate Excluding Financing Costs (Millions)

| FTA Standard Cost Category                               | FY11  | FY12  | FY13  | FY14  | FY15  | FY16  | FY17  | FY18  | FY19  | FY20  | FY21  | FY22  | Total   |
|----------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| 10 - Guideways and Track Elements                        | \$-   | \$-   | \$-   | \$253 | \$402 | \$287 | \$149 | \$40  | \$17  | \$-   | \$-   | \$-   | \$1,150 |
| 20 - Stations, Stops, Terminals, Intermodal              | \$-   | \$-   | \$-   | \$77  | \$96  | \$19  | \$-   | \$223 | \$160 | \$64  | \$-   | \$-   | \$638   |
| 30 - Support Facilities: Yards, Shops, Admin. Buildings. | \$-   | \$-   | \$-   | \$5   | \$15  | \$35  | \$35  | \$10  | \$-   | \$-   | \$-   | \$-   | \$101   |
| 40 - Sitework and Special Conditions                     | \$-   | \$8   | \$54  | \$63  | \$84  | \$84  | \$63  | \$21  | \$17  | \$13  | \$13  | \$-   | \$419   |
| 50 - Systems                                             | \$-   | \$-   | \$-   | \$17  | \$20  | \$6   | \$-   | \$28  | \$98  | \$70  | \$28  | \$14  | \$281   |
| 60 - ROW, Land, Existing Improvements                    | \$-   | \$10  | \$364 | \$-   | \$-   | \$-   | \$-   | \$-   | \$-   | \$-   | \$-   | \$-   | \$374   |
| 70 - Vehicles                                            | \$-   | \$-   | \$50  | \$101 | \$151 | \$101 | \$50  | \$25  | \$15  | \$10  | \$-   | \$-   | \$503   |
| 80 - Professional Services                               | \$19  | \$21  | \$47  | \$47  | \$59  | \$59  | \$59  | \$59  | \$59  | \$83  | \$49  | \$30  | \$593   |
| 90 - Unallocated Contingency                             | \$1   | \$4   | \$56  | \$38  | \$57  | \$50  | \$36  | \$34  | \$34  | \$23  | \$9   | \$4   | \$347   |
| Total (2011 \$)                                          | \$21  | \$43  | \$571 | \$601 | \$884 | \$641 | \$393 | \$441 | \$400 | \$263 | \$99  | \$48  | \$4,407 |
| Escalation Rates                                         | 0.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |         |
| Total (YOE \$)                                           | \$21  | \$44  | \$606 | \$656 | \$995 | \$743 | \$470 | \$543 | \$507 | \$343 | \$133 | \$67  | \$5,129 |

WESTSIDE SUBWAY EXTENSION

### 2.1.2 Capital Cost Estimating Methodology

The capital cost estimate was developed from preliminary scope descriptions, specifications, engineering drawings, typical sections, proposed station locations, and definitions of each of the major cost components available in the Fall of 2010, prior to the start of PE. These preliminary documents formed the basis for the identification of the various elements used to prepare the capital cost estimate. The capital cost estimate was prepared by first establishing unit prices, which were determined for each cost category. Quantity assessments for each major SCC were then estimated. Next contingencies were allocated to each cost category, allowing for the preliminary scope of the project. Finally, unallocated contingency was added to the project to allow for bid and construction risk. For the FY2013 New Starts update, the capital cost estimate was revised to include: 1) project expenditure costs through FY 2011, 2) current in-progress estimate changes within each SCC category, and 3) a change in finance costs based on New Starts funding assumed to be approximately \$150 million per year.

Two methodologies were utilized for establishing unit prices: (1) historical information and (2) “bottoms-up” pricing. Typically, estimates are developed using a combination of the two; however, given the early stage of the design and with few engineering details available at this time, the historical bid price method was used almost exclusively. As the project evolves during PE and final design, a better mix of detailed pricing and historical information will be utilized. When applied, the detail or “bottoms-up” pricing will be built based on production rates, material and equipment costs, labor costs, contractor overhead and profit, contractor general requirements such as mobilization, insurance, and all costs that contribute to a contractor’s anticipated overall bid price.

It should be noted that unit pricing was not adjusted to reflect cost drivers such as bid risk, agency reputation in the contracting community, and other considerations. These adjustments will be addressed through the application of additional allocated and/or unallocated contingency as the project further evolves and in accordance with FTA’s Risk Assessment process.

The historical database used for this project includes unit pricing on projects from all project life-cycles based on applicable elements from other similar projects. In all cases, any pricing information was properly adjusted for the Los Angeles area.

Utilization of this pricing data essentially represented a parametric estimating approach, whereby typical cross sections, alignments, and configurations were assigned a cost-per-unit such as mile, square foot, or route foot. For most applications, this type of estimate is sufficiently accurate at the early stages of design. Certainly, where adequate standard designs and criteria or other information become available, a detailed estimate may be developed to check the parametric assessments. Bid prices, particularly historical bid prices from LACMTA’s database that were used as a basis to establish estimates for the project, were adjusted to reflect any unique project attributes, including geographical considerations. For location factor adjustments, the City Cost Index (CCI) published by R.S. Means was utilized.

Equipment rates for big ticket items such as the tunnel boring machines in later project phases were based on manufacturer’s quotes, R.S. Means, and/or the Corp. of Engineers Construction Equipment Ownership and Operating Expense Schedule. Material pricing was obtained from supplier quotes, and checked against published sources that include R.S. Means and Engineering News-Record (ENR).

Detailed quantity take-offs were not performed at this stage of the project due to the preliminary nature of the project drawings and sketches. Quantity assessments were made based on general descriptions of horizontal and vertical alignments, standard design criteria, and order-of-magnitude assessments. To the extent that the preliminary design work has allowed, unit prices were combined with the quantity take-offs to determine the costs of each major category of work, such as guideway elements, stations, and system elements.

In accordance with FTA SCC, allocated contingencies were included with each cost category to address lack of scope and quantity definition during this early phase of the project. The amount of allocated contingency depends on the complexity of any particular SCC code as well as the stage of engineering completion, but was typically in the 5 to 25 percent range. As part of FTA's risk assessment process, contingencies will be evaluated and appropriate allocations for risk determined.

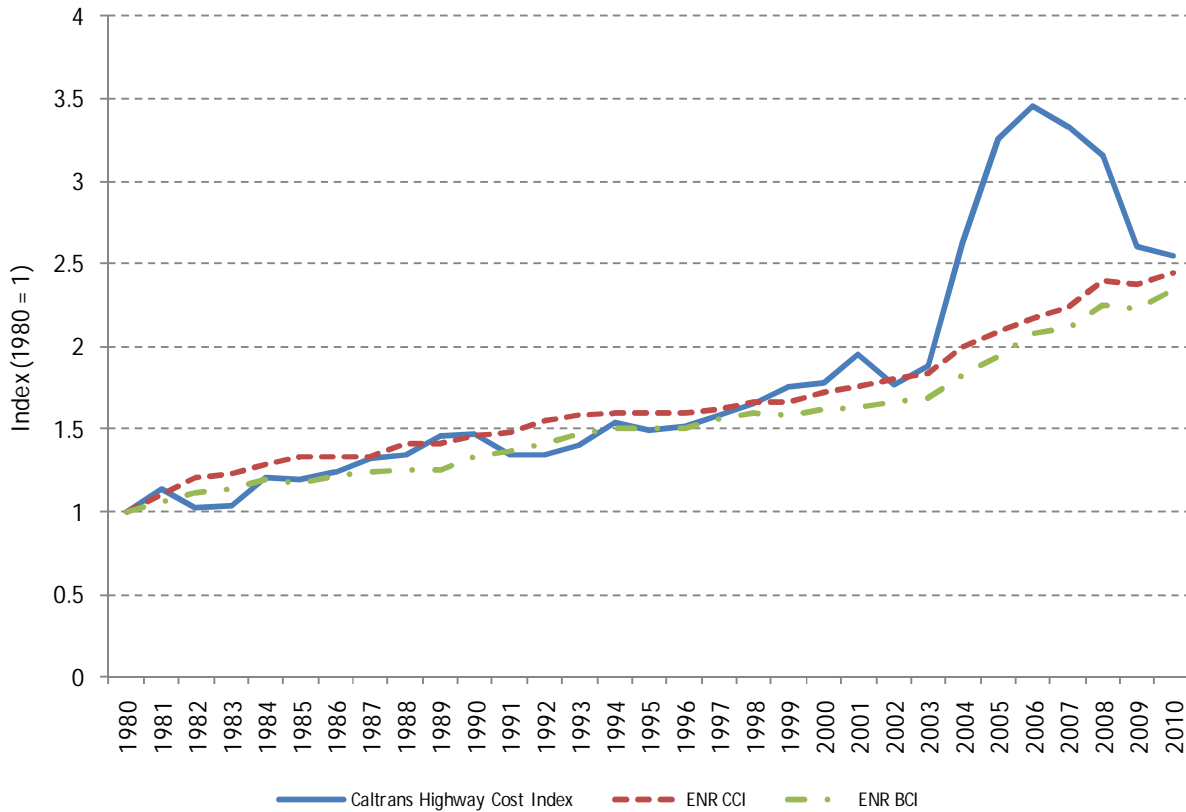
Unallocated contingency was added to address bid risk and construction risk in addition to the aforementioned allocated contingency. Combined, the allocated and the unallocated contingency reflect the total contingency. Unallocated contingency is intended to address "unknown unknowns," or to simply reflect a prudent amount to cover unanticipated events, including political events, labor strife, weather, differing site conditions, commodity pricing fluctuations, unfavorable market conditions, bid risk, etc. The unallocated contingency was calculated to be approximately 10 percent of the sum of SCC codes 10 through 80.

All Westside Subway Extension capital costs, including contingencies, were estimated in 2011 dollars and inflated to YOE dollars at the annual capital cost escalation rates delineated in Table 2-1. Construction (including procurement) is expected to take place from FY 2013 through FY 2022, with revenue service beginning in FY 2022 on the nearly completed system. The capital cost escalation rates delineated in Table 2-1 were derived from the Caltrans Highway Cost Index. As a result of the economic downturn, capital projects in Southern California have experienced a very favorable bid environment. Highway construction bids have been consistently more than 20 percent below the engineer's estimate due to the slowdown in commodities, surety, and energy price inflation. The latest quarterly Caltrans Highway Cost Index reflects this favorable situation. As such, for transit projects, it is conservatively assumed that there will be 3 percent annual growth for FY2012 and beyond.

Global Insight ([www.ihsglobalinsight.com](http://www.ihsglobalinsight.com)), a leading independent provider of economic and financial forecasts, predicts Consumer Price Index (CPI) growth in the Los Angeles-Long Beach-Santa Ana region to be 1.45 percent from the 3rd quarter of 2011 to the 3rd quarter of 2012, whereas the project cost includes a more conservative 3.0 percent growth rate for FY 2012. Further, Global Insight predicts growth of 2.22 percent from the 3rd quarter of 2012 to the 3rd quarter of 2013, which corresponds to the 3.0 percent FY 2013 capital cost growth assumption. Figure 2-1 provides a summary of escalation indices from 2003 – 2010 from the Caltrans Highway Index and the Engineering News Record (ENR) indices.



Figure 2-1: Long Term Capital Cost Indices in the Los Angeles Region



As is shown in Figure 2-1, prior to the international run-up in commodity, surety, and energy prices and the subsequent international crisis, the Caltrans Highway Cost Index moved mostly in tandem with the ENR’s Los Angeles Construction Cost Index (CCI) and Building Cost Index (BCI). The compound annual average growth rates for the Caltrans Highway Cost Index, CCI, and BCI from 1980 to 2010 are 3.17 percent, 3.02 percent, and 2.88 percent, respectively. However, when analyzing the data prior to the housing bubble, from 1980 to 2003, the compound annual average growth rates are 2.78 percent, 2.68 percent, and 2.32 percent, for the Caltrans Highway Cost Index, CCI, and BCI respectively. The most recent data shows the Caltrans Highway Construction Cost Index right in line with CCI and BCI.

As previously stated, included in the Westside Subway Extension capital cost estimate is 27 percent in allocated and unallocated contingencies to account for uncertainties in design, right-of-way acquisitions, and economic conditions at the time of design and construction. As the project proceeds through project development, the financial plan and associated capital cost estimates will be regularly evaluated and updated with the latest cost and project scope information. As details of the project are developed, the contingencies within the capital cost estimate will be reduced. Value engineering will be undertaken during PE and final design to examine cost savings opportunities. During construction, should the actual costs exceed the budget, a plan for bringing costs back in line with the budget will be devised. Cost and schedule will be monitored during construction through the issuance of monthly reports summarizing cost and schedule information as well as an overall update on all aspects of the project. A detailed Westside Subway Extension capital cost estimate

according to FTA's SCCs is presented in Table 2-2, and a buildup of the project's capital cost estimate by year is presented in Table 2-3.

LACMTA has also adopted a new policy referred to as the "Unified Cost Management Process and Policy" for Measure R projects, which was approved by the LACMTA Board in January 2011. The policy is discussed in greater detail in Section 5.

A master schedule for the project has been developed that covers all activities from the end of planning through preliminary and final design and all construction contracts. Anticipated durations for all of the design-related activities have been included in the schedule based on previous experience with projects of similar complexity, including some contingency. A preliminary breakout of construction contracts and approximate durations are also included to establish the feasibility of the proposed construction completion date. The limits, scope and sequencing of the construction contracts will be further refined during PE with the master schedule forming the basis for all further refinements. In the event that durations of certain activities increase beyond those shown in the master schedule, the durations and sequence of subsequent activities on the schedule will be evaluated to mitigate time lost and hold the major project milestones fixed in time.

As portions of the project enter construction, the detailed scheduling required for construction will be the responsibility of the contractor. An initial baseline schedule reflecting zero progress on the contract will be required at the outset of the project. Subsequently, the contractor will be required to submit progress schedule updates by the seventh of each month including a narrative of current and anticipated problems, delays and proposed mitigating steps, changes to durations and interdependencies of activities, and anticipated progress for the next period.

A preliminary project schedule is presented in Table 2-4.

Table 2-2: Westside Subway Extension Capital Costs

| MAIN WORKSHEET - BUILD ALTERNATIVE (Rev.14, August 5, 2011)                 |             |                                          |                                                |                                |                                    |                                                   |                                                    |                          |
|-----------------------------------------------------------------------------|-------------|------------------------------------------|------------------------------------------------|--------------------------------|------------------------------------|---------------------------------------------------|----------------------------------------------------|--------------------------|
| Los Angeles County Metropolitan Transportation Authority (Metro)            |             |                                          |                                                |                                |                                    | Today's Date                                      |                                                    | 9/12/11                  |
| Westside Subway Extension Project - Advance Conceptual Engineering          |             |                                          |                                                |                                |                                    | Yr of Base Year \$                                |                                                    | 2011                     |
| LPA Alignment Constellation Blvd                                            |             |                                          |                                                |                                |                                    | Yr of Revenue Ops                                 |                                                    | 2022                     |
|                                                                             | Quantity    | Base Year Dollars w/o Contingency (X000) | Base Year Dollars Allocated Contingency (X000) | Base Year Dollars TOTAL (X000) | Base Year Dollars Unit Cost (X000) | Base Year Dollars Percentage of Construction Cost | Base Year Dollars Percentage of Total Project Cost | YOE Dollars Total (X000) |
| <b>10 GUIDEWAY &amp; TRACK ELEMENTS (route miles)</b>                       | <b>9.00</b> | 950                                      | 199                                            | <b>1,150</b>                   | <b>\$128</b>                       | <b>44%</b>                                        | <b>24%</b>                                         | <b>1,312</b>             |
| 10.01 Guideway: At-grade exclusive right-of-way                             |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)              |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 10.03 Guideway: At-grade in mixed traffic                                   |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 10.04 Guideway: Aerial structure                                            |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 10.05 Guideway: Built-up fill                                               |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 10.06 Guideway: Underground cut & cover                                     | 1.43        | 204,942                                  | 44,030                                         | 249                            | \$174                              |                                                   |                                                    | 284                      |
| 10.07 Guideway: Underground tunnel                                          | 7.57        | 702,881                                  | 151,009                                        | 854                            | \$113                              |                                                   |                                                    | 975                      |
| 10.08 Guideway: Retained cut or fill                                        |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 10.09 Track: Direct fixation                                                |             | 33,672                                   | 3,367                                          | 37                             |                                    |                                                   |                                                    | 42                       |
| 10.10 Track: Embedded                                                       |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 10.11 Track: Ballasted                                                      |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 10.12 Track: Special (switches, turnouts)                                   |             | 5,121                                    | 512                                            | 6                              |                                    |                                                   |                                                    | 6                        |
| 10.13 Track: Vibration and noise dampening                                  |             | 3,879                                    | 388                                            | 4                              |                                    |                                                   |                                                    | 5                        |
| <b>20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)</b>                   | <b>7</b>    | 532                                      | 106                                            | <b>638</b>                     | <b>\$91</b>                        | <b>25%</b>                                        | <b>13%</b>                                         | <b>774</b>               |
| 20.01 At-grade station, stop, shelter, mall, terminal, platform             |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 20.02 Aerial station, stop, shelter, mall, terminal, platform               |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 20.03 Underground station, stop, shelter, mall, terminal, platform          | 7           | 489,353                                  | 97,871                                         | 587                            | \$84                               |                                                   |                                                    | 712                      |
| 20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc. |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 20.05 Joint development                                                     |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 20.06 Automobile parking multi-story structure                              |             | 10,000                                   | 2,000                                          | 12                             |                                    |                                                   |                                                    | 15                       |
| 20.07 Elevators, escalators                                                 |             | 32,714                                   | 6,543                                          | 39                             |                                    |                                                   |                                                    | 48                       |
| <b>30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>                    | <b>9.00</b> | 88                                       | 13                                             | <b>101</b>                     | <b>\$11</b>                        | <b>4%</b>                                         | <b>2%</b>                                          | <b>118</b>               |
| 30.01 Administration Building: Office, sales, storage, revenue counting     |             | 3,984                                    | 598                                            | 5                              |                                    |                                                   |                                                    | 5                        |
| 30.02 Light Maintenance Facility                                            |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 30.03 Heavy Maintenance Facility                                            |             | 28,295                                   | 4,244                                          | 33                             |                                    |                                                   |                                                    | 38                       |
| 30.04 Storage or Maintenance of Way Building                                |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 30.05 Yard and Yard Track                                                   |             | 55,519                                   | 8,328                                          | 64                             |                                    |                                                   |                                                    | 75                       |
| <b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>                                 | <b>9.00</b> | 349                                      | 70                                             | <b>419</b>                     | <b>\$47</b>                        | <b>16%</b>                                        | <b>9%</b>                                          | <b>482</b>               |
| 40.01 Demolition, Clearing, Earthwork                                       |             | 13,940                                   | 2,788                                          | 17                             |                                    |                                                   |                                                    | 19                       |
| 40.02 Site Utilities, Utility Relocation                                    |             | 35,086                                   | 7,017                                          | 42                             |                                    |                                                   |                                                    | 48                       |
| 40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments |             | 14,410                                   | 2,882                                          | 17                             |                                    |                                                   |                                                    | 20                       |
| 40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks  |             | 10,064                                   | 2,013                                          | 12                             |                                    |                                                   |                                                    | 14                       |
| 40.05 Site structures including retaining walls, sound walls                |             | 10,000                                   | 2,000                                          | 12                             |                                    |                                                   |                                                    | 14                       |
| 40.06 Pedestrian / bike access and accommodation, landscaping               |             | 9,409                                    | 1,882                                          | 11                             |                                    |                                                   |                                                    | 13                       |
| 40.07 Automobile, bus, van accessways including roads, parking lots         |             | 14,880                                   | 2,976                                          | 18                             |                                    |                                                   |                                                    | 21                       |
| 40.08 Temporary Facilities and other indirect costs during construction     |             | 241,454                                  | 48,291                                         | 290                            |                                    |                                                   |                                                    | 333                      |
| <b>50 SYSTEMS</b>                                                           | <b>9.00</b> | 244                                      | 37                                             | <b>281</b>                     | <b>\$31</b>                        | <b>11%</b>                                        | <b>6%</b>                                          | <b>355</b>               |
| 50.01 Train control and signals                                             |             | 58,552                                   | 8,783                                          | 67                             |                                    |                                                   |                                                    | 85                       |
| 50.02 Traffic signals and crossing protection                               |             | 0                                        |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 50.03 Traction power supply: substations                                    |             | 40,224                                   | 6,034                                          | 46                             |                                    |                                                   |                                                    | 58                       |
| 50.04 Traction power distribution: catenary and third rail                  |             | 35,064                                   | 5,260                                          | 40                             |                                    |                                                   |                                                    | 51                       |
| 50.05 Communications                                                        |             | 64,309                                   | 9,646                                          | 74                             |                                    |                                                   |                                                    | 93                       |
| 50.06 Fare collection system and equipment                                  |             | 21,108                                   | 3,166                                          | 24                             |                                    |                                                   |                                                    | 31                       |
| 50.07 Central Control                                                       |             | 25,000                                   | 3,750                                          | 29                             |                                    |                                                   |                                                    | 36                       |
| <b>Construction Subtotal (10 - 50)</b>                                      | <b>9.00</b> | <b>2,164</b>                             | <b>425</b>                                     | <b>2,589</b>                   | <b>\$288</b>                       | <b>100%</b>                                       | <b>54%</b>                                         | <b>3,042</b>             |
| <b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>                                  | <b>9.00</b> | 302                                      | 72                                             | <b>374</b>                     | <b>\$42</b>                        |                                                   | <b>8%</b>                                          | <b>396</b>               |
| 60.01 Purchase or lease of real estate                                      |             | 301,208                                  | 71,412                                         | 373                            |                                    |                                                   |                                                    | 395                      |
| 60.02 Relocation of existing households and businesses                      |             | 1,000                                    | 237                                            | 1                              |                                    |                                                   |                                                    | 1                        |
| <b>70 VEHICLES (number)</b>                                                 | <b>104</b>  | 458                                      | 46                                             | <b>503</b>                     | <b>\$5</b>                         |                                                   | <b>10%</b>                                         | <b>573</b>               |
| 70.01 Light Rail                                                            |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 70.02 Heavy Rail                                                            | 104         | 416,000                                  | 41,600                                         | 458                            | \$4                                |                                                   |                                                    | 521                      |
| 70.03 Commuter Rail                                                         |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 70.04 Bus                                                                   |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 70.05 Other                                                                 |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 70.06 Non-revenue vehicles                                                  |             |                                          |                                                | 0                              |                                    |                                                   |                                                    | 0                        |
| 70.07 Spare parts                                                           |             | 41,600                                   | 4,160                                          | 46                             |                                    |                                                   |                                                    | 52                       |
| <b>80 PROFESSIONAL SERVICES (applies to Cats. 10-50)</b>                    | <b>9.00</b> | 544                                      | 50                                             | <b>593</b>                     | <b>\$66</b>                        | <b>23%</b>                                        | <b>12%</b>                                         | <b>713</b>               |
| 80.01 Preliminary Engineering                                               |             | 46,000                                   | 0                                              | 46                             |                                    |                                                   |                                                    | 55                       |
| 80.02 Final Design                                                          |             | 108,193                                  | 10,819                                         | 119                            |                                    |                                                   |                                                    | 143                      |
| 80.03 Project Management for Design and Construction                        |             | 129,832                                  | 12,983                                         | 143                            |                                    |                                                   |                                                    | 172                      |
| 80.04 Construction Administration & Management                              |             | 86,554                                   | 8,655                                          | 95                             |                                    |                                                   |                                                    | 114                      |
| 80.05 Professional Liability and other Non-Construction Insurance           |             | 0                                        | 0                                              | 0                              |                                    |                                                   |                                                    | 0                        |
| 80.06 Legal; Permits; Review Fees by other agencies, cities, etc.           |             | 21,639                                   | 2,164                                          | 24                             |                                    |                                                   |                                                    | 29                       |
| 80.07 Surveys, Testing, Investigation, Inspection                           |             | 43,277                                   | 4,328                                          | 48                             |                                    |                                                   |                                                    | 57                       |
| 80.08 Start up                                                              |             | 108,193                                  | 10,819                                         | 119                            |                                    |                                                   |                                                    | 143                      |
| <b>Subtotal (10 - 80)</b>                                                   | <b>9.00</b> | <b>3,467</b>                             | <b>593</b>                                     | <b>4,060</b>                   | <b>\$451</b>                       |                                                   | <b>84%</b>                                         | <b>4,724</b>             |
| <b>90 UNALLOCATED CONTINGENCY</b>                                           |             |                                          |                                                | <b>346,735</b>                 |                                    |                                                   | <b>7%</b>                                          | <b>405</b>               |
| <b>Subtotal (10 - 90)</b>                                                   | <b>9.00</b> |                                          |                                                | <b>4,407</b>                   | <b>\$490</b>                       |                                                   | <b>91%</b>                                         | <b>5,129</b>             |
| <b>100 FINANCE CHARGES</b>                                                  |             |                                          |                                                | <b>420</b>                     |                                    |                                                   | <b>9%</b>                                          | <b>534</b>               |
| <b>Total Project Cost (10 - 100)</b>                                        | <b>9.00</b> |                                          |                                                | <b>4,826</b>                   | <b>\$536</b>                       |                                                   | <b>100%</b>                                        | <b>5,662</b>             |
| Allocated Contingency as % of Base Yr Dollars w/o Contingency               |             |                                          |                                                | 17.09%                         |                                    |                                                   |                                                    |                          |
| Unallocated Contingency as % of Base Yr Dollars w/o Contingency             |             |                                          |                                                | 10.00%                         |                                    |                                                   |                                                    |                          |
| Total Contingency as % of Base Yr Dollars w/o Contingency                   |             |                                          |                                                | 27.09%                         |                                    |                                                   |                                                    |                          |
| Unallocated Contingency as % of Subtotal (10 - 80)                          |             |                                          |                                                | 8.54%                          |                                    |                                                   |                                                    |                          |
| YOE Construction Cost per Mile (X000)                                       |             |                                          |                                                |                                |                                    |                                                   |                                                    | \$338                    |
| YOE Total Project Cost per Mile Not Including Vehicles (X000)               |             |                                          |                                                |                                |                                    |                                                   |                                                    | \$565                    |
| YOE Total Project Cost per Mile (X000)                                      |             |                                          |                                                |                                |                                    |                                                   |                                                    | \$629                    |

Table 2-3: Westside Subway Extension Capital Cost Inflation Worksheet

| INFLATION WORKSHEET                                                |                 |                    |           |           |            |            |              |            |            |            |            |            |            |            |           |           |           |           |          |
|--------------------------------------------------------------------|-----------------|--------------------|-----------|-----------|------------|------------|--------------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|----------|
| Los Angeles County Metropolitan Transportation Authority (Metro)   |                 |                    |           |           |            |            |              |            |            |            |            |            |            |            |           |           |           |           |          |
| Westside Subway Extension Project - Advance Conceptual Engineering |                 |                    |           |           |            |            |              |            |            |            |            |            |            |            |           |           |           |           |          |
| LPA Alignment Constellation Blvd                                   |                 |                    |           |           |            |            |              |            |            |            |            |            |            |            |           |           |           |           |          |
| Insert comments, notes, etc.                                       |                 |                    |           |           |            |            |              |            |            |            |            |            |            |            |           |           |           |           |          |
| BASE YEAR DOLLARS (X\$000)                                         | Base Yr Dollars | Double-Check Total | 2011      | 2012      | 2013       | 2014       | 2015         | 2016       | 2017       | 2018       | 2019       | 2020       | 2021       | 2022       | 2023      | 2024      | 2025      | 2026      | 2027     |
| 10 GUIDEWAY & TRACK ELEMENTS (route miles)                         | 1,150           | 1,150              | 0         | 0         | 0          | 252,956    | 402,431      | 287,451    | 149,474    | 40,243     | 17,247     | 0          | 0          | 0          | 0         | 0         | 0         | 0         | 0        |
| 20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)                 | 638             | 638                | 0         | 0         | 0          | 76,618     | 95,772       | 19,154     | 0          | 223,468    | 159,620    | 63,848     | 0          | 0          | 0         | 0         | 0         | 0         | 0        |
| 30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS                  | 101             | 101                | 0         | 0         | 0          | 5,048      | 15,145       | 35,339     | 35,339     | 10,097     | 0          | 0          | 0          | 0          | 0         | 0         | 0         | 0         | 0        |
| 40 SITEWORK & SPECIAL CONDITIONS                                   | 419             | 419                | 0         | 8,382     | 54,482     | 62,864     | 83,818       | 83,818     | 62,864     | 20,955     | 16,764     | 12,573     | 12,573     | 0          | 0         | 0         | 0         | 0         | 0        |
| 50 SYSTEMS                                                         | 281             | 281                | 0         | 0         | 0          | 16,854     | 19,663       | 5,618      | 0          | 28,090     | 98,313     | 70,224     | 28,090     | 14,045     | 0         | 0         | 0         | 0         | 0        |
| 60 ROW, LAND, EXISTING IMPROVEMENTS                                | 374             | 374                | 0         | 10,244    | 363,614    | 0          | 0            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0         | 0         | 0        |
| 70 VEHICLES (number)                                               | 503             | 503                | 0         | 0         | 50,336     | 100,672    | 151,008      | 100,672    | 50,336     | 25,168     | 15,101     | 10,067     | 0          | 0          | 0         | 0         | 0         | 0         | 0        |
| 80 PROFESSIONAL SERVICES (applies to Cats. 10-50)                  | 593             | 593                | 19,313    | 20,746    | 47,477     | 47,477     | 59,346       | 59,346     | 59,346     | 59,346     | 59,346     | 83,084     | 48,960     | 29,673     | 0         | 0         | 0         | 0         | 0        |
| 90 UNALLOCATED CONTINGENCY                                         | 347             | 347                | 1,386     | 3,594     | 55,590     | 38,141     | 57,211       | 49,843     | 35,974     | 34,023     | 34,023     | 23,405     | 9,210      | 4,334      | 0         | 0         | 0         | 0         | 0        |
| 100 FINANCE CHARGES                                                | 420             | 420                | 0         | 8         | 27         | 28         | 30           | 30         | 36         | 35         | 34         | 33         | 37         | 44         | 40        | 17        | 12        | 8         | 4        |
| <b>Total Project Cost (10 - 100)</b>                               | <b>4,826</b>    | <b>4,826</b>       | <b>21</b> | <b>51</b> | <b>598</b> | <b>628</b> | <b>914</b>   | <b>671</b> | <b>429</b> | <b>476</b> | <b>434</b> | <b>296</b> | <b>136</b> | <b>92</b>  | <b>40</b> | <b>17</b> | <b>12</b> | <b>8</b>  | <b>4</b> |
| <b>Inflation Rate</b>                                              |                 |                    | 0.030     | 0.030     | 0.030      | 0.030      | 0.030        | 0.030      | 0.030      | 0.030      | 0.030      | 0.030      | 0.030      | 0.030      | 0.030     | 0.030     | 0.030     | 0.035     | 0.035    |
| <b>Compounded Inflation Factor</b>                                 |                 |                    | 1.000     | 1.030     | 1.061      | 1.093      | 1.126        | 1.159      | 1.194      | 1.230      | 1.267      | 1.305      | 1.344      | 1.384      | 1.426     | 1.469     | 1.513     | 1.566     | 1.620    |
| YEAR OF EXPENDITURE DOLLARS (X\$000)                               | YOE Dollars     |                    | 2011      | 2012      | 2013       | 2014       | 2015         | 2016       | 2017       | 2018       | 2019       | 2020       | 2021       | 2022       | 2023      | 2024      | 2025      | 2026      | 2027     |
| 10 GUIDEWAY & TRACK ELEMENTS (route miles)                         | 1,312           |                    | 0         | 0         | 0          | 276        | 453          | 333        | 178        | 49         | 22         | 0          | 0          | 0          | 0         | 0         | 0         | 0         | 0        |
| 20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)                 | 774             |                    | 0         | 0         | 0          | 84         | 108          | 22         | 0          | 275        | 202        | 83         | 0          | 0          | 0         | 0         | 0         | 0         | 0        |
| 30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS                  | 118             |                    | 0         | 0         | 0          | 6          | 17           | 41         | 42         | 12         | 0          | 0          | 0          | 0          | 0         | 0         | 0         | 0         | 0        |
| 40 SITEWORK & SPECIAL CONDITIONS                                   | 482             |                    | 0         | 9         | 58         | 69         | 94           | 97         | 75         | 26         | 21         | 16         | 17         | 0          | 0         | 0         | 0         | 0         | 0        |
| 50 SYSTEMS                                                         | 355             |                    | 0         | 0         | 0          | 18         | 22           | 7          | 0          | 35         | 125        | 92         | 38         | 19         | 0         | 0         | 0         | 0         | 0        |
| 60 ROW, LAND, EXISTING IMPROVEMENTS                                | 396             |                    | 0         | 11        | 386        | 0          | 0            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0         | 0         | 0        |
| 70 VEHICLES (number)                                               | 573             |                    | 0         | 0         | 53         | 110        | 170          | 117        | 60         | 31         | 19         | 13         | 0          | 0          | 0         | 0         | 0         | 0         | 0        |
| 80 PROFESSIONAL SERVICES (applies to Cats. 10-50)                  | 713             |                    | 19        | 21        | 50         | 52         | 67           | 69         | 71         | 73         | 75         | 108        | 66         | 41         | 0         | 0         | 0         | 0         | 0        |
| 90 UNALLOCATED CONTINGENCY                                         | 405             |                    | 1         | 4         | 59         | 42         | 64           | 58         | 43         | 42         | 43         | 31         | 12         | 6          | 0         | 0         | 0         | 0         | 0        |
| 100 FINANCE CHARGES                                                | 534             |                    | -         | 8,171     | 28,627     | 30,348     | 33,328       | 34,477     | 42,860     | 42,860     | 42,636     | 42,636     | 49,925     | 60,654     | 56,394    | 24,234    | 18,174    | 12,116    | 6,058    |
| <b>Total Project Cost (10 - 100)</b>                               | <b>5,662</b>    |                    | <b>21</b> | <b>52</b> | <b>635</b> | <b>687</b> | <b>1,029</b> | <b>778</b> | <b>513</b> | <b>586</b> | <b>550</b> | <b>386</b> | <b>183</b> | <b>127</b> | <b>56</b> | <b>24</b> | <b>18</b> | <b>12</b> | <b>6</b> |

WESTSIDE SUBWAY EXTENSION

Table 2-4: Westside Subway Extension Schedule

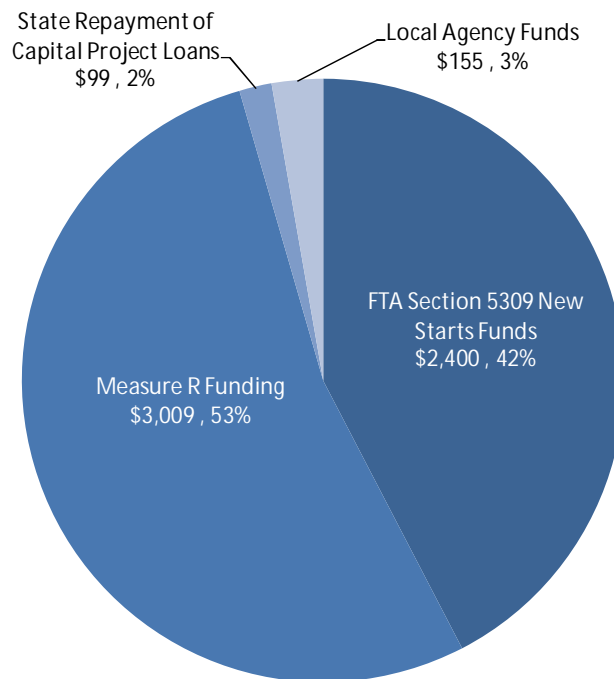
| SCHEDULE                                                       |            | (Rev.14, August 5, 2011) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------------------------------------------------------|------------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Los Angeles County Metropolitan Transportation Authority       |            | Today's Date             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Westside Subway Extension Project - Advance Construction       |            | Yr of Base Year \$       |      | 2011 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| LPA Alignment Constellation Blvd                               |            | Yr of Revenue Ops        |      | 2022 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Insert comments, notes, etc.                                   | Start Date | End Date                 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
| <b>Preliminary Engineering</b>                                 | 11/01/10   | 10/31/11                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Design                                                         |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Develop cost estimate, schedule, ridership forecast            |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Conduct reviews                                                |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Develop FEIS, receive Record of Decision                       |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Submit request / receive FTA approval to enter Final Design    |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| <b>Final Design</b>                                            | 07/19/12   | 03/17/14                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Develop the contract documents for the Build Alternative       |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Develop cost estimate, schedule                                |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Acquire real estate; relocate households and businesses        |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Conduct reviews                                                |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Submit request / receive FTA approval for FFGA                 |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Issue requests for bids, make awards of construction contracts |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| <b>Construction</b>                                            | 07/11/14   | 08/27/22                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Construct fixed infrastructure                                 |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Finalize real estate acquisitions and relocations              |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Acquire and test vehicles                                      |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| <b>Revenue Ops / Closeout of Project</b>                       | 08/27/22   | 08/28/23                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Revenue Operations                                             |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Before and After Study; Two years post Rev Ops                 |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Fulfillment of the New Starts funding commitment               |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Completion of project close-out, resolution of claims          |            |                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

\* Note: schedule milestones are shown in fiscal years.

### 2.1.3 Westside Subway Extension Capital Funding Sources

The proposed capital sources of funds for the Westside Subway Extension project are summarized in Figure 2-2. The project funding plan relies on the following sources of funds: FTA Section 5309 New Starts funds, Measure R Funding, State Repayment for Capital Project Loans, and Local Agency Funds.

Figure 2-2: Westside Subway Extension Sources of Funds (YOE \$M)



Federal Section 5309 New Starts funds requested for the Westside Subway Extension project total \$2,400 million, an amount equal to 42 of the total capital cost including finance charges.

The remaining \$3,263 million, or 58 percent of total capital costs, will be funded through the following local sources:

***\$3,009 million in Measure R revenue:*** Measure R is a 1/2-cent transportation sales tax approved in November 2008 by Los Angeles County voters to meet the transportation needs of the County. This is the third half-cent transportation sales tax within the County (the others being Proposition A and Proposition C; please see Section 3 for a detailed description of the two measures). Collection of the tax began on July 1, 2009, for public transit and highway purposes (rail expansion, local street and highway improvements, traffic reduction, better public transportation, and quality of life) for a period of 30 years. LACMTA is responsible for administering Measure R revenues. Measure R revenues flow to LACMTA which then allocates the revenues in accordance with legally binding allocation rules delineated by Los Angeles County Ordinance #08-01 (the Ordinance approving Measure R), LACMTA Formula Allocation Procedure, and LACMTA Board actions. Ordinance #08-01 mandates that 65 percent of Measure R revenues are to be allocated to rail or bus transit. Further, Ordinance

#08-01 specifies that 35 percent of Measure R revenues must be allocated to the twelve capital expansion projects included in the long-range plan that it delineates.

Overall, Measure R is expected to generate nearly \$36 billion in revenues from FY 2010 to FY 2040. Of that \$36 billion, approximately \$12.3 billion (or approximately 35 percent of total revenues) is mandated to be allocated to the twelve capital expansion projects included in the long-range capital plan by Ordinance #08-01. As outlined in the Measure R expenditure plan, which is included in Ordinance #08-01, the Westside Subway Extension project is legislated to receive a minimum of \$900 million and up to \$4,074 million (in 2008 dollars) in Measure R funding.

The \$3,009 million in Measure R funding that is planned for the project represents 53 percent of the total Westside Subway Extension project costs and is less than the \$4,074 million (2008 dollars) limit that the project is permitted to receive. Approximately \$387 million of the Measure R revenues will be utilized as cash. The remaining \$2,622 million will be leveraged to accommodate the accelerated completion schedule of America Fast Forward. The LACMTA Board has placed a high priority on completion of the Westside Subway Extension and eleven other projects as an objective of America Fast Forward. On April 23, 2010, the LACMTA Board of Directors approved a resolution to support the acceleration of construction of twelve high-priority transit capital projects, including the Westside Subway Extension.

***\$155 million in local agency funds:*** The Measure R Expenditure Plan, as delineated in Ordinance #08-01, assumes that local jurisdictions will provide 3 percent of proposed total project costs.

On April 28, 2010, the Council of the City of Los Angeles approved Council File No. 09-0600-S48. Included in Council File No. 09-0600-S48 is approval of an accelerated 3 percent local match for Measure R projects within the City of Los Angeles, which includes funding for the Westside Subway Extension consistent with the accelerated America Fast Forward schedule.

***\$99 million in State repayment for capital project loans:*** The FY 2010 LACMTA budget included a “Special Revenue Other” fund balance of \$297.0 million in AB 3090 and Traffic Congestion Relief Program (TCRP) which reflects repayment from the State of California of previous capital project loans. These capital reimbursements (Fund 3562, Repayment from State of Capital Project Loans) are for advances made by LACMTA to the State in lieu of capital project funding that could not be provided by the State on the originally programmed schedule. LACMTA assumes that these funds must be used for capital purposes only. As they are reimbursements for prior capital expenses, the funds are flexible for many transportation capital purposes, including subway uses now prohibited by Proposition A and Proposition C. These funds are already in LACMTA’s accounts and available for use. Table 2-5 represents LACMTA’s June 30, 2011 Trial Balance and fund breakdown for this source. The figure reflects the following:

- July 1, 2010 beginning balance was \$307.5 million;
- Net investment earnings were \$6.5 million;
- Expenditures between July 1, 2010 and June 30, 2011 were \$60.9 million; and
- June 30, 2011 ending balance was \$253.2 million.

The fund’s June 30, 2011 balance is allocated between cash and cash equivalents, investments, interest receivable, leases and other, and notes receivable

Table 2-5: LACMTA June 30, 2011 Trail Balance: Fund 3562, Repayment from State of Capital Project Loans (\$M)

| Fund 3562 Trial Balance                                    |        |
|------------------------------------------------------------|--------|
| Fund 3562 Fund Balance (July 1, 2010)                      | \$308  |
| Plus: Net Investment Earnings                              | \$6    |
| Minus: Expenditures Between July 1, 2010 and June 30, 2011 | \$(61) |
| Fund 3562 Fund Balance (June 30, 2011)                     | \$253  |
| Fund 3562 Asset Breakdown                                  |        |
| Cash and Cash Equivalents                                  | \$78   |
| Investments                                                | \$133  |
| Interest Receivable                                        | \$2    |
| Leases and Other                                           | \$40   |
| Notes Receivable                                           | \$0    |
| Fund 3562 Fund Balance (July 1, 2010)                      | \$253  |

LACMTA is taking advantage of the flexibility of this source by assuming the use of the funds, in part, for leveraging federal New Starts funds for planned subway construction projects, including the Westside Subway Extension.

LACMTA has programmed \$99 million in Reimbursement Fund revenue for the Westside Extension. These funds will be used on project expenditures in FY 2012 and FY 2013 and represent only 2 percent of total project expenditures.

In summary, 58 percent of the total Westside Subway Extension capital costs will be funded with non-Federal funding. Of this amount, the majority (95 percent) will come from Measure R funding and repayment of state capital funding. These funds should be considered fully committed. The remaining 3 percent will come from local funding sources, which are committed through local agency funds, as directed by Ordinance #08-01. These funds should be considered programmed.

#### 2.1.4 Westside Subway Extension Capital Financing Strategy

As originally planned, Measure R was expected to generate the revenues necessary to fund the non-Federal contribution for the Westside Subway Extension on a pay-as-you-go basis. However, to meet the accelerated schedules of all twelve projects in America Fast Forward, LACMTA intends to leverage Measure R funds through debt financing. This financial plan assumes that LACMTA will leverage \$2,622 million in Measure R revenues for the Westside Subway Extension project using the following financial instruments.

***\$641 million Measure R backed Transportation Infrastructure Finance and Innovation Act (TIFIA) loan:*** It is anticipated that the Westside Subway Extension project will receive a \$641 million TIFIA direct loan backed by future Measure R revenues. LACMTA submitted a letter of interest to the U.S. Department of Transportation (USDOT) for a \$640.8 million TIFIA loan. In July 2011, LACMTA was informed that USDOT had invited LACMTA to submit a formal application for the TIFIA loan. LACMTA intends to submit an application following a Record of Decision for the project.

The interest rate on the \$641 million in TIFIA proceeds is assumed to be equal to the 3.43 percent. The loan is expected to be paid back over an 18 year period. The loan will be backed by future Measure R revenues; all debt service payments on the 18 year loan will be paid with Measure R revenues.

***\$1,982 million Measure R backed Qualified Transportation Improvement Bonds (QTIBs):*** It is proposed that the project receive \$1,982 million in Measure R backed QTIB revenues. QTIBs represent a new category of direct subsidy tax-preferred bonds for transit initiatives of national significance, and are pending legislative approval as part of pending or future tax legislation. It is proposed that the federal interest subsidy would be set at 100 percent of the interest rate on the bonds and the bond principal repayment must be backed by non-federal revenue source, such as Measure R. QTIBs are proposed to be enacted as part of a pilot program, through which the Secretary of Transportation would select nationally significant projects or programs of projects, such as America Fast Forward, based on high benefit-cost ratios or other project parameters.

Eligible projects would include public transportation projects, or programs of projects, that significantly reduce greenhouse gases or emissions, have an estimated capital cost in excess of \$1 billion, and derive not more than 30 percent of their capital cost funding from federal New Starts funds. For LACMTA, the 30 percent limit applies to the amount of New Starts funding within the entire America Fast Forward program of projects. LACMTA intends to fund only 22 percent of the America Fast Forward program with Federal funds.

The creation of a QTIB type financing instrument is not unprecedented. Since 1997, Congress has enacted half a dozen separate programs authorizing state and local governments to issue tax-preferred debt at or near zero percent. These programs, totaling in excess of \$37 billion, have been for purposes such as public education, Gulf and Midwestern disaster recovery, clean renewable energy, forestry conservation and energy conservation. The interest subsidies are designed to provide federal buy-downs of 70 percent to 100 percent of borrowers' interest expense. Each program has a volume cap and maturity limitation associated with it.

The \$1,982 million in QTIB proceeds are assumed to be fixed-rate serial bonds with a 30-year amortization and level principal payments. The bonds' interest rates are assumed to be 5.5 percent. Similar to the assumed TIFIA financing, the QTIBs will be backed by future Measure R revenues and will be paid back only with future Measure R revenues.

***\$1,050 million FTA Section 5309 New Starts backed Capital Grant Receipt Revenue Bonds:*** LACMTA anticipates receipt of the FTA Section 5309 New Starts funding, assuming annual appropriations of not more than \$150 million from FY 2013 - FY 2028. This payment schedule is not consistent with the project's cash flow requirements during the construction period. As such, LACMTA will issue a total of \$1,135 million in FTA Section 5309 Capital Grant Receipt Revenue Bonds in FY 2013 through FY 2018. Financing charges for the bonds will total \$473 million assuming a 4.0 percent interest rate.

As described in more detail in Section 3, LACMTA plans to receive \$7,999 million revenue from Measure R backed debt instruments to fund America Fast Forward (allocated between QTIBs, TIFIA loans, BABs, tax exempt bonds, and commercial paper issuances). A total of \$9,820 million in debt service payments will be paid with Measure R revenues between FY 2011 and FY 2039. Given this debt service schedule, a minimum annual debt service coverage ratio of 0.84 is anticipated to occur in

FY 2019. Over the FY 2011 to FY 2039 time period, the average annual debt service coverage ratio is a respectable 1.84.

As the Westside Subway Extension progresses through PE, the financial plan will be revised based on cost and schedule changes, market conditions, and legislative developments. For a more detailed discussion on the overall capital financing strategy for America Fast Forward, please see Section 3.

### **Short-Term Financing**

In the event of short-term cash flow needs, LACMTA has access to a commercial paper program. Commercial Paper Notes are issued by LACMTA to fund capital projects on a short-term basis prior to being permanently financed with long-term bonds or receiving grant funding. LACMTA issues both taxable and tax-exempt commercial paper notes, with original maturity dates ranging from one to 270 days, at various interest rates. Under the terms of the notes, LACMTA can roll-over the principal amounts due for additional periods.

In addition, LACMTA utilizes a Proposition A Commercial Paper Program which is authorized up to \$350 million; and a Proposition C Commercial Paper Program that is authorized up to \$150 M. The outstanding amount of commercial paper as of July 2011 is \$ 143.7 million.

#### **2.1.5 Westside Subway Extension Sources and Uses of Funds**

The proposed sources and uses of funds, by year, for the Westside Subway Extension project are summarized in Table 2-6. As previously mentioned, FTA Section 5309 funds represent 42 percent of the capital project requirements. The other 58 percent of capital funds are provided by local funding sources that are either planned or budgeted by LACMTA.

Table 2-6: Westside Subway Extension Sources and Uses of Funds

|                                             | FY11        | FY12        | FY13         | FY14         | FY15           | FY16         | FY17         | FY18         | FY19         | FY20         | FY21         | FY22         | FY23        | FY24        | FY25        | FY26        | FY27        | FY28       | Total          | Percent of Total |
|---------------------------------------------|-------------|-------------|--------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|------------|----------------|------------------|
| <b>Uses of Funds</b>                        |             |             |              |              |                |              |              |              |              |              |              |              |             |             |             |             |             |            |                |                  |
| Westside Subway Extension                   | \$21        | \$44        | \$606        | \$656        | \$995          | \$743        | \$470        | \$543        | \$507        | \$343        | \$133        | \$67         | \$-         | \$-         | \$-         | \$-         | \$-         | \$-        | \$5,129        | 90.6%            |
| Finance Charges                             | \$-         | \$-         | \$8          | \$29         | \$30           | \$33         | \$34         | \$43         | \$43         | \$43         | \$43         | \$50         | \$61        | \$56        | \$24        | \$18        | \$12        | \$6        | \$534          | 9.4%             |
| <b>TOTAL USES OF FUNDS</b>                  | <b>\$21</b> | <b>\$44</b> | <b>\$614</b> | <b>\$685</b> | <b>\$1,026</b> | <b>\$777</b> | <b>\$504</b> | <b>\$586</b> | <b>\$550</b> | <b>\$386</b> | <b>\$175</b> | <b>\$116</b> | <b>\$61</b> | <b>\$56</b> | <b>\$24</b> | <b>\$18</b> | <b>\$12</b> | <b>\$6</b> | <b>\$5,662</b> | <b>100.0%</b>    |
| <b>Sources of Funds</b>                     |             |             |              |              |                |              |              |              |              |              |              |              |             |             |             |             |             |            |                |                  |
| FTA Section 5309 New Starts Funds           | \$-         | \$-         | \$150        | \$150        | \$150          | \$150        | \$150        | \$150        | \$150        | \$150        | \$150        | \$150        | \$150       | \$150       | \$150       | \$150       | \$150       | \$150      | \$2,400        | 42.4%            |
| 5309 Capital Grant Rcpt Rev Bonds Proceeds  | \$-         | \$-         | \$202        | \$506        | \$43           | \$74         | \$28         | \$208        | \$-          | \$74         | \$-          | \$-          | \$-         | \$-         | \$-         | \$-         | \$-         | \$-        | \$1,135        | 20.0%            |
| 5309 Capital Grant Rcpt Rev Bonds Repayment | \$-         | \$-         | \$-          | \$-          | \$-            | \$-          | \$-          | \$-          | \$(80)       | \$-          | \$(72)       | \$(83)       | \$(150)     | \$(150)     | \$(150)     | \$(150)     | \$(150)     | \$(150)    | \$(1,135)      | -20.0%           |
| QTIBs backed by Measure R                   | \$-         | \$-         | \$228        | \$29         | \$833          | \$553        | \$35         | \$12         | \$182        | \$56         | \$55         | \$-          | \$-         | \$-         | \$-         | \$-         | \$-         | \$-        | \$1,982        | 35.0%            |
| TIFIA Loan backed by Measure R              | \$-         | \$-         | \$-          | \$-          | \$-            | \$-          | \$282        | \$182        | \$113        | \$64         | \$-          | \$-          | \$-         | \$-         | \$-         | \$-         | \$-         | \$-        | \$641          | 11.3%            |
| Measure R Funding                           | \$-         | \$-         | \$-          | \$-          | \$-            | \$-          | \$-          | \$31         | \$43         | \$43         | \$43         | \$50         | \$61        | \$56        | \$24        | \$18        | \$12        | \$6        | \$387          | 6.8%             |
| Local Agency Funds                          | \$-         | \$-         | \$-          | \$-          | \$-            | \$-          | \$9          | \$3          | \$142        | \$-          | \$-          | \$-          | \$-         | \$-         | \$-         | \$-         | \$-         | \$-        | \$155          | 2.7%             |
| State Repay Capital Projects                | \$21        | \$44        | \$34         | \$-          | \$-            | \$-          | \$-          | \$-          | \$-          | \$-          | \$-          | \$-          | \$-         | \$-         | \$-         | \$-         | \$-         | \$-        | \$99           | 1.7%             |
| <b>TOTAL SOURCES OF FUNDS</b>               | <b>\$21</b> | <b>\$44</b> | <b>\$614</b> | <b>\$685</b> | <b>\$1,026</b> | <b>\$777</b> | <b>\$504</b> | <b>\$586</b> | <b>\$550</b> | <b>\$386</b> | <b>\$175</b> | <b>\$116</b> | <b>\$61</b> | <b>\$56</b> | <b>\$24</b> | <b>\$18</b> | <b>\$12</b> | <b>\$6</b> | <b>\$5,662</b> | <b>100.0%</b>    |

## WESTSIDE SUBWAY EXTENSION



## 2.2 Operating Plan for the Westside Subway Extension Project

This section describes the O&M costs and revenues associated with the continued operation of the Westside Subway Extension project from the initiation of service in FY 2022 through FY 2040.

### 2.2.1 Operating Costs

Annual operating and maintenance (O&M) costs for the Westside Subway Extension reflects the same methodology used by LACMTA for system-wide rail O&M costs. As described in more detail in Section 3, rail O&M costs in LACMTA’s financial forecast are estimated based on the change in annual revenue vehicle service hours combined with an escalation rate based on local consumer price index (CPI) forecasts from the UCLA Anderson Forecast.

Once implemented, the Westside Subway Extension will operate as an extension of LACMTA’s existing Purple Line. Annual operating costs for the Westside Subway Extension reflect projected incremental increases in revenue vehicle service hours for the existing Purple Line.

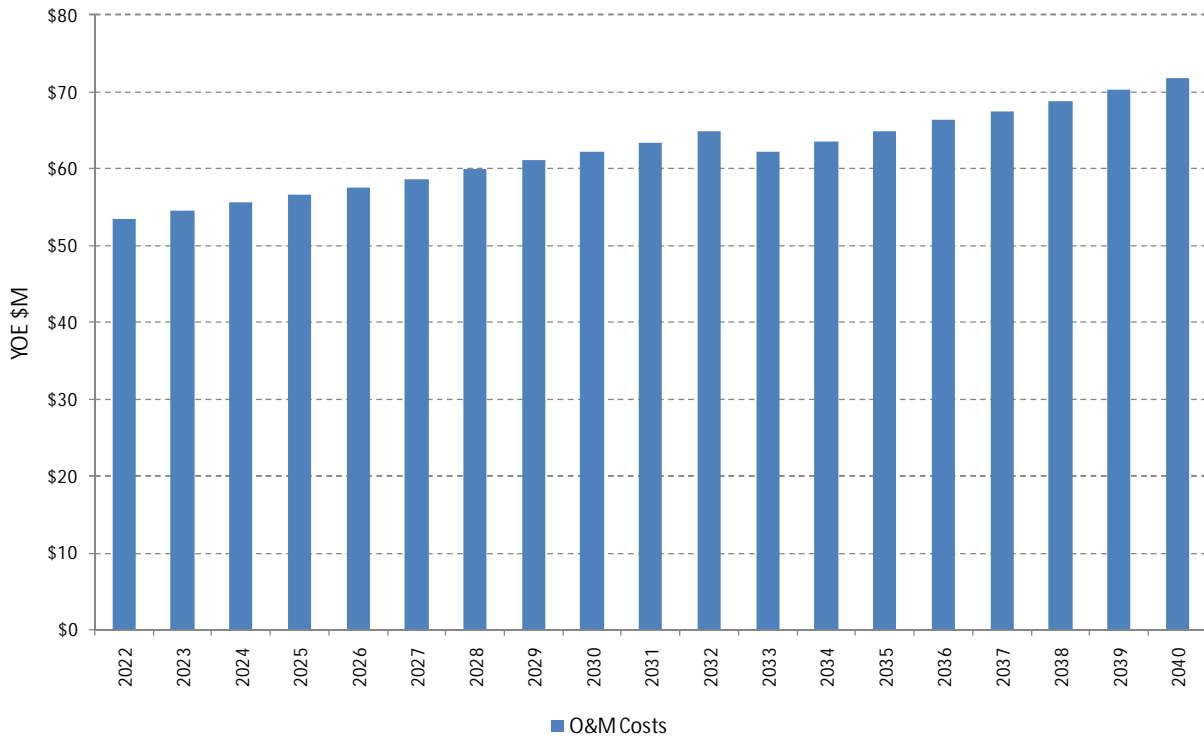
Table 2-7 summarizes the Westside Subway Extension’s annual revenue service vehicle hours and Figure 2-3 summarizes annual O&M costs estimated over the FY 2022 to FY 2040 period. As shown in the table and figure, revenue service hours are projected to remain relatively stable which results in O&M costs increasing an average of 1.64 percent per year during the 18 year period.

Table 2-7: Westside Subway Extension Revenue Service Vehicle Hours – FY 2022 to FY 2040

| FY   | Revenue Vehicle Service Hours |
|------|-------------------------------|
| 2022 | 142,850                       |
| 2023 | 142,850                       |
| 2024 | 143,270                       |
| 2025 | 142,850                       |
| 2026 | 142,850                       |
| 2027 | 142,850                       |
| 2028 | 143,270                       |
| 2029 | 142,850                       |
| 2030 | 142,850                       |
| 2031 | 142,850                       |
| 2032 | 143,270                       |
| 2033 | 142,850                       |
| 2034 | 142,850                       |
| 2035 | 142,850                       |
| 2036 | 143,270                       |
| 2037 | 142,850                       |
| 2038 | 142,850                       |
| 2039 | 142,850                       |
| 2040 | 143,270                       |



Figure 2-3: Westside Subway Extension Annual O&M Costs: FY 2022 to FY 2040 (YOE \$M)



### 2.2.2 Operating Revenue Sources

The annual O&M costs associated with the Westside Subway Extension are projected to be funded as part of the operation of LACMTA’s overall rail system. On this basis, LACMTA’s financial forecast does not allocate revenue sources to individual lines. As discussed in detail in Section 3, the rail operations plan forecasts revenue levels to meet system-wide operating costs. O&M revenue sources discussed in Section 3 include the following:

- Fare revenue;
- Proposition A sales tax;
- Proposition C sales tax;
- Measure R sales tax;
- Other Non-Operating revenue (Advertising, Lease Revenue)
- State Transit Assistance;
- FTA Section 5309 Fixed Guideway Modernization; and
- FTA Section 5340 Growing States and High Density funding.



## 3.0 LACMTA SYSTEMWIDE FINANCIAL PLAN

### 3.1 LACMTA Capital Plan

This section will discuss LACMTA's historic and forecasted capital sources and uses of funds. It will first discuss LACMTA's historic sources of funds. It will then detail LACMTA's various projected sources of funds. Next, a brief overview of LACMTA's Capital Program will be provided prior to discussing LACMTA's current state of good repair assessment and outlining LACMTA's capital expenditure forecast. LACMTA's proposed America Fast Forward financial plan will then be detailed and analyzed. Finally, LACMTA's projected sources and uses of funds for rail and bus through 2040 will be provided.

All revenue and cost assumptions presented are as delineated in the Los Angeles County MTA Countywide Forecasting Model for FY 2010 to FY 2040 prepared for America Fast Forward and dated August 19, 2011. The forecast is a derivative of the FY 2009 Long Range Transportation Plan and reflects changes implemented by the Board's approved 30/10 Initiative strategy.

The Long Range Transportation Plan is the guiding policy behind funding decisions on transportation projects and programs in Los Angeles County. Major capital projects and programs that are identified in the 2009 LRTP have priority for future programming of funds. While these projects and programs require further Board approval at various stages of their development, they are priorities for further planning, design, construction, and the pursuit of additional funding.

The LRTP is a balanced plan that strategically expands and enhances the current infrastructure and makes the most of LACMTA's previous transportation resources. It honors past LACMTA commitments for now and the future, and builds new priorities into the new LRTP. The 2009 LRTP lays out a 30-year strategy for keeping Los Angeles County moving and is based on financial forecast of continued economic growth and moderate inflation. LACMTA's commitment to maintain and improve Los Angeles County's transportation system will depend on funding availability and strategies for obtaining new or increased funding.

LACMTA Board policy provides direction on how the America Fast Forward roll-out should be conducted so as to ensure that LRTP priorities are maintained. Recommendations 1.a. and 1.b. of the 30/10 Initiative Board Report, Board Item #33 (April 2010), established the following conditions:

- a. *"A specific MTA Board action is required to re-program highway capital project funding for use on transit capital projects as result of 30/10, unless such re-programming does not result in a net decrease to the highway capital project funding;*
- b. *Likewise, a specific MTA Board action is required to re-program transit capital project funding for use on highway capital projects as a result of 30/10, unless such re-programming does not result in a net decrease to the transit capital project funding."*

This board policy restricts the potential for funding dedicated to the transit projects in the America Fast Forward program, including the Regional Connector and the Westside Subway Extension, to be diverted to highway purposes in the LRTP. Accordingly, this financial plan focuses on the capital funding sources used for the long-term bus and rail capital needs. Additional information on the

sources of funding utilized by LACMTA for transit capital needs is provided in the following sections.

### 3.1.1 LACMTA Capital Expenditure Program

LACMTA defines a capital expenditure as any acquisition or construction project that has a value of \$2,500 or greater and a useful life of more than one year. LACMTA's Capital Program (CP) is a financial plan of proposed capital projects, their costs, and schedules. The CP is designed to meet LACMTA's infrastructure needs in a responsive and efficient manner. It incorporates the current and future needs of LACMTA and is updated annually during LACMTA's annual budgeting process. Appropriations for the capital plan are approved on a life-of project basis and thus do not lapse at the end of the fiscal year. This helps to provide flexible funding over the life of a project and authorizes staff to re-appropriate unexpended revenues and expenses from prior years.

The Capital Program provides for the acquisition, construction, reconstruction, purchase of initial fixtures and equipment, renovation, rehabilitation, and replacement of facilities with a life expectancy of at least one year and any related costs for land acquisitions, land improvements, design, feasibility studies, engineering studies and engineering. It includes projects which are, or will become, the property of LACMTA.

LACMTA's capital projects are generally grouped into two major elements: major construction projects and infrastructure improvement and acquisition projects (which are further grouped into twelve elements). Each element is managed by a subject matter expert known as an Element Sponsor. The Element Sponsors are responsible for validating project need, approving the scope, ranking the projects and monitoring the project managers to ensure project completion on schedule and within budget. The project elements are as follows:

- **Major Construction Projects:** The major construction projects are those projects that add new infrastructure to the region.
- **Bus Acquisitions:** Annual procurement of buses for the LACMTA bus fleet.
- **Bus Facilities Improvements:** Construction work at bus divisions to replace and refurbish equipment and facilities and the expansion of buildings and facilities.
- **Bus Maintenance:** Annual maintenance costs for the LACMTA bus fleet.
- **Rail Facilities Improvements:** Facility expansion, safety improvements, security projects, and support equipment for rail facilities.
- **Wayside Systems:** Upgrading of stations and operating facilities, safety improvements, and maintenance and refurbishment of traction power, signals, facilities and track.
- **Rail Vehicle Maintenance:** Annual maintenance costs for the LACMTA rail vehicle fleet.
- **Rail Rehabilitation:** The schedule lifecycle rehabilitation of rail system assets.
- **IT/Communications:** The development of communications and information systems and replacement of obsolete computer equipment.
- **Non-Revenue Vehicles:** The purchase of replacement and expansion vehicles to support bus and rail operations and general LACMTA functions.

- **Warehouse Projects:** Upgrading materials handling systems and constructing storage facilities at bus and rail divisions.
- **Security Projects:** Installation and upgrades for system-wide security assets.
- **Other Capital Projects:** All other projects not captured in the aforementioned elements.

The annual updates to LACMTA's Capital Program allow LACMTA to ensure that their capital preservation needs are adequately financed on an annual basis and that they maintain a state of good repair. One metric that helps as a measure of LACMTA's current capital condition is average bus fleet age. In 1998, the LACMTA Board adopted a policy with a goal of reducing the average bus fleet age to 6 years. As is delineated in LACMTA's FY 2010 National Transit Database submission, LACMTA's average bus fleet age was 9.5 years. However according to the agency's bus fleet management plan dated July 2011, as of June 2011, LACMTA's average bus fleet age was 7.2 years, and is projected to drop to 6.0 years by FY 2020.

#### 3.1.1.1 State of Good Repair

LACMTA has sought to ensure that its system remains in a state of good repair (SGR), consistent with the FTA definitions. In August 2009, LACMTA introduced a SGR initiative to begin the task of assessing the condition of the agency's assets. LACMTA Rail Operations took the lead in developing the program and began work on identifying assets. In September 2009, FTA requested the following data for an expanded SGR study: Guideway, Facilities, Systems, Stations, Non-Revenue Vehicles, Transit Mode, Asset Classification, Quantity, In-Service Date/Age, and Estimated Replacement Cost. Staff collected the data from many sources, including existing lists of equipment maintained by various departments, interviews with subject matter experts, and a 2001 LACMTA Inventory Report.

LACMTA's asset data was entered into the FTA's Transit Economic Requirements Model (TERM) software. TERM is a decision support tool that estimates capital needs for asset rehabilitation and replacement by simulating the asset life cycle – including maintenance, rehabilitation and replacement. The Rehabilitation and Replacement Module in TERM uses asset deterioration schedules (decay curves) to predict the useful life and replacement date of capital assets. The deterioration schedules were created using empirical asset condition data obtained from on-site asset condition inspections of bus and rail transit assets at more than 50 different U.S. transit properties. LACMTA staff obtained the deterioration schedules used by TERM. The deterioration schedules assume no geographical or weather variations and that proper preventive maintenance is performed on the assets.

TERM uses a 5-point rating system defined in Table 3-1. The threshold for considering an asset to be in a state of good repair is when the condition rating is 2.5 (the mid-point between adequate and marginal) or higher.

The preliminary analysis also shows that nearly all rail assets are currently in "adequate" condition or better. The first rail line began revenue service in 1990, so no rail assets are older than 20 years. Since the FTA deterioration schedules are based on nationwide empirical data without accounting for varying geographical or weather conditions, it is likely that LACMTA assets are in better condition than the deterioration schedules suggest, as the Los Angeles region is not subject to the extreme winter conditions experienced by other metropolitan regions.

Table 3-1: Transit Economic Requirements Model Condition Ratings

| Condition Rating | Description                                                                                                        |
|------------------|--------------------------------------------------------------------------------------------------------------------|
| 4.8 – 5.0        | Excellent, new or like new asset; no visible defects                                                               |
| 4.0 – 4.7        | Good asset showing minimal signs of wear; some (slightly) defective or deteriorated component(s)                   |
| 3.0 – 3.9        | Adequate asset has reached its mid-life (condition 3.5); some moderately defective or deteriorated component(s)    |
| 2.0 – 2.9        | Marginal asset reaching or just past its useful life (condition 2.5); increasing number of deteriorated components |
| 1.0 – 1.9        | Poor asset past its useful life; in need of replacement; may have critically damaged component(s)                  |

The total lengths of the various types of track guideway and track are the current best estimates obtained from the track department. LACMTA asset conditions vary between poor and excellent. The TERM deterioration schedules were used to obtain decay conditions for the assets in the capital asset inventory. The results are summarized in Table 3-2. These results do not include revenue vehicles.

Table 3-2: LACMTA Rail System TERM Condition Ratings

| Term                           | Condition Rating | Age    |
|--------------------------------|------------------|--------|
| Heavy Rail                     | 2.00 - 4.99      | 0 - 17 |
| Light Rail                     | 1.90 - 5.00      | 0 - 19 |
| Heavy/Light Rail Common Assets | 1.04 - 5.00      | 0 - 30 |

LACMTA staff used the capital asset inventory and prototype SGR database developed in response to FTA’s data request to develop a capital expenditure forecast of SGR requirements for its existing assets. The database estimates are only for the cost to rehabilitate assets currently overdue for rehabilitation and for future rehabilitation of present assets. The estimates do not include new assets for new lines, capacity enhancements, or other improvements. These estimates also represent the minimum funding level needed to prevent the assets from reaching “poor” condition. The annual estimates do not take into consideration the term of project delivery and do not spread the cash flow over the several years that asset rehabilitation may take. Therefore, the actual projected cash flow required in the capital expenditure forecast is flatter than the estimates would suggest. The database estimates for current rail and bus rapid transit lines were used as the basis for the SGR costs in the capital expenditure forecast. The database is being updated and LACMTA is working with FTA to use the data to test FTA’s new TERM Lite software.

SGR costs were escalated at the CPI rates delineated in the UCLA Anderson Forecast. SGR costs for future rail lines in the capital expenditure forecast are based on a methodology developed for a LACMTA asset inventory study. The forecast is based on actual rehabilitation and replacement costs experienced by the Washington Metropolitan Area Transit Authority (WMATA) compared to original installation capital costs. The LACMTA rail SGR costs were calculated in the same manner based on the original installation capital costs of the Metro Blue, Red, Gold and Green Lines. The SGR costs are estimated to begin six years after a rail line begins revenue operations. SGR costs for future rail

lines were assumed to escalate at the CPI growth rates specified in the July 2010 UCLA Anderson Forecast.

### 3.1.1.2 Other Capital Expenditures

Capital expansion costs other than SGR are included in the capital expenditure forecast at the project level and can include major construction projects (capital expansion), vehicle procurements, facilities and vehicle maintenance, among other project types. Vehicle procurement costs and other facility, infrastructure, and vehicle procurements/maintenance are assumed to escalate at the CPI rate determined in the UCLA Anderson Forecast. Major construction capital expansion projects, such as the twelve America Fast Forward capital expansion projects, are assumed to escalate at 1 percent in FY 2011, 2 percent in FY 2012, and 3 percent annually from FY 2013 and beyond.

The rail capital expenditure forecast through FY 2040 is delineated in Table 3-3. The two largest components of the rail capital expenditure forecast through FY 2040 are major projects and debt service. It should be noted that 7 percent of projected capital expenditures are allocated to SGR improvements on existing rail lines, while another 7 percent is dedicated to SGR for proposed rail lines. Notable components of the Miscellaneous Improvements category include Metrolink capital costs, certain light rail yard projects, and contingencies. The contingencies represent annual balances of Measure R (2%), Measure R (3%), and Measure R (35%) without regard for prior year carryovers. The annual amount is negative in the forecast when some of the prior cumulative balance is used. Figure 3-1 delineates the capital expenditure allocations among expenditure types in the capital expenditure forecast through FY 2040. Figure 3-2 shows the annual capital expenditures broken out by category. As is consistent with America Fast Forward, the majority of capital spending on major projects occurs within the next 10 years, whereas debt service payments increase steadily in the 20 years after.

Table 3-3: Rail Capital Expenditure Forecast through FY 2040 (YOE \$M)

| FY   | Major Projects |                    | State of Good Repair Existing Lines |                    | State of Good Repair Future Lines |                    | Vehicles       |                    | System Improvements |                    | General Improvements |                    | Other Miscellaneous Improvements |                    | Debt Service   |                    | Total          |                    |
|------|----------------|--------------------|-------------------------------------|--------------------|-----------------------------------|--------------------|----------------|--------------------|---------------------|--------------------|----------------------|--------------------|----------------------------------|--------------------|----------------|--------------------|----------------|--------------------|
|      | Cost (YOE \$M) | Annual Growth Rate | Cost (YOE \$M)                      | Annual Growth Rate | Cost (YOE \$M)                    | Annual Growth Rate | Cost (YOE \$M) | Annual Growth Rate | Cost (YOE \$M)      | Annual Growth Rate | Cost (YOE \$M)       | Annual Growth Rate | Cost (YOE \$M)                   | Annual Growth Rate | Cost (YOE \$M) | Annual Growth Rate | Cost (YOE \$M) | Annual Growth Rate |
| 2011 | \$498          | N/A                | \$46                                | N/A                | \$0                               | N/A                | \$33           | N/A                | \$66                | N/A                | \$0                  | N/A                | \$856                            | N/A                | \$251          | N/A                | \$1,750        | N/A                |
| 2012 | \$750          | 50.5%              | \$1                                 | -98.4%             | \$0                               | N/A                | \$22           | -33.4%             | \$3                 | N/A                | \$71                 | N/A                | (\$4)                            | -100.5%            | \$292          | 16.3%              | \$1,135        | -35.2%             |
| 2013 | \$1,635        | 118.0%             | \$15                                | 1900.0%            | \$0                               | N/A                | \$33           | 47.1%              | \$0                 | -93.8%             | \$25                 | -64.8%             | \$668                            | -15114.7%          | \$345          | 18.2%              | \$2,722        | 139.9%             |
| 2014 | \$1,931        | 18.1%              | \$12                                | -20.7%             | \$0                               | N/A                | \$46           | 41.8%              | \$0                 | 100.0%             | \$15                 | -40.0%             | (\$481)                          | -172.0%            | \$381          | 10.4%              | \$1,904        | -30.0%             |
| 2015 | \$2,647        | 37.1%              | \$0                                 | -100.0%            | \$0                               | N/A                | \$201          | 335.9%             | \$6                 | 1291.4%            | \$14                 | -7.3%              | \$1,461                          | -403.5%            | \$532          | 39.7%              | \$4,861        | 155.3%             |
| 2016 | \$2,235        | -15.6%             | \$0                                 | N/A                | \$0                               | N/A                | \$119          | -40.7%             | \$30                | 436.5%             | \$15                 | 7.9%               | (\$1,234)                        | -184.4%            | \$543          | 1.9%               | \$1,708        | -64.9%             |
| 2017 | \$1,778        | -20.4%             | \$0                                 | N/A                | \$0                               | N/A                | \$47           | -60.6%             | \$68                | 126.6%             | \$20                 | 36.7%              | \$324                            | -126.2%            | \$598          | 10.2%              | \$2,835        | 66.0%              |
| 2018 | \$1,688        | -5.1%              | \$0                                 | N/A                | \$0                               | N/A                | \$98           | 108.6%             | \$82                | 21.7%              | \$30                 | 47.2%              | (\$267)                          | -182.4%            | \$615          | 2.8%               | \$2,247        | -20.8%             |
| 2019 | \$989          | -41.4%             | \$0                                 | N/A                | \$0                               | N/A                | \$5            | -95.4%             | \$91                | 10.9%              | \$29                 | -4.2%              | \$68                             | -125.3%            | \$830          | 35.1%              | \$2,011        | -10.5%             |
| 2020 | \$418          | -57.7%             | \$283                               | N/A                | \$7                               | N/A                | \$84           | 1761.4%            | \$74                | -19.1%             | \$54                 | 86.9%              | \$34                             | -49.8%             | \$739          | -11.0%             | \$1,693        | -15.8%             |
| 2021 | \$183          | -56.2%             | \$247                               | -12.6%             | \$9                               | 30.1%              | \$83           | -0.6%              | \$35                | -52.8%             | \$55                 | 2.0%               | \$16                             | -51.8%             | \$819          | 10.8%              | \$1,448        | -14.5%             |
| 2022 | \$87           | -52.8%             | \$351                               | 41.8%              | \$15                              | 64.0%              | \$66           | -21.0%             | \$29                | -18.3%             | \$56                 | 2.0%               | \$90                             | 452.3%             | \$835          | 1.9%               | \$1,528        | 5.5%               |
| 2023 | \$15           | -82.7%             | \$179                               | -48.9%             | \$19                              | 24.8%              | \$35           | -47.4%             | \$84                | 194.1%             | \$57                 | 1.9%               | \$105                            | 16.2%              | \$853          | 2.1%               | \$1,346        | -11.9%             |
| 2024 | \$0            | -100.0%            | \$235                               | 31.4%              | \$26                              | 40.0%              | \$61           | 77.2%              | \$0                 | -100.0%            | \$58                 | 1.8%               | \$11                             | -90.0%             | \$940          | 10.3%              | \$1,332        | -1.1%              |
| 2025 | \$0            | N/A                | \$481                               | 104.2%             | \$35                              | 33.1%              | \$64           | 4.9%               | \$0                 | N/A                | \$59                 | 1.9%               | \$151                            | 1334.5%            | \$880          | -6.4%              | \$1,671        | 25.4%              |
| 2026 | \$0            | N/A                | \$215                               | -55.3%             | \$47                              | 35.8%              | \$50           | -21.6%             | \$0                 | N/A                | \$61                 | 1.9%               | \$160                            | 6.0%               | \$904          | 2.7%               | \$1,437        | -14.0%             |
| 2027 | \$0            | N/A                | \$158                               | -26.5%             | \$72                              | 51.8%              | \$47           | -7.1%              | \$32                | N/A                | \$62                 | 1.9%               | \$163                            | 2.0%               | \$942          | 4.2%               | \$1,475        | 2.6%               |
| 2028 | \$0            | N/A                | \$185                               | 17.1%              | \$85                              | 17.9%              | \$109          | 133.8%             | \$10                | -68.8%             | \$63                 | 2.0%               | \$147                            | -10.2%             | \$954          | 1.2%               | \$1,552        | 5.2%               |
| 2029 | \$0            | N/A                | \$195                               | 5.7%               | \$115                             | 36.4%              | \$65           | -40.8%             | \$35                | 257.1%             | \$64                 | 2.0%               | \$165                            | 12.5%              | \$817          | -14.3%             | \$1,457        | -6.1%              |
| 2030 | \$0            | N/A                | \$22                                | -88.8%             | \$109                             | -5.9%              | \$65           | -0.2%              | \$29                | -18.8%             | \$65                 | 1.9%               | \$202                            | 22.2%              | \$790          | -3.3%              | \$1,281        | -12.1%             |
| 2031 | \$0            | N/A                | \$110                               | 402.5%             | \$224                             | 106.2%             | \$88           | 35.2%              | \$22                | -23.6%             | \$67                 | 1.9%               | \$253                            | 25.6%              | \$812          | 2.8%               | \$1,575        | 23.0%              |
| 2032 | \$0            | N/A                | \$48                                | -56.6%             | \$275                             | 22.9%              | \$70           | -19.9%             | \$0                 | -100.0%            | \$68                 | 1.9%               | \$241                            | -4.9%              | \$858          | 5.6%               | \$1,559        | -1.0%              |
| 2033 | \$0            | N/A                | \$270                               | 469.1%             | \$460                             | 67.3%              | \$2            | -97.4%             | \$0                 | N/A                | \$69                 | 1.9%               | \$256                            | 6.1%               | \$909          | 6.0%               | \$1,967        | 26.1%              |
| 2034 | \$0            | N/A                | \$50                                | -81.5%             | \$370                             | -19.6%             | \$42           | 2250.0%            | \$0                 | N/A                | \$71                 | 2.0%               | \$251                            | -2.0%              | \$971          | 6.8%               | \$1,755        | -10.8%             |
| 2035 | \$0            | N/A                | \$532                               | 962.3%             | \$371                             | 0.3%               | \$43           | 0.5%               | \$0                 | N/A                | \$72                 | 2.0%               | \$400                            | 59.6%              | \$909          | -6.4%              | \$2,327        | 32.6%              |
| 2036 | \$0            | N/A                | \$61                                | -88.5%             | \$328                             | -11.8%             | \$49           | 15.1%              | \$0                 | N/A                | \$48                 | -33.9%             | \$352                            | -12.1%             | \$979          | 7.7%               | \$1,816        | -22.0%             |
| 2037 | \$0            | N/A                | \$0                                 | -100.0%            | \$324                             | -1.2%              | \$45           | -9.0%              | \$0                 | N/A                | \$36                 | -23.9%             | \$217                            | -38.3%             | \$1,166        | 19.1%              | \$1,787        | -1.6%              |
| 2038 | \$0            | N/A                | \$15                                | 150900.0%          | \$254                             | -21.4%             | \$46           | 4.3%               | \$0                 | N/A                | \$37                 | 1.0%               | \$261                            | 20.2%              | \$1,155        | -0.9%              | \$1,768        | -1.0%              |
| 2039 | \$1,418        | N/A                | \$140                               | 827.2%             | \$395                             | 55.5%              | \$6            | -88.1%             | \$0                 | N/A                | \$14                 | -61.9%             | (\$1,237)                        | -574.4%            | \$1,280        | 10.8%              | \$2,015        | 14.0%              |
| 2040 | \$0            | -100.0%            | \$308                               | 119.9%             | \$537                             | 35.7%              | \$0            | -92.7%             | \$0                 | N/A                | \$80                 | 477.2%             | \$0                              | -100.0%            | \$724          | -43.4%             | \$1,649        | -18.2%             |

WESTSIDE SUBWAY EXTENSION



Figure 3-1: Rail Capital Expenditures – FY 2011 to FY 2040 (YOE \$M)

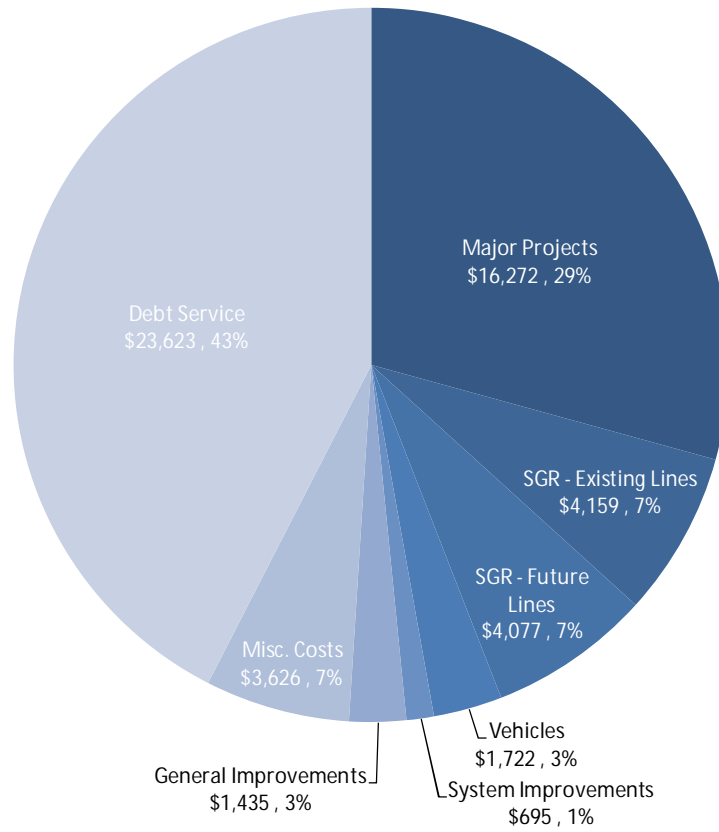
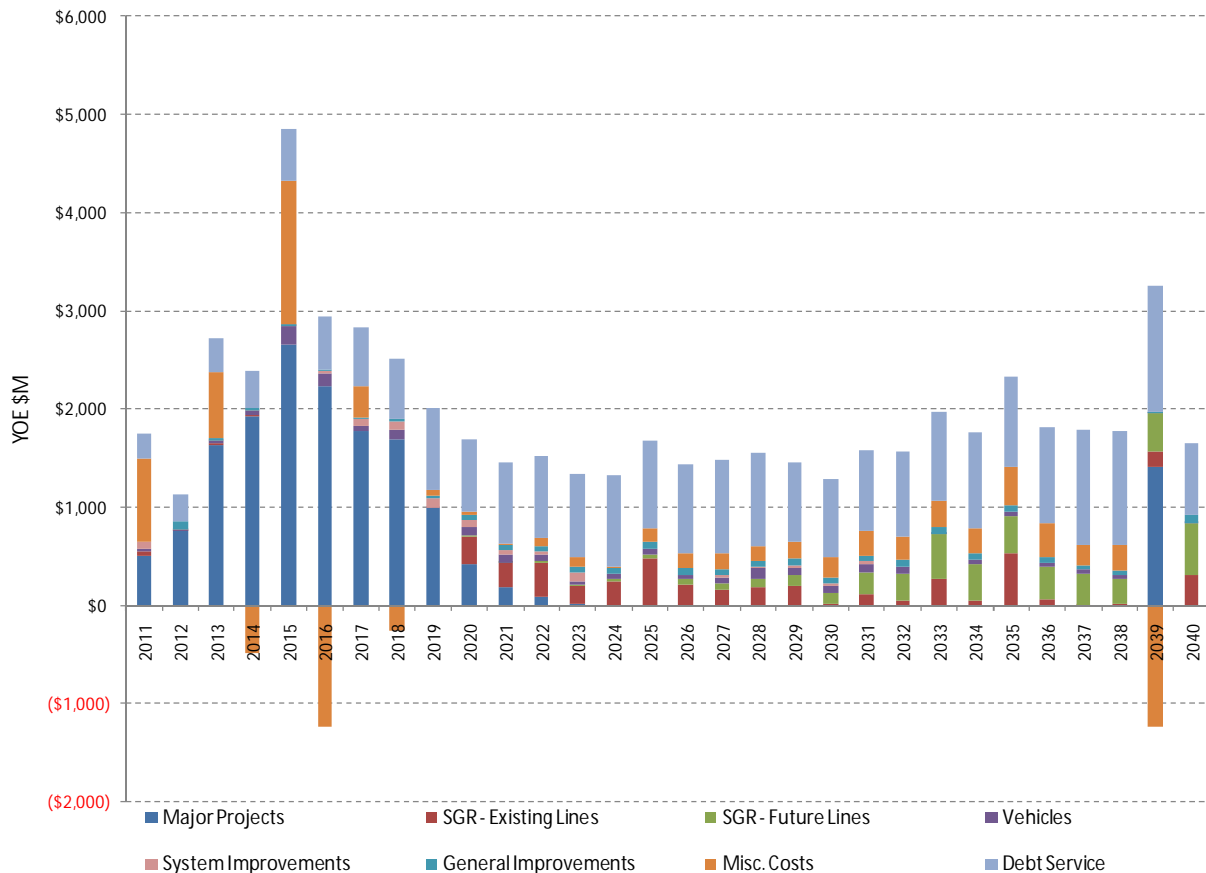


Figure 3-2: Rail Capital Expenditures by Year (YOE \$M)



Note: Notable components of the Miscellaneous Improvements category include Metrolink capital costs, certain light rail yard projects, and contingencies. The contingencies represent annual balances of Measure R (2%), Measure R (3%), and Measure R (35%) without regard for prior year carryovers. The annual amount is negative in the forecast when some of the prior cumulative balance is used.

The LACMTA bus capital expenditure forecast through FY 2040 is delineated in Table 3-4. As shown in Figure 3-3, LACMTA Bus accounts for 50 percent of projected expenditures between FY 2011 and FY 2040. The LACMTA Bus cost category includes all new bus procurements by LACMTA and includes the projected purchase of expansion buses. The Municipal Operators cost category represents the costs associated with various municipal bus programs being run throughout the County. Figure 3-4 provides LACMTA bus and paratransit capital expenditures by year.

Table 3-4: Countywide Bus and Paratransit Capital Expenditure Forecast through FY 2040 (YOE \$M)

| FY   | MTA Bus        |                    | Municipal Operators |                    | Paratransit    |                    | CRD Project    |                    | Debt Service   |                    | Total          |                    |
|------|----------------|--------------------|---------------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
|      | Cost (YOE \$M) | Annual Growth Rate | Cost (YOE \$M)      | Annual Growth Rate | Cost (YOE \$M) | Annual Growth Rate | Cost (YOE \$M) | Annual Growth Rate | Cost (YOE \$M) | Annual Growth Rate | Cost (YOE \$M) | Annual Growth Rate |
| 2011 | \$164          | N/A                | \$189               | N/A                | \$0.45         | N/A                | \$210          | N/A                | \$0            | N/A                | \$563          | N/A                |
| 2012 | \$130          | -20.4%             | \$193               | 2.2%               | \$0.45         | 0.0%               | \$40           | N/A                | \$0            | N/A                | \$364          | -35.3%             |
| 2013 | \$242          | 85.4%              | \$182               | -6.1%              | \$0.45         | 0.0%               | \$2            | N/A                | \$0            | N/A                | \$426          | 16.9%              |
| 2014 | \$249          | 3.0%               | \$180               | -0.6%              | \$0.45         | 0.0%               | \$0            | N/A                | \$1            | 312.8%             | \$431          | 1.2%               |
| 2015 | \$181          | -27.2%             | \$183               | 1.3%               | \$0.45         | 0.0%               | \$0            | N/A                | \$2            | 51.5%              | \$367          | -15.0%             |
| 2016 | \$213          | 17.4%              | \$179               | -2.0%              | \$0.45         | 0.0%               | \$0            | N/A                | \$5            | 124.4%             | \$397          | 8.3%               |
| 2017 | \$190          | -10.7%             | \$182               | 1.5%               | \$0.45         | 0.0%               | \$0            | N/A                | \$7            | 55.4%              | \$379          | -4.4%              |
| 2018 | \$263          | 38.6%              | \$188               | 3.6%               | \$0.45         | 0.0%               | \$0            | N/A                | \$11           | 45.4%              | \$462          | 21.9%              |
| 2019 | \$223          | -15.3%             | \$191               | 1.5%               | \$0.45         | 0.0%               | \$0            | N/A                | \$14           | 31.2%              | \$428          | -7.4%              |
| 2020 | \$262          | 17.7%              | \$199               | 4.2%               | \$0.45         | 0.0%               | \$0            | N/A                | \$18           | 33.1%              | \$480          | 12.2%              |
| 2021 | \$254          | -3.2%              | \$202               | 1.6%               | \$0.45         | 0.0%               | \$0            | N/A                | \$23           | 24.4%              | \$480          | -0.2%              |
| 2022 | \$217          | -14.5%             | \$210               | 3.9%               | \$0.45         | 0.0%               | \$0            | N/A                | \$26           | 13.1%              | \$454          | -5.4%              |
| 2023 | \$374          | 72.2%              | \$213               | 1.4%               | \$0.45         | 0.0%               | \$0            | N/A                | \$40           | 54.2%              | \$627          | 38.3%              |
| 2024 | \$240          | -35.9%             | \$221               | 3.8%               | \$0.45         | 0.0%               | \$0            | N/A                | \$42           | 5.6%               | \$503          | -19.8%             |
| 2025 | \$274          | 14.5%              | \$224               | 1.4%               | \$0.45         | 0.0%               | \$0            | N/A                | \$47           | 11.3%              | \$546          | 8.5%               |
| 2026 | \$302          | 10.0%              | \$233               | 3.7%               | \$0.45         | 0.0%               | \$0            | N/A                | \$54           | 14.2%              | \$588          | 7.8%               |
| 2027 | \$307          | 1.8%               | \$236               | 1.3%               | \$0.45         | 0.0%               | \$0            | N/A                | \$58           | 7.5%               | \$601          | 2.1%               |
| 2028 | \$289          | -5.8%              | \$244               | 3.6%               | \$0.45         | 0.0%               | \$0            | N/A                | \$59           | 2.5%               | \$593          | -1.3%              |
| 2029 | \$286          | -1.3%              | \$248               | 1.3%               | \$0.45         | 0.0%               | \$0            | N/A                | \$59           | 0.1%               | \$593          | -0.1%              |
| 2030 | \$298          | 4.3%               | \$256               | 3.4%               | \$0.45         | 0.0%               | \$0            | N/A                | \$59           | 0.1%               | \$614          | 3.5%               |
| 2031 | \$349          | 17.1%              | \$259               | 1.1%               | \$0.45         | 0.0%               | \$0            | N/A                | \$57           | -4.4%              | \$665          | 8.4%               |
| 2032 | \$295          | -15.5%             | \$267               | 3.1%               | \$0.45         | 0.0%               | \$0            | N/A                | \$53           | -6.8%              | \$615          | -7.5%              |
| 2033 | \$327          | 11.0%              | \$270               | 1.2%               | \$0.45         | 0.0%               | \$0            | N/A                | \$50           | -5.1%              | \$648          | 5.4%               |
| 2034 | \$287          | -12.4%             | \$279               | 3.2%               | \$0.45         | 0.0%               | \$0            | N/A                | \$50           | 0.0%               | \$616          | -4.9%              |
| 2035 | \$279          | -2.6%              | \$282               | 1.3%               | \$0.45         | 0.0%               | \$0            | N/A                | \$39           | -21.3%             | \$602          | -2.4%              |
| 2036 | \$433          | 55.1%              | \$291               | 3.1%               | \$0.45         | 0.0%               | \$0            | N/A                | \$39           | 0.0%               | \$764          | 27.0%              |
| 2037 | \$304          | -29.8%             | \$295               | 1.3%               | \$0.45         | 0.0%               | \$0            | N/A                | \$35           | -10.2%             | \$635          | -16.9%             |
| 2038 | \$377          | 24.1%              | \$304               | 3.1%               | \$0.45         | 0.0%               | \$0            | N/A                | \$29           | -18.8%             | \$710          | 11.9%              |
| 2039 | \$376          | -0.3%              | \$307               | 1.2%               | \$0.45         | 0.0%               | \$0            | N/A                | \$25           | -13.9%             | \$709          | -0.2%              |
| 2040 | \$384          | 1.9%               | \$314               | 2.1%               | \$0.45         | 0.0%               | \$0            | N/A                | \$21           | -16.2%             | \$719          | 1.4%               |

Figure 3-3: Bus Capital Expenditures – FY 2011 to FY 2040 (YOE \$M)

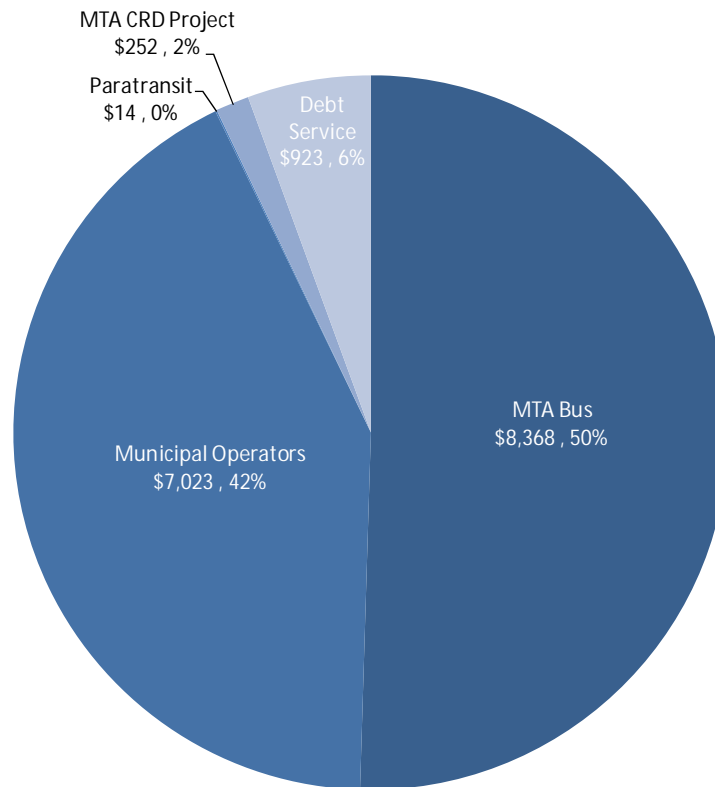
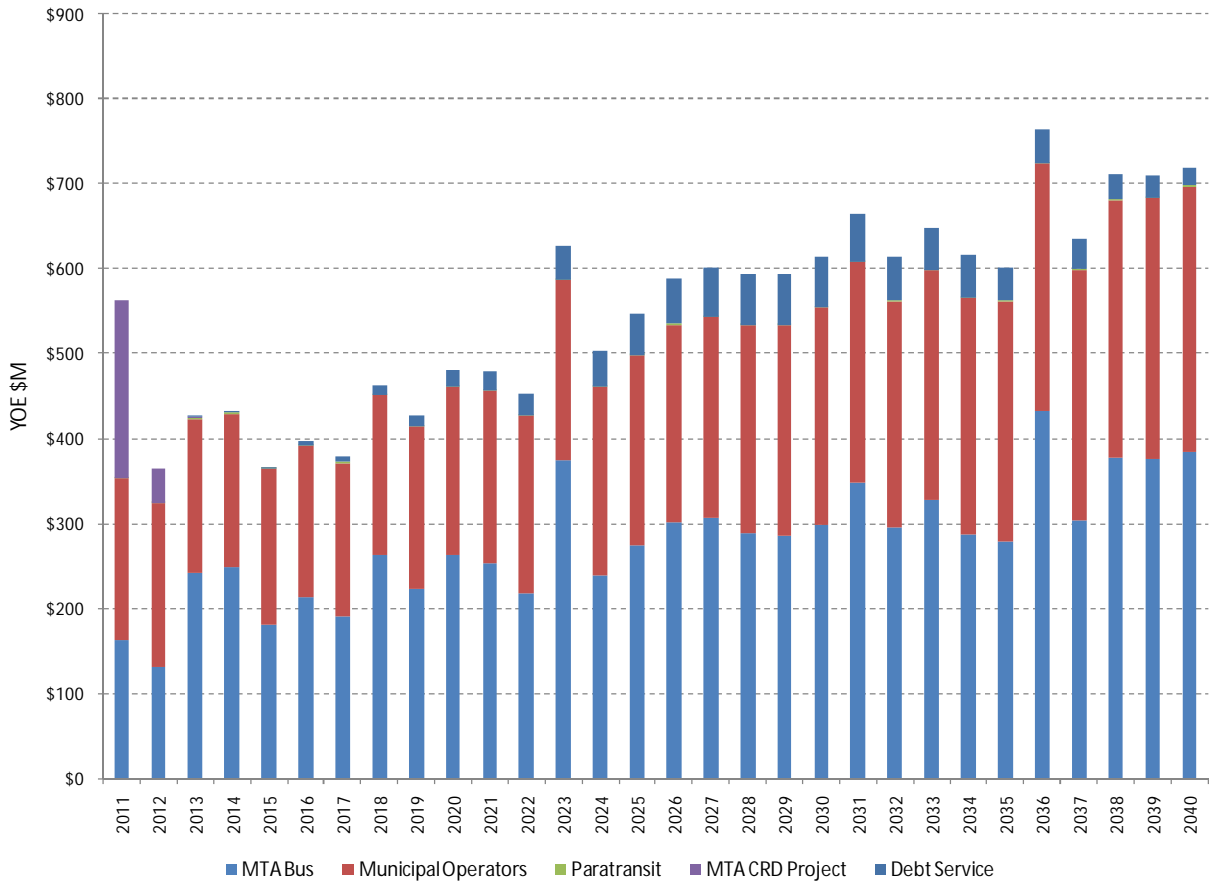




Figure 3-4: Bus Capital Expenditures by Year (YOE \$M)





The LACMTA highway capital expenditure forecast for LACMTA controlled expenditures only is shown in Table 3-5.

Table 3-5: LACMTA Controlled Highway Capital Expenditure Forecast through FY 2040 (YOE \$M)

| FY   | Capital Costs  |                    | Debt Service   |                    | Total          |                    |
|------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
|      | Cost (YOE \$M) | Annual Growth Rate | Cost (YOE \$M) | Annual Growth Rate | Cost (YOE \$M) | Annual Growth Rate |
| 2011 | \$930          | N/A                | \$49           | N/A                | \$979          | N/A                |
| 2012 | \$1,309        | 40.74%             | \$62           | 27.61%             | \$1,371        | 40.08%             |
| 2013 | \$1,260        | -3.71%             | \$90           | 44.66%             | \$1,350        | -1.51%             |
| 2014 | \$786          | -37.61%            | \$126          | 39.66%             | \$912          | -32.45%            |
| 2015 | \$513          | -34.77%            | \$151          | 19.87%             | \$664          | -27.22%            |
| 2016 | \$521          | 1.52%              | \$160          | 5.65%              | \$680          | 2.46%              |
| 2017 | \$365          | -29.97%            | \$167          | 4.34%              | \$531          | -21.92%            |
| 2018 | \$291          | -20.24%            | \$176          | 5.73%              | \$467          | -12.10%            |
| 2019 | \$296          | 1.71%              | \$185          | 5.21%              | \$481          | 3.03%              |
| 2020 | \$648          | 119.09%            | \$192          | 3.44%              | \$840          | 74.55%             |
| 2021 | \$621          | -4.12%             | \$205          | 6.91%              | \$826          | -1.61%             |
| 2022 | \$648          | 4.28%              | \$223          | 8.71%              | \$871          | 5.37%              |
| 2023 | \$625          | -3.61%             | \$242          | 8.53%              | \$866          | -0.50%             |
| 2024 | \$706          | 13.09%             | \$242          | 0.18%              | \$948          | 9.49%              |
| 2025 | \$835          | 18.20%             | \$269          | 11.05%             | \$1,104        | 16.37%             |
| 2026 | \$837          | 0.24%              | \$299          | 11.09%             | \$1,136        | 2.88%              |
| 2027 | \$753          | -9.98%             | \$328          | 9.94%              | \$1,082        | -4.74%             |
| 2028 | \$711          | -5.57%             | \$351          | 6.86%              | \$1,062        | -1.79%             |
| 2029 | \$638          | -10.37%            | \$370          | 5.53%              | \$1,008        | -5.12%             |
| 2030 | \$733          | 14.95%             | \$389          | 5.11%              | \$1,122        | 11.34%             |
| 2031 | \$507          | -30.84%            | \$398          | 2.15%              | \$905          | -19.39%            |
| 2032 | \$481          | -5.18%             | \$401          | 0.85%              | \$882          | -2.53%             |
| 2033 | \$410          | -14.61%            | \$405          | 0.92%              | \$815          | -7.55%             |
| 2034 | \$414          | 0.88%              | \$409          | 0.97%              | \$823          | 0.92%              |
| 2035 | \$256          | -38.07%            | \$400          | -2.00%             | \$657          | -20.16%            |
| 2036 | \$384          | 49.91%             | \$401          | 0.02%              | \$785          | 19.49%             |
| 2037 | \$230          | -40.08%            | \$401          | 0.00%              | \$631          | -19.63%            |
| 2038 | \$330          | 43.18%             | \$401          | 0.00%              | \$730          | 15.77%             |
| 2039 | \$182          | -44.92%            | \$354          | -11.53%            | \$536          | -26.61%            |
| 2040 | \$19           | -89.27%            | \$308          | -13.06%            | \$328          | -38.89%            |

### 3.1.2 LACMTA Historic Sources of Funds

LACMTA’s gross agency wide historical capital sources of funds from FY 2004 to FY 2010 are delineated in Table 3-6. As is shown, from FY 2004 to FY 2010, LACMTA’s overall sources of revenues grew at an annual average growth rate of 6.6 percent (3.4 percent excluding the addition of Measure R revenues starting in FY 2010).

Figure 3-5 shows the overall breakdown of funding between FY 2004 and FY 2010. Historically, sales tax revenues (Proposition A, Proposition C, and Transportation Development Act funds) have provided a majority of funding, representing 60 percent of total funding between FY 2004 and FY 2010. This is followed by other, miscellaneous revenue sources, included financing revenues, which provided 17 percent of revenues. This is followed by Federal and State revenues which have provided 14 percent and 8 percent of revenues from FY 2004 to FY 2010, respectively. Finally, local funds provided 1 percent of total revenues during the FY 2004 to FY 2010 timeframe. Details on the various revenue sources will be provided in Section 3.1.2.

Figure 3-5: LACMTA Capital Revenues – FY 2004 to FY 2010 (YOE \$M)

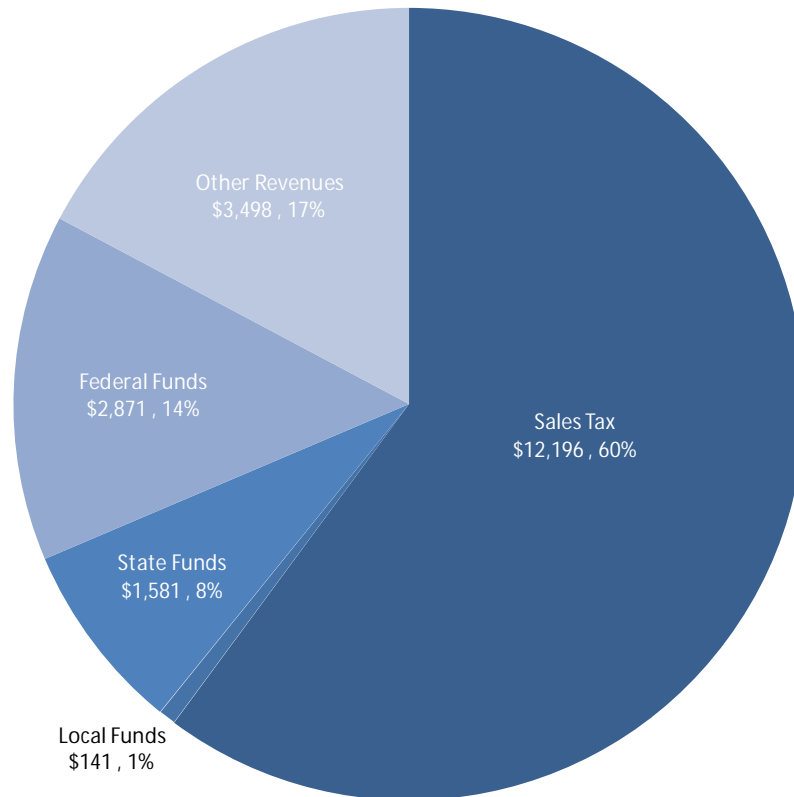


Table 3-6: LACMTA Sources of Funds: Seven-Year History and Trends

| Revenue Source            | FY 2004   | FY 2005   | FY 2006   | FY 2007   | FY 2008   | FY 2009   | FY 2010   |
|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sales Tax                 |           |           |           |           |           |           |           |
| Prop A                    | \$576.7   | \$619.5   | \$669.0   | \$686.2   | \$683.3   | \$620.8   | \$566.0   |
| Prop C                    | \$576.7   | \$619.6   | \$669.0   | \$686.3   | \$683.5   | \$620.9   | \$566.0   |
| Measure R                 | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$551.0   |
| TDA                       | \$294.0   | \$314.5   | \$338.7   | \$344.9   | \$340.5   | \$310.4   | \$285.0   |
| STA                       | \$31.1    | \$34.0    | \$62.2    | \$191.1   | \$61.5    | \$76.5    | \$117.0   |
| Total Sales Tax           | \$1,478.4 | \$1,587.6 | \$1,739.0 | \$1,908.4 | \$1,768.9 | \$1,628.6 | \$1,534.0 |
| Local Funds               |           |           |           |           |           |           |           |
| Access Service Inc - ASI  | \$47.0    | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     |
| City of LA                | \$1.2     | \$2.2     | \$5.4     | \$1.7     | \$0.0     | (\$0.5)   | \$0.3     |
| AQMD                      | \$0.0     | \$0.0     | \$0.0     | \$0.7     | \$0.0     | \$0.0     | \$0.0     |
| BAD                       | \$0.0     | \$0.0     | \$0.0     | \$20.7    | \$0.0     | \$0.0     | \$0.0     |
| EZ Pass                   | \$0.0     | \$0.0     | \$0.0     | \$7.1     | \$0.0     | \$9.3     | \$8.5     |
| Local Other               | \$8.2     | \$2.8     | \$1.3     | \$0.0     | \$7.0     | \$12.5    | \$6.7     |
| Total Local               | \$56.4    | \$5.0     | \$6.8     | \$30.2    | \$7.0     | \$21.3    | \$15.5    |
| State Funds               |           |           |           |           |           |           |           |
| STIP/TCRP                 | \$14.7    | \$31.4    | \$176.0   | \$43.6    | \$51.4    | \$244.1   | \$216.0   |
| SHA                       | \$0.3     | \$0.0     | \$0.0     | \$0.0     | \$0.0     |           |           |
| TCRP                      | \$0.0     | \$0.0     | \$14.9    | \$357.4   | \$56.4    |           |           |
| AQMD                      | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     |           |           |
| STIP - PPM                | \$0.0     | \$0.0     | \$0.0     | \$4.5     | \$11.8    | \$8.4     | \$5.9     |
| FSP                       | \$6.6     | \$0.0     | \$7.0     | \$8.5     | \$0.0     | \$8.4     | \$26.7    |
| Prop 1B Infrastr. Bonds   | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$161.0   | \$113.1   |           |
| State Homeland Security   | \$0.0     | \$0.0     | \$0.1     | \$0.0     | \$0.0     |           |           |
| State Other               | \$0.3     | \$0.1     | \$3.9     | \$0.0     | \$11.0    | \$37.6    | (\$41.9)  |
| Total State               | \$21.9    | \$31.6    | \$202.0   | \$414.0   | \$291.6   | \$411.7   | \$206.7   |
| Federal Funds             |           |           |           |           |           |           |           |
| 5309 New Starts           | \$11.5    | \$97.4    | \$121.0   | \$160.1   | \$36.5    | \$66.8    | \$26.6    |
| 5309 Fixed Guideways      | \$50.6    | \$43.2    | \$31.2    | \$40.0    | \$42.5    | \$187.5   | \$127.1   |
| 5309 Bus Facilities       | \$0.0     | \$0.0     | \$6.6     | \$5.2     | \$3.4     | \$1.4     | \$2.5     |
| 5307 Capital              | \$52.6    | \$241.2   | \$219.6   | \$137.0   | \$234.0   | \$34.4    | \$199.4   |
| CMAQ                      | \$55.7    | \$64.7    | \$104.0   | \$53.4    | \$49.5    | \$72.2    | \$87.2    |
| Federal Tea               | \$0.0     | \$0.0     | \$1.3     | \$0.0     | \$0.0     |           |           |
| RSTP                      | \$13.0    | \$0.0     | \$0.0     | \$2.2     | \$0.0     |           |           |
| Grow. State Rail PM 5340  | \$0.0     | \$0.0     | \$0.0     | \$8.0     | \$0.0     | \$7.1     | \$7.5     |
| Federal STP               | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     |           |           |
| Federal Homeland Security | \$0.0     | \$0.5     | \$1.9     | \$1.8     | \$0.0     | \$1.0     | \$3.5     |
| Federal Other             | \$0.9     | \$0.0     | \$0.0     | \$0.0     | \$10.9    | \$5.5     | \$139.1   |
| Total Federal Funds       | \$184.3   | \$447.0   | \$485.6   | \$407.5   | \$376.9   | \$376.0   | \$592.9   |



Table 3-7: LACMTA Sources of Funds: Seven-Year History and Trends (continued)

| Revenue Source           | FY 2004   | FY 2005   | FY 2006   | FY 2007   | FY 2008   | FY 2009   | FY 2010   |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Other Revenues           |           |           |           |           |           |           |           |
| Investment Income        | \$57.5    | \$30.3    | \$50.0    | \$76.7    | \$83.9    | \$63.0    | \$44.0    |
| Lease and Rental         | \$11.0    | \$12.3    | \$12.5    | \$0.0     | \$0.0     | \$10.0    | \$16.0    |
| License and Fines        | \$7.7     | \$8.1     | \$8.2     | \$8.4     | \$8.4     | \$8.0     | \$8.0     |
| Other                    | \$34.5    | \$29.3    | \$31.6    | \$46.9    | \$47.5    | \$51.0    | \$35.0    |
| Operating Revenues       | \$234.0   | \$284.8   | \$298.3   | \$304.5   | \$349.7   | \$358.0   | \$342.0   |
| Non-Operating Revenues   | \$115.8   | \$6.0     | \$6.4     | \$7.1     | \$7.4     |           |           |
| Prop A Rail bonds/CP     | \$60.0    | \$104.2   | \$9.5     | \$20.0    | \$0.0     | \$0.0     | \$0.0     |
| Prop A Disc. Bonds/CP    | \$0.0     | \$0.0     | \$0.0     | \$9.4     | \$0.0     | \$0.0     | \$0.0     |
| Prop C St & Hwy Bonds/CP | \$22.4    | \$88.4    | \$0.0     | \$56.1    | \$0.0     | \$0.0     | \$0.0     |
| Prop C Discret. Bonds/CP | \$0.0     | \$0.2     | \$6.0     | \$7.2     | \$0.0     | \$0.0     | \$0.0     |
| General Revenue Bond     | \$0.0     | \$0.0     | \$0.3     | \$0.5     | \$0.0     | \$0.0     | \$0.0     |
| Total Other Revenues     | \$542.9   | \$563.6   | \$422.7   | \$536.8   | \$496.9   | \$490.0   | \$445.0   |
| Total Revenues           | \$2,283.9 | \$2,634.7 | \$2,856.0 | \$3,297.0 | \$2,941.2 | \$2,927.5 | \$2,794.1 |

### 3.1.3 LACMTA Capital Sources of Funds Forecast

LACMTA's capital expenditures are funded primarily with federal, state and local grants. Additionally, LACMTA finances a portion of its capital projects with debt and short-term financing. A majority of funding is locally generated through three half-cent voter initiatives, Propositions A and C and now Measure R. In November 2008, more than two-thirds of Los Angeles County voters approved Measure R, providing up to \$36 billion in new funding to build many new highway and transit projects, including the twelve America Fast Forward capital expansion projects.

Table 3-8 provides a summary of actual local funding from 2000 to 2010, and the forecast of local funding sources from 2011 to 2040. These various major local, state, federal and financing revenue sources for LACMTA are summarized below.

Table 3-8: Major LACMTA Local Revenue Sources – FY 2011 to FY 2040 (YOE \$M)

| FY   | Proposition A (Gross) |                    | Proposition C (Gross) |                    | Measure R (Gross) |                    | TDA (Gross)       |                    |
|------|-----------------------|--------------------|-----------------------|--------------------|-------------------|--------------------|-------------------|--------------------|
|      | Revenue (YOE \$M)     | Annual Growth Rate | Revenue (YOE \$M)     | Annual Growth Rate | Revenue (YOE \$M) | Annual Growth Rate | Revenue (YOE \$M) | Annual Growth Rate |
| 2011 | \$597                 | 5.5%               | \$597                 | -3.9%              | \$591             | 7.3%               | \$301             | 5.6%               |
| 2012 | \$634                 | 6.3%               | \$635                 | 6.3%               | \$634             | 7.3%               | \$320             | 6.3%               |
| 2013 | \$672                 | 5.9%               | \$672                 | 5.9%               | \$672             | 5.9%               | \$339             | 5.9%               |
| 2014 | \$711                 | 5.9%               | \$711                 | 5.9%               | \$711             | 5.9%               | \$359             | 5.9%               |
| 2015 | \$754                 | 6.0%               | \$754                 | 6.0%               | \$754             | 6.0%               | \$380             | 6.0%               |
| 2016 | \$799                 | 6.0%               | \$799                 | 6.0%               | \$799             | 6.0%               | \$403             | 6.0%               |
| 2017 | \$844                 | 5.6%               | \$844                 | 5.6%               | \$844             | 5.6%               | \$426             | 5.6%               |
| 2018 | \$889                 | 5.3%               | \$889                 | 5.3%               | \$889             | 5.3%               | \$448             | 5.3%               |
| 2019 | \$935                 | 5.2%               | \$936                 | 5.2%               | \$935             | 5.2%               | \$472             | 5.2%               |
| 2020 | \$983                 | 5.1%               | \$983                 | 5.1%               | \$983             | 5.1%               | \$496             | 5.1%               |
| 2021 | \$1,033               | 5.1%               | \$1,033               | 5.1%               | \$1,033           | 5.1%               | \$521             | 5.1%               |
| 2022 | \$1,077               | 4.3%               | \$1,077               | 4.3%               | \$1,077           | 4.3%               | \$543             | 4.3%               |
| 2023 | \$1,123               | 4.3%               | \$1,123               | 4.3%               | \$1,123           | 4.3%               | \$566             | 4.3%               |
| 2024 | \$1,169               | 4.1%               | \$1,169               | 4.1%               | \$1,169           | 4.1%               | \$590             | 4.1%               |
| 2025 | \$1,218               | 4.2%               | \$1,218               | 4.2%               | \$1,218           | 4.2%               | \$614             | 4.2%               |
| 2026 | \$1,267               | 4.0%               | \$1,268               | 4.0%               | \$1,267           | 4.0%               | \$639             | 4.0%               |
| 2027 | \$1,315               | 3.8%               | \$1,316               | 3.8%               | \$1,315           | 3.8%               | \$663             | 3.8%               |
| 2028 | \$1,365               | 3.8%               | \$1,366               | 3.8%               | \$1,365           | 3.8%               | \$688             | 3.8%               |
| 2029 | \$1,414               | 3.6%               | \$1,414               | 3.6%               | \$1,414           | 3.6%               | \$713             | 3.6%               |
| 2030 | \$1,462               | 3.4%               | \$1,463               | 3.4%               | \$1,462           | 3.4%               | \$737             | 3.4%               |
| 2031 | \$1,507               | 3.0%               | \$1,507               | 3.0%               | \$1,507           | 3.0%               | \$760             | 3.0%               |
| 2032 | \$1,550               | 2.9%               | \$1,550               | 2.9%               | \$1,550           | 2.9%               | \$782             | 2.9%               |
| 2033 | \$1,597               | 3.0%               | \$1,597               | 3.0%               | \$1,597           | 3.0%               | \$805             | 3.0%               |
| 2034 | \$1,646               | 3.1%               | \$1,646               | 3.1%               | \$1,646           | 3.1%               | \$830             | 3.1%               |
| 2035 | \$1,695               | 3.0%               | \$1,695               | 3.0%               | \$1,695           | 3.0%               | \$855             | 3.0%               |
| 2036 | \$1,743               | 2.8%               | \$1,743               | 2.8%               | \$1,743           | 2.8%               | \$879             | 2.8%               |
| 2037 | \$1,794               | 2.9%               | \$1,794               | 2.9%               | \$1,794           | 2.9%               | \$905             | 2.9%               |
| 2038 | \$1,845               | 2.9%               | \$1,845               | 2.9%               | \$1,845           | 2.9%               | \$930             | 2.9%               |
| 2039 | \$1,894               | 2.6%               | \$1,894               | 2.6%               | \$1,894           | 2.6%               | \$955             | 2.6%               |
| 2040 | \$1,945               | 2.7%               | \$1,945               | 2.7%               | \$0               | N/A                | \$981             | 2.7%               |

\*Data for 2002 through 2010 are actual amounts. Forecasts for FY 2011 through FY 2040 are estimated based on the UCLA Anderson Forecast of taxable sales.



3.1.3.1 Local Funds

**Proposition A** is a ½-cent sales tax in Los Angeles County enacted by voters in 1980. LACMTA is responsible for administering its revenues. Funds flow to LACMTA which allocates to itself and other agencies according to the LACMTA Formula Allocation Procedure and LACMTA Board actions. These funds can be leveraged by bonding for capital projects other than the Westside Subway Extension and Regional Connector projects. The LACMTA Reform and Accountability Act of 1998 prevents the use of Proposition A and Proposition C funds on operating or capital underground uses. Table 3-9 identifies the revenue allocations and debt requirements mandated by the Proposition A ordinance.

Table 3-9: Proposition A Revenue Allocations and Debt Policy

| Program                         | % of Sales Tax (Net of Admin) | Allowable Uses and Status                                                                                     | Debt Policy Maximum                    |
|---------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Local Return                    | 25%                           | Any transit purpose. Distributed to localities based on population.                                           | N/A                                    |
| Prop A Rail Development Program | 35%                           | Rail Operations and Capital. Is currently committed to debt service in an amount close to the Policy Maximum. | 87% of Prop A 35% Rail Revenues        |
| Discretionary                   | 40%                           | Any transit purpose. Current state practice directs funds to bus subsidies and incentives.                    | No further issuance currently planned. |
| Total                           | 100%                          | 100%                                                                                                          | 100%                                   |
| Administration                  | 5%                            |                                                                                                               |                                        |

Obligations of LACMTA payable from the Proposition A Sales Tax consist of sales tax revenue bonds, lease revenue bonds, commercial paper notes and certain amounts owed under interest rate swap agreements. Commercial Paper Notes are issued by Metro to fund capital projects on a short-term basis prior to being permanently financed with long-term bonds or receiving grant funding. Metro issues both taxable and tax-exempt commercial paper notes, with original maturity dates ranging from one to 270 days, at various interest rates. Under the terms of the notes, Metro can roll-over the principal amounts due for additional periods.

On January 24, 1991, Metro received authorization to issue \$350 million aggregate principal amount of its Proposition A tax exempt commercial paper notes (the "Proposition A Commercial Paper Notes"). As of September 1, 2011, \$ 120 million aggregate principal amount of Proposition A Commercial Paper Notes were outstanding. The Proposition A Commercial Paper Notes are Third Tier Subordinate Lien Obligations and are payable from Proposition A Sales Tax revenues on a subordinate basis to the Proposition A First Tier Senior Sales Tax Bonds and the Proposition A Second Tier Obligations. Although Metro has authorization to issue up to \$350 million aggregate principal amount, the current Liquidity Facility provides only \$250 million of liquidity and Metro will not issue Proposition A Commercial Paper Notes in excess of that amount.

At this time, LACMTA has three priority levels of obligations: 1) First Tier Senior Lien bonds, 2) Second Tier Obligations and 3) Third tier Obligations. Table 3-10 depicts the outstanding principal amounts associated with each level of debt obligation as of July 2011.

Table 3-10: Proposition A Outstanding Debt Obligations (YOE \$M)

| Level of Priority                          | Outstanding as of July 2011 |
|--------------------------------------------|-----------------------------|
| First Tier Senior Lien Bonds               | \$1,404                     |
| Second Tier Obligations                    | \$24                        |
| Third Tier Obligations (commercial paper)* | \$120                       |
| <b>Total</b>                               | <b>\$1,548</b>              |

\*As of September 1, 2011

LACMTA forecasts \$35,607 million (this amount is net of administration of \$1,874 million) in Proposition A revenues to be available from FY 2011 through FY 2040. This reflects the use of a conservative growth rate derived by reducing the July 2010 UCLA Anderson Forecast taxable sales forecast growth by 15 percent. Of the total \$35,607 million, \$14,348 million (40.0 percent) is dedicated to Bus Operations and the Bus Incentive Program. The Rail Development Account will receive \$12,462 million (35.0 percent) and \$8,902 million (25 percent) is committed to the Local Return Account.

Proposition C is a voter-enacted ½-cent sales tax for public transit purposes approved by voters in 1990. LACMTA is responsible for administering its funds. Funds flow to LACMTA which allocates to itself and other agencies according to the LACMTA Formula Allocation Procedure, the LACMTA Call for Projects, and LACMTA Board actions. These funds can be leveraged by bonding for capital projects other than the Westside Subway Extension and Regional Connector projects. The LACMTA Reform and Accountability Act of 1998 prevents the use of Proposition A and Proposition C funds on operating or capital underground uses.

Table 3-11 identifies the legally binding apportionments and debt requirements associated with the Proposition C ordinance.

Table 3-11: Proposition C Revenue Allocations and Debt Policy

| Program                                               | % of Sales Tax (Net of Admin) | Allowable Uses and Status                                                                                        | Debt Policy Maximum                                    |
|-------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Security                                              | 5%                            | Transit Security. Operations or capital.                                                                         | No Debt Issuance                                       |
| Commuter Rail/ Transit Centers                        | 10%                           | Commuter Rail and Park and Ride. Operations or capital.                                                          | 40% of Prop C 10% Commuter Rail Revenue                |
| Local Return                                          | 20%                           | Any transit purpose and certain roadways heavily used by transit. Distributed to localities based on population. | NA                                                     |
| Transit Related Improvements to Freeways and Highways | 25%                           | Streets, Highways and Fixed Guideway Projects on Railroad Right-of-Way.                                          | 60% of Prop C 25% Transit Related Improvement Revenues |
| Discretionary                                         | 40%                           | Bus and Rail, Capital and Operating.                                                                             | 40% of Prop C 40% Discretionary Revenues               |
| <b>Total</b>                                          | <b>100%</b>                   | <b>100%</b>                                                                                                      | <b>100%</b>                                            |
| Administration                                        | 1.5%                          |                                                                                                                  |                                                        |

Long-term obligations of LACMTA payable from the Proposition C Sales Tax consist of sales tax revenue bonds and commercial paper notes, and certain amount owed under various interest rate swap agreements, one standby bond purchase agreement and two reimbursement agreements. On June 9, 1993, Metro received authorization to issue \$150 million of tax-exempt and taxable commercial paper notes (the "Proposition C Commercial Paper Notes") payable from and secured by Proposition C Sales Tax revenues. As of September 1, 2011, the Proposition C Commercial Paper Notes were outstanding with a maturity value of \$23.5 million. The Proposition C Commercial Paper Notes are Subordinate Lien Obligations and are payable from Proposition C Sales Tax revenue on a basis subordinate to the lien on Proposition C Sales Tax revenues granted to the Senior Bonds and any Senior Parity Debt.

LACMTA has two priority levels of obligations secured by the Proposition C Sales Tax: 1) Senior Bonds and Senior Parity Debt and 2) its Subordinate Obligations. Table 3-12 depicts the outstanding principal amounts associated with the two levels of obligations as of July 2011.

Table 3-12: Proposition C Outstanding Debt Obligations

| Level of Priority        | Outstanding as of January 1, 2010 |
|--------------------------|-----------------------------------|
| Sales Tax Revenue Bonds  | \$1,171                           |
| Subordinate Obligations* | \$24                              |
| Total                    | \$1,195                           |

\*As of September 1, 2011

LACMTA forecasts \$36,921 million (this amount is net of administration of \$562 million) in Proposition C revenues to be available from FY 2011 through FY 2040. This reflects the use of a conservative growth rate derived by reducing the July 2010 UCLA Anderson forecast of taxable sales growth by 15 percent. Of the total \$36,921 million, \$7,384 million (20 percent) is dedicated to the Local Return. The Security Account will receive \$1,846 million (5 percent), Transit-Related Highway projects will receive \$9,230 million (25 percent) and \$19,833 million (54 percent) is discretionary.

**Measure R** is a 1/2-cent transportation sales tax approved in November 2008 by Los Angeles County voters to meet the transportation needs of the County. Collection of the tax began on July 1, 2009, for public transit and highway purposes (rail expansion, local street and highway improvements, traffic reduction, better public transportation, and quality of life) for a period of 30 years. LACMTA is responsible for administering Measure R revenues. Measure R revenues flow to LACMTA which then allocates the revenues in accordance with legally binding allocation rules delineated by Los Angeles County Ordinance #08-01 (the Ordinance approving Measure R), LACMTA Formula Allocation Procedure, and LACMTA Board actions. Table 3-13 is derived from the Ordinance #08-01 and represents the revenue allocations mandated by Measure R. As is shown in the Table, 65 percent of Measure R revenues are to be allocated to transit.

Overall, Measure R is expected to generate \$35.0 billion in revenues from FY 2011 to FY 2040. Of that approximately \$35.0 billion, approximately \$12.3 billion (or approximately 35 percent of total revenues) is mandated to be allocated to the twelve America Fast Forward capital expansion projects by Ordinance #08-01 (with specific amounts to be allocated to each project). Revenues from Measure R can be leveraged to build capital projects, as is planned in America Fast Forward.



Table 3-13: Measure R Revenue Allocations

| Subfund         | Program                                                                                                                   | % of Sales Tax (Net of Admin) |
|-----------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Transit Capital | New Rail and/or Bus Rapid Transit Capital projects                                                                        | 35%                           |
| Transit Capital | Metrolink Capital Improvement Projects                                                                                    | 3%                            |
| Transit Capital | Metro Rail Capital – System Improvements, Rail Yards and Rail Cars                                                        | 2%                            |
| Highway Capital | Carpool Lanes, Highways, Goods Movement, Grade Separations and Soundwalls                                                 | 20%                           |
| Operations      | Rail Operations                                                                                                           | 5%                            |
| Operations      | Bus Operations                                                                                                            | 20%                           |
| Local Return    | Major Street resurfacing, rehabilitation and reconstruction, pothole repair, signals, bikeways, streetscapes and transit. | 15%                           |
| Total           |                                                                                                                           | 100%                          |

The twelve America Fast Forward projects were originally proposed to be completed over 30 years. Under America Fast Forward, the projects have been accelerated to reach substantial completion within 10 years. This will require leveraging of Measure R revenues to obtain the upfront funding necessary to complete the twelve capital expansion projects. Item #33 adopted by the LACMTA Board on April 22, 2010, outlined the America Fast Forward Initiative acceleration schedule and ordered the projects in terms of priority to Los Angeles County. Table 3-9 shows the original and the most current anticipated accelerated completion dates for the twelve America Fast Forward capital expansion projects, as well as the funding allocations required by Ordinance #08-01 for each project. It should be noted that the projects in Table 3-14 are ordered in their mandated order of priority; as directed by the LACMTA Board, they must be sequenced in the order delineated on the Table.

Table 3-14: America Fast Forward Project Prioritization

| Priority | Project                                       | Original Completion | America Fast Forward Completion | Minimum Measure R Funding (2008 \$M) | Additional Measure R Funding (2008 \$M) | Total Measure R Funding (2008 \$M) |
|----------|-----------------------------------------------|---------------------|---------------------------------|--------------------------------------|-----------------------------------------|------------------------------------|
| 1        | Orange Line Canoga Extension                  | 2013                | 2013                            | \$32                                 | \$150                                   | \$182                              |
| 2        | Exposition - Phase II*                        | 2015                | 2015                            | \$925                                | \$-                                     | \$925                              |
| 3        | Gold Line Foothill Extension (from Pasadena)  | 2017                | 2015                            | \$735                                | \$-                                     | \$735                              |
| 4        | East San Fernando Valley North-South Corridor | 2018                | 2018                            | \$68.5                               | \$-                                     | \$69                               |
| 5        | Crenshaw/LAX Transit Corridor                 | 2018                | 2018                            | \$235.5                              | \$971.5                                 | \$1,207                            |
| 6        | Regional Connector*                           | 2019                | 2019                            | \$160                                | \$-                                     | \$160                              |
| 7A       | Westside Subway Extension - Segment 1**       | 2019                | 2022                            | \$900                                | \$3,174                                 | \$4,074                            |
| 7B       | Westside Subway Extension - Segment 2**       | 2026                | 2022                            | N/A                                  | N/A                                     | N/A                                |

Table 3-14: America Fast Forward Project Prioritization (continued)

| Priority | Project                                 | Original Completion | America Fast Forward Completion | Minimum Measure R Funding (2008 \$M) | Additional Measure R Funding (2008 \$M) | Total Measure R Funding (2008 \$M) |
|----------|-----------------------------------------|---------------------|---------------------------------|--------------------------------------|-----------------------------------------|------------------------------------|
| 8        | West Santa Ana Branch                   | 2027                | 2020                            | \$-                                  | \$240                                   | \$240                              |
| 9        | Green Line Extension to LAX             | 2028                | 2018                            | \$-                                  | \$200                                   | \$200                              |
| 10       | Gold Line Eastside Extension Phase II   | 2035                | 2020                            | \$-                                  | \$1,271                                 | \$1,271                            |
| 11       | South Bay Green Line Extension          | 2035                | 2018                            | \$-                                  | \$272                                   | \$272                              |
| 7C       | Westside Subway Extension - Segment 3** | 2036                | 2022                            | N/A                                  | N/A                                     | N/A                                |
| 12       | San Fernando Valley I-405               | 2039                | 2020                            | \$-                                  | \$1,000                                 | \$1,000                            |

\*The Exposition - Phase II and Regional Connector Measure R funding amounts are given in Year of Expenditure dollars.

\*\*The funding shown for the Westside Subway Extension - Segment 1 represents Measure R funding available for all three Westside Subway Extension segments.

LACMTA forecasts \$34,998 million in (this amount is net of administration of \$533 million) Measure R revenues to be available from FY 2011 through FY 2040. This reflects the use of a conservative growth rate derived by reducing the July 2010 UCLA Anderson taxable sales forecast growth rate by 15 percent. Of the total Measure R revenues, \$5,250 million (15.0 percent) is dedicated to the Local Return. Metrolink will receive \$1,050 million (3.0 percent). Rail Capital and Operations will receive \$2,450 million (7.0 percent). Twenty percent (\$7,000 million) has been committed to Bus Operations. Transit Capital will receive \$12,249 million (35.0 percent) and \$7,000 million (20.0 percent) is dedicated to Highway Projects.

Long-term obligations of LACMTA payable from the Measure R Sales Tax consist of sales tax revenue bonds and commercial paper notes. Table 3-15 depicts the outstanding principal amounts associated with the sales tax revenue bonds as of July 2011.

Table 3-15: Measure R Outstanding Debt Obligations

| Level of Priority       | Outstanding as of July 1, 2011 |
|-------------------------|--------------------------------|
| Sales Tax Revenue Bonds | \$732                          |

The **Transportation Development Act (TDA)** created a Local Transportation Fund (LTF) for each county derived from ¼ cent of the 7.25 cent statewide retail sales tax base. The funds are apportioned to each county by the State Board of Equalization according to the amount of tax collected in the county. The funds are held by the County of Los Angeles which deducts for its administrative costs and distributes the balance as directed by the LACMTA Accounting Department. Most of the TDA funds are allocated under Title 4 of the Act which can be used to fund public transportation systems, bus capital or operations. These funds are often used as local match to FTA Section 5309 and Section 5307 funds.

LACMTA forecasts \$17,657 million in Article 4 revenues to be available for Bus Operations (\$12,905 million), Bus Capital (\$4,716 million) and Agency-wide Capital (\$36 million) from FY 2011 through FY 2040. This reflects the use of a conservative growth rate derived by reducing the July 2010 UCLA Anderson forecast of taxable sales growth by 15 percent. Table 3-8 shows the gross historical and forecasted Proposition A, Proposition C, Measure R, and TDA revenues. It should be noted that all local revenue sources are projected to escalate at the annual CPI rate determined in the UCLA Anderson Forecast, dated July 2010, which is described in Appendix C of this financial plan.

#### 3.1.3.2 State Funds

LACMTA receives several sources of state funding for transportation projects. The following sections summarize the most significant sources of state funding used by LACMTA for bus and rail transit capital projects. Table 3-16 includes the forecast of future state funding sources from 2011 to 2040.



Table 3-16: Major Countywide LACMTA State Revenue Sources – FY 2011 to FY 2040 (YOE \$M)

| FY   | RIP Funds         |                    | STA               |                    | Prop 1B Bonds     |                    | Other             |                    |
|------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|
|      | Revenue (YOE \$M) | Annual Growth Rate | Revenue (YOE \$M) | Annual Growth Rate | Revenue (YOE \$M) | Annual Growth Rate | Revenue (YOE \$M) | Annual Growth Rate |
| 2011 | \$91              | N/A                | \$115             | N/A                | \$587             | N/A                | \$6               | N/A                |
| 2012 | \$178             | 95.6%              | \$96              | -16.5%             | \$714             | 21.6%              | \$8               | 38.9%              |
| 2013 | \$60              | -66.3%             | \$96              | 0.0%               | \$541             | -24.3%             | \$6               | -28.9%             |
| 2014 | \$54              | -10.0%             | \$96              | 0.0%               | \$79              | -85.5%             | \$25              | 331.3%             |
| 2015 | \$114             | 111.1%             | \$97              | 1.0%               | \$24              | -69.1%             | \$68              | 169.1%             |
| 2016 | \$130             | 14.0%              | \$98              | 1.0%               | \$34              | 39.8%              | \$131             | 91.4%              |
| 2017 | \$54              | -58.5%             | \$99              | 1.0%               | \$41              | 19.9%              | \$6               | -95.2%             |
| 2018 | \$150             | 177.8%             | \$100             | 1.0%               | \$5               | -86.6%             | \$8               | 33.6%              |
| 2019 | \$150             | 0.0%               | \$101             | 1.0%               | \$0               | -100.0%            | \$6               | -23.0%             |
| 2020 | \$150             | 0.0%               | \$102             | 1.0%               | \$0               | N/A                | \$6               | 1.4%               |
| 2021 | \$150             | 0.0%               | \$103             | 1.0%               | \$0               | N/A                | \$9               | 32.3%              |
| 2022 | \$150             | 0.0%               | \$104             | 1.0%               | \$0               | N/A                | \$7               | -22.3%             |
| 2023 | \$150             | 0.0%               | \$105             | 1.0%               | \$0               | N/A                | \$7               | 1.4%               |
| 2024 | \$150             | 0.0%               | \$106             | 1.0%               | \$0               | N/A                | \$9               | 31.0%              |
| 2025 | \$150             | 0.0%               | \$107             | 0.9%               | \$0               | N/A                | \$7               | -21.5%             |
| 2026 | \$150             | 0.0%               | \$108             | 0.9%               | \$0               | N/A                | \$7               | 1.4%               |
| 2027 | \$150             | 0.0%               | \$109             | 0.9%               | \$0               | N/A                | \$9               | 29.8%              |
| 2028 | \$150             | 0.0%               | \$111             | 1.8%               | \$0               | N/A                | \$7               | -20.8%             |
| 2029 | \$150             | 0.0%               | \$112             | 0.9%               | \$0               | N/A                | \$7               | 1.4%               |
| 2030 | \$150             | 0.0%               | \$113             | 0.9%               | \$0               | N/A                | \$9               | 28.6%              |
| 2031 | \$150             | 0.0%               | \$114             | 0.9%               | \$0               | N/A                | \$8               | -20.1%             |
| 2032 | \$150             | 0.0%               | \$115             | 0.9%               | \$0               | N/A                | \$8               | 1.4%               |
| 2033 | \$150             | 0.0%               | \$116             | 0.9%               | \$0               | N/A                | \$10              | 27.5%              |
| 2034 | \$150             | 0.0%               | \$117             | 0.9%               | \$0               | N/A                | \$8               | -19.4%             |
| 2035 | \$150             | 0.0%               | \$119             | 1.7%               | \$0               | N/A                | \$8               | 1.4%               |
| 2036 | \$150             | 0.0%               | \$120             | 0.8%               | \$0               | N/A                | \$10              | 26.4%              |
| 2037 | \$150             | 0.0%               | \$121             | 0.8%               | \$0               | N/A                | \$8               | -18.7%             |
| 2038 | \$150             | 0.0%               | \$122             | 0.8%               | \$0               | N/A                | \$8               | 1.4%               |
| 2039 | \$150             | 0.0%               | \$123             | 0.8%               | \$0               | N/A                | \$10              | 25.4%              |
| 2040 | \$150             | 0.0%               | \$125             | 1.6%               | \$0               | N/A                | \$9               | -18.0%             |

Reliable High-Speed Passenger Train Bond Act for the 21st Century (also known as **Proposition 1A High Speed Rail Bonds**), approved in November 2008, authorized the issuance of \$9.95 billion of general obligation bonds. This will partially fund a \$40 billion, 800-mile high speed train that will run between San Francisco and Los Angeles. In addition, \$950 million of the bond proceeds are available for capital projects on other passenger rail lines to provide connectivity to the high-speed train system and for capacity enhancements and safety improvements to those lines. The bill under which this proposition was approved, Assembly Bill 3034 (2008), provides for \$760 million allocated to eligible recipients based on a defined formula. The majority of Los Angeles County's \$238.6 million expected share of these funds is included in the financial forecast with \$114.9 million for the Regional Connector and \$123.7 million for Metrolink.

**Proposition 1B**, approved by the voters in the November 2006 general elections, enacts 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 purposes, including high-priority transportation corridor improvements, transit and passenger rail improvements, state-local partnership transportation projects, and transit security projects. LACMTA forecasts \$2,025 million in funding from 2011-2018 through Proposition 1B. The specific funding anticipated to be used for LACMTA's Capital Program is summarized below.

- *Corridor Mobility Improvement Account (CMIA)* was funded with \$4.5 billion through Proposition 1B. The funds in the CMIA are to be available to the California Transportation Commission (CTC), upon appropriation in the annual Budget Bill by the Legislature, for allocation for performance improvements on the state highway system or major access routes to the state highway system. LACMTA anticipates \$1,056 million in CMIA funding during FYs 2011-2018 to fund specific highway projects.
- *Trade Corridors Improvement* fund received \$2 billion through Proposition 1B. Funds are committed for infrastructure improvements along federally designated "Trade Corridors of National Significance" in California or along other corridors within this state that have a high volume of freight movement. Of these total funds, LACMTA has designated approximately \$587 million annually in FYs 2011-2014.
- *Intercity Rail Improvements* received \$400 million through Proposition 1B. Funds will be allocated by the CTC, upon appropriation by the Legislature, to the California Department of Transportation (Caltrans) for intercity rail improvements. Twenty million is dedicated for FY 2011-2012 according to LACMTA forecasts.
- *State-Local Partnership Program Account* (\$1 billion): Funds shall be available to eligible transportation projects nominated by an applicant transportation agency. A dollar for dollar match of local funds shall be required for an applicant transportation agency to receive state funds under this program. Funds will be allocated by the California Transportation Commission (CTC), upon appropriation by the Legislature and subject to such conditions and criteria as the Legislature may provide by statute, over a five-year period to applicant transportation agencies. For fiscal years 2011 through 2017, LACMTA forecasts \$237 million to be available for its Capital Program.
- *Transit System Safety, Security & Disaster Response Account* (\$1 billion): Funds shall be available for capital projects that provide increased protection against a security and safety threat, and for capital expenditures to increase the capacity of transit operators, to develop disaster



response transportation systems that can move people, goods, and emergency personnel and equipment in the aftermath of a disaster impairing the mobility of goods, people, and equipment. Funds in this account will be allocated by the California Office of Emergency Services (OES) for capital projects that provide increased protection against a security and safety threat, and to develop a disaster response transportation system that can move people, goods, emergency personnel and equipment in the aftermath of a disaster, as follows:

- 60 percent for capital expenditures to agencies and transit operators.
- 25 percent for capital expenditures to regional public waterborne transit agencies
- 15 percent for capital expenditures to the intercity passenger rail system.

LACMTA anticipates \$113 million to be available for its Capital Program during FY 2011 through 2017.

- *Highway Railroad Crossing Safety: (\$250 million).* Funds are available to Caltrans for the completion of high-priority grade separation and railroad crossing safety improvements. Match funding is required. As such, \$14 million of these funds will be used in Los Angeles County during fiscal year 2011.
- *Traffic Light Synchronization* funds are available to Caltrans to develop a program to fund traffic light synchronization projects or other technology-based improvements to improve safety, operations and the effective capacity of local streets and roads. In Los Angeles County, \$30 million will be used annually to synchronize Los Angeles city local streets through FY 2012 (\$60 million total).
- *The Local Streets and Roads* account received over 10 percent of the total proceeds from Proposition 1B. Funds are used for improvements to transportation facilities that will assist in reducing local traffic congestion and further deterioration, improving traffic flows, or increasing traffic safety. Funds will be allocated, upon appropriation by the Legislature, by formula as specified in Proposition 1B (50 percent to counties and 50 percent to cities): 75 percent of funds apportioned to counties are based on the number of vehicles registered in the county relative to all counties in the State, and 25 percent are based on number of county maintained road miles relative to all county maintained road miles in the State; Funds apportioned to cities are based on total population of the city in relation to all cities in the State (minimum \$400,000 to each city). LACMTA forecasts the use of these funds within the County and LA cities during 2011 through 2015, totaling \$380 million.
- *Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA).* \$3.6 billion of these funds shall be available upon issuance of bonds by the State for rehabilitation, safety or modernization improvements, capital service enhancements or expansions, new capital projects, bus rapid transit improvements, or for rolling stock procurement, rehabilitation or replacement. LACMTA forecasts using \$702 million of these funds from FY 2011 to FY 2013.

In 2000, the Legislature enacted the *Traffic Congestion Relief Act (Act)*, a six-year funding plan to address state and local transportation needs. The Act created two funds both of which receive funding from a combination of State General Fund revenues (one-time) and gasoline sales taxes (ongoing) that previously did not go to transportation. LACMTA uses funds from the Traffic Congestion Relief Fund (TCRF) to support the projects specified in the Act to reduce congestion. Due to the State's fiscal condition in the early 2000s, much of the funding was loaned to the State

General Fund. As a result, later statutes extended the annual transfer of revenues to the TCRF through FY 2008 and specified repayment of prior-year loans which will likely continue into the next decade. In June 2009, the California Transportation Commission adopted an updated statewide allocation plan for the remainder of the funds.

LACMTA forecasts \$358 million of TCRF funds are available through 2017. Seventy four percent (\$266 million) is dedicated towards highway capital projects. An additional \$92 million (26 percent) is committed to rail capital.

**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.

LACMTA is responsible for programming just under 17 percent of any funds that are distributed statewide through the State Transportation Improvement Program or STIP. The LRTP assumes that the LACMTA will use these funds to fulfill commitments made in prior STIP processes through FY 2015. In FY 2016 and beyond, new funds are assumed to be available for capital projects in the LRTP, including the Call for Projects.

- **Interregional Improvement Program (IIP):** 25 percent of STIP funds are used for capacity enhancing highway improvements proposed and administered by Caltrans, and for intercity rail capital improvements. LACMTA forecasts the use of \$114 million of IIP funds through FY 2016 for highway projects.
- **Regional Improvement Program (RIP):** 75 percent of STIP funds are distributed 60 percent by formula to the 13 southern counties and 40 percent to the northern counties. LACMTA, as RTPA, proposes regional projects for itself, Caltrans and local agencies. Since LACMTA receives no federal metropolitan planning funds, LACMTA may propose to use up to 5 percent of its RIP share for project Planning, Programming and Monitoring (PPM) which may be used for project planning including studies and alternatives analyses. LACMTA forecasts the use of RIP funds from FY2011 through FY 2040, totaling \$2,652 million for highway projects and \$1,268 million for transit projects. This total forecasts reflects the assumption of receipt of a constant \$150 million for FY 2017 through 2040. This level of funding assumes that the annual amount of the California STIP will be approximately \$900 million.

### 3.1.3.3 Federal Funds

The provisions and funding programs specified in SAFETEA-LU, which includes all Federal highway, transit, and transportation programs, are assumed in the financial forecast. This financial plan assumes that current federal funding programs that are included in SAFETEA-LU will continue in the future. In the absence of clear federal transportation funding policy, existing funding levels for individual programs other than federal formula funds are assumed to grow 1.4 percent annually beyond the SAFETEA-LU period. The historical and forecasted major sources of Federal funds received by LACMTA for FY 2000 to FY 2040 are shown in Table 3-17. From FY 2011 to FY 2040, FTA Section 5309 New Starts funding is assumed for the Regional Connector (\$671 million) and Westside Subway Extension (\$2,400 million).

Table 3-17: Major LACMTA Federal Revenue Sources – FY 2011 to FY 2040 (YOE \$M)

| FY   | FTA Section 5309<br>New Starts |                       | FTA Section 5309<br>Fixed Guideway Mod. |                       | FTA Section 5309<br>Bus & Bus Facilities |                       | FTA Section 5307<br>Capital |                       | CMAQ                 |                       | Other*               |                       | Total                |                       |
|------|--------------------------------|-----------------------|-----------------------------------------|-----------------------|------------------------------------------|-----------------------|-----------------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|
|      | Revenue<br>(YOE<br>\$M)        | Annual<br>Growth Rate | Revenue<br>(YOE<br>\$M)                 | Annual<br>Growth Rate | Revenue<br>(YOE \$M)                     | Annual Growth<br>Rate | Revenue<br>(YOE<br>\$M)     | Annual<br>Growth Rate | Revenue<br>(YOE \$M) | Annual Growth<br>Rate | Revenue<br>(YOE \$M) | Annual<br>Growth Rate | Revenue<br>(YOE \$M) | Annual Growth<br>Rate |
| 2011 | \$0                            | N/A                   | \$41                                    | N/A                   | \$1                                      | N/A                   | \$224                       | N/A                   | \$135                | N/A                   | \$361                | N/A                   | \$763                | N/A                   |
| 2012 | \$0                            | N/A                   | \$41                                    | 1.4%                  | \$9                                      | 551.1%                | \$227                       | 1.4%                  | \$138                | 1.8%                  | \$143                | -60.5%                | \$558                | -26.8%                |
| 2013 | \$250                          | NA                    | \$42                                    | 1.4%                  | \$30                                     | 236.6%                | \$231                       | 1.4%                  | \$140                | 1.8%                  | \$114                | -19.8%                | \$807                | 44.6%                 |
| 2014 | \$250                          | 0.0%                  | \$42                                    | 1.4%                  | \$9                                      | -70.5%                | \$234                       | 1.4%                  | \$143                | 1.8%                  | \$123                | 7.6%                  | \$801                | -0.8%                 |
| 2015 | \$250                          | 0.0%                  | \$43                                    | 1.4%                  | \$0                                      | -100.0%               | \$237                       | 1.4%                  | \$100                | -29.9%                | \$125                | 1.4%                  | \$755                | -5.7%                 |
| 2016 | \$250                          | 0.0%                  | \$44                                    | 1.4%                  | \$0                                      | NA                    | \$240                       | 1.4%                  | \$100                | 0.0%                  | \$110                | -11.8%                | \$744                | -1.4%                 |
| 2017 | \$250                          | 0.0%                  | \$44                                    | 1.4%                  | \$0                                      | NA                    | \$244                       | 1.4%                  | \$100                | 0.0%                  | \$112                | 1.8%                  | \$750                | 0.8%                  |
| 2018 | \$250                          | 0.0%                  | \$45                                    | 1.4%                  | \$0                                      | NA                    | \$247                       | 1.4%                  | \$100                | 0.0%                  | \$114                | 1.8%                  | \$756                | 0.8%                  |
| 2019 | \$212                          | -15.2%                | \$45                                    | 1.4%                  | \$0                                      | NA                    | \$251                       | 1.4%                  | \$100                | 0.0%                  | \$116                | 1.8%                  | \$724                | -4.2%                 |
| 2020 | \$159                          | -24.9%                | \$46                                    | 1.4%                  | \$5                                      | NA                    | \$254                       | 1.4%                  | \$80                 | -20.0%                | \$118                | 1.7%                  | \$663                | -8.5%                 |
| 2021 | \$150                          | -5.8%                 | \$47                                    | 1.4%                  | \$5                                      | 0.0%                  | \$258                       | 1.4%                  | \$80                 | 0.0%                  | \$120                | 1.8%                  | \$660                | -0.4%                 |
| 2022 | \$150                          | 0.0%                  | \$47                                    | 1.4%                  | \$5                                      | 0.0%                  | \$261                       | 1.4%                  | \$80                 | 0.0%                  | \$122                | 1.7%                  | \$666                | 1.0%                  |
| 2023 | \$150                          | 0.0%                  | \$48                                    | 1.4%                  | \$5                                      | 0.0%                  | \$265                       | 1.4%                  | \$80                 | 0.0%                  | \$125                | 1.7%                  | \$673                | 1.0%                  |
| 2024 | \$150                          | 0.0%                  | \$49                                    | 1.4%                  | \$5                                      | 0.0%                  | \$269                       | 1.4%                  | \$80                 | 0.0%                  | \$127                | 1.7%                  | \$679                | 1.0%                  |
| 2025 | \$150                          | 0.0%                  | \$49                                    | 1.4%                  | \$5                                      | 0.0%                  | \$272                       | 1.4%                  | \$80                 | 0.0%                  | \$129                | 1.7%                  | \$686                | 1.0%                  |
| 2026 | \$150                          | 0.0%                  | \$50                                    | 1.4%                  | \$5                                      | 0.0%                  | \$276                       | 1.4%                  | \$60                 | -25.0%                | \$131                | 1.7%                  | \$672                | -1.9%                 |
| 2027 | \$150                          | 0.0%                  | \$51                                    | 1.4%                  | \$5                                      | 0.0%                  | \$280                       | 1.4%                  | \$60                 | 0.0%                  | \$133                | 1.7%                  | \$679                | 1.0%                  |
| 2028 | \$150                          | 0.0%                  | \$52                                    | 1.4%                  | \$5                                      | 0.0%                  | \$284                       | 1.4%                  | \$60                 | 0.0%                  | \$135                | 1.7%                  | \$686                | 1.0%                  |
| 2029 | \$200                          | 33.4%                 | \$52                                    | 1.4%                  | \$5                                      | 0.0%                  | \$288                       | 1.4%                  | \$60                 | 0.0%                  | \$138                | 1.7%                  | \$743                | 8.3%                  |
| 2030 | \$200                          | 0.0%                  | \$53                                    | 1.4%                  | \$5                                      | 0.0%                  | \$292                       | 1.4%                  | \$60                 | 0.0%                  | \$140                | 1.7%                  | \$750                | 1.0%                  |
| 2031 | \$200                          | 0.0%                  | \$54                                    | 1.4%                  | \$5                                      | 0.0%                  | \$296                       | 1.4%                  | \$60                 | 0.0%                  | \$142                | 1.7%                  | \$757                | 1.0%                  |
| 2032 | \$200                          | 0.0%                  | \$54                                    | 1.4%                  | \$5                                      | 0.0%                  | \$300                       | 1.4%                  | \$60                 | 0.0%                  | \$145                | 1.7%                  | \$765                | 1.0%                  |
| 2033 | \$200                          | 0.0%                  | \$55                                    | 1.4%                  | \$5                                      | 0.0%                  | \$305                       | 1.4%                  | \$60                 | 0.0%                  | \$147                | 1.7%                  | \$772                | 1.0%                  |
| 2034 | \$200                          | 0.0%                  | \$56                                    | 1.4%                  | \$5                                      | 0.0%                  | \$309                       | 1.4%                  | \$60                 | 0.0%                  | \$150                | 1.6%                  | \$780                | 1.0%                  |
| 2035 | \$200                          | 0.0%                  | \$57                                    | 1.4%                  | \$5                                      | 0.0%                  | \$313                       | 1.4%                  | \$60                 | 0.0%                  | \$152                | 1.6%                  | \$787                | 1.0%                  |

WESTSIDE SUBWAY EXTENSION

Table 3-17: Major LACMTA Federal Revenue Sources – FY 2011 to FY 2040 (YOE \$M) (continued)

| FY   | FTA Section 5309<br>New Starts |                       | FTA Section 5309<br>Fixed Guideway Mod. |                       | FTA Section 5309<br>Bus & Bus Facilities |                       | FTA Section 5307<br>Capital |                       | CMAQ                 |                       | Other*               |                       | Total                |                       |
|------|--------------------------------|-----------------------|-----------------------------------------|-----------------------|------------------------------------------|-----------------------|-----------------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|
|      | Revenue<br>(YOE<br>\$M)        | Annual<br>Growth Rate | Revenue<br>(YOE<br>\$M)                 | Annual<br>Growth Rate | Revenue<br>(YOE \$M)                     | Annual Growth<br>Rate | Revenue<br>(YOE<br>\$M)     | Annual<br>Growth Rate | Revenue<br>(YOE \$M) | Annual Growth<br>Rate | Revenue<br>(YOE \$M) | Annual<br>Growth Rate | Revenue<br>(YOE \$M) | Annual Growth<br>Rate |
| 2036 | \$200                          | 0.0%                  | \$58                                    | 1.4%                  | \$5                                      | 0.0%                  | \$317                       | 1.4%                  | \$60                 | 0.0%                  | \$155                | 1.7%                  | \$795                | 1.0%                  |
| 2037 | \$200                          | 0.0%                  | \$58                                    | 1.4%                  | \$5                                      | 0.0%                  | \$322                       | 1.4%                  | \$60                 | 0.0%                  | \$157                | 1.6%                  | \$803                | 1.0%                  |
| 2038 | \$200                          | 0.0%                  | \$59                                    | 1.4%                  | \$5                                      | 0.0%                  | \$326                       | 1.4%                  | \$60                 | 0.0%                  | \$160                | 1.7%                  | \$810                | 1.0%                  |
| 2039 | \$200                          | 0.0%                  | \$60                                    | 1.4%                  | \$5                                      | 0.0%                  | \$331                       | 1.4%                  | \$60                 | 0.0%                  | \$163                | 1.7%                  | \$819                | 1.0%                  |
| 2040 | \$0                            | -100.0%               | \$61                                    | 1.4%                  | \$5                                      | 0.0%                  | \$336                       | 1.4%                  | \$60                 | 0.0%                  | \$165                | 1.7%                  | \$627                | -23.4%                |

\*Other includes all other project LACMTA Federal Revenues.

**Section 5309 New Starts** funding is awarded by FTA on a discretionary basis for fixed guideway capital investment projects. Funds are provided by FTA based on the terms of a Full Funding Grant Agreement, following a formal FTA review and rating of the project in terms of various criteria specified in law and regulation. The total Federal share of a project is \$75 million or more with a maximum share of 80 percent, although many projects receive funds at a federal share of 60 percent or lower. In FY 2010 LACMTA received an allocation of \$74 million of New Starts funding, which was the final year of FFGA funding for the Gold Line Eastside extension project, which opened in November 2009.

This financial plan is based on the assumption that Westside Subway Extension will receive a grant equal to 42 percent of its total project cost and the Regional Connector will receive a grant equal to 50 percent of its total project costs. The forecast also assumes that LACMTA will receive additional funding for future fixed guideway projects from 2021 to 2040, however these future New Starts funds have not been incorporated into the systemwide sources and uses until eligible project have been identified.

**Section 5309 Fixed Guideway Modernization** funding is used for rehabilitation and replacement of major fixed guideway capital investment projects. Eligible activities are capital projects to modernize or improve existing fixed guideway systems, including purchase and rehabilitation of rolling stock, track, line equipment, structures, signals and communications, power equipment and substations, passenger stations and terminals, security equipment and systems, maintenance facilities and equipment, operational support equipment including computer hardware and software, system extensions, and preventive maintenance. These funds are apportioned by FTA based on statutory formula to urbanized areas with rail systems that have been in operation for at least seven years. LACMTA intends to use these funds for preventive maintenance, rail cars, and rehabilitation and replacement for state of good repair purposes.

This financial plan assumes that approximately \$41 million is estimated to go to LACMTA for rail modernization programs in FY 2011 and \$41 in FY 2012.

The forecast assumes that these funds will grow at an average annual growth rate of 1.4 percent from FY 2011 to FY 2040. Additional miles will be included annually as Metrolink and LACMTA rail service miles become eligible and are applied to the federal formula. This added revenue is assumed based on current formulas. Additional funding is expected seven years after new rail lines become operational.

**Section 5309 Bus and Bus Facilities / Clean Fuel Program** funds can be used for the purchasing of buses, bus maintenance and administrative facilities, transfer facilities, intermodal terminals, park-and-ride stations, and passenger shelters. Approximately \$49 million in earmark funding is included in FY 2011 to FY 2014. Using LACMTA's estimated share of the national formula in the Clean Fuel Program (which references the CMAQ formula), an average of \$5.0 million per year is assumed starting in FY 2020. This forecast is based on the intent of the Clean Fuel Program and assumes that federal funding will be available to meet clean air requirements in Los Angeles County. Congressional appropriations have transferred the Clean Fuel Program allocation to the Section 5309 Bus and Bus Facilities discretionary section of the annual funding bill. These discretionary earmarks result in generally the same amount each year to LACMTA.

***Congestion Mitigation and Air Quality Improvements (CMAQ)*** funding is for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide, and particulate matter which reduce transportation-related emissions. Funds are apportioned by to metropolitan regions based on a formula that takes into account population and severity of pollution in ozone and carbon monoxide areas. The funds are then awarded to projects that help reduce carbon emissions. The federal share of CMAQ funds is generally 80 percent, but is 90 percent or 100 percent in certain cases. Funds may be flexed or transferred to the FTA in order to be used for transit projects.

CMAQ program funding has been adjusted to reflect air quality improvements in Los Angeles County. LACMTA is part of the South Coast Air Quality Basin in Southern California and the deadline for compliance with the latest updated air quality standards is 2020. Accordingly, the annual revenue forecast is reduced beginning FY 2015, again beginning FY 2020, and again beginning FY 2026.

LACMTA's forecast for CMAQ funds assumes that it will receive approximately \$556 million from 2011 to 2014. From 2015 to 2019, LACMTA would receive approximately \$100 million per year; and from 2020 to 2025 LACMTA would receive \$80 million per year; and from 2026 to 2040, LACMTA assumes it would receive \$60 million per year.

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. It is assumed that all new rail lines and various LACMTA Rapid bus projects will receive CMAQ funding for their actual operating costs for the first three years of operation.

***Section 5307 Capital Funds*** are apportioned to urban areas based on a formula. For areas with populations of 200,000 and more, the formula is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guideway revenue vehicle miles, and fixed guideway route miles as well as population and population density.

Section 5307 funds can be used for preventive maintenance costs as well as capital costs. Eligible activities include planning, engineering design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software.

The amount of Section 5307 funds assumed in the financial plan is based on the Southern California Association of Governments formulas. Funding is assumed to increase by 1.4 percent in all future years. The financial forecast assumes the continued usage of these funds by LACMTA for eligible bus preventive maintenance costs in the operating budget.

The forecast also assumes that these funds will be allocated to all eligible bus operators by formula for identified capital requirements, pursuant to the current LACMTA Capital Allocation Procedure (85 percent by formula and 15 percent discretionary). For financial modeling purposes only and to determine potential funds for the agencies, future discretionary funds are assumed split between the

Municipal Operators and LACMTA based on the average of the last five years. The actual allocation of the 15 percent discretionary funds will occur annually and may vary from this modeling assumption.

The Municipal Operators use their formula portion of Section 5307 for capital facilities and purchasing replacement buses on a 12-year cycle. New buses for fixed route expansion are planned along with smaller vehicles and capital facilities to support the expansion. In the event that the Municipal Operators convert from diesel fuel to cleaner burning fuels, provisions for alternative fueling facilities are provided in the capital facilities funding component; several have initiated this conversion.

**Surface Transportation Program (STP)** funds are appropriated by Congress for highway improvements but are flexible and eligible for transit capital projects, Transportation Demand Management, and improvements to highways and arterial roads. The funding is apportioned to states based 25 percent on total lane miles of Federal-aid highways, 40 percent on vehicles miles traveled on Federal-aid highways, and 35 percent on highway users' tax payments into the Highway Account of the Highway Trust Fund. Half of the STP allocation to the State is assumed to go to the California State Highway Account with the remainder allocated to the regions by formula in accordance with Section 182.6 of the California Streets and Highways Code. Funds may be flexed or transferred to the FTA in order to be used for transit projects.

Most of LACMTA's Regional Surface Transportation Improvement Program (RSTIP) share of STP funding is assumed converted to funds eligible for paratransit uses by Access Services. This is possible because Access Services, as contracted service, is considered a capital expense. Some RSTIP funds have been assumed for carpool lanes and freeway gap closures/arterial widening in Los Angeles County.

The **Section 5340 Growing State Program** is based on the amount of population growth anticipated and averages \$8.1 million per year. Until the 2010 census-based estimates are available, the 2000 census is used to determine the amount of revenue for Los Angeles County. This new revenue source is assumed used for rail purposes. The actual award of funds is done through the Section 5307 requirements and FTA grant management procedures.

**Transportation Enhancements (TE)** – Ten percent of each state's federal STP apportionment must be used for Federal TE projects such as pedestrian and bicycle facilities, landscaping and other scenic beautification, and historical preservation and rehabilitation. Federal TE apportionments are programmed through the STIP. Los Angeles County projects are selected through the LACMTA Call for Projects process.

#### 3.1.4 LACMTA America Fast Forward Capital Financing Strategy

As originally planned, Measure R was expected to generate the revenues necessary to fund a majority of the non-Federal contribution for the 12 long-term capital expansion projects on a pay-as-you-go basis. However, to meet the accelerated schedules of all twelve projects in America Fast Forward, LACMTA intends to leverage Measure R funds through debt financing. This financial plan assumes that LACMTA will receive \$8,299 million in Measure R backed leveraged revenues for the twelve America Fast Forward projects using the financial instruments detailed below. The overall funding breakout for the program of projects in America Fast Forward is delineated in Table 3-18.



Table 3-18: America Fast Forward Funding Breakout (YOE \$M)

| Project                                       | Total Project Cost | Federal Funds  |              |                     | Measure R Funds |                |              |                  |              | State Funds  |                      |               |                   |              | Local Funds  |              |                    |              |
|-----------------------------------------------|--------------------|----------------|--------------|---------------------|-----------------|----------------|--------------|------------------|--------------|--------------|----------------------|---------------|-------------------|--------------|--------------|--------------|--------------------|--------------|
|                                               |                    | New Starts     | CMAQ         | Other Federal Funds | TIFIA Debt      | QTIBs          | BABs         | Tax Exempt Bonds | Comm Paper   | Cash         | State Repay Cap Loan | State Prop 1B | State Prop 1A HSR | TCRP/RIP     | Prop A       | Prop C       | Local Agency Funds | Other Local  |
| Orange Line Canoga Extension                  | \$221              | \$-            | \$-          | \$-                 | Ineligible      | Ineligible     | \$-          | \$-              | \$-          | \$2          | \$-                  | \$132         | \$-               | \$4          | \$-          | \$84         | \$-                | \$-          |
| Exposition - Phase II                         | \$1,309            | \$-            | \$-          | \$-                 | Ineligible      | Ineligible     | \$262        | \$89             | \$305        | \$157        | \$-                  | \$49          | \$-               | \$48         | \$238        | \$115        | \$45               | \$-          |
| Gold Line Foothill Extension (from Pasadena)  | \$787              | \$-            | \$-          | \$15                | Ineligible      | Ineligible     | \$308        | \$90             | \$-          | \$272        | \$-                  | \$-           | \$-               | \$-          | 75.6         | \$0          | \$26               | \$-          |
| East San Fernando Valley North-South Corridor | \$171              | \$-            | \$-          | \$-                 | \$-             | \$-            | \$-          | \$-              | \$-          | 67.5         | \$1                  | \$3           | \$-               | \$94         | \$-          | \$1          | \$5                | \$1          |
| Crenshaw/LAX Transit Corridor                 | \$1,715            | \$-            | \$68         | \$30                | \$546           | \$646          | \$-          | \$-              | \$-          | \$15         | \$-                  | \$201         | \$-               | \$50         | \$14         | \$93         | \$51               | \$-          |
| Regional Connector                            | \$1,366            | \$671          | \$-          | \$-                 | \$-             | \$160          | \$-          | \$-              | \$-          | \$-          | \$0                  | \$176         | \$115             | \$18         | Ineligible   | Ineligible   | \$41               | \$185        |
| Westside Subway Extension                     | \$5,662            | \$2,400        | \$-          | \$-                 | \$641           | \$1,982        | \$-          | \$-              | \$-          | \$387        | \$99                 | \$-           | \$-               | \$-          | Ineligible   | Ineligible   | \$155              | \$-          |
| West Santa Ana Branch                         | \$289              | \$-            | \$-          | \$-                 | \$-             | \$240          | \$-          | \$-              | \$-          | \$-          | \$-                  | \$-           | \$-               | \$-          | \$-          | \$41         | \$9                | \$-          |
| Green Line Extension to LAX                   | \$241              | \$-            | 34.1         | \$-                 | \$-             | \$193          | \$-          | \$-              | \$-          | \$7          | \$-                  | \$-           | \$-               | \$-          | \$-          | \$-          | \$7                | \$-          |
| Gold Line Eastside Extension Phase II         | \$1,529            | \$-            | 40.1         | \$-                 | \$-             | \$1,264        | \$-          | \$-              | \$-          | \$7          | \$7                  | \$-           | \$-               | 0.5          | \$3          | \$162        | \$46               | \$-          |
| South Bay Green Line Extension                | \$333              | \$-            | 6.5          | \$-                 | \$-             | \$272          | \$-          | \$-              | \$-          | \$-          | \$5                  | \$-           | \$-               | \$-          | \$-          | \$39         | \$10               | \$-          |
| San Fernando Valley I-405                     | \$1,380            | \$-            | \$-          | \$-                 | \$-             | \$1,000        | \$-          | \$-              | \$-          | \$-          | \$-                  | \$-           | \$-               | \$1          | \$-          | 337.7        | \$41               | \$-          |
| <b>Total</b>                                  | <b>\$15,004</b>    | <b>\$3,071</b> | <b>\$149</b> | <b>\$45</b>         | <b>\$1,187</b>  | <b>\$5,757</b> | <b>\$571</b> | <b>\$179</b>     | <b>\$305</b> | <b>\$914</b> | <b>\$111</b>         | <b>\$560</b>  | <b>\$115</b>      | <b>\$215</b> | <b>\$331</b> | <b>\$873</b> | <b>\$436</b>       | <b>\$186</b> |

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**Transportation Infrastructure Finance and Innovation Act (TIFIA) loans:** It is anticipated that the major capital projects will receive \$1,187 million in direct TIFIA loan draws in FY 2016 through FY 2020, representing an assumed front-end commitment from the USDOT to provide financing for the Westside Subway Extension and Crenshaw/LAX projects. The TIFIA loan would be backed by Measure R revenues.

The interest rate on the TIFIA for the Westside Subway Extension project proceeds is assumed to be equal to the 3.43 percent on a par amount of \$640.8 million. The loans are expected to be paid back over a 19-year period. The loans will be backed by future Measure R revenues; all debt service payments on the 19-year loan will be paid with Measure R revenues.

**Qualified Transportation Improvement Bonds (QTIBs):** It is proposed that the twelve America Fast Forward projects receive \$5,757 million in Measure R backed QTIB revenues on a programmatic level. QTIBs represent a new category of direct subsidy tax-preferred bonds for transit initiatives of national significance, and are pending legislative approval as part of pending or future tax legislation. It is proposed that the federal interest subsidy would be set at 100 percent of the interest rate on the bonds and the bond principal repayment must be backed by non-federal revenue source, such as Measure R. QTIBs are proposed to be enacted as part of a pilot program, through which the Secretary of Transportation would select nationally significant projects or programs of projects, such as America Fast Forward, that significantly reduce greenhouse gases or emissions, have an estimated capital cost in excess of \$1 billion, and derive not more than 30 percent of their capital cost funding from federal grant programs. For LACMTA, the 30 percent limit would apply to the amount of Federal funds available for the entire America Fast Forward program of projects, which would be approximately 22 percent.

The creation of a QTIB type financing instrument is not unprecedented. Since 1997, Congress has enacted half a dozen separate programs authorizing state and local governments to issue tax-preferred debt at or near zero percent. These programs, totaling in excess of \$37 billion, have been for purposes such as public education, Gulf and Midwestern disaster recovery, clean renewable energy, forestry conservation and energy conservation. The interest subsidies are designed to provide federal buy-downs of 70 percent to 100 percent of borrowers' interest expense. Each program has a volume cap and maturity limitation associated with it.

The \$5,757 million in QTIB proceeds are assumed to be fixed-rate serial bonds with a 30-year amortization and level principal payments. The bonds' interest rates are assumed to be 5.45 percent, which is estimated from a benchmark AA-rated 30-year municipal bond from Thomson Reuters and is reflective of today's interest rates. In the proposed financing plan, it is assumed that QTIBs will be issued in FY 2013, FY 2015, FY 2017, and FY 2019. Similar to the assumed TIFIA financing, the QTIBs will be backed by future Measure R revenues and will be paid back only with future Measure R revenues.

**Build America Bonds (BABs):** The financial plan assumes \$571 million in BABs, which are taxable bonds issued by state and local governments that gives them access to the conventional corporate debt markets. BABs were issued in FY 2011, resulting in \$571 million in revenue. The BABs are fixed-rate serial bonds with the first debt service payment made in FY 2011 and the final maturity in FY 2039. Interest rates range from 4.28 percent for the first maturity on June 1, 2021 to a high of 5.735 percent for the last maturity on June 1, 2039. Because of the 35 percent federal subsidy, the net interest cost for the entire bond issue is approximately 3.52 percent.

**Commercial Paper:** The assumed financing plan has the projects receiving \$305 million in Measure R backed commercial paper. The assumed interest rate for this debt is 2.3 percent for FY 2011 to FY 2013, 2.8 percent for FY 2014 to FY 2020, and 3.3 percent for FY 2021 to FY 2039. All rates include the cost of the credit facility. Both the underlying interest rate and cost of credit facility are reflective of current market pricing and comparable to the cost on the LACMTA's existing commercial paper programs.

**Proposition A backed Bonds:** The current financing plan assumes that the Exposition – Phase II (\$238 million) and the Crenshaw/LAX (\$14 million) projects will receive a total of \$260 million Proposition A senior lien bonds. The Proposition A bonds are assumed to be fixed-rate serial bonds with a 30-year amortization and level annual debt service. The interest rate is assumed to be 4.5 percent for issues in FY 2011 to FY 2013, 5.0 percent for FY 2014 to FY 2020, and 5.5 percent for FY 2021 to FY 2039. Issuance costs are assumed to be 1.4 percent of the par amount.

**Measure R backed Tax Exempt Bonds:** In conjunction with the BABs, tax exempt bonds were issued in FY 2011 and provide funding for the Exposition – Phase II and Gold Line Foothill Extension projects. The tax-exempt bonds are fixed-rate serial bonds with the first debt service payments made in FY 2011 and the final maturity in FY 2020. After an initial \$15.2 million, carrying a 0.50 percent interest rate, is repaid on June 1, 2012, interest rates range from 3.00 percent to 5.00 percent depending on the maturity date.

**Section 5309 Capital Grant Receipts Revenue Bonds:** LACMTA anticipates receipt of the FTA Section 5309 New Starts funding for the Westside Extension project via installments ranging from \$150 to \$250 million beginning in FY 2013 and going through FY 2039. This payment schedule is not consistent with the project's cash flow requirements during the construction period. As such, LACMTA will issue a total of \$1,134 million in FTA Section 5309 Capital Grant Receipt Revenue Bonds in FY 2013 through FY 2018, and FY 2020. Financing charges for the bonds will total \$473 million assuming a 4.0 percent interest rate.

**State Issued Debt:** Eight of the 12 America Fast Forward capital expansion projects are assumed to receive some combination of State Proposition 1A High Speed Rail bonds, State Proposition 1B bonds, or RIP Proposition 1B bonds. These proposed funding sources represent Los Angeles County's share of anticipated State issued debt financing. As such, it is assumed that the State will be able to issue debt and offer the County its share of funding. These revenues are therefore treated as straight revenue sources and not financing, as the State is obtaining the financing and passing the revenues onto the County.

The following sections will outline the annual Measure R backed debt financing assumptions. First the timing of the debt proceeds will be outlined. Next, the debt instrument draw-downs by each project will be highlighted. Finally, the annual debt service payments by LACMTA will be detailed. In total LACMTA plans to receive \$7,999 million revenue from Measure R backed debt instruments to fund America Fast Forward. A total of \$9,820 million in debt service payments will be paid with Measure R revenues between FY 2010 and FY 2040. Given this debt service schedule, a minimum annual debt service coverage ratio of 0.84 is anticipated to occur in FY 2019. Over the FY 2010 to FY 2040 time period, the average annual debt service coverage ratio is a respectable 1.25.



3.1.4.1 Financing Revenues

Table 3-19 demonstrates the annual financing instrument revenues for the four Measure R backed debt instruments. The overall breakdown of the four financing instruments is shown in Figure 3-6 while the annual breakdown of financing instrument revenues is depicted in Figure 3-7.

Table 3-19: Measure R backed Financing Instrument Revenues (YOE \$M)

| FY    | QTIBs (YOE \$M) | TIFIA Loan (YOE \$M) | Tax Exempt Bonds (YOE \$M) | BABs (YOE \$M) | Comm Paper (YOE \$M) | Total (YOE \$M) |
|-------|-----------------|----------------------|----------------------------|----------------|----------------------|-----------------|
| 2011  | \$0             | \$0                  | \$179                      | \$571          | \$0                  | \$750           |
| 2012  | \$0             | \$0                  | \$0                        | \$0            | \$0                  | \$0             |
| 2013  | \$989           | \$0                  | \$0                        | \$0            | \$0                  | \$989           |
| 2014  | \$0             | \$0                  | \$0                        | \$0            | \$87                 | \$87            |
| 2015  | \$3,175         | \$0                  | \$0                        | \$0            | \$218                | \$3,393         |
| 2016  | \$0             | \$126                | \$0                        | \$0            | \$0                  | \$126           |
| 2017  | \$1,105         | \$554                | \$0                        | \$0            | \$0                  | \$1,660         |
| 2018  | \$0             | \$330                | \$0                        | \$0            | \$0                  | \$330           |
| 2019  | \$488           | \$114                | \$0                        | \$0            | \$0                  | \$601           |
| 2020  | \$0             | \$64                 | \$0                        | \$0            | \$0                  | \$64            |
| TOTAL | \$5,757         | \$1,188              | \$179                      | \$571          | \$305                | \$8,000         |

Figure 3-6: Measure R backed Financing Instrument Revenue Breakdown – FY 2011 to FY 2040 (YOE \$M)

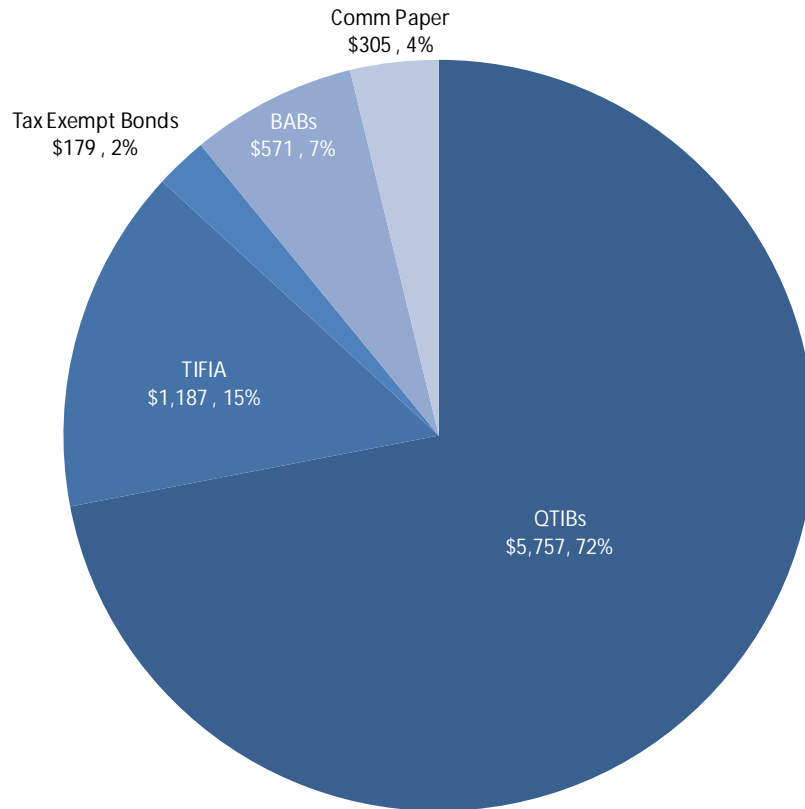
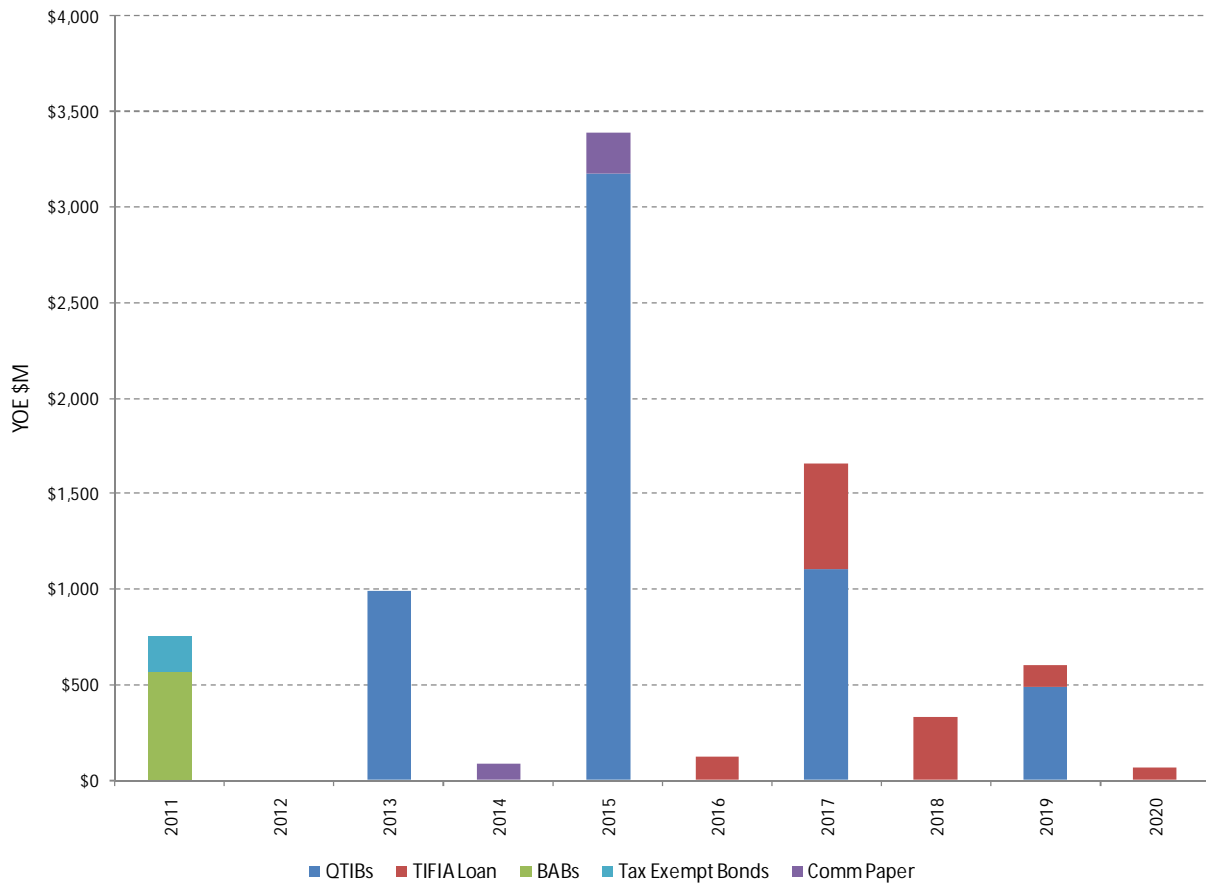




Figure 3-7: Measure R backed Financing Instrument Revenue (YOE \$M)



### 3.1.4.2 Financing Draw-downs

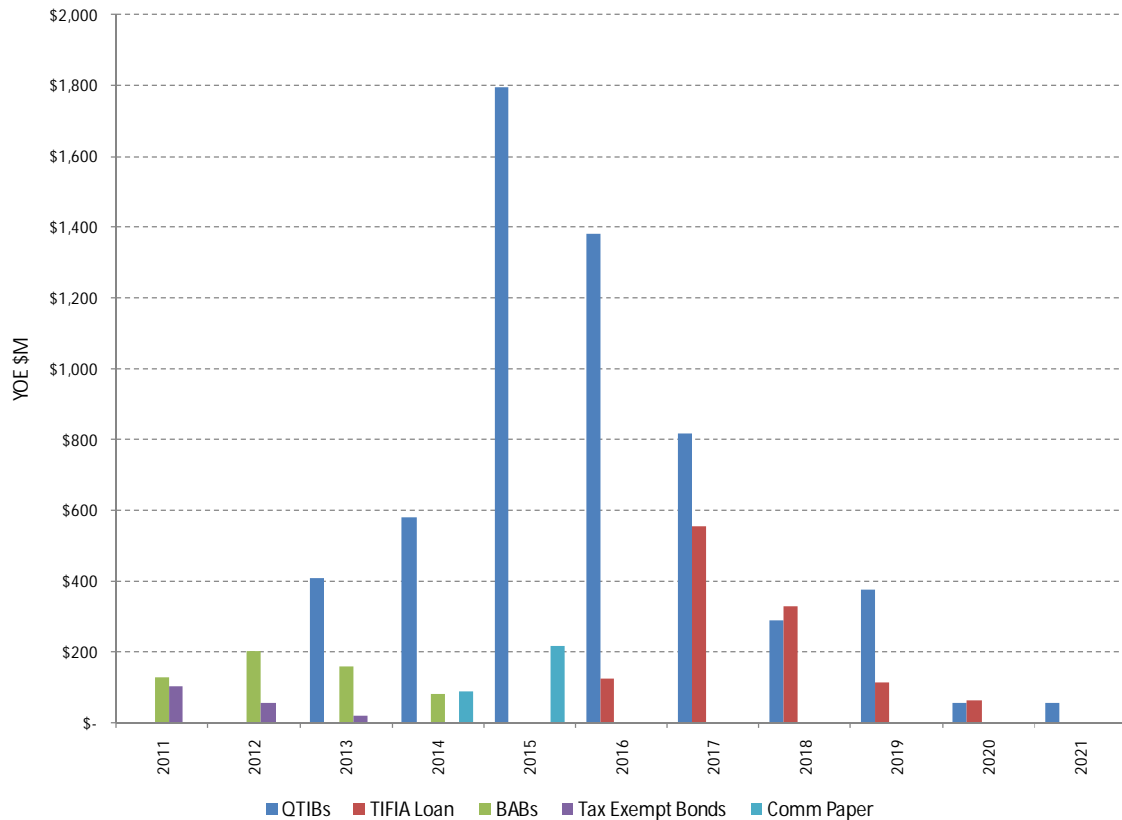
Table 3-20 demonstrates the annual financing instrument draw-downs for the four Measure R backed debt instruments for each of the twelve America Fast Forward capital expansion projects. The annual drawdown of each financing instrument is shown in Figure 3-8.

Table 3-20: Measure R backed Financing Instrument Draw-Downs (YOE \$M)

| Project                                       | FY11         | FY12         | FY13         | FY14         | FY15           | FY16           | FY17           | FY18         | FY19         | FY20         | FY21        | FY22           | Total          |
|-----------------------------------------------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|--------------|--------------|--------------|-------------|----------------|----------------|
| Orange Line Canoga Extension                  | \$0          | \$0          | \$0          | \$0          | \$0            | \$0            | \$0            | \$0          | \$0          | \$0          | \$0         | \$0            | \$0            |
| Exposition - Phase II                         | \$180        | \$172        | \$0          | \$87         | \$218          | \$0            | \$0            | \$0          | \$0          | \$0          | \$0         | \$657          | \$657          |
| BABs                                          | \$128        | \$134        | \$0          | \$0          | \$0            | \$0            | \$0            | \$0          | \$0          | \$0          | \$0         | \$262          | \$262          |
| Commercial Paper                              | \$0          | \$0          | \$0          | \$87         | \$218          | \$0            | \$0            | \$0          | \$0          | \$0          | \$0         | \$305          | \$305          |
| Tax Exempt Bonds                              | \$52         | \$37         | \$0          | \$0          | \$0            | \$0            | \$0            | \$0          | \$0          | \$0          | \$0         | \$89           | \$89           |
| Gold Line Foothill Extension (from Pasadena)  | \$50         | \$88         | \$181        | \$80         | \$0            | \$0            | \$0            | \$0          | \$0          | \$0          | \$0         | \$398          | \$398          |
| BABs                                          | \$0          | \$68         | \$160        | \$80         | \$0            | \$0            | \$0            | \$0          | \$0          | \$0          | \$0         | \$308          | \$308          |
| Tax Exempt Bonds                              | \$50         | \$20         | \$21         | \$0          | \$0            | \$0            | \$0            | \$0          | \$0          | \$0          | \$0         | \$90           | \$90           |
| East San Fernando Valley North-South Corridor | \$0          | \$0          | \$0          | \$0          | \$0            | \$0            | \$0            | \$0          | \$0          | \$0          | \$0         | \$0            | \$0            |
| Crenshaw/LAX Transit Corridor                 | \$0          | \$0          | \$0          | \$246        | \$272          | \$233          | \$287          | \$149        | \$5          | \$0          | \$0         | \$1,192        | \$1,192        |
| QTIBs                                         | \$0          | \$0          | \$0          | \$246        | \$272          | \$108          | \$15           | \$1          | \$5          | \$0          | \$0         | \$646          | \$646          |
| TIFIA                                         | \$0          | \$0          | \$0          | \$0          | \$0            | \$126          | \$272          | \$148        | \$0          | \$0          | \$0         | \$546          | \$546          |
| Regional Connector                            | \$0          | \$0          | \$0          | \$1          | \$48           | \$39           | \$43           | \$30         | \$0          | \$0          | \$0         | \$160          | \$160          |
| QTIBs                                         | \$0          | \$0          | \$0          | \$1          | \$48           | \$39           | \$43           | \$30         | \$0          | \$0          | \$0         | \$160          | \$160          |
| Westside Subway Extension                     | \$0          | \$0          | \$229        | \$29         | \$833          | \$553          | \$317          | \$194        | \$295        | \$119        | \$55        | \$2,622        | \$2,622        |
| QTIBs                                         | \$0          | \$0          | \$229        | \$29         | \$833          | \$553          | \$35           | \$12         | \$182        | \$56         | \$55        | \$1,982        | \$1,982        |
| TIFIA                                         | \$0          | \$0          | \$0          | \$0          | \$0            | \$0            | \$282          | \$182        | \$113        | \$64         | \$0         | \$641          | \$641          |
| West Santa Ana Branch                         | \$0          | \$0          | \$12         | \$19         | \$49           | \$50           | \$58           | \$52         | \$0          | \$0          | \$0         | \$240          | \$240          |
| QTIBs                                         | \$0          | \$0          | \$12         | \$19         | \$49           | \$50           | \$58           | \$52         | \$0          | \$0          | \$0         | \$240          | \$240          |
| Green Line Extension to LAX                   | \$0          | \$0          | \$20         | \$40         | \$60           | \$46           | \$27           | \$0          | \$0          | \$0          | \$0         | \$193          | \$193          |
| QTIBs                                         | \$0          | \$0          | \$20         | \$40         | \$60           | \$46           | \$27           | \$0          | \$0          | \$0          | \$0         | \$193          | \$193          |
| Gold Line Eastside Extension Phase II         | \$0          | \$0          | \$79         | \$70         | \$240          | \$274          | \$297          | \$114        | \$191        | \$0          | \$0         | \$1,264        | \$1,264        |
| QTIBs                                         | \$0          | \$0          | \$79         | \$70         | \$240          | \$274          | \$297          | \$114        | \$191        | \$0          | \$0         | \$1,264        | \$1,264        |
| South Bay Greenline Extension                 | \$0          | \$0          | \$29         | \$40         | \$60           | \$70           | \$58           | \$14         | \$0          | \$0          | \$0         | \$272          | \$272          |
| QTIBs                                         | \$0          | \$0          | \$29         | \$40         | \$60           | \$70           | \$58           | \$14         | \$0          | \$0          | \$0         | \$272          | \$272          |
| San Fernando Valley I-405                     | \$0          | \$0          | \$39         | \$136        | \$233          | \$242          | \$284          | \$67         | \$0          | \$0          | \$0         | \$1,000        | \$1,000        |
| QTIBs                                         | \$0          | \$0          | \$39         | \$136        | \$233          | \$242          | \$284          | \$67         | \$0          | \$0          | \$0         | \$1,000        | \$1,000        |
| <b>Total</b>                                  | <b>\$230</b> | <b>\$260</b> | <b>\$588</b> | <b>\$749</b> | <b>\$2,012</b> | <b>\$1,507</b> | <b>\$1,370</b> | <b>\$619</b> | <b>\$491</b> | <b>\$119</b> | <b>\$55</b> | <b>\$7,999</b> | <b>\$8,000</b> |

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Figure 3-8: Measure R backed Financing Instrument Draw-Downs (YOE \$M)



### 3.1.4.3 Debt Service

Table 3-21 demonstrates the annual financing instrument debt service for the four Measure R backed debt instruments. The overall breakdown of the four financing instruments is shown in Figure 3-9 while the annual breakdown of financing instrument debt service is depicted in Figure 3-10.

Table 3-21: Measure R backed Financing Instrument Debt Service (YOE \$M)

| FY   | QTIBs (YOE \$M) | TIFIA Loan (YOE \$M) | BABs (YOE \$M) | Tax Exempt Bonds (YOE \$M) | Comm Paper (YOE \$M) | Total (YOE \$M) | Measure R Revenue* (YOE \$M) | Debt Service Cover Ratio |
|------|-----------------|----------------------|----------------|----------------------------|----------------------|-----------------|------------------------------|--------------------------|
| 2011 | \$0             | \$0                  | \$11           | \$4                        | \$0                  | \$15            | \$200                        | 13.50                    |
| 2012 | \$0             | \$0                  | \$21           | \$22                       | \$0                  | \$43            | \$213                        | 5.00                     |
| 2013 | \$39            | \$0                  | \$21           | \$22                       | \$0                  | \$81            | \$232                        | 2.85                     |
| 2014 | \$39            | \$0                  | \$21           | \$22                       | \$2                  | \$84            | \$231                        | 2.76                     |
| 2015 | \$174           | \$0                  | \$21           | \$22                       | \$9                  | \$225           | \$260                        | 1.16                     |
| 2016 | \$174           | \$0                  | \$21           | \$22                       | \$9                  | \$225           | \$266                        | 1.18                     |



Table 3-21: Measure R backed Financing Instrument Debt Service (YOE \$M) (continued)

| FY    | QTIBs<br>(YOE \$M) | TIFIA Loan<br>(YOE \$M) | BABs<br>(YOE \$M) | Tax Exempt<br>Bonds<br>(YOE \$M) | Comm Paper<br>(YOE \$M) | Total<br>(YOE \$M) | Measure R<br>Revenue*<br>(YOE \$M) | Debt Service Cover<br>Ratio |
|-------|--------------------|-------------------------|-------------------|----------------------------------|-------------------------|--------------------|------------------------------------|-----------------------------|
| 2017  | \$225              | \$0                     | \$21              | \$22                             | \$9                     | \$276              | \$291                              | 1.06                        |
| 2018  | \$225              | \$0                     | \$21              | \$22                             | \$9                     | \$276              | \$297                              | 1.08                        |
| 2019  | \$249              | \$0                     | \$21              | \$22                             | \$91                    | \$383              | \$323                              | 0.84                        |
| 2020  | \$249              | \$0                     | \$21              | \$22                             | \$78                    | \$370              | \$329                              | 0.89                        |
| 2021  | \$249              | \$18                    | \$43              | \$0                              | \$42                    | \$352              | \$356                              | 1.01                        |
| 2022  | \$249              | \$38                    | \$43              | \$0                              | \$4                     | \$334              | \$361                              | 1.08                        |
| 2023  | \$249              | \$52                    | \$43              | \$0                              | \$4                     | \$348              | \$387                              | 1.11                        |
| 2024  | \$249              | \$55                    | \$43              | \$0                              | \$109                   | \$456              | \$393                              | 0.86                        |
| 2025  | \$249              | \$64                    | \$43              | \$0                              | \$9                     | \$365              | \$420                              | 1.15                        |
| 2026  | \$249              | \$79                    | \$43              | \$0                              | \$0                     | \$371              | \$427                              | 1.15                        |
| 2027  | \$249              | \$94                    | \$43              | \$0                              | \$0                     | \$386              | \$454                              | 1.18                        |
| 2028  | \$249              | \$110                   | \$43              | \$0                              | \$0                     | \$402              | \$461                              | 1.15                        |
| 2029  | \$249              | \$125                   | \$43              | \$0                              | \$0                     | \$417              | \$488                              | 1.17                        |
| 2030  | \$249              | \$91                    | \$43              | \$0                              | \$0                     | \$383              | \$494                              | 1.29                        |
| 2031  | \$249              | \$108                   | \$43              | \$0                              | \$0                     | \$400              | \$519                              | 1.30                        |
| 2032  | \$249              | \$125                   | \$43              | \$0                              | \$0                     | \$417              | \$524                              | 1.26                        |
| 2033  | \$249              | \$143                   | \$43              | \$0                              | \$0                     | \$435              | \$550                              | 1.26                        |
| 2034  | \$249              | \$162                   | \$43              | \$0                              | \$0                     | \$454              | \$557                              | 1.23                        |
| 2035  | \$249              | \$48                    | \$43              | \$0                              | \$0                     | \$340              | \$584                              | 1.72                        |
| 2036  | \$249              | \$68                    | \$43              | \$0                              | \$0                     | \$360              | \$591                              | 1.64                        |
| 2037  | \$249              | \$238                   | \$43              | \$0                              | \$0                     | \$530              | \$618                              | 1.17                        |
| 2038  | \$249              | \$208                   | \$43              | \$0                              | \$0                     | \$500              | \$626                              | 1.25                        |
| 2039  | \$249              | \$303                   | \$43              | \$0                              | \$0                     | \$595              | \$653                              | 1.10                        |
| 2040  | \$0                | \$0                     | \$0               | \$0                              | \$0                     | \$0                | \$-                                | N/A                         |
| Total | \$6,111            | \$2,129                 | \$1,006           | \$201                            | \$373                   | \$9,820            | \$12,106                           | 1.25                        |

\*Only includes 35 percent of gross Measure R revenue dedicated to the twelve America Fast Forward capital expansion projects.

Figure 3-9: Measure R backed Financing Instrument Debt Service Breakdown – FY 2011 to FY 2040  
(YOE \$M)

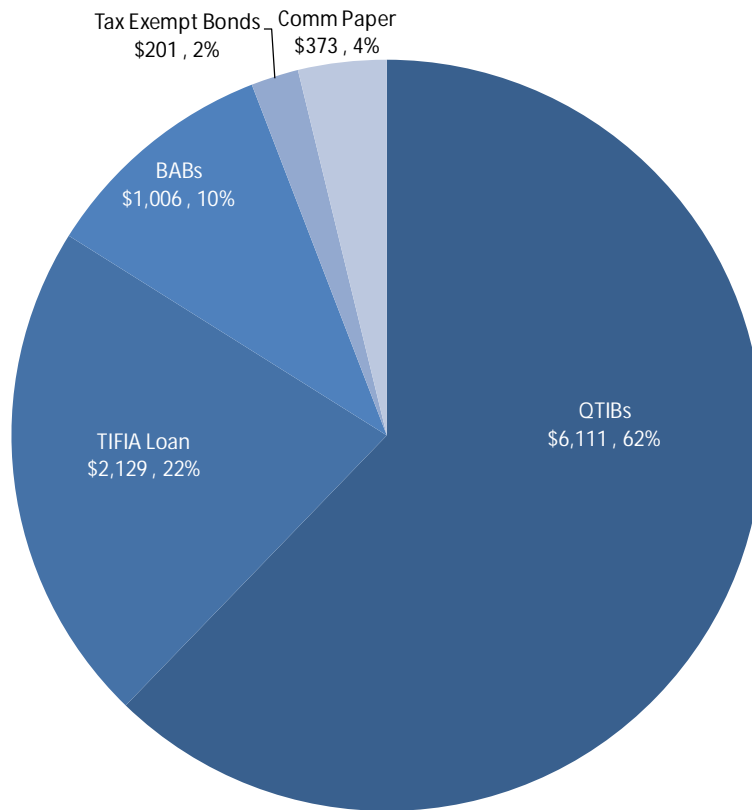
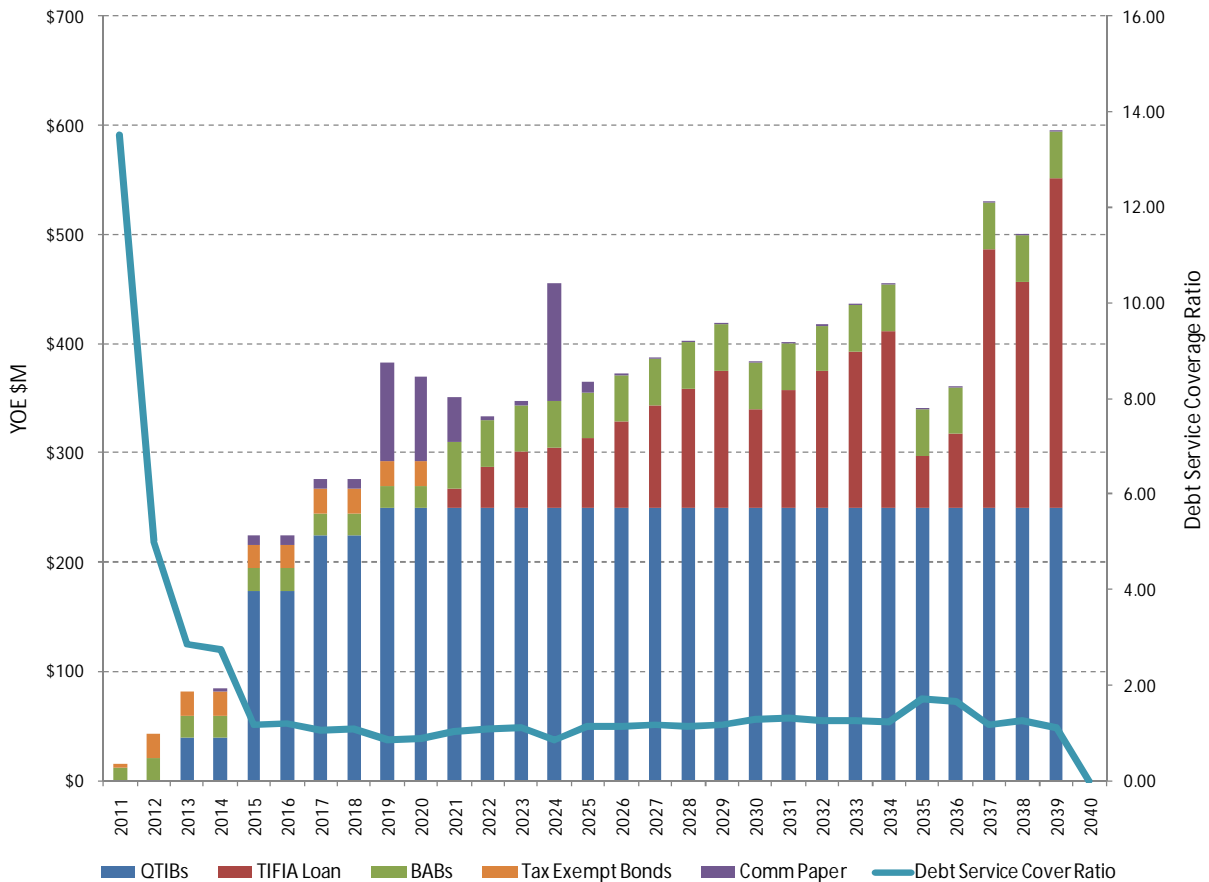


Figure 3-10: Measure R backed Financing Instrument Debt Service (YOE \$M)



It should be noted that as the Westside Subway Extension progresses through PE and project development, the financial plan will be revised based on cost and schedule changes, market conditions, and legislative developments.

### 3.1.5 LACMTA Capital Sources and Uses of Funds Forecast

Table 3-22 delineates LACMTA’s overall capital sources and uses of funds forecast through FY 2040 for its Rail, Transit Corridors, and Bus (including municipal operators) services. It should be noted that given that the America Fast Forward projects will be funded primarily from dedicated Measure R funding that may only be used to fund the twelve projects, LACMTA’s capital needs would be met regardless of whether or not the twelve America Fast Forward capital expansion projects are built. The funding for the projects is dedicated and available and will be used for the projects without adversely impacting the existing LACMTA system.

Table 3-22: LACMTA Capital Sources and Uses of Funds Through 2040 for Rail, Transit Corridors, and Bus (including municipal operators) (YOE \$M)

|                                                                            | FY11  | FY12   | FY13   | FY14    | FY15    | FY16    | FY17    | FY18    | FY19    | FY20    | FY21    | FY22    | FY23    | FY24    | FY25    | FY26    | FY27    | FY28    | FY29    | FY30    | FY31    | FY32    | FY33    | FY34    | FY35    | FY36    | FY37    | FY38    | FY39    | FY40    | Total    |         |
|----------------------------------------------------------------------------|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| Capital Sources of Funds: Rail, Transit Corridors, and Bus (All Operators) |       |        |        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          |         |
| Local Funding                                                              |       |        |        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          |         |
| Proposition A                                                              | \$202 | \$219  | \$228  | \$243   | \$254   | \$264   | \$272   | \$308   | \$312   | \$309   | \$328   | \$351   | \$280   | \$298   | \$330   | \$349   | \$372   | \$380   | \$389   | \$404   | \$427   | \$452   | \$473   | \$495   | \$534   | \$563   | \$572   | \$597   | \$623   | \$647   | \$11,474 |         |
| Proposition C                                                              | \$201 | \$246  | \$216  | \$288   | \$231   | \$201   | \$191   | \$366   | \$202   | \$268   | \$270   | \$258   | \$278   | \$209   | \$240   | \$266   | \$267   | \$251   | \$281   | \$282   | \$332   | \$274   | \$281   | \$281   | \$282   | \$358   | \$286   | \$346   | \$405   | \$593   | \$8,449  |         |
| Measure R                                                                  | \$235 | \$261  | \$278  | \$297   | \$319   | \$336   | \$344   | \$361   | \$376   | \$394   | \$413   | \$429   | \$447   | \$464   | \$483   | \$503   | \$524   | \$545   | \$566   | \$587   | \$608   | \$628   | \$649   | \$672   | \$696   | \$722   | \$746   | \$770   | \$775   | \$0     | \$14,430 |         |
| Local Agency Cont.                                                         | \$15  | \$27   | \$3    | \$28    | \$20    | \$126   | \$61    | \$57    | \$142   | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$478    |         |
| State Repay Cap Proj Loans                                                 | \$69  | \$92   | \$57   | \$24    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$241    |         |
| TDA                                                                        | \$65  | \$63   | \$97   | \$104   | \$140   | \$163   | \$139   | \$198   | \$164   | \$185   | \$190   | \$139   | \$205   | \$193   | \$184   | \$158   | \$177   | \$179   | \$165   | \$156   | \$204   | \$170   | \$189   | \$145   | \$137   | \$183   | \$114   | \$116   | \$152   | \$143   | \$4,616  |         |
| Lease/Leaseback                                                            | \$27  | \$13   | \$0    | \$43    | \$47    | \$0     | \$0     | \$0     | \$0     | \$2     | \$6     | \$6     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$145    |         |
| Other                                                                      | \$0   | \$2    | \$2    | \$0     | \$0     | \$0     | \$0     | \$19    | \$67    | \$0     | \$0     | \$0     | \$84    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$174    |         |
| Total Local Funding                                                        | \$814 | \$923  | \$881  | \$1,026 | \$1,012 | \$1,090 | \$1,006 | \$1,309 | \$1,263 | \$1,158 | \$1,207 | \$1,183 | \$1,294 | \$1,164 | \$1,237 | \$1,277 | \$1,340 | \$1,355 | \$1,401 | \$1,430 | \$1,571 | \$1,523 | \$1,593 | \$1,594 | \$1,650 | \$1,825 | \$1,718 | \$1,829 | \$1,955 | \$1,383 | \$40,008 |         |
| Annual Growth Rate                                                         |       | 13.4%  | -4.6%  | 16.5%   | -1.4%   | 7.8%    | -7.7%   | 30.0%   | -3.5%   | -8.3%   | 4.2%    | -1.9%   | 9.4%    | -10.1%  | 6.3%    | 3.2%    | 5.0%    | 1.1%    | 3.4%    | 2.1%    | 9.9%    | -3.0%   | 4.6%    | 0.1%    | 3.5%    | 10.6%   | -5.8%   | 6.5%    | 6.9%    | -29.3%  | 1.8%     |         |
| State Funding                                                              |       |        |        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          |         |
| RIP Funds                                                                  | \$64  | \$39   | \$22   | \$28    | \$122   | \$50    | \$47    | \$136   | \$41    | \$81    | \$6     | \$6     | \$26    | \$26    | \$26    | \$26    | \$7     | \$7     | \$7     | \$11    | \$13    | \$19    | \$32    | \$45    | \$27    | \$14    | \$15    | \$100   | \$143   | \$81    | \$1,269  |         |
| Proposition 1B Bonds                                                       | \$140 | \$267  | \$323  | \$154   | \$77    | \$52    | \$70    | \$53    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0      | \$1,135 |
| High Speed Rail Bonds                                                      | \$18  | \$0    | \$15   | \$25    | \$50    | \$70    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0      | \$178   |
| Traffic Congestion Relief Prog                                             | \$0   | \$2    | \$0    | \$9     | \$26    | \$55    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$92     |         |
| SCAQMD/AB 2766                                                             | \$0   | \$0    | \$0    | \$0     | \$2     | \$0     | \$0     | \$2     | \$0     | \$0     | \$2     | \$0     | \$0     | \$2     | \$0     | \$0     | \$2     | \$0     | \$0     | \$2     | \$0     | \$0     | \$2     | \$0     | \$0     | \$2     | \$0     | \$0     | \$2     | \$0     | \$0      | \$18    |
| Total State Funding                                                        | \$223 | \$309  | \$360  | \$216   | \$277   | \$226   | \$117   | \$191   | \$41    | \$81    | \$8     | \$6     | \$26    | \$28    | \$26    | \$26    | \$9     | \$7     | \$7     | \$13    | \$13    | \$19    | \$34    | \$45    | \$27    | \$16    | \$15    | \$100   | \$145   | \$81    | \$2,692  |         |
| Annual Growth Rate                                                         |       | 38.6%  | 16.5%  | -39.8%  | 28.1%   | -18.3%  | -48.6%  | 63.5%   | -78.3%  | 96.8%   | -90.2%  | -23.8%  | 327.1%  | 8.1%    | -6.4%   | 0.0%    | -66.8%  | -20.0%  | 2.9%    | 81.9%   | -1.5%   | 50.4%   | 77.3%   | 30.8%   | -40.4%  | -39.6%  | -9.3%   | 583.3%  | 43.9%   | -44.3%  | -3.4%    |         |
| Federal Funding                                                            |       |        |        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          |         |
| Section 5309 New Starts                                                    | \$0   | \$0    | \$250  | \$250   | \$250   | \$250   | \$250   | \$250   | \$212   | \$159   | \$150   | \$150   | \$150   | \$150   | \$150   | \$150   | \$150   | \$150   | \$150   | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0      | \$3,071 |
| Section 5309 FGM                                                           | \$0   | \$0    | \$0    | \$0     | \$0     | \$0     | \$0     | \$1     | \$5     | \$18    | \$37    | \$39    | \$15    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0      | \$115   |
| Section 5309 Bus & Bus Facilities                                          | \$1   | \$9    | \$30   | \$9     | \$0     | \$0     | \$0     | \$0     | \$0     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5     | \$5      | \$154   |
| Section 5307 Capital                                                       | \$170 | \$86   | \$87   | \$88    | \$89    | \$90    | \$99    | \$95    | \$111   | \$105   | \$124   | \$135   | \$134   | \$133   | \$160   | \$173   | \$197   | \$185   | \$213   | \$210   | \$223   | \$230   | \$248   | \$256   | \$277   | \$285   | \$311   | \$319   | \$261   | \$159   | \$5,251  |         |
| Section 5310                                                               | \$0   | \$0    | \$0    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0      | \$12    |
| Section 5340                                                               | \$0   | \$0    | \$0    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$1     | \$1     | \$1     | \$1     | \$1      | \$13    |
| CMAQ                                                                       | \$94  | \$61   | \$3    | \$6     | \$29    | \$89    | \$9     | \$17    | \$46    | \$11    | \$0     | \$0     | \$0     | \$0     | \$0     | \$13    | \$30    | \$30    | \$9     | \$1     | \$16    | \$16    | \$16    | \$15    | \$14    | \$17    | \$17    | \$7     | \$12    | \$576   |          |         |
| RSTP                                                                       | \$14  | \$28   | \$0    | \$8     | \$0     | \$48    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$17    | \$18    | \$18    | \$18    | \$18    | \$6     | \$19    | \$19    | \$19    | \$19    | \$268    |         |
| ARRA                                                                       | \$116 | \$0    | \$0    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0      | \$116   |
| Total Federal Fund.                                                        | \$396 | \$184  | \$370  | \$361   | \$369   | \$478   | \$359   | \$365   | \$375   | \$298   | \$316   | \$329   | \$305   | \$288   | \$315   | \$329   | \$366   | \$371   | \$249   | \$224   | \$247   | \$269   | \$288   | \$295   | \$317   | \$310   | \$352   | \$361   | \$293   | \$196   | \$9,575  |         |
| Annual Growth Rate                                                         |       | -53.4% | 100.8% | -2.5%   | 2.2%    | 29.5%   | -24.9%  | 1.6%    | 2.8%    | -20.5%  | 5.9%    | 4.3%    | -7.5%   | -5.4%   | 9.4%    | 4.2%    | 11.2%   | 1.4%    | -32.8%  | -10.0%  | 10.0%   | 9.1%    | 6.9%    | 2.6%    | 7.2%    | -2.1%   | 13.4%   | 2.5%    | -18.8%  | -32.9%  | -2.4%    |         |
| Financing Revenues                                                         |       |        |        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          |         |
| Senior Lien Bonds - Prop A                                                 | \$68  | \$73   | \$335  | \$119   | \$134   | \$90    | \$0     | \$0     | \$7     | \$336   | \$296   | \$318   | \$168   | \$335   | \$408   | \$244   | \$272   | \$302   | \$313   | \$157   | \$299   | \$363   | \$500   | \$337   | \$535   | \$249   | \$237   | \$189   | \$300   | \$200   | \$7,184  |         |
| Senior Lien Bonds - Prop C                                                 | \$0   | \$0    | \$10   | \$20    | \$0     | \$21    | \$20    | \$263   | \$153   | \$110   | \$80    | \$130   | \$180   | \$20    | \$230   | \$150   | \$90    | \$110   | \$80    | \$70    | \$110   | \$0     | \$200   | \$100   | \$400   | \$180   | \$100   | \$0     | \$300   | \$240   | \$3,367  |         |
| BABS-Measure R 35%                                                         | \$571 | \$0    | \$0    | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0      | \$571   |
| QTIBS-Measure R 35%                                                        | \$0   | \$0    | \$989  | \$0     | \$3,175 | \$0     | \$1,105 | \$0     | \$488   | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0     | \$0      | \$5,757 |

Table 3-22: LACMTA Capital Sources and Uses of Funds Through 2040 for Rail, Transit Corridors, and Bus (including municipal operators) (YOE \$M) (continued)

|                                                                                | FY11           | FY12           | FY13           | FY14           | FY15           | FY16           | FY17           | FY18           | FY19           | FY20           | FY21           | FY22           | FY23           | FY24           | FY25           | FY26           | FY27           | FY28           | FY29           | FY30           | FY31           | FY32           | FY33           | FY34           | FY35           | FY36           | FY37           | FY38           | FY39           | FY40           | Total           |     |          |
|--------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----|----------|
| TIFIA - Measure R 35%                                                          | \$0            | \$0            | \$0            | \$0            | \$0            | \$126          | \$554          | \$330          | \$114          | \$64           | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$1,187         |     |          |
| Tax Exempt Bonds - Measure R 35%                                               | \$179          | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$179           |     |          |
| Commercial Paper - Measure R 35%                                               | \$0            | \$0            | \$0            | \$87           | \$218          | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$305           |     |          |
| Commercial Paper - Measure R 2%                                                | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$25           | \$45           | \$0            | \$53           | \$21           | \$15           | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$159           |     |          |
| Capital Grant Receipt Revenue Bonds proceeds                                   | \$0            | \$0            | \$202          | \$506          | \$43           | \$74           | \$28           | \$208          | \$0            | \$73           | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$1,134         |     |          |
| Transit Corridor Bridge Loan Proceeds                                          | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0             |     |          |
| <b>Total Financing Revenues</b>                                                | <b>\$818</b>   | <b>\$73</b>    | <b>\$1,537</b> | <b>\$732</b>   | <b>\$3,570</b> | <b>\$310</b>   | <b>\$1,733</b> | <b>\$845</b>   | <b>\$761</b>   | <b>\$636</b>   | <b>\$397</b>   | <b>\$463</b>   | <b>\$348</b>   | <b>\$355</b>   | <b>\$638</b>   | <b>\$394</b>   | <b>\$362</b>   | <b>\$412</b>   | <b>\$393</b>   | <b>\$227</b>   | <b>\$409</b>   | <b>\$363</b>   | <b>\$700</b>   | <b>\$437</b>   | <b>\$935</b>   | <b>\$429</b>   | <b>\$337</b>   | <b>\$189</b>   | <b>\$600</b>   | <b>\$440</b>   | <b>\$19,843</b> |     |          |
| Annual Growth Rate                                                             |                | -91.1%         | 2002.6%        | -52.4%         | 387.7%         | -91.3%         | 459.1%         | -51.2%         | -10.0%         | -16.4%         | -37.5%         | 16.5%          | -24.7%         | 1.9%           | 79.7%          | -38.2%         | -8.1%          | 14.0%          | -4.7%          | -42.2%         | 80.0%          | -11.3%         | 93.0%          | -37.6%         | 114.0%         | -54.1%         | -21.4%         | -43.9%         | 217.5%         | -26.7%         | N/A             |     |          |
| <b>Total Capital Sources of Funds</b>                                          | <b>\$2,251</b> | <b>\$1,489</b> | <b>\$3,148</b> | <b>\$2,335</b> | <b>\$5,227</b> | <b>\$2,105</b> | <b>\$3,215</b> | <b>\$2,709</b> | <b>\$2,440</b> | <b>\$2,174</b> | <b>\$1,928</b> | <b>\$1,982</b> | <b>\$1,974</b> | <b>\$1,835</b> | <b>\$2,217</b> | <b>\$2,026</b> | <b>\$2,076</b> | <b>\$2,145</b> | <b>\$2,050</b> | <b>\$1,894</b> | <b>\$2,240</b> | <b>\$2,175</b> | <b>\$2,615</b> | <b>\$2,371</b> | <b>\$2,928</b> | <b>\$2,580</b> | <b>\$2,421</b> | <b>\$2,479</b> | <b>\$2,993</b> | <b>\$2,100</b> | <b>\$72,119</b> |     |          |
| Annual Growth Rate                                                             |                | -33.8%         | 111.4%         | -25.8%         | 123.8%         | -59.7%         | 52.8%          | -15.7%         | -9.9%          | -10.9%         | -11.3%         | 2.8%           | -0.4%          | -7.0%          | 20.8%          | -8.6%          | 2.5%           | 3.3%           | -4.4%          | -7.6%          | 18.2%          | -2.9%          | 20.2%          | -9.3%          | 23.5%          | -11.9%         | -6.1%          | 2.4%           | 20.7%          | -29.8%         | -0.2%           |     |          |
| <b>Capital Uses of Funds: Rail, Transit Corridors, and Bus (All Operators)</b> |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                 |     |          |
| <b>Rail and Transit Corridors Uses</b>                                         |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                 |     |          |
| Major Projects                                                                 | \$498          | \$750          | \$1,635        | \$1,931        | \$2,647        | \$2,235        | \$1,778        | \$1,688        | \$989          | \$418          | \$183          | \$87           | \$15           | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$1,418         | \$0 | \$16,272 |
| State of Good Repair - Ex. Lines                                               | \$46           | \$1            | \$15           | \$12           | \$0            | \$0            | \$0            | \$0            | \$0            | \$283          | \$247          | \$351          | \$179          | \$235          | \$481          | \$215          | \$158          | \$185          | \$195          | \$22           | \$110          | \$48           | \$270          | \$50           | \$532          | \$61           | \$0            | \$15           | \$140          | \$308          | \$4,159         |     |          |
| State of Good Repair - Future Lines                                            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$7            | \$9            | \$15           | \$19           | \$26           | \$35           | \$47           | \$72           | \$85           | \$115          | \$109          | \$224          | \$275          | \$460          | \$370          | \$371          | \$328          | \$324          | \$254          | \$395          | \$537          | \$4,077         |     |          |
| Vehicles                                                                       | \$33           | \$22           | \$33           | \$46           | \$201          | \$119          | \$47           | \$98           | \$5            | \$84           | \$83           | \$66           | \$35           | \$61           | \$64           | \$50           | \$47           | \$109          | \$65           | \$65           | \$88           | \$70           | \$2            | \$42           | \$43           | \$49           | \$45           | \$46           | \$6            | \$0            | \$1,722         |     |          |
| System Improvements                                                            | \$66           | \$3            | \$0            | \$0            | \$6            | \$30           | \$68           | \$82           | \$91           | \$74           | \$35           | \$29           | \$84           | \$0            | \$0            | \$0            | \$32           | \$10           | \$35           | \$29           | \$22           | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$695           |     |          |
| General Improvements                                                           | \$0            | \$71           | \$25           | \$15           | \$14           | \$15           | \$20           | \$30           | \$29           | \$54           | \$55           | \$56           | \$57           | \$58           | \$59           | \$61           | \$62           | \$63           | \$64           | \$65           | \$67           | \$68           | \$69           | \$71           | \$72           | \$48           | \$36           | \$37           | \$14           | \$80           | \$1,435         |     |          |
| Miscellaneous Imp.                                                             | \$856          | -\$4           | \$668          | -\$481         | \$1,461        | -\$1,234       | \$324          | -\$267         | \$68           | \$34           | \$16           | \$90           | \$105          | \$11           | \$151          | \$160          | \$163          | \$147          | \$165          | \$202          | \$253          | \$241          | \$256          | \$251          | \$400          | \$352          | \$217          | \$261          | -\$1,237       | \$0            | \$3,626         |     |          |
| Debt Service                                                                   | \$251          | \$292          | \$345          | \$381          | \$532          | \$543          | \$598          | \$615          | \$830          | \$739          | \$819          | \$835          | \$853          | \$940          | \$880          | \$904          | \$942          | \$954          | \$817          | \$790          | \$812          | \$858          | \$909          | \$971          | \$909          | \$979          | \$1,166        | \$1,155        | \$1,280        | \$724          | \$23,623        |     |          |
| <b>Total Rail and Transit Corridors Uses</b>                                   | <b>\$1,750</b> | <b>\$1,135</b> | <b>\$2,722</b> | <b>\$1,904</b> | <b>\$4,861</b> | <b>\$1,708</b> | <b>\$2,835</b> | <b>\$2,247</b> | <b>\$2,011</b> | <b>\$1,693</b> | <b>\$1,448</b> | <b>\$1,528</b> | <b>\$1,346</b> | <b>\$1,332</b> | <b>\$1,671</b> | <b>\$1,437</b> | <b>\$1,475</b> | <b>\$1,552</b> | <b>\$1,457</b> | <b>\$1,281</b> | <b>\$1,575</b> | <b>\$1,559</b> | <b>\$1,967</b> | <b>\$1,755</b> | <b>\$2,327</b> | <b>\$1,816</b> | <b>\$1,787</b> | <b>\$1,768</b> | <b>\$2,015</b> | <b>\$1,649</b> | <b>\$55,611</b> |     |          |
| Annual Growth Rate                                                             |                | -35.2%         | 139.9%         | -30.0%         | 155.3%         | -64.9%         | 66.0%          | -20.8%         | -10.5%         | -15.8%         | -14.5%         | 5.5%           | -11.9%         | -1.1%          | 25.4%          | -14.0%         | 2.6%           | 5.2%           | -6.1%          | -12.1%         | 23.0%          | -1.0%          | 26.1%          | -10.8%         | 32.6%          | -22.0%         | -1.6%          | -1.0%          | 14.0%          | -18.2%         | -0.2%           |     |          |
| <b>Bus (All Operators) Uses</b>                                                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                 |     |          |
| MTA Bus                                                                        | \$164          | \$130          | \$242          | \$249          | \$181          | \$213          | \$190          | \$263          | \$223          | \$262          | \$254          | \$217          | \$374          | \$240          | \$274          | \$302          | \$307          | \$289          | \$286          | \$298          | \$349          | \$295          | \$327          | \$287          | \$279          | \$433          | \$304          | \$377          | \$376          | \$384          | \$8,368         |     |          |
| Municipal Operators                                                            | \$189          | \$193          | \$182          | \$180          | \$183          | \$179          | \$182          | \$188          | \$191          | \$199          | \$202          | \$210          | \$213          | \$221          | \$224          | \$233          | \$236          | \$244          | \$248          | \$256          | \$259          | \$267          | \$270          | \$279          | \$282          | \$291          | \$295          | \$304          | \$307          | \$314          | \$7,023         |     |          |
| Paratransit                                                                    | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$14            |     |          |
| Debt Service                                                                   | \$0            | \$0            | \$0            | \$1            | \$2            | \$5            | \$7            | \$11           | \$14           | \$18           | \$23           | \$26           | \$40           | \$42           | \$47           | \$54           | \$58           | \$59           | \$59           | \$59           | \$57           | \$53           | \$50           | \$50           | \$39           | \$39           | \$35           | \$29           | \$25           | \$21           | \$923           |     |          |
| CRD Project                                                                    | \$210          | \$40           | \$2            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$252           |     |          |
| <b>Total Bus Uses</b>                                                          | <b>\$563</b>   | <b>\$364</b>   | <b>\$426</b>   | <b>\$431</b>   | <b>\$367</b>   | <b>\$397</b>   | <b>\$379</b>   | <b>\$462</b>   | <b>\$428</b>   | <b>\$480</b>   | <b>\$480</b>   | <b>\$454</b>   | <b>\$627</b>   | <b>\$503</b>   | <b>\$546</b>   | <b>\$588</b>   | <b>\$601</b>   | <b>\$593</b>   | <b>\$593</b>   | <b>\$614</b>   | <b>\$665</b>   | <b>\$615</b>   | <b>\$648</b>   | <b>\$616</b>   | <b>\$602</b>   | <b>\$764</b>   | <b>\$635</b>   | <b>\$710</b>   | <b>\$709</b>   | <b>\$719</b>   | <b>\$16,580</b> |     |          |
| Annual Growth Rate                                                             |                | -35.3%         | 16.9%          | 1.2%           | -15.0%         | 8.3%           | -4.4%          | 21.9%          | -7.4%          | 12.2%          | -0.2%          | -5.4%          | 38.3%          | -19.8%         | 8.5%           | 7.8%           | 2.1%           | -1.3%          | -0.1%          | 3.5%           | 8.4%           | -7.5%          | 5.4%           | -4.9%          | -2.4%          | 27.0%          | -16.9%         | 11.9%          | -0.2%          | 1.4%           | 0.8%            |     |          |
| <b>Total Capital Uses of Funds</b>                                             | <b>\$2,313</b> | <b>\$1,499</b> | <b>\$3,148</b> | <b>\$2,335</b> | <b>\$5,227</b> | <b>\$2,105</b> | <b>\$3,215</b> | <b>\$2,709</b> | <b>\$2,440</b> | <b>\$2,174</b> | <b>\$1,928</b> | <b>\$1,982</b> | <b>\$1,974</b> | <b>\$1,835</b> | <b>\$2,217</b> | <b>\$2,026</b> | <b>\$2,076</b> | <b>\$2,145</b> | <b>\$2,050</b> | <b>\$1,894</b> | <b>\$2,240</b> | <b>\$2,175</b> | <b>\$2,615</b> | <b>\$2,371</b> | <b>\$2,928</b> | <b>\$2,580</b> | <b>\$2,421</b> | <b>\$2,479</b> | <b>\$2,724</b> | <b>\$2,368</b> | <b>\$72,191</b> |     |          |
| Annual Growth Rate                                                             |                | -35.2%         | 110.0%         | -25.8%         | 123.8%         | -59.7%         | 52.7%          | -15.7%         | -9.9%          | -10.9%         | -11.3%         | 2.8%           | -0.4%          | -7.0%          | 20.8%          | -8.6%          | 2.5%           | 3.3%           | -4.4%          | -7.6%          | 18.2%          | -2.9%          | 20.2%          | -9.3%          | 23.5%          | -11.9%         | -6.1%          | 2.4%           | 9.9%           | -13.1%         | 0.1%            |     |          |
| Beginning Year Cash Bal.                                                       | \$72           | \$10           | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$268          |                 |     |          |
| Annual Net Change to Cash Balance                                              | (\$62)         | (\$10)         | (\$0)          | (\$0)          | \$0            | \$0            | \$0            | (\$0)          | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | (\$0)          | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$268          | (\$268)         |     |          |
| Ending Fiscal Year Cash Balance                                                | \$10           | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$0            | \$268          | \$0            |                 |     |          |

## 3.2 Operating Plan for LACMTA

This section describes the system-wide cost and revenue assumptions for countywide bus, rail, and highway operating costs.

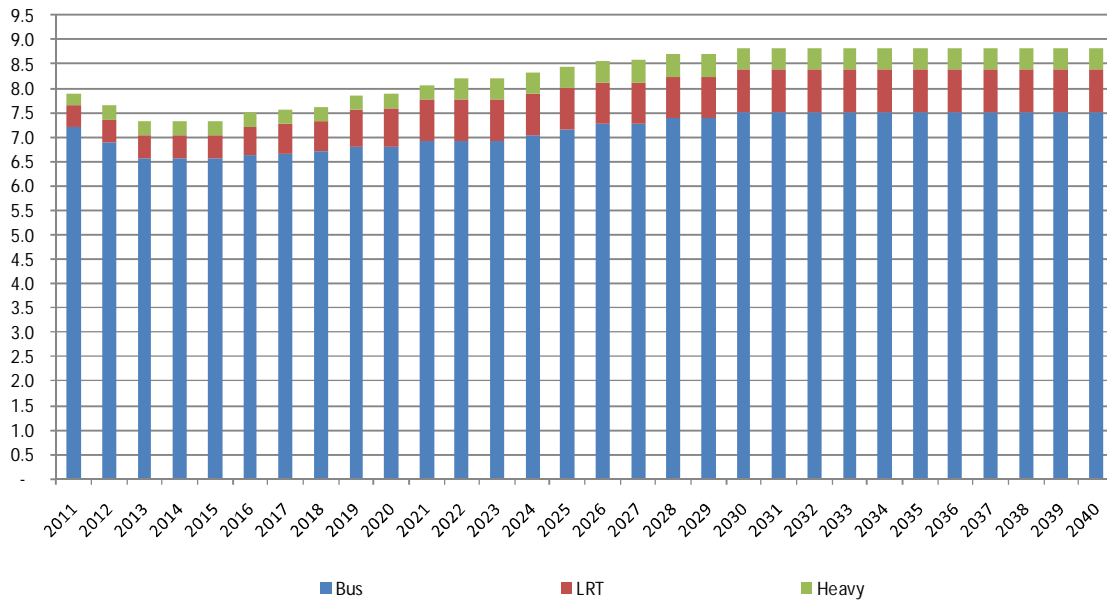
### 3.2.1 Operating and Maintenance Costs for LACMTA

Annual O&M costs reflect projections based on LACMTA's Countywide Financial Forecasting Model. The financial model uses a cost per revenue service hour for bus lines and revenue vehicle service hours for rail lines. Starting with budgeted amounts for the base year, service levels on existing lines are extrapolated out based on a number of factors. In the short term, annual hours reflect service plans developed by operations staff based on direction of the LACMTA Board and senior management. Figure 3-11 summarizes the projected bus revenue service hours and rail revenue vehicle service hours assumed in the Long Range Plan.

In October 1996, LACMTA signed a Consent Decree requiring the agency to add bus service to meet court-mandated overcrowding targets and limit fare increases for ten years. In that year (FY 1997), the agency operated 6.58 million revenue service hours of bus, light rail and heavy rail service combined. Total system boardings in FY 1997 were 386 million. By FY 2010, revenue service hour levels had risen to 8.3 million, an increase of more than 25 percent over FY 1997 levels. Over that same period, total system boardings rose 20 percent to 462 million. The costs of the added service caused an increase of other funding sources to be used to cover operating expenses. This structural imbalance is currently being mitigated with an emphasis on quality of service provided, rather than quantity of service. While total hours of service decline in the first few years of this plan, maintenance costs are being held relatively constant to improve the overall performance and appearance of the fleet. Despite the reduced level of service, the impact to ridership is expected to be minimized by improvements in operations performance as measured by schedule adherence, fleet cleanliness and enhanced bus/rail service integration.

As shown in Figure 3-11, bus revenue service hours are projected to drop approximately one million hours over the next few years as a result of the service restructuring mentioned above. In FY 2016, revenue service hours are projected to begin increasing once again, due to a combination of the implementation of new BRT lines and service additions reflecting future travel demand forecasts. Figure 3-11 also indicates that rail revenue vehicle service hours remain relatively constant in the short term, with minor increases in service levels occurring when new lines are implemented and existing lines are extended. Additionally, in the long term, service levels are adjusted to correspond to assumptions generated by travel demand forecasts.

Figure 3-11: Projected Bus and Rail Service Hours – FY 2011 to FY 2040 (Millions)



The financial forecast reflects that O&M costs for bus and rail are assumed to be “built-in” to the operating costs per hour. Therefore, O&M costs are estimated based on the change in annual revenue service hours combined with an escalation rate based on local CPI forecasts from the UCLA Anderson Forecast. In the short term, escalation rates reflect the CPI forecasts which are then modified by a cost matrix developed by the LACMTA’s Budget Department. This cost matrix is a forecast to capture the impact of significant O&M costs that do not necessarily vary with the CPI and include fuel prices, electricity prices, labor agreements and health care premiums. Beyond the time frame of this cost matrix, FY 2017 for bus and rail costs are escalated strictly by CPI. Table 3-23 summarizes the annual and cumulative escalation rates based on the UCLA Anderson Forecast.

Table 3-23: CPI Escalation Rates

| FY   | CPI (UCLA Anderson Forecast) | Compound Inflation Rate |
|------|------------------------------|-------------------------|
| 2011 | 1.23%                        | 1.203                   |
| 2012 | 1.99%                        | 1.227                   |
| 2013 | 2.21%                        | 1.255                   |
| 2014 | 2.43%                        | 1.285                   |
| 2015 | 2.41%                        | 1.316                   |
| 2016 | 2.42%                        | 1.348                   |
| 2017 | 2.31%                        | 1.379                   |
| 2018 | 2.16%                        | 1.409                   |

Table 3-23: CPI Escalation Rates (continued)

| FY   | CPI<br>(UCLA Anderson<br>Forecast) | Compound Inflation Rate |
|------|------------------------------------|-------------------------|
| 2019 | 2.06%                              | 1.438                   |
| 2020 | 1.97%                              | 1.466                   |
| 2021 | 1.97%                              | 1.495                   |
| 2022 | 1.99%                              | 1.525                   |
| 2023 | 1.89%                              | 1.554                   |
| 2024 | 1.82%                              | 1.582                   |
| 2025 | 1.87%                              | 1.612                   |
| 2026 | 1.91%                              | 1.642                   |
| 2027 | 1.86%                              | 1.673                   |
| 2028 | 2.03%                              | 1.707                   |
| 2029 | 1.97%                              | 1.740                   |
| 2030 | 1.94%                              | 1.774                   |
| 2031 | 1.89%                              | 1.808                   |
| 2032 | 1.89%                              | 1.842                   |
| 2033 | 1.94%                              | 1.877                   |
| 2034 | 1.96%                              | 1.914                   |
| 2035 | 1.99%                              | 1.952                   |
| 2036 | 2.02%                              | 1.992                   |
| 2037 | 2.05%                              | 2.033                   |
| 2038 | 2.07%                              | 2.075                   |
| 2039 | 1.95%                              | 2.115                   |
| 2040 | 1.92%                              | 2.156                   |

In FY 2011, LACMTA budgeted 7.2 million revenue service hours of contract bus, directly-operated bus and fixed route Rapid Bus service. According to service planning reports, just approximately 99 percent of budgeted hours were operated in FY 2011. Based on historic experience, it is typical for actual hours to end up approximately 1 to 3 percent below budgeted amounts. To be conservative, the full budgeted amount in the current fiscal year is used as the base for bus operations in the Financial Forecast.

Within the financial forecast, the FY 2011 bus operating costs per hour reflect the following: contract service (\$84.19), fixed route (\$130.45) and Rapid Bus service (\$223.22). The total cost per hour rate for buses is \$128.23.



By FY 2040, the cost per hour rates are projected to be \$150.25 for contract service, \$280.37 for fixed route, and \$476.63 Rapid Bus service. The total cost per hour rate for buses is \$283.78. Over the FY 2011 to FY 2040 period, the countywide compound annual growth rate for the combined cost per hour rate is 2.9 percent while the compound annual growth rate for LACMTA operated bus service is 2.9 percent. As shown in Table 3-24, this growth rate is slightly higher than LACMTA’s historic experience for total bus which was 2.2 percent over the FY 2001 to FY 2010 period.

Table 3-24: Historic Cost Per Hour: Total Bus

|             | Cost per Hour |
|-------------|---------------|
| 2001        | \$98.39       |
| 2002        | \$98.44       |
| 2003        | \$101.33      |
| 2004        | \$109.44      |
| 2005        | \$102.80      |
| 2006        | \$109.09      |
| 2007        | \$118.87      |
| 2008        | \$119.93      |
| 2009        | \$120.98      |
| 2010        | \$119.64      |
| <b>CAGR</b> | <b>2.20%</b>  |

As mentioned above, total revenue service hours are reduced approximately 650,000 hours between FY 2011 and FY 2013, but start rising again in FY 2019 due to two factors. The first is that new services open, such as the East San Fernando Valley North-South and feeder bus service for the Crenshaw/LAX Transit Corridor Project. The second factor is bus replacement. The agency currently has nearly 883 45-foot composite and 60-foot articulated buses in the fleet. Following the current order of 45-foot vehicles, the current plan is to purchase only 40-foot buses thereafter. In order to remain within the same service level range as the long-term travel demand forecast, the agency’s adopted Long Range Transportation Plan specifies a fleet mix of 2,567 40-foot equivalent buses in 2030, which is reflected in the financial forecast. In order to keep the total number of seats and the revenue service hours per bus relatively constant, the financial forecast reflects an increase in hours as 40-foot buses replace higher capacity vehicles as part of the on-going 13 year replacement cycle.

The largest increase in service in the financial forecast occurs in rail. Approximately 440,000 LRT revenue service vehicle hours and approximately 177,000 heavy rail revenue service vehicle hours are added by between FY 2010 and FY 2022. This reflects the ambitious America Fast Forward schedule for Measure R projects. Operating costs for the new lines and extensions to existing lines are based on operating plans for each project, to the extent that such plans currently exist.

Within the financial forecast, the FY 2011 rail operating costs per hour reflect the following: LRT (\$390.49), heavy rail (\$363.42), and total rail (\$380.32). Over the FY 2011 to FY 2040 period, the cost per hour rates are projected to increase an average of 2.1 percent per year. By FY 2040, the cost per hour rates are projected to be \$696.26 for LRT, \$620.09 for heavy rail, and \$683.14 for total rail. As shown in Table 3-25, this growth rate is slightly lower than LACMTA’s historic experience for total rail which was 3.2 percent over the FY 2001 to FY 2010 period.

Table 3-25: Historic Cost Per Hour: Total Rail

|             | Cost per Hour |
|-------------|---------------|
| 2001        | \$287.87      |
| 2002        | \$291.38      |
| 2003        | \$274.01      |
| 2004        | \$310.50      |
| 2005        | \$337.24      |
| 2006        | \$355.51      |
| 2007        | \$360.18      |
| 2008        | \$367.66      |
| 2009        | \$357.85      |
| 2010        | \$381.52      |
| <b>CAGR</b> | <b>3.18%</b>  |

Finally, for those projects still in the preliminary phase of project development that do not have an operating plan, service levels are prorated based on line length and existing service hours for similar-type rail services.

### 3.2.2 Countywide Rail Operating Plan

#### 3.2.2.1 Countywide Rail O&M Costs

Countywide rail O&M costs are categorized into two categories: those services operated by LACMTA (LRT and heavy rail) and Metrolink commuter rail. As shown in Table 3-26 and described in more detail below, over the FY 2011 to FY 2040 period, countywide rail operating costs total approximately \$24.7 billion dollars. Of this total, \$20.9 billion is for LACMTA-operated heavy and LRT lines (84.7 percent) and \$3.8 billion (15.3 percent) for LACMTA’s share of the operating subsidy for the multi-jurisdictional Metrolink commuter rail service.



Table 3-26: Countywide Rail Operating Costs – FY 2011 to FY 2040 (YOE \$M)

| Countywide Rail O&M Costs                 | FY 2010 - 2040 Total | Percent Share |
|-------------------------------------------|----------------------|---------------|
| LACMTA                                    | \$20,948.5           | 84.7%         |
| Metrolink Commuter Rail (LA County Share) | \$3,758.5            | 15.3%         |
| Subtotal Countywide Rail Operations       | \$24,707.0           | 100.0%        |

### LACMTA-Operated Rail Services

Using the methodology described above, the financial forecast projects annual O&M costs for the existing and proposed heavy and LRT lines. In addition to the O&M costs, the model also includes security costs for each of the lines. Security costs are based on budget numbers as a percentage of the total cost of service. Specific rail information allows each line to have its own cost factor. These percentages are assumed to remain constant throughout the life of the plan, so security costs are escalated at the same rate as the service to which they are connected. Table 3-27 summarizes the projected total O&M costs over the FY 2011 to FY 2040 period. As shown in the table, rail operating costs account for approximately \$16.9 billion (80.8 percent) and security costs account for \$4.0 billion (19.2 percent) of the \$20.9 billion dollar total.

Table 3-27: Total LACMTA Rail O&M Costs – FY 2011 to FY 2040 (YOE \$M)

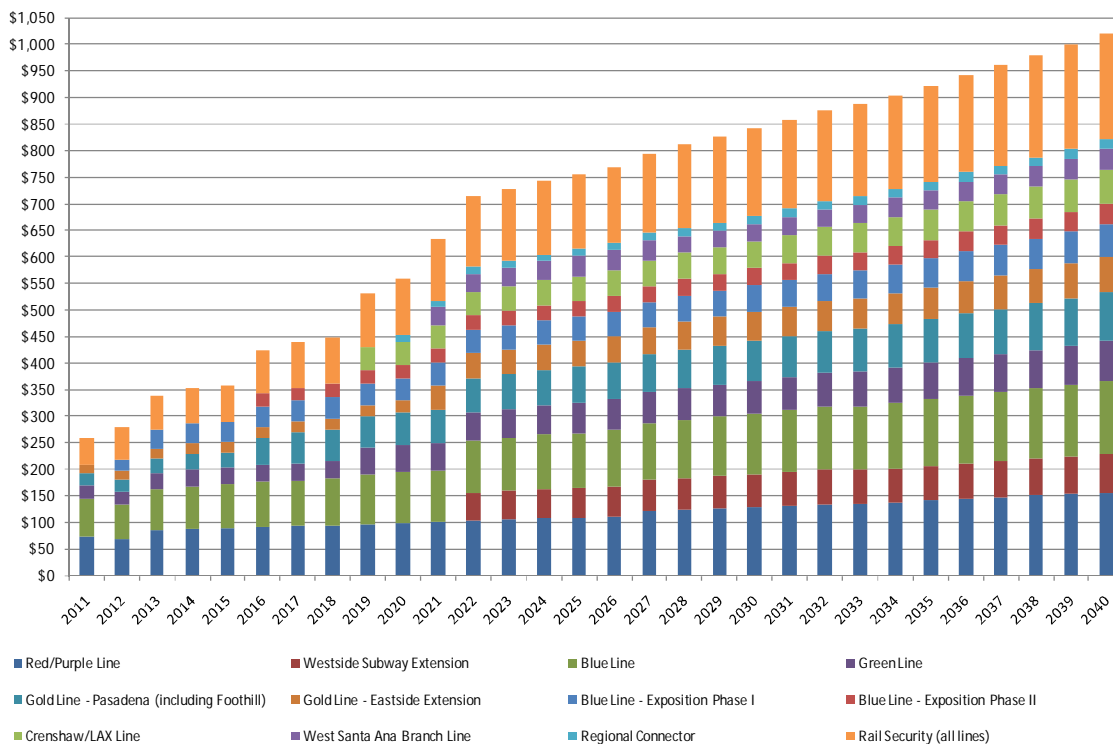
| O&M Costs                                 | FY 2011-2040 Total |
|-------------------------------------------|--------------------|
| Operations                                |                    |
| Heavy Rail Operations                     |                    |
| Red/Purple Line                           | \$3,442.9          |
| LRT Operations                            |                    |
| Westside Subway Extension                 | \$1,182.8          |
| Blue Line                                 | \$3,134.9          |
| Green Line                                | \$1,603.7          |
| Gold Line - Pasadena (including Foothill) | \$1,951.3          |
| Gold Line - Eastside Extension            | \$1,305.9          |
| Blue Line - Exposition Phase I            | \$1,346.2          |
| Blue Line - Exposition Phase II           | \$770.8            |
| Crenshaw/LAX Line                         | \$1,138.4          |
| West Santa Ana Branch Line                | \$712.5            |
| Regional Connector                        | \$319.2            |
| LRT Operations Subtotal                   | \$13,465.6         |
| Total Operations                          | \$16,908.6         |
| Security Costs                            |                    |
| Heavy Rail Security                       |                    |
| Red/Purple Line                           | \$1,208.6          |
| LRT Security                              |                    |
| Blue Line incl. Expo/Reg'l Conn.          | \$974.8            |

Table 3-27: Total LACMTA Rail O&amp;M Costs – FY 2011 to FY 2040 (YOE \$M) (continued)

| O&M Costs                    | FY 2011-2040 Total |
|------------------------------|--------------------|
| Green Line                   | \$413.4            |
| Gold Line including Eastside | \$1,097.2          |
| Crenshaw Line                | \$230.4            |
| West Santa Ana Line          | \$115.6            |
| LRT Security Subtotal        | \$2,831.4          |
| Total Security               | \$4,040.0          |
| LACMTA-Operated Subtotal     | \$20,948.5         |

Figure 3-12 summarizes the annual O&M costs by rail line and total security costs. As shown in the previous table and figure, the Westside Subway Extension comprises approximately 5.6 percent of overall rail O&M costs.

Figure 3-12: Annual LACMTA Rail O&amp;M Costs – FY 2011 to FY 2040 (YOE \$M)



Over the FY 2011 to FY 2040 period, LACMTA-operated rail costs are projected to increase from \$259.2 million to \$1,021.3 million. Overall, this reflects a compound annual growth rate of 4.8 percent. The compound annual growth rates for heavy rail, LRT and rail security are 3.9 percent, 5.7 percent, and 4.8 percent respectively.



Table 3-28 summarizes heavy rail and LRT O&M costs over the last 10 years based on information in the 2010 CAFR. As shown in the table, the compound annual growth rate for heavy rail over this period was 5.7 percent, while LRT experienced a 10.5 percent growth rate. The growth rates projected in the financial plan are lower than the historic actual and reflect LACMTA’s commitment to control future O&M costs.

Table 3-28: Historic LACMTA-Operated Rail Annual Operation Costs – FY 2001 to FY 2010 (YOE \$M)

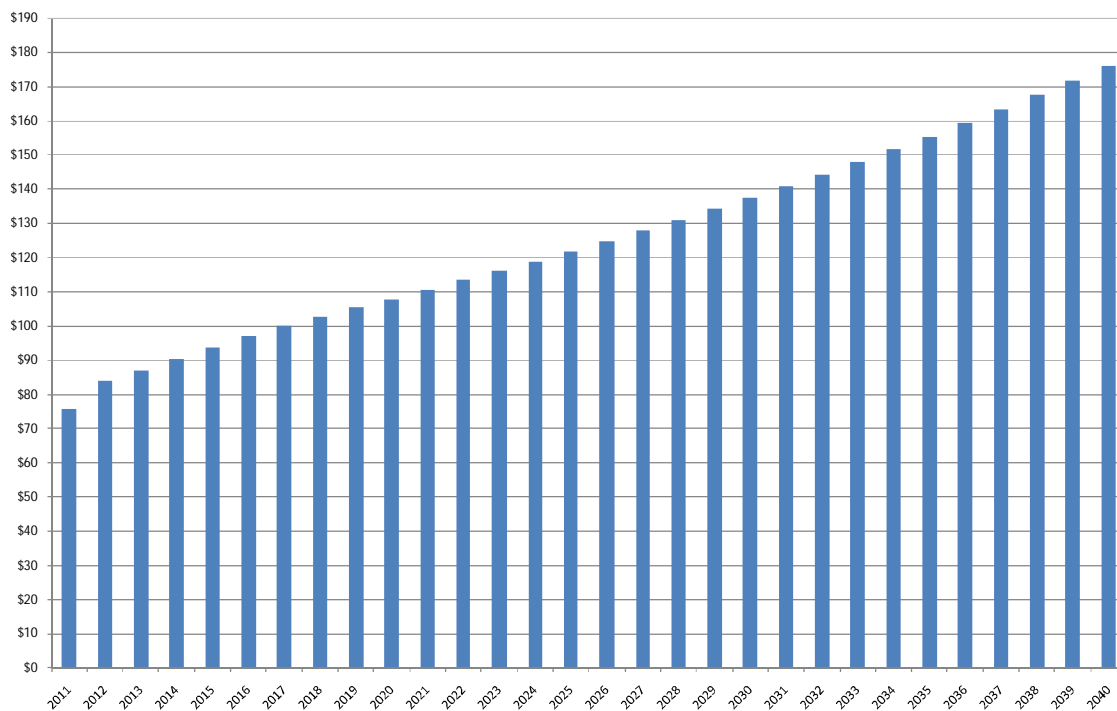
| Metro Rail | FY01    | FY02    | FY03    | FY04     | FY05     | FY06     | FY07     | FY08     | FY09     | FY10     |
|------------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
| LRT        | \$68.46 | \$83.69 | \$86.20 | \$111.65 | \$126.12 | \$132.40 | \$144.47 | \$153.27 | \$150.11 | \$168.59 |
| Heavy Rail | \$54.50 | \$62.23 | \$67.10 | \$65.83  | \$76.37  | \$77.54  | \$87.37  | \$95.93  | \$88.79  | \$89.50  |

### Metrolink Commuter Rail

Metrolink commuter rail service is operated by the Southern California Regional Rail Authority (SCRRA). SCRRA was established in 1991 as a Joint Powers Authority (JPA) with the purpose of planning, designing, building and operating a new passenger rail service (Metrolink) among the Southern California counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCRRA’s five member agencies include LACMTA, Orange County Transportation Authority (OCTA), Riverside County Transportation Commission (RCTC), San Bernardino Associated Governments (SANBAG), and Ventura County Transportation Commission (VCTC). Since Metrolink service was established, the annual operating subsidy has been distributed among the five member agencies based on a cost-allocation methodology and annual service levels. Metrolink commuter rail operating costs in the financial plan reflect LACMTA’s share of future operating costs based on SCRRA’s long range operating plan and the current cost allocation methodology as well as costs funded by Metrolink’s fares.

Figure 3-13 summarizes LACMTA’s annual share of operating costs. As shown in the figure, the compound annual growth rate for Metrolink costs is approximately 3.0 percent. Over the FY 2011 to FY 2040 period, LACMTA’s share of Metrolink O&M costs is estimated to be \$3.8 billion, which is approximately 15.2 percent of the countywide rail operating costs.

Figure 3-13: Los Angeles County Portion of Projected Metrolink Commuter Rail Operating Costs – FY 2011 to FY 2040 (YOE \$M)



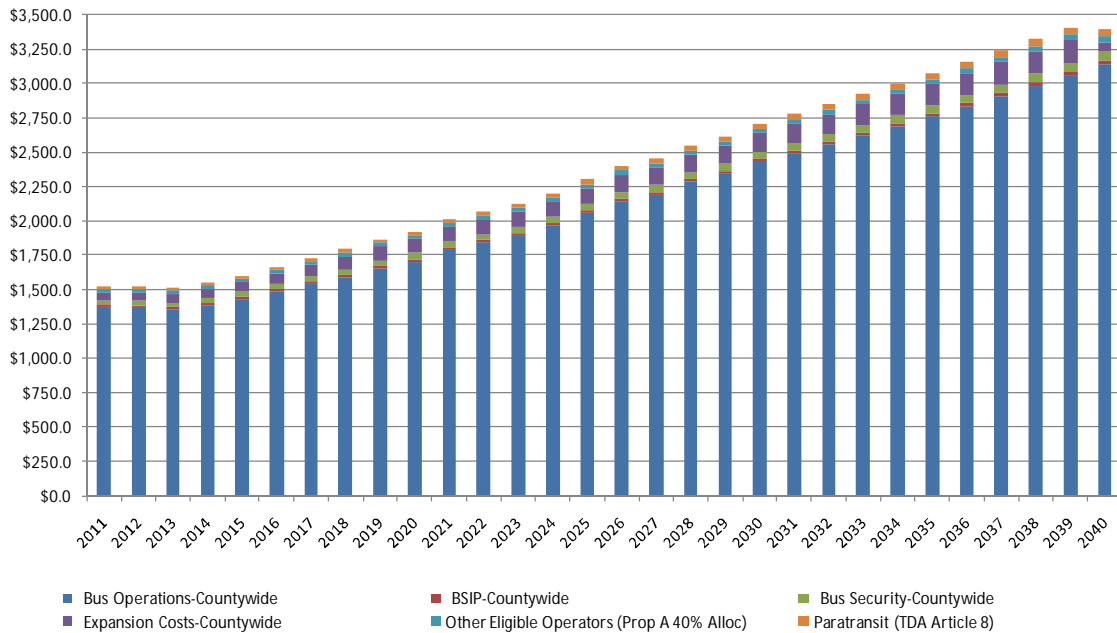
### 3.2.2.2 Countywide Bus O&M Costs

Countywide bus O&M costs are categorized into five categories: bus operations (LACMTA and Municipal operated bus and paratransit services); bus service improvement program (BSIP); bus security; expansion costs; and other services (other eligible operators and TDA Article 8 paratransit). As shown in Table 3-29 and described in more detail below, over the FY 2011 to FY 2040 period, countywide bus operating costs total approximately \$70.4 billion dollars. Of this total, \$63.9 billion is for bus operations (89.6 percent), \$578.9 million is for BSIP (0.8 percent); \$1.5 billion is for bus security (2.0 percent), and \$1.9 billion is for other services (4.8 percent). Figure 3-14 summarizes the annual O&M costs by countywide bus category.

Table 3-29: Countywide Bus Operating Costs – FY 2011 to FY 2040 (YOE \$M)

| Bus Uses                   | FY 2011 to FY 2040 Total | Percent Share |
|----------------------------|--------------------------|---------------|
| Bus Operations-Countywide  | \$63,902                 | 89.6%         |
| BSIP-Countywide            | \$579                    | 0.8%          |
| Bus Security-Countywide    | \$1,460                  | 2.0%          |
| Expansion Costs-Countywide | \$3,454                  | 4.8%          |
| Other                      | \$1,896                  | 2.7%          |
| <b>Total</b>               | <b>\$71,290</b>          | <b>100.0%</b> |

Figure 3-14: Annual Bus O&M Costs: – FY 2011 to FY 2040 (YOE \$M)



### Countywide Bus Operations

The countywide bus operations category includes LACMTA-operated bus and paratransit services as well as bus service provided by municipalities and non-LACMTA eligible providers. Over the FY 2011 to FY 2040 period, these countywide bus operating costs are projected to increase from \$1.4 billion to \$3.1 billion. Overall, this reflects a compound annual growth rate of 2.9 percent.

Specifically related to LACMTA-operated bus service, annual operating costs are projected to increase from \$0.94 billion in FY 2011 to \$2.16 billion in FY 2040. The compound average annual growth rate over this period is 2.8 percent. Table 3-30 summarizes LACMTA-operated O&M costs over the last 10 years based on information in the FY 2009 CAFR and the FY 2010 Financial Statements.

As shown in the table, the compound annual growth rate for LACMTA-operated bus service over this period was 4.3 percent. However, compared to the 2.0 percent compound annual growth rate over FY 2007 to FY 2010 period, the 2.8 percent growth rate in the financial plan is slightly higher. The growth rates projected in the financial plan reflect a continuation of LACMTA’s commitment to control O&M costs.

Table 3-30: Historic Annual LACMTA Bus Operating Costs – FY 2001 to FY 2010 (YOE \$M)

|     | FY01   | FY02   | FY03   | FY04   | FY05   | FY06   | FY07   | FY08   | FY09   | FY10   |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bus | \$0.62 | \$0.72 | \$0.74 | \$0.71 | \$0.77 | \$0.84 | \$0.89 | \$0.92 | \$0.94 | \$0.91 |

### Bus Service Improvement Program (BSIP)

This program is designed to provide additional level of service to routes experiencing consistent overcrowding issues. Costs in this program reflect both LACMTA operated services as well as services provided by the region's Municipal operators. The financial plan assumes BSIP costs will grow from \$14.1 million in FY 2011 to \$25.3 million in FY 2040. This represents a 2.0 percent compound annual growth rate between FY 2011 and FY 2040. In total this expansion category is projected to cost \$578.9 million.

### Bus Security

Using a similar methodology that was described for rail, annual bus security costs are included in the financial plan. The only difference is that for bus, security costs are combined for all routes as opposed to cost estimates for individual lines for rail. These costs are projected to grow from \$32.9 million in FY 2011 to \$66.3 million in FY 2040. This represents a 2.4 percent compound annual growth rate between FY 2011 and FY 2040.

### Expansion

The financial plan county-wide bus expansion costs will support the region's Municipal Bus Operators, including the purchase of bus and paratransit vehicles. The financial plan assumes costs for this expansion will grow from \$57.2 million in FY 2011 to a high of \$170.1 million. In total, this expansion category is projected to cost \$3.5 billion.

### Other Operations

This cost category reflects projects funded by the component of Proposition C 40% Discretionary for other eligible operators (i.e. non-LACMTA and non-Municipal operators) and TDA Section 8 funds. The financial plan assumes costs will equal revenues levels on an annual basis. In total this category is projected to account for 2.7 percent of county-wide bus operations and approximately \$1.8 billion over the FY 2011 to FY 2040 period.

#### 3.2.2.3 Countywide O&M Revenues

As described below, countywide rail and bus O&M revenues are provided from fare revenue and a variety of local, State, and federal funding sources. Table 3-31 and Figure 3-15 summarize rail O&M revenue sources assumed in the financial plan over the FY 2011 to FY 2040 period. As shown in the table and figure, total rail O&M funding reflects the following: local revenues approximately 49.0 percent; passenger fares (LACMTA-operated heavy and LRT lines and Metrolink fare revenue in Los Angeles County) approximately 33.5 percent; federal funds approximately 10.9 percent and State funds approximately 6.5 percent.



Table 3-31: Projected Countywide Rail O&M Revenue Levels – FY 2011 to FY 2040 (YOE \$M)

| Rail O&M Revenue Sources                             | FY 2011-2040 Total |
|------------------------------------------------------|--------------------|
| FY 2011 Beginning Balance                            | \$13               |
| Fares                                                |                    |
| Red/Purple Line                                      | \$2,246            |
| Blue Line (including Expo & Regional Connector)      | \$1,911            |
| Green Line                                           | \$601              |
| Gold Line - Pasadena (including Eastside & Foothill) | \$945              |
| Crenshaw/LAX Line                                    | \$369              |
| West Santa Ana Branch Line                           | \$265              |
| Metrolink (LA County portion)                        | \$1,885            |
| <b>Total Fares</b>                                   | <b>\$8,221</b>     |
| Local                                                |                    |
| Proposition A 35%                                    | \$2,880            |
| Proposition C 5% (Security)                          | \$400              |
| Proposition C 40% (Discretionary)                    | \$4,740            |
| Proposition C 10% (for Metrolink)                    | \$1,874            |
| Measure R Sales Tax                                  | \$1,750            |
| Other (Advertising, General, Misc)                   | \$801              |
| <b>Total Local</b>                                   | <b>\$12,445</b>    |
| State                                                |                    |
| STA - Population Share                               | \$1,513            |
| <b>Total State</b>                                   | <b>\$1,513</b>     |
| Federal                                              |                    |
| Section 5307 Urbanized Area Formula                  | \$480              |
| Section 5309 Fixed Guideway Modernization            | \$1,375            |
| Section 5340 Growing States & High Density           | \$242              |
| CMAQ (Gold/Expo/Crenshaw/New Lines Ops)              | \$418              |
| <b>Total Federal</b>                                 | <b>\$2,515</b>     |
| <b>LACMTA-Operated Subtotal</b>                      | <b>\$24,707</b>    |

Figure 3-15: Projected Countywide Rail O&amp;M Revenue Levels – FY 2011 to FY 2040 (YOE \$M)

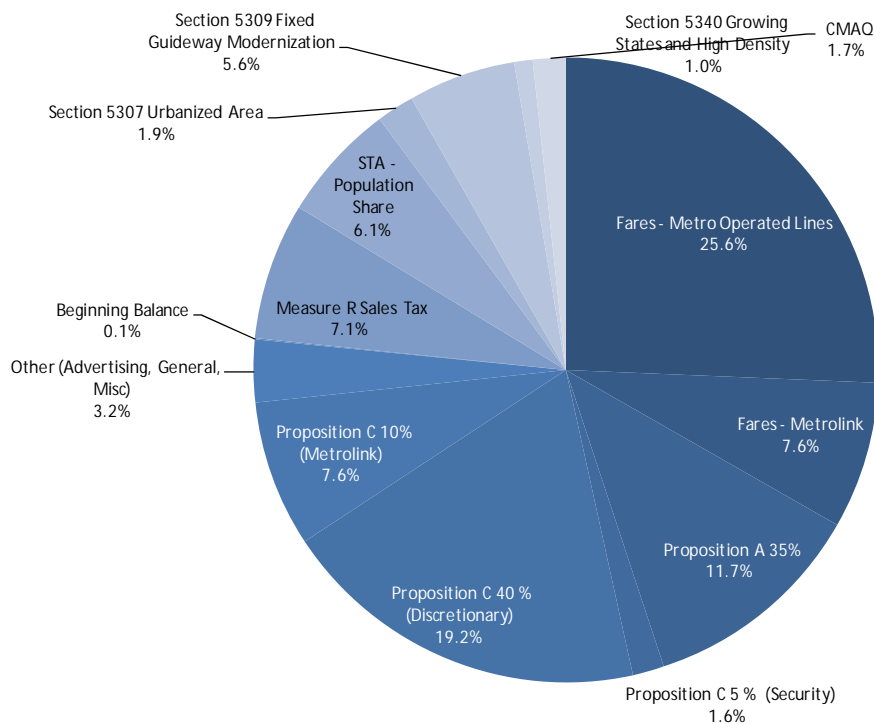


Table 3-32 and Figure 3-16 summarize Countywide bus O&M revenue sources assumed in the financial plan over the FY 2010 to FY 2040 period. As shown in the table and figure, total bus O&M funding reflects the following: local revenues approximately 65.7 percent; passenger fares approximately 24.2 percent; federal funds approximately 7.5 percent and State funds approximately 2.5 percent. A description of the rail and bus O&M revenue sources is provided following the table and figure.

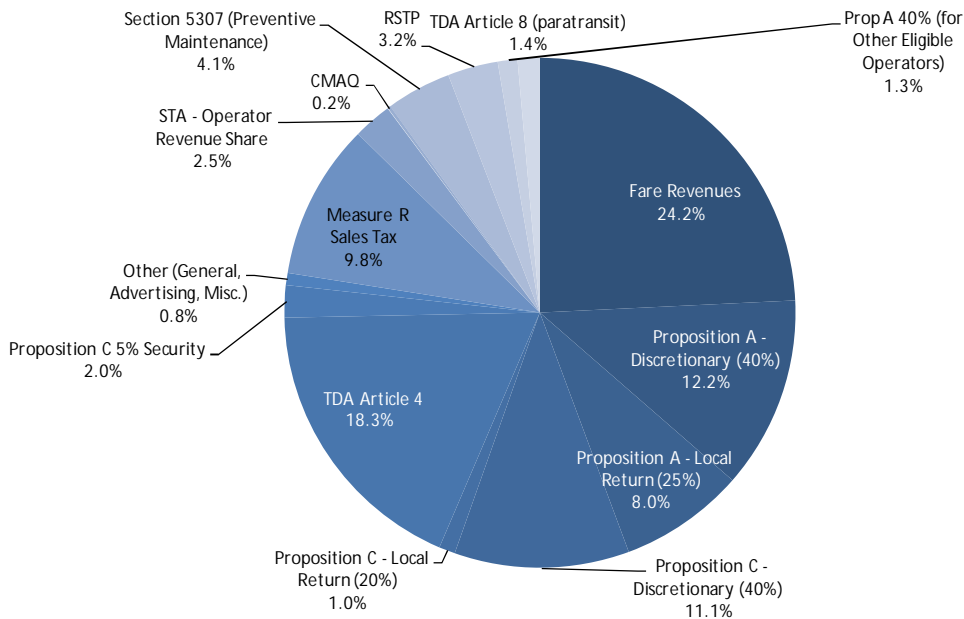
Table 3-32: Projected Countywide Bus O&amp;M Revenue Levels – FY 2010 to FY 2040 (YOE \$M)

| Bus O&M Revenue Sources                   | FY 2010-2040 Total |
|-------------------------------------------|--------------------|
| FY 2011 Beginning Balance                 | \$100              |
| <b>Local</b>                              |                    |
| Fare Revenues                             | \$17,248           |
| Proposition A - Discretionary (40%)       | \$8,652            |
| Proposition A - Local Return (25%)        | \$5,675            |
| Prop A 40% (for Other Eligible Operators) | \$896              |

Table 3-32: Projected Countywide Bus O&M Revenue Levels – FY 2010 to FY 2040 (YOE \$M)  
(continued)

| Bus O&M Revenue Sources               | FY 2010-2040 Total |
|---------------------------------------|--------------------|
| Proposition C - Discretionary (40%)   | \$7,882            |
| Proposition C - Local Return (20%)    | \$727              |
| TDA Article 4                         | \$13,005           |
| TDA Article 8 (paratransit)           | \$999              |
| Proposition C 5% Security             | \$1,446            |
| Other (General, Advertising, Misc.)   | \$550              |
| Measure R Sales Tax                   | \$7,000            |
| <b>Total Local</b>                    | <b>\$64,079</b>    |
| <b>State</b>                          |                    |
| STA - Operator Revenue Share          | \$1,764            |
| <b>Total State</b>                    | <b>\$1,764</b>     |
| <b>Federal</b>                        |                    |
| CMAQ                                  | \$141              |
| Section 5307 (Preventive Maintenance) | \$2,943            |
| RSTP                                  | \$2,263            |
| <b>Total Federal</b>                  | <b>\$5,348</b>     |
| <b>LACMTA-Operated Subtotal</b>       | <b>\$71,290</b>    |

Figure 3-16: Projected Countywide Bus O&M Revenue Levels – FY 2010 to FY 2040 (YOE \$M)



## Fare Revenue

As is shown in Figure 3-16, countywide fare revenue is projected to provide approximately 24.2 percent of total funding for operations. For LACMTA specifically, fare revenue projections for both rail and bus operations reflect the agency's goal to grow from the current 27.8 percent fare recovery rate and achieve at a minimum a 30 percent fare recovery ratio over the FY 2011 to FY 2040 period. The LACMTA Board has taken action toward achieving this target, with approval of fare increases in July 2008 and again in July 2010.

Achieving the 30 percent fare recovery ratio is projected to occur in FY 2014 in combination with a proposed fare increase. Beyond FY 2014, as costs and service levels change, periodic fare structure adjustments (every two years) are assumed to maintain the fare recovery ratio above 30 percent. This goal reflects the assumption that transit riders will be paying close to one-third of the operating cost to provide transit services on LACMTA's system. As described in more detail below, LACMTA's sales tax and other revenues will be used to subsidize the remaining two-thirds of the transit operating costs. Maintaining the 30 percent fare recovery ratio will require a combination of strategies such as reducing unproductive service, achieving operating efficiencies, reducing costs, and increasing operating revenues.

## Non-Operating Revenue

In addition to fare revenue, the following summarizes the local, State, and federal revenue sources that are projected to provide operating support for the LACMTA rail and bus services.

### Local Funds

As shown in Figure 3-17 and Figure 3-18, the majority of local funds for countywide rail and bus operations are provided by components of the local sales taxes (Proposition A, Proposition C, and Measure R) with smaller levels provided by other LACMTA funds. Descriptions of the local funding sources are provided after the figures.

Figure 3-17: Rail Annual Local Funding Sources – FY 2011 to FY 2040 (YOE \$M)

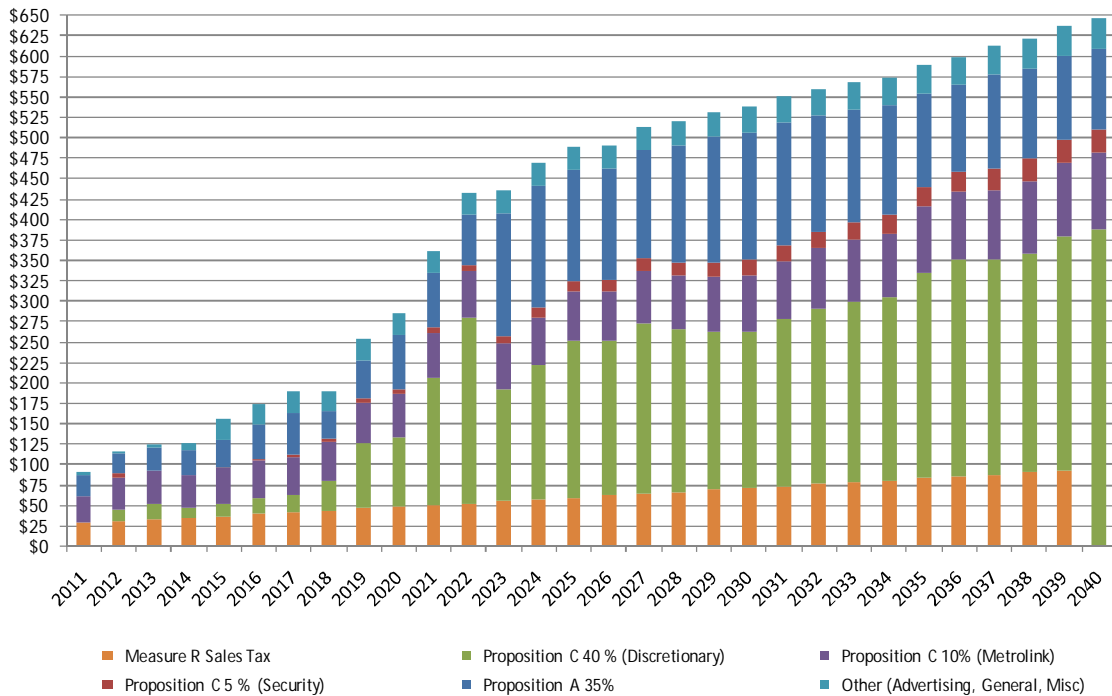
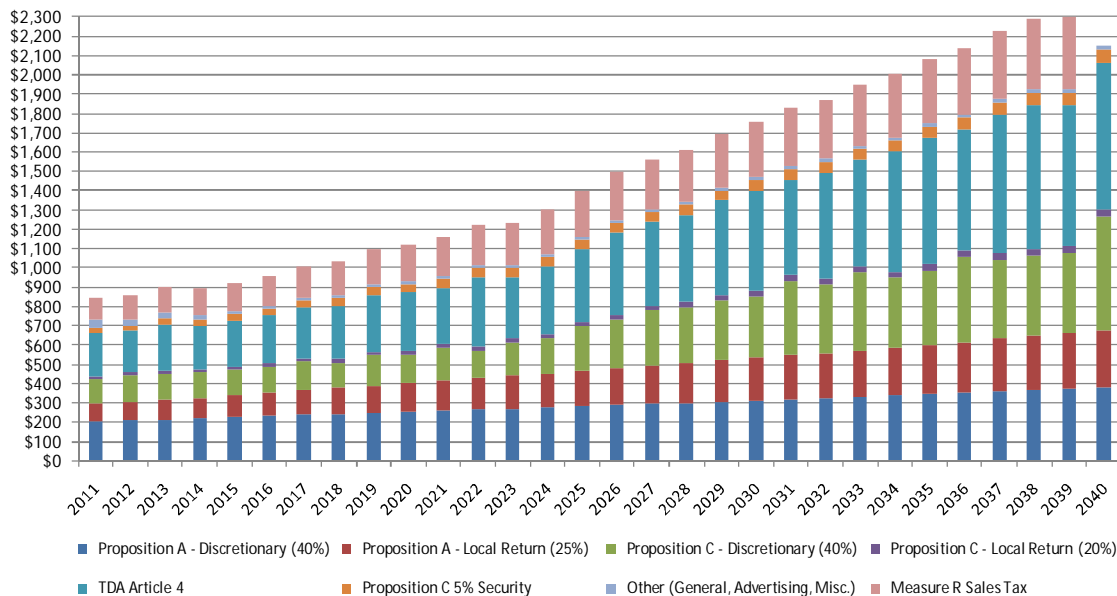


Figure 3-18: Bus Annual Local Funding Sources – FY 2011 to FY 2040 (YOE \$M)



**Proposition A Funds:** As stated previously in Section 3.1, \$37.5 billion in Proposition A funds are projected over the FY 2011 to FY 2040 period. These funds will be allocated among four funding programs: Local Return Program (25 percent), Rail Development Program (35 percent), Discretionary Program (40 percent), and the 5 percent of 40 percent Incentive

Program. Rail operations will be funded from a portion of the Proposition A 35 percent Rail development Program.

*Proposition A 35 Percent Rail Development Program:* These funds can be used for a variety of construction and operation purposes. For previous major construction projects, such as the Blue, Green and Red Lines, LACMTA has leveraged these funds by bonding in accordance with the agency’s adopted debt policy. Bond debt service has the first claim of funds from this program. Other eligible uses include the acquisition, renovation, rehabilitation, and replacement of rail vehicles, rail facilities, and wayside systems; operation of rail systems, and acquisition and maintenance of rights of way.

The financial plan projects \$12.5 billion in Proposition A 35 percent funds. Of this total, \$9.6 billion (76.8 percent) is projected to be used for capital purposes and \$2.9 billion (23.2 percent) will be used to support heavy rail and LRT services operated by LACMTA.

*Proposition A 40 Percent Discretionary Program:* These funds are allocated based on Board policy which stated that 95 percent of these funds will be allocated to county bus operators by formula based on projected receipts plus CPI, adjusted once during the mid-year reallocation. Growth above CPI, if any, is transferred to Proposition C 40 percent Discretionary per the Discretionary Grant Program and Incentive Program Guidelines. SB 1755 (Calderon, 1991) mandates adherence to the Transit Operator Formula Funds (Formula Allocation Procedure) unless changed by  $\frac{3}{4}$  vote of LACMTA Board.

The financial plan projects \$8.7 billion in Proposition A 40 percent Discretionary funds to support bus operations.

***Proposition C 5 Percent Security, 40 Percent Discretionary, and 10 Percent Commuter Rail/Transit Centers Programs:*** As stated previously in Section 3.1, \$38.0 billion in Proposition C funds projected over the FY 2011 to FY 2040 period will be allocated among five funding programs: Rail and Bus Security (5 percent), MetroInk Commuter Rail/Transit Centers (10 percent), Local Returns (20 percent), Transit-related Improvements to Freeways and State Highways and Public Mass Transit Improvements to Railroad Rights-of-Way (25 percent) and Discretionary program (40 percent). The following Proposition C programs provide funding for countywide rail operations:

*Proposition C 5 Percent Security Program:* These funds improve and expand rail and bus security services such as new rail line security, transit service and facilities security, security incentives, security improvements, and demonstration projects. The financial plan projects \$1.9 billion for this program which will distributed as follows:

- Municipal Operators: \$314.1 million (17.0 percent)
- LACMTA Bus Security: \$1,131.6 million (61.3 percent)

- LACMTA Rail Security: \$400.4 million (21.7 percent)

*Proposition C 40 Percent Discretionary Program:* These funds are currently allocated at the discretion of LACMTA Board to LACMTA and non-LACMTA operators and agencies after all other funding opportunities are exhausted. The financial plan projects \$14.8 billion for this program, which is allocated among 14 different capital, operating and debt service categories. Funding for rail operations is projected to be \$4.7 billion over the FY 2011 to FY 2040 period, which is approximately 31.7 percent of the total Proposition C 40 percent Discretionary Program. Funding for bus operations is projected to be \$7.9 billion over the FY 2011 to FY 2040 period, which is approximately 53.4 percent of the total Proposition C 40 percent Discretionary Program.

*Proposition C 10 Percent Commuter Rail/Transit Centers Program:* These funds may be used for planning, construction and operation of commuter rail such as Metrolink including vehicles and equipment, and right-of-way improvements to tracks, bridges and signal systems. In years when funds are available, this program can be used for other capital projects such as transit centers, freeway bus stops, park-n-ride lots. The financial plan projects \$3.3 billion for this program, which is allocated among 9 different capital, operating and debt service categories. Funding LACMTA's share of Metrolink commuter rail operations is projected to be \$1.9 billion over the FY 2011 to FY 2040 period, which is approximately 58.0 percent of the total Proposition C 10 percent Commuter Rail/Transit Centers Program.

*Proposition C 20 Percent Local Return:* These funds are distributed to cities on a per capita basis exclusively for public transit purposes. The financial plan assumes \$726 million out of a total of the \$7.4 billion total will be used to support countywide bus operations.

**Measure R Rail and Bus Operations Program:** The \$35.5 billion in Measure R funds forecast to be received over the FY 2011 to FY 2040 period will be allocated among nine funding programs: Transit Capital Specific Projects (35 percent); Highway Projects (20 percent); Local Return (15 percent); Rail Operations (5 percent); Bus Operations (20 percent); Metrolink (3 percent); Transit Capital (35 percent); Rail Capital General Improvements (2 percent); and Administration (1.5 percent). The Measure R 5 percent Rail Operations Program will be used to support operating costs of new rail projects, including the Regional Connector and projected to provide \$1.8 billion for rail operations over the FY 2011 to FY 2040 period. The Bus Operations 20 percent program will support county-wide bus operations and is projected to provide \$7.0 billion over the FY 2011 to FY 2040 period.

**Other LACMTA Funds:** This category reflects fees collected by LACMTA for advertising, chartering, leasing, and other miscellaneous services. Over the FY 2011 to FY 2040 period, these sources are projected to average \$32.5 million per year and increase approximately 2.0 percent per year. Over the FY 2010 to FY 2040 period these sources will generate \$801.3 million for rail operations (3.6 percent of total rail operating revenues) and \$549.5 million for bus operations (0.8 percent of total bus operating revenue).

*State Funds – State Transit Assistance*

The financial plan includes one State funding program for rail operations, State Transit Assistance (STA) – Population Share program. Through FY 2008, funding was provided through 50 percent of the Public Transportation Account (PTA) revenue. Funds were apportioned to counties based 50 percent on population share and 50 percent to operator revenue share (the ratio of each transit operator’s revenues to the revenues of operators in the State) In 2007, Senate Bill 717 (SB 717) changed the allocation of the PTA program beginning in FY 2009. Under SB 717, STA is funded from 75 percent of the PTA revenue and is apportioned 50 percent based on population share and 50 percent based on operator revenue share. Applicants for funds must meet one of the following eligibility tests:

1. Latest audited operating cost per revenue vehicle hour does not exceed the sum of the preceding year’s operating cost per revenue vehicle hour and an amount equal to the product of the percentage change in CPI for the same period multiplied by the preceding year’s operating cost per revenue vehicle hour.
2. Latest audited 3-year average operating cost per revenue vehicle hour does not exceed the sum of the average of the operating cost per revenue vehicle hour in the 3 years preceding the latest audited year and an amount equal to the product of the average percentage change in CPI for the same period multiplied by the average operating cost per revenue vehicle hour in the same 3 years.

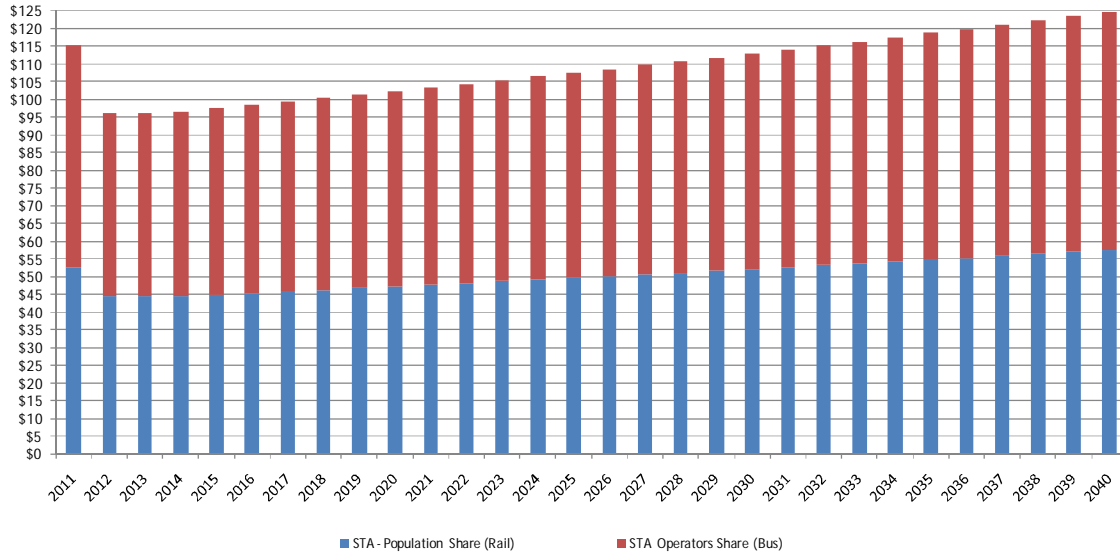
LACMTA’s policy has been to allocate the population share of STA funds for rail operations. This is reflected in the financial plan with 100.0 percent of annual funds used for rail operations.

The State of California budget provided for a one-time allocation of \$400 million statewide for the State Transit Assistance (STA) program (half Population Share and half Operator Revenue Share) to fund FY 2009 – FY 2010 and FY 2010 to FY 2011. This allocation was made in late June 2010 and is, therefore, reflected in FY 2011 in the financial forecast. Recent State legislation provides that 75 percent of the revenue from the State sales tax on diesel be directed to the STA program beginning in FY 2011- FY2012. The estimate is \$350 million per year statewide of which Los Angeles County, through the LACMTA, is allocated a share of each half of the STA program by formula. LACMTA allocates the Population Share to itself and suballocates the Operator Revenue Share to itself and to the Municipal Operators in LA County according to the LACMTA Formula Allocation Procedure (FAP).

As shown in Figure 3-19, beginning in 2014, the financial plan assumes these funds will increase 0.3 percent per year, with the total funding amounts growing from \$115.1 million to \$124.7 million. In total the financial plan projects \$3.3 billion in STA funds, which reflects \$1.8 billion for bus (2.5 percent of total bus operating revenue) and \$1.5 billion for rail (6.6 percent of total rail operating revenue).



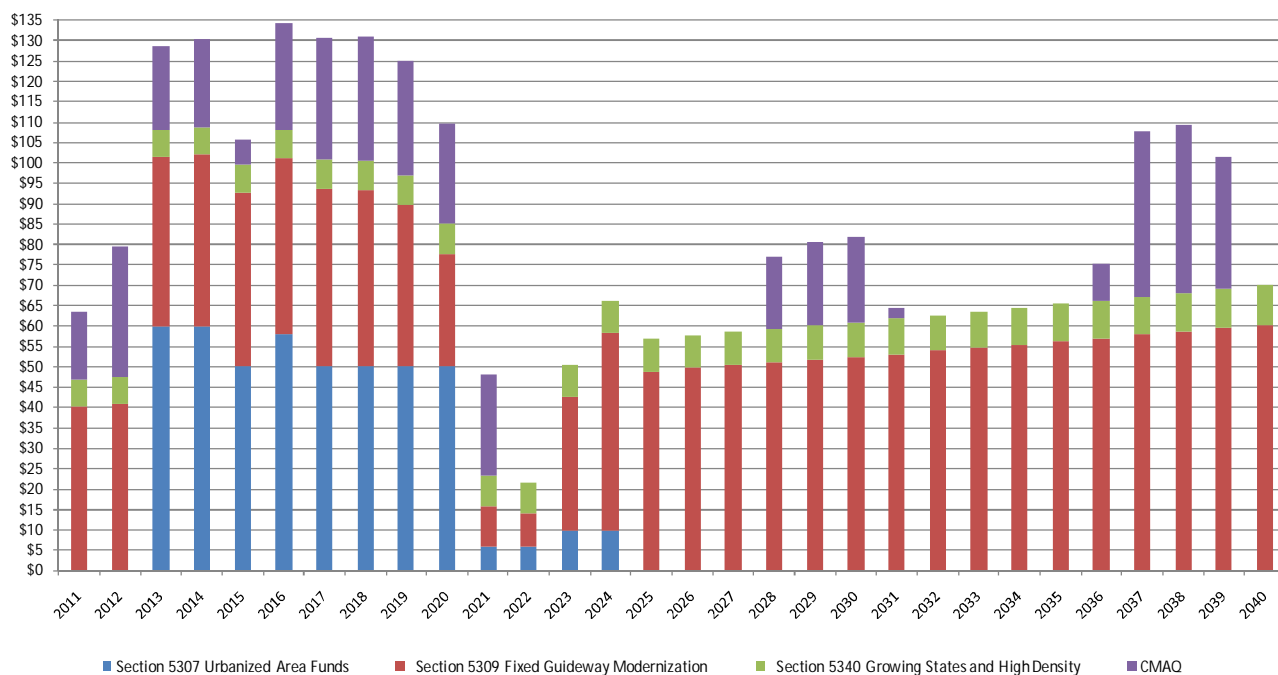
Figure 3-19: Annual State Transit Assistance – Population Share – FY 2011 to FY 2040 (YOE \$M)



*Federal Funds*

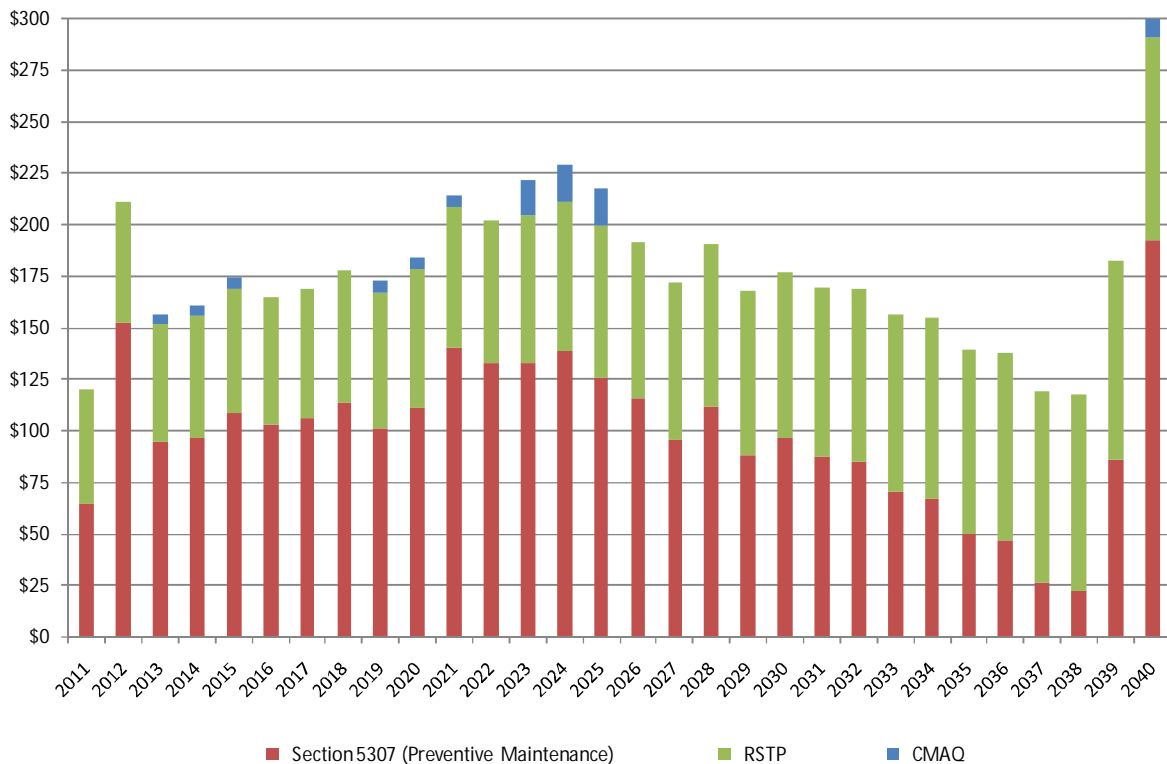
The rail operating plan includes four federal funding sources: FTA Section 5307 Urbanized Area Formula Funds; FTA Section 5309 Fixed Guideway Modernization Program; FTA Section 5340 Growing States and High Density Program; and FHWA Congestion Mitigation and Air Quality Program. Figure 3-20 summarizes the projected annual funding levels for each of these programs.

Figure 3-20: Rail Annual Federal Funding Levels – FY 2011 to FY 2040 (YOE \$M)



The bus operating plan also includes three federal funding sources: FTA Section 5307 Urbanized Area Formula funds; FHWA CMAQ funds, and FHWA Regional Surface Transportation Program (RSTP) funds. Figure 3-21 summarizes the projected annual funding levels for each of these programs.

Figure 3-21: Bus Annual Federal Funding Levels – FY 2011 to FY 2040 (YOE \$M)



**Section 5309 Fixed Guideway Modernization Funds:** A federal formula program that is allocated to urbanized areas with populations greater than 200,000 with fixed guideway systems that have been in operation for at least seven years. As stated in Section 3.1, these funds can be used for capital projects as well as for preventive maintenance activities incorporated into the operating plan. These activities can include preservation of fixed guideway infrastructure such as maintenance of vehicles, buildings, equipment, electric power facilities, vehicle movement control systems, fare collection and counting equipment, structures, tunnels, subways, and roadways.

The financial plan assumes that these funds will increase 1.4 percent per year over FY 2011 to FY 2040, with the total funding amounts growing from \$40.7 million to \$60.9 million. In general 99.0 percent of total annual funds are projected to be used for preventive maintenance purposes. The remaining 1.0 percent (approximately \$0.4 million to \$0.5 million per year) is projected to be used for agency-wide capital projects.

Additionally, as shown previously in Figure 3-20, the exceptions to this allocation are over the FY 2018 to FY 2023 period when fixed guideway program funding is used to support State of Good Repair rehabilitation and replacement projects and to purchase new rail cars, which was described previously in Section 3.1.

**Section 5340 Growing States and High Density Program:** Funds from this program are allocated based on two categories. First, 50 percent of funds are made available under the

Growing States factors and are apportioned based on State population forecasts for 15 years beyond the most recent census. Amounts apportioned for each State are then allocated to urbanized and rural areas based on the State's urban/rural population ratio. Second, the remaining 50 percent is allocated based on the High Density States factor which distributes funds to States with population densities greater than 370 people per square mile and are apportioned only to urbanized areas within those States. The State of California does not qualify for High Density funds since its population density is 217 people per square mile

The financial plan assumes these funds will grow 1.4 percent per year from \$6.9 million to \$9.8 million over the FY 2011 to FY 2040 period. On an annual basis 95 percent of annual funding levels are used for rail operations and the remaining 5 percent (approximately \$0.4 to \$0.5 million per year) is allocated to the other Los Angeles County urbanized areas of Lancaster-Palmdale and Santa Clarita. In total, Section 5340 funds represent 1.0 percent of the total countywide rail O&M funds.

**Section 5307 Urbanized Area Formula Funds:** Section 5307 Urbanized Area Formula Funds may be used for Preventive Maintenance as well as for transit capital. Of the total \$8.7 billion in revenues projected over the FY 2011 to FY 2040 period, 34.9 percent is proposed for expenditure on preventive maintenance costs associated with the LACTMA bus program and 5.2 percent is proposed for rail operations.

**CMAQ:** In addition to the capital use of CMAQ funds as described in Section 3.1, CMAQ funds can also be used for the first three years of operating costs of new lines. The financial plan reflects use of CMAQ funds to support the operation of new rail lines (Gold Line, Expo Line, and Crenshaw/LAX Line) and bus services during the first three years of operations. In total the financial plan projects \$417.9 million in CMAQ funds to support the first three years of operations of new rail lines and \$141.3 million. This represents 1.7 percent of total rail O&M revenue and 0.2 percent of total bus O&M revenue.

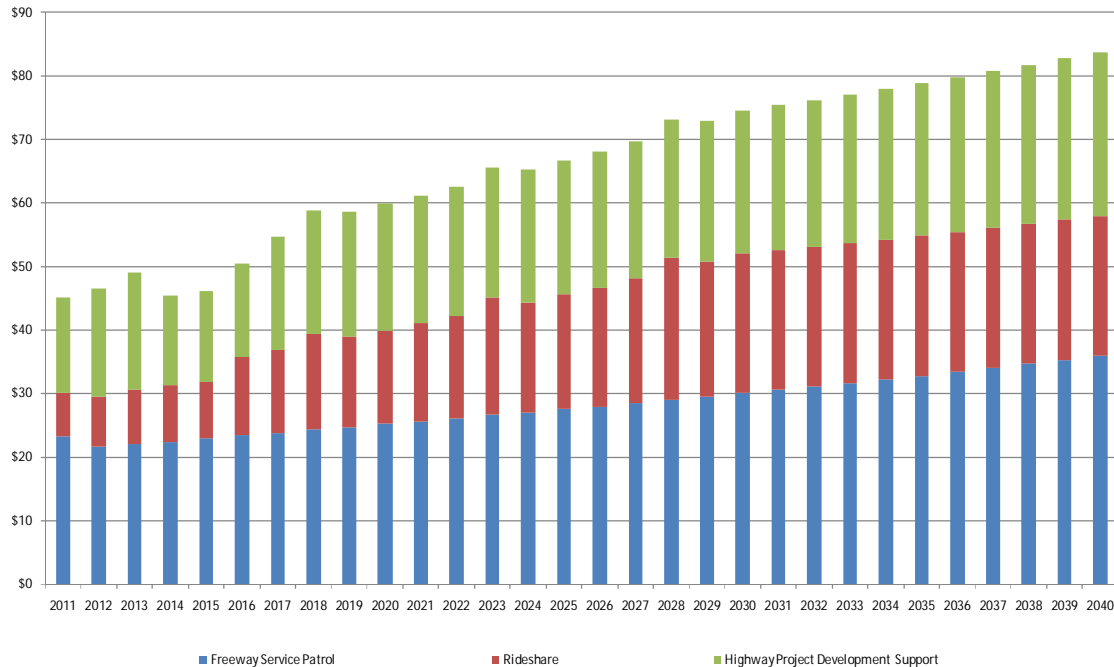
**RSTP:** A total of \$2.3 billion in RSTP funding is used to support bus O&M, with no RSTP funding used for rail. This represents 3.2 percent of total bus O&M costs.

### 3.2.3 Countywide Highway Operating Plan

#### 3.2.3.1 Countywide Highway O&M Costs

As shown in Figure 3-22, the financial plan includes various activities of Caltrans, local jurisdictions in the County, and LACMTA related to highway operations. LACMTA controlled highway operations include freeway service patrol, rideshare, and highway project development support. The annual cost of these activities is projected to increase annually, growing from an annual cost of approximately \$45.1 million in FY 2011 to \$83.7 million in FY 2040. Over this period, LACMTA controlled highway operations related costs are projected to total \$1,989 million over the period.

Figure 3-22: LACMTA Controlled Highway Operations Related Costs – FY 2011 to FY 2040 (YOE \$M)



### 3.2.3.2 Countywide Highway Operations Revenues

Except for Proposition C 25 percent funds, the sources of funding for Highway Operations are firewalled for use on highways and local roads. Thus, these sources are isolated from the countywide rail, transit corridor, and bus components of the LRTP. These sources include:

- Proposition C 25 Percent funds;
- SAFE;
- HOV Violation Fines;
- Freeway Service Patrol - State Highway Account
- State Highway Account funds for Caltrans Operations;
- Local Agency funds; and
- State Gas Tax Subventions.

### 3.2.4 Countywide Bus and Rail Sources and Uses

Based on the costs and revenue assumptions and descriptions described previously, Table 3-33 provides LACMTA’s cash flows for rail and bus operations respectively. As shown in the tables, after having a small beginning balance in FY 2011, the cash flow for both rail and bus operations reflect sources being equal to uses through FY 2040.

Table 3-33: LACMTA O&M Sources and Uses of Funds Through 2040 for Rail (YOE \$M)

| Rail Sources                                 | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2021    | 2022    | 2023    | 2024    | 2025    | 2026    | 2027    | 2028    | 2029    | 2030    | 2031    | 2032      | 2033      | 2034      | 2035      | 2036      | 2037      | 2038      | 2039      | 2040      |
|----------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Local                                        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |           |           |           |           |           |           |           |
| Fares - Red/Purple Lines                     | \$34.6  | \$34.6  | \$35.1  | \$39.7  | \$40.2  | \$44.3  | \$44.9  | \$48.6  | \$49.2  | \$51.8  | \$52.4  | \$70.7  | \$71.7  | \$75.4  | \$76.4  | \$80.8  | \$81.8  | \$86.1  | \$87.2  | \$90.9  | \$92.0  | \$95.9    | \$97.1    | \$101.2   | \$102.5   | \$106.8   | \$108.2   | \$112.8   | \$114.2   | \$119.0   |
| Fares - Blue Line (incl Expo & Reg'l Conn.)  | \$19.7  | \$25.0  | \$29.4  | \$33.3  | \$33.7  | \$43.3  | \$44.7  | \$48.4  | \$49.0  | \$55.2  | \$55.9  | \$58.9  | \$59.6  | \$62.7  | \$63.5  | \$67.2  | \$68.0  | \$71.6  | \$72.5  | \$75.6  | \$76.5  | \$79.8    | \$80.8    | \$84.2    | \$85.3    | \$88.9    | \$90.0    | \$93.8    | \$95.0    | \$99.0    |
| Fares - Green Line                           | \$8.6   | \$8.6   | \$8.7   | \$9.9   | \$10.0  | \$11.1  | \$11.2  | \$12.1  | \$16.8  | \$17.6  | \$17.8  | \$18.7  | \$19.0  | \$19.9  | \$20.2  | \$21.4  | \$21.6  | \$22.8  | \$23.0  | \$24.0  | \$24.3  | \$25.4    | \$25.7    | \$26.8    | \$27.1    | \$28.2    | \$28.6    | \$29.8    | \$30.2    | \$31.5    |
| Fares - Gold Line (incl Eastside & Foothill) | \$8.6   | \$8.6   | \$8.7   | \$9.9   | \$10.0  | \$16.8  | \$19.3  | \$20.9  | \$21.1  | \$22.2  | \$29.4  | \$30.8  | \$31.1  | \$32.8  | \$33.2  | \$35.1  | \$35.5  | \$37.4  | \$37.9  | \$39.5  | \$40.0  | \$41.7    | \$42.2    | \$44.0    | \$44.5    | \$46.4    | \$47.0    | \$49.0    | \$49.6    | \$51.7    |
| Fares - Crenshaw Line                        | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$12.2  | \$12.5  | \$12.6  | \$13.3  | \$13.4  | \$14.2  | \$14.3  | \$15.2  | \$15.3  | \$16.1  | \$16.3  | \$17.0  | \$17.3  | \$18.0    | \$18.2    | \$19.0    | \$19.2    | \$20.0    | \$20.3    | \$21.2    | \$21.4    | \$22.3    |
| Fares - West Santa Ana Line                  | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$10.0  | \$10.2  | \$10.3  | \$10.8  | \$11.0  | \$11.6  | \$11.8  | \$12.4  | \$12.5  | \$13.1  | \$13.2  | \$13.8    | \$14.0    | \$14.5    | \$14.7    | \$15.4    | \$15.5    | \$16.2    | \$16.4    | \$17.1    |
| Fares - Metrolink                            | \$43.5  | \$45.0  | \$46.6  | \$48.2  | \$49.9  | \$51.6  | \$52.8  | \$54.0  | \$55.1  | \$56.2  | \$57.3  | \$58.4  | \$59.5  | \$60.6  | \$61.7  | \$62.9  | \$64.1  | \$65.4  | \$66.7  | \$68.0  | \$69.3  | \$70.6    | \$71.9    | \$73.3    | \$74.8    | \$76.3    | \$77.9    | \$79.5    | \$81.0    | \$82.6    |
| Proposition A 35%                            | \$26.8  | \$23.7  | \$29.0  | \$29.4  | \$34.3  | \$42.0  | \$51.5  | \$33.0  | \$46.5  | \$67.4  | \$68.0  | \$61.3  | \$150.0 | \$150.0 | \$137.0 | \$136.0 | \$132.0 | \$143.0 | \$153.0 | \$156.0 | \$150.0 | \$142.0   | \$138.0   | \$135.0   | \$115.0   | \$105.0   | \$115.0   | \$110.0   | \$102.0   | \$98.0    |
| Proposition C 5 % (Security)                 | \$0.0   | \$5.5   | \$0.0   | \$0.0   | \$0.3   | \$1.4   | \$2.5   | \$3.7   | \$4.9   | \$6.2   | \$7.5   | \$8.7   | \$9.9   | \$11.1  | \$12.4  | \$13.7  | \$15.0  | \$16.2  | \$17.4  | \$18.6  | \$19.7  | \$20.6    | \$21.7    | \$22.9    | \$24.0    | \$25.1    | \$26.2    | \$27.3    | \$28.4    | \$29.5    |
| Proposition C 40 % (Discretionary)           | \$0.0   | \$14.5  | \$19.1  | \$11.3  | \$15.1  | \$20.5  | \$20.5  | \$36.0  | \$80.1  | \$85.7  | \$155.8 | \$228.0 | \$136.1 | \$165.0 | \$191.4 | \$188.7 | \$209.1 | \$198.6 | \$193.4 | \$190.3 | \$203.8 | \$214.4   | \$220.2   | \$223.1   | \$251.8   | \$265.3   | \$262.0   | \$267.8   | \$285.3   | \$387.6   |
| TDA Article 4                                | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     |
| Proposition C 10% (Metrolink)                | \$32.3  | \$38.9  | \$40.5  | \$42.1  | \$43.8  | \$45.5  | \$47.4  | \$48.8  | \$50.2  | \$51.8  | \$53.3  | \$54.9  | \$56.6  | \$58.3  | \$60.0  | \$61.8  | \$63.7  | \$65.6  | \$67.5  | \$69.6  | \$71.6  | \$73.8    | \$76.0    | \$78.3    | \$80.6    | \$83.1    | \$85.5    | \$88.1    | \$90.8    | \$93.5    |
| Other (Advertising, General, Misc)           | \$2.4   | \$2.6   | \$2.7   | \$8.3   | \$25.0  | \$25.6  | \$26.2  | \$24.7  | \$25.2  | \$25.7  | \$26.2  | \$26.8  | \$27.3  | \$27.8  | \$28.3  | \$28.8  | \$29.4  | \$29.9  | \$30.5  | \$31.1  | \$31.7  | \$32.3    | \$32.9    | \$33.6    | \$34.3    | \$34.9    | \$35.7    | \$36.4    | \$37.1    | \$37.8    |
| Measure R Sales Tax                          | \$29.1  | \$31.2  | \$33.1  | \$35.0  | \$37.1  | \$39.4  | \$41.6  | \$43.8  | \$46.1  | \$48.4  | \$50.9  | \$53.1  | \$55.3  | \$57.6  | \$60.0  | \$62.4  | \$64.8  | \$67.2  | \$69.6  | \$72.0  | \$74.2  | \$76.3    | \$78.6    | \$81.1    | \$83.5    | \$85.8    | \$88.3    | \$90.9    | \$93.3    | \$0.0     |
| Subtotal Local                               | \$205.7 | \$238.4 | \$252.8 | \$267.1 | \$299.5 | \$341.5 | \$362.5 | \$374.0 | \$456.4 | \$500.6 | \$597.2 | \$693.6 | \$699.8 | \$746.2 | \$769.5 | \$785.6 | \$812.1 | \$832.4 | \$847.7 | \$865.7 | \$883.6 | \$904.5   | \$917.3   | \$937.0   | \$957.3   | \$981.3   | \$1,000.2 | \$1,022.8 | \$1,044.6 | \$1,069.7 |
| State                                        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |           |           |           |           |           |           |           |
| STA - Population Share                       | \$52.8  | \$44.5  | \$44.5  | \$44.5  | \$44.9  | \$45.4  | \$45.8  | \$46.3  | \$46.8  | \$47.2  | \$47.7  | \$48.2  | \$48.7  | \$49.2  | \$49.6  | \$50.1  | \$50.6  | \$51.2  | \$51.7  | \$52.2  | \$52.7  | \$53.2    | \$53.8    | \$54.3    | \$54.8    | \$55.4    | \$55.9    | \$56.5    | \$57.1    | \$57.6    |
| Subtotal State                               | \$52.8  | \$44.5  | \$44.5  | \$44.5  | \$44.9  | \$45.4  | \$45.8  | \$46.3  | \$46.8  | \$47.2  | \$47.7  | \$48.2  | \$48.7  | \$49.2  | \$49.6  | \$50.1  | \$50.6  | \$51.2  | \$51.7  | \$52.2  | \$52.7  | \$53.2    | \$53.8    | \$54.3    | \$54.8    | \$55.4    | \$55.9    | \$56.5    | \$57.1    | \$57.6    |
| Federal                                      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |           |           |           |           |           |           |           |
| Section 5309 Fixed Guideway Modernization    | \$40.3  | \$40.9  | \$41.4  | \$42.0  | \$42.6  | \$43.2  | \$43.8  | \$43.2  | \$39.8  | \$27.8  | \$9.8   | \$8.1   | \$32.7  | \$48.3  | \$48.9  | \$49.6  | \$50.3  | \$51.0  | \$51.7  | \$52.5  | \$53.2  | \$54.0    | \$54.7    | \$55.5    | \$56.2    | \$57.0    | \$57.8    | \$58.6    | \$59.5    | \$60.3    |
| Section 5307 Urbanized Area Formula          | \$0.0   | \$0.0   | \$60.0  | \$60.0  | \$50.0  | \$58.0  | \$50.0  | \$50.0  | \$50.0  | \$50.0  | \$6.0   | \$26.0  | \$10.0  | \$10.0  | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     |
| Section 5340 Growing States and High Density | \$6.5   | \$6.6   | \$6.7   | \$6.8   | \$6.9   | \$7.0   | \$7.1   | \$7.2   | \$7.3   | \$7.4   | \$7.5   | \$7.6   | \$7.7   | \$7.8   | \$7.9   | \$8.0   | \$8.2   | \$8.3   | \$8.4   | \$8.5   | \$8.6   | \$8.7     | \$8.9     | \$9.0     | \$9.1     | \$9.2     | \$9.4     | \$9.5     | \$9.6     | \$9.8     |
| Homeland Security Grants                     | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     |
| CMAQ (Gold/Expo/Crenshaw/New Lines Ops)      | \$16.7  | \$32.2  | \$20.4  | \$21.3  | \$6.3   | \$25.9  | \$29.9  | \$30.5  | \$36.9  | \$33.5  | \$76.7  | \$43.5  | \$44.3  | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     |
| Subtotal Federal                             | \$63.6  | \$79.6  | \$128.6 | \$130.1 | \$105.8 | \$134.1 | \$130.8 | \$130.9 | \$134.0 | \$118.7 | \$100.0 | \$85.2  | \$94.7  | \$66.1  | \$56.9  | \$57.7  | \$58.5  | \$59.3  | \$60.1  | \$61.0  | \$61.8  | \$62.7    | \$63.6    | \$64.5    | \$65.4    | \$66.3    | \$67.2    | \$68.2    | \$69.1    | \$70.1    |
| Total Sources                                | \$322.0 | \$362.5 | \$425.8 | \$441.7 | \$450.2 | \$520.9 | \$539.2 | \$551.2 | \$637.2 | \$666.5 | \$744.9 | \$827.0 | \$843.2 | \$861.4 | \$876.0 | \$893.4 | \$921.2 | \$942.8 | \$959.5 | \$978.8 | \$998.1 | \$1,020.5 | \$1,034.6 | \$1,055.8 | \$1,077.5 | \$1,103.0 | \$1,123.4 | \$1,147.5 | \$1,170.8 | \$1,197.4 |

Table 3-33: LACMTA O&M Sources and Uses of Funds Through 2040 for Rail (YOE \$M) (continued)

| Rail Uses                                        | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2021    | 2022    | 2023    | 2024    | 2025    | 2026    | 2027    | 2028    | 2029    | 2030    | 2031    | 2032      | 2033      | 2034      | 2035      | 2036      | 2037      | 2038      | 2039      | 2040      |
|--------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Red/Purple Line                                  | \$74.3  | \$68.0  | \$84.1  | \$86.4  | \$90.1  | \$92.5  | \$92.9  | \$94.9  | \$96.9  | \$99.1  | \$100.7 | \$102.7 | \$104.6 | \$106.9 | \$108.5 | \$110.6 | \$121.0 | \$123.8 | \$125.9 | \$128.3 | \$130.8 | \$133.6   | \$135.8   | \$138.5   | \$141.2   | \$144.5   | \$147.0   | \$150.1   | \$153.0   | \$156.4   |
| Westside Subway Extension                        | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$53.5  | \$54.5  | \$55.7  | \$56.5  | \$57.6  | \$58.7  | \$60.0  | \$61.0  | \$62.2  | \$63.4  | \$64.8    | \$62.3    | \$63.5    | \$64.8    | \$66.3    | \$67.4    | \$68.8    | \$70.2    | \$71.7    |
| Blue Line                                        | \$70.1  | \$64.7  | \$77.4  | \$80.9  | \$80.9  | \$84.0  | \$85.3  | \$87.2  | \$92.3  | \$94.4  | \$96.0  | \$97.9  | \$99.8  | \$101.9 | \$103.5 | \$105.5 | \$107.4 | \$109.9 | \$111.7 | \$113.9 | \$116.1 | \$118.6   | \$120.6   | \$122.9   | \$125.4   | \$128.3   | \$130.5   | \$133.2   | \$135.8   | \$138.8   |
| Green Line                                       | \$25.1  | \$25.3  | \$30.6  | \$32.0  | \$32.0  | \$32.5  | \$33.0  | \$33.7  | \$50.1  | \$51.3  | \$52.1  | \$53.2  | \$54.2  | \$55.3  | \$56.2  | \$57.2  | \$58.3  | \$59.7  | \$60.7  | \$61.8  | \$63.0  | \$64.4    | \$65.4    | \$66.7    | \$68.1    | \$69.6    | \$70.8    | \$72.3    | \$73.7    | \$75.4    |
| Gold Line - Pasadena (including Foothill)        | \$23.8  | \$23.0  | \$28.1  | \$29.5  | \$29.4  | \$50.5  | \$58.3  | \$59.6  | \$60.8  | \$62.2  | \$63.2  | \$64.5  | \$65.7  | \$67.1  | \$68.1  | \$69.4  | \$70.7  | \$72.4  | \$73.6  | \$75.0  | \$76.4  | \$78.1    | \$79.4    | \$80.9    | \$82.5    | \$84.5    | \$85.9    | \$87.7    | \$89.4    | \$91.4    |
| Gold Line - Eastside Extension                   | \$14.9  | \$15.5  | \$18.9  | \$19.8  | \$19.8  | \$20.1  | \$20.4  | \$20.9  | \$21.3  | \$21.8  | \$46.1  | \$47.0  | \$47.9  | \$48.9  | \$49.7  | \$50.6  | \$51.6  | \$52.8  | \$53.6  | \$54.7  | \$55.7  | \$56.9    | \$57.9    | \$59.0    | \$60.2    | \$61.6    | \$62.6    | \$63.9    | \$65.2    | \$66.6    |
| Blue Line - Exposition Phase I                   | \$0.0   | \$20.4  | \$34.9  | \$36.5  | \$36.5  | \$38.3  | \$38.9  | \$39.8  | \$40.6  | \$41.5  | \$42.2  | \$43.0  | \$43.8  | \$44.8  | \$45.5  | \$46.4  | \$47.2  | \$48.3  | \$49.1  | \$50.1  | \$51.0  | \$52.1    | \$53.0    | \$54.0    | \$55.1    | \$56.4    | \$57.4    | \$58.6    | \$59.7    | \$61.0    |
| Blue Line - Exposition Phase II                  | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$24.3  | \$24.6  | \$25.2  | \$25.7  | \$26.3  | \$26.7  | \$27.2  | \$27.7  | \$28.4  | \$28.8  | \$29.3  | \$29.9  | \$30.6  | \$31.1  | \$31.7  | \$32.3  | \$33.0    | \$33.5    | \$34.2    | \$34.9    | \$35.7    | \$36.3    | \$37.1    | \$37.8    | \$38.7    |
| Crenshaw Line                                    | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$42.0  | \$43.0  | \$43.6  | \$44.5  | \$45.3  | \$46.4  | \$47.0  | \$47.9  | \$48.8  | \$50.0  | \$50.8  | \$51.8  | \$52.7  | \$54.0    | \$54.8    | \$55.9    | \$57.0    | \$58.4    | \$59.3    | \$60.5    | \$61.7    | \$63.2    |
| West Santa Ana Line                              | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$34.4  | \$35.1  | \$35.7  | \$36.4  | \$37.1  | \$37.8  | \$38.5  | \$31.4  | \$31.8  | \$32.4  | \$33.0  | \$33.9    | \$34.3    | \$35.0    | \$35.7    | \$36.6    | \$37.2    | \$37.9    | \$38.7    | \$39.6    |
| Regional Connector                               | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$12.5  | \$12.7  | \$13.0  | \$13.2  | \$13.5  | \$13.7  | \$14.0  | \$14.2  | \$14.5  | \$14.8  | \$15.1  | \$15.4  | \$15.7    | \$16.0    | \$16.3    | \$16.6    | \$17.0    | \$17.3    | \$17.6    | \$18.0    | \$18.4    |
| Rail Security - Red Line                         | \$18.8  | \$21.8  | \$22.2  | \$22.7  | \$23.3  | \$23.9  | \$24.4  | \$24.9  | \$25.4  | \$26.0  | \$26.5  | \$40.3  | \$41.0  | \$41.9  | \$42.6  | \$43.4  | \$46.4  | \$47.4  | \$48.2  | \$49.2  | \$50.1  | \$51.2    | \$52.0    | \$53.1    | \$54.1    | \$55.4    | \$56.3    | \$57.5    | \$58.6    | \$59.9    |
| Rail Security - Blue Line incl. Expo/Reg'l Conn. | \$12.4  | \$17.2  | \$19.3  | \$19.8  | \$20.3  | \$25.5  | \$26.0  | \$26.6  | \$27.7  | \$30.5  | \$31.0  | \$31.7  | \$32.3  | \$33.0  | \$33.5  | \$34.1  | \$34.7  | \$35.6  | \$36.1  | \$36.8  | \$37.5  | \$38.4    | \$39.0    | \$39.8    | \$40.5    | \$41.5    | \$42.2    | \$43.1    | \$43.9    | \$44.9    |
| Rail Security - Green Line                       | \$6.5   | \$7.6   | \$7.7   | \$7.9   | \$8.1   | \$8.3   | \$8.5   | \$8.7   | \$12.9  | \$13.2  | \$13.4  | \$13.7  | \$13.9  | \$14.2  | \$14.5  | \$14.7  | \$15.0  | \$15.4  | \$15.6  | \$15.9  | \$16.2  | \$16.6    | \$16.8    | \$17.2    | \$17.5    | \$17.9    | \$18.2    | \$18.6    | \$19.0    | \$19.4    |
| Rail Security - Gold Line including Eastside     | \$13.2  | \$15.2  | \$15.5  | \$15.9  | \$16.3  | \$23.7  | \$26.5  | \$27.1  | \$27.6  | \$28.3  | \$36.8  | \$37.5  | \$38.2  | \$39.0  | \$39.6  | \$40.4  | \$41.1  | \$42.1  | \$42.8  | \$43.6  | \$44.5  | \$45.4    | \$46.2    | \$47.1    | \$48.0    | \$49.1    | \$50.0    | \$51.0    | \$52.0    | \$53.2    |
| Rail Security - Crenshaw Line                    | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$8.5   | \$8.7   | \$8.8   | \$9.0   | \$9.2   | \$9.4   | \$9.5   | \$9.7   | \$9.9   | \$10.1  | \$10.3  | \$10.5  | \$10.7  | \$10.9    | \$11.1    | \$11.3    | \$11.5    | \$11.8    | \$12.0    | \$12.3    | \$12.5    | \$12.7    |
| Rail Security - West Santa Ana Line              | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$7.9   | \$8.1   | \$8.2   | \$8.4   | \$8.5     | \$8.7     | \$8.9     | \$9.0     | \$9.2     | \$9.4     | \$9.6     | \$9.8     | \$10.0    |
| Red Line special anti-terrorism activities       | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     | \$0.0     |
| Subtotal MTA                                     | \$259.2 | \$278.6 | \$338.8 | \$351.4 | \$356.5 | \$423.7 | \$439.0 | \$448.4 | \$531.8 | \$558.6 | \$634.3 | \$713.7 | \$727.1 | \$742.6 | \$754.2 | \$768.7 | \$793.4 | \$811.9 | \$825.3 | \$841.3 | \$857.2 | \$876.1   | \$886.7   | \$904.1   | \$922.1   | \$943.6   | \$960.0   | \$979.9   | \$999.0   | \$1,021.3 |
| Metrolink                                        | \$75.8  | \$83.9  | \$87.1  | \$90.3  | \$93.7  | \$97.2  | \$100.2 | \$102.8 | \$105.3 | \$107.9 | \$110.6 | \$113.3 | \$116.1 | \$118.9 | \$121.7 | \$124.7 | \$127.7 | \$131.0 | \$134.2 | \$137.5 | \$140.9 | \$144.4   | \$147.9   | \$151.6   | \$155.4   | \$159.4   | \$163.4   | \$167.6   | \$171.8   | \$176.1   |
| Total Uses                                       | \$334.9 | \$362.5 | \$425.8 | \$441.7 | \$450.2 | \$520.9 | \$539.2 | \$551.2 | \$637.1 | \$666.5 | \$744.9 | \$827.0 | \$843.2 | \$861.4 | \$876.0 | \$893.4 | \$921.2 | \$942.8 | \$959.5 | \$978.8 | \$998.1 | \$1,020.5 | \$1,034.6 | \$1,055.8 | \$1,077.5 | \$1,103.0 | \$1,123.4 | \$1,147.5 | \$1,170.8 | \$1,197.4 |

WESTSIDE SUBWAY EXTENSION

Table 3-34: LACMTA O&M Sources and Uses of Funds Through 2040 for Bus (including Municipal Operators) (YOE \$M)

| Bus Sources                               | 2011           | 2012           | 2013           | 2014           | 2015           | 2016           | 2017           | 2018           | 2019           | 2020           | 2021           | 2022           | 2023           | 2024           | 2025           | 2026           | 2027           | 2028           | 2029           | 2030           | 2031           | 2032           | 2033           | 2034           | 2035           | 2036           | 2037           | 2038           | 2039           | 2040           |
|-------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Local</b>                              |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| Fare Revenues                             | \$356.7        | \$351.4        | \$361.7        | \$398.8        | \$412.3        | \$445.1        | \$450.8        | \$481.3        | \$486.2        | \$505.9        | \$510.9        | \$531.6        | \$536.8        | \$558.4        | \$563.8        | \$588.8        | \$594.5        | \$618.8        | \$624.9        | \$645.5        | \$651.8        | \$673.2        | \$679.8        | \$702.3        | \$709.2        | \$732.8        | \$740.1        | \$764.8        | \$772.2        | \$797.7        |
| Proposition A - Discretionary (40%)       | \$205.7        | \$210.2        | \$215.3        | \$220.8        | \$226.6        | \$232.5        | \$238.3        | \$243.9        | \$249.4        | \$254.8        | \$260.3        | \$265.8        | \$271.3        | \$276.6        | \$282.3        | \$288.1        | \$293.8        | \$300.2        | \$306.4        | \$312.7        | \$318.9        | \$325.1        | \$331.6        | \$338.4        | \$345.4        | \$352.6        | \$360.0        | \$367.6        | \$375.0        | \$382.4        |
| Proposition A - Local Return (25%)        | \$90.4         | \$96.1         | \$101.7        | \$107.7        | \$114.2        | \$121.0        | \$127.8        | \$134.7        | \$141.6        | \$148.9        | \$156.4        | \$163.1        | \$170.1        | \$177.0        | \$184.5        | \$191.9        | \$199.2        | \$206.7        | \$214.1        | \$221.4        | \$228.1        | \$234.7        | \$241.7        | \$249.2        | \$256.7        | \$263.9        | \$271.6        | \$279.4        | \$286.7        | \$294.4        |
| Proposition C - Discretionary (40%)       | \$129.3        | \$139.8        | \$135.5        | \$128.0        | \$130.6        | \$136.7        | \$148.0        | \$130.1        | \$156.3        | \$149.1        | \$171.2        | \$141.6        | \$172.3        | \$181.4        | \$228.7        | \$249.5        | \$286.9        | \$288.3        | \$308.4        | \$315.5        | \$385.6        | \$354.1        | \$402.3        | \$360.7        | \$386.3        | \$438.1        | \$409.3        | \$418.5        | \$413.3        | \$586.1        |
| Proposition C - Local Return (20%)        | \$11.6         | \$12.3         | \$13.0         | \$13.8         | \$14.6         | \$15.5         | \$16.4         | \$17.2         | \$18.1         | \$19.1         | \$20.0         | \$20.9         | \$21.8         | \$22.7         | \$23.6         | \$24.6         | \$25.5         | \$26.5         | \$27.4         | \$28.4         | \$29.2         | \$30.0         | \$31.0         | \$31.9         | \$32.9         | \$33.8         | \$34.8         | \$35.8         | \$36.7         | \$37.7         |
| TDA Article 4                             | \$226.9        | \$216.9        | \$238.6        | \$224.9        | \$238.4        | \$246.3        | \$262.7        | \$277.3        | \$296.4        | \$300.8        | \$288.9        | \$360.3        | \$315.9        | \$349.3        | \$381.2        | \$430.1        | \$433.4        | \$454.9        | \$491.2        | \$522.6        | \$495.5        | \$549.7        | \$552.5        | \$619.7        | \$650.9        | \$627.3        | \$720.2        | \$742.3        | \$728.5        | \$761.4        |
| Proposition C 5% Security                 | \$29.4         | \$25.7         | \$33.1         | \$35.0         | \$36.8         | \$38.0         | \$39.1         | \$40.1         | \$41.2         | \$42.2         | \$43.3         | \$44.4         | \$45.4         | \$46.5         | \$47.6         | \$48.7         | \$49.8         | \$51.0         | \$52.2         | \$53.4         | \$54.5         | \$55.7         | \$56.9         | \$58.2         | \$59.5         | \$60.8         | \$62.2         | \$63.6         | \$64.9         | \$66.3         |
| Other (General, Advertising, Misc.)       | \$38.3         | \$35.0         | \$32.0         | \$26.5         | \$11.4         | \$10.8         | \$11.0         | \$13.3         | \$13.6         | \$13.8         | \$14.1         | \$14.4         | \$14.7         | \$14.9         | \$15.2         | \$15.5         | \$15.7         | \$16.1         | \$16.4         | \$16.7         | \$17.1         | \$17.5         | \$17.9         | \$18.3         | \$18.8         | \$19.2         | \$19.7         | \$20.2         | \$20.7         | \$21.1         |
| Measure R Sales Tax                       | \$116.5        | \$125.0        | \$132.4        | \$140.1        | \$148.6        | \$157.4        | \$166.3        | \$175.2        | \$184.3        | \$193.7        | \$203.5        | \$212.2        | \$221.3        | \$230.3        | \$240.0        | \$249.7        | \$259.1        | \$269.0        | \$278.6        | \$288.1        | \$296.8        | \$305.4        | \$314.5        | \$324.2        | \$334.0        | \$343.4        | \$353.4        | \$363.5        | \$373.1        | \$0.0          |
| Prop A 40% (for Other Eligible Operators) | \$27.4         | \$27.9         | \$28.6         | \$22.8         | \$23.4         | \$24.0         | \$24.5         | \$25.0         | \$25.6         | \$26.1         | \$26.6         | \$27.1         | \$27.6         | \$28.1         | \$28.6         | \$29.2         | \$29.7         | \$30.3         | \$30.9         | \$31.5         | \$32.1         | \$32.7         | \$33.4         | \$34.0         | \$34.7         | \$35.4         | \$36.1         | \$36.9         | \$37.6         | \$38.3         |
| TDA Article 8 (paratransit)               | \$14.6         | \$17.5         | \$17.8         | \$18.8         | \$20.0         | \$21.2         | \$22.4         | \$23.6         | \$24.9         | \$26.2         | \$27.5         | \$28.7         | \$29.9         | \$31.2         | \$32.5         | \$33.8         | \$35.1         | \$36.4         | \$37.8         | \$39.1         | \$40.2         | \$41.4         | \$42.7         | \$44.0         | \$45.3         | \$46.6         | \$48.0         | \$49.4         | \$50.7         | \$52.0         |
| <b>Subtotal Local</b>                     | <b>\$1,247</b> | <b>\$1,258</b> | <b>\$1,310</b> | <b>\$1,337</b> | <b>\$1,377</b> | <b>\$1,448</b> | <b>\$1,507</b> | <b>\$1,562</b> | <b>\$1,638</b> | <b>\$1,680</b> | <b>\$1,723</b> | <b>\$1,810</b> | <b>\$1,827</b> | <b>\$1,916</b> | <b>\$2,028</b> | <b>\$2,150</b> | <b>\$2,223</b> | <b>\$2,298</b> | <b>\$2,388</b> | <b>\$2,475</b> | <b>\$2,550</b> | <b>\$2,619</b> | <b>\$2,704</b> | <b>\$2,781</b> | <b>\$2,874</b> | <b>\$2,954</b> | <b>\$3,055</b> | <b>\$3,142</b> | <b>\$3,159</b> | <b>\$3,038</b> |
| <b>State</b>                              |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| STA - Operator Revenue Share              | \$62.3         | \$51.7         | \$51.7         | \$51.9         | \$52.4         | \$52.9         | \$53.5         | \$54.0         | \$54.5         | \$55.1         | \$55.6         | \$56.2         | \$56.7         | \$57.3         | \$57.9         | \$58.4         | \$59.0         | \$59.6         | \$60.2         | \$60.8         | \$61.4         | \$62.0         | \$62.6         | \$63.2         | \$63.9         | \$64.5         | \$65.1         | \$65.8         | \$66.4         | \$67.1         |
| <b>Subtotal State</b>                     | <b>\$62.3</b>  | <b>\$51.7</b>  | <b>\$51.7</b>  | <b>\$51.9</b>  | <b>\$52.4</b>  | <b>\$52.9</b>  | <b>\$53.5</b>  | <b>\$54.0</b>  | <b>\$54.5</b>  | <b>\$55.1</b>  | <b>\$55.6</b>  | <b>\$56.2</b>  | <b>\$56.7</b>  | <b>\$57.3</b>  | <b>\$57.9</b>  | <b>\$58.4</b>  | <b>\$59.0</b>  | <b>\$59.6</b>  | <b>\$60.2</b>  | <b>\$60.8</b>  | <b>\$61.4</b>  | <b>\$62.0</b>  | <b>\$62.6</b>  | <b>\$63.2</b>  | <b>\$63.9</b>  | <b>\$64.5</b>  | <b>\$65.1</b>  | <b>\$65.8</b>  | <b>\$66.4</b>  | <b>\$67.1</b>  |
| <b>Federal</b>                            |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| CMAQ                                      | \$0.0          | \$0.0          | \$4.9          | \$5.1          | \$5.0          | \$0.0          | \$0.0          | \$0.0          | \$5.5          | \$5.8          | \$24.1         | \$18.9         | \$36.2         | \$17.7         | \$18.1         | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          | \$0.0          |
| Section 5307 (Preventive Maintenance)     | \$64.5         | \$152.4        | \$94.5         | \$96.7         | \$108.9        | \$103.1        | \$105.8        | \$113.2        | \$101.1        | \$111.1        | \$140.1        | \$112.6        | \$133.2        | \$138.6        | \$125.5        | \$116.1        | \$95.8         | \$112.2        | \$88.4         | \$96.0         | \$87.1         | \$84.6         | \$70.4         | \$67.3         | \$50.3         | \$47.1         | \$26.3         | \$22.6         | \$85.7         | \$192.3        |
| RSTP                                      | \$55.1         | \$58.7         | \$57.4         | \$58.8         | \$60.2         | \$61.7         | \$63.1         | \$64.5         | \$65.8         | \$67.1         | \$68.4         | \$69.8         | \$71.1         | \$72.4         | \$73.8         | \$75.2         | \$76.6         | \$78.2         | \$79.7         | \$81.2         | \$82.7         | \$84.3         | \$85.9         | \$87.6         | \$89.3         | \$91.1         | \$93.0         | \$94.9         | \$96.8         | \$98.7         |
| <b>Subtotal Federal</b>                   | <b>\$119.6</b> | <b>\$211.0</b> | <b>\$156.8</b> | <b>\$160.6</b> | <b>\$174.1</b> | <b>\$164.8</b> | <b>\$168.9</b> | <b>\$177.7</b> | <b>\$172.4</b> | <b>\$184.0</b> | <b>\$232.6</b> | <b>\$201.3</b> | <b>\$240.5</b> | <b>\$228.7</b> | <b>\$217.5</b> | <b>\$191.3</b> | <b>\$172.4</b> | <b>\$190.4</b> | <b>\$168.1</b> | <b>\$177.2</b> | <b>\$169.8</b> | <b>\$168.9</b> | <b>\$156.3</b> | <b>\$154.9</b> | <b>\$139.6</b> | <b>\$138.2</b> | <b>\$119.3</b> | <b>\$117.5</b> | <b>\$182.5</b> | <b>\$291.0</b> |
| <b>Total Sources</b>                      | <b>\$1,429</b> | <b>\$1,521</b> | <b>\$1,518</b> | <b>\$1,550</b> | <b>\$1,603</b> | <b>\$1,666</b> | <b>\$1,730</b> | <b>\$1,794</b> | <b>\$1,865</b> | <b>\$1,920</b> | <b>\$2,011</b> | <b>\$2,068</b> | <b>\$2,124</b> | <b>\$2,202</b> | <b>\$2,303</b> | <b>\$2,400</b> | <b>\$2,454</b> | <b>\$2,548</b> | <b>\$2,617</b> | <b>\$2,713</b> | <b>\$2,781</b> | <b>\$2,850</b> | <b>\$2,923</b> | <b>\$2,999</b> | <b>\$3,077</b> | <b>\$3,157</b> | <b>\$3,240</b> | <b>\$3,325</b> | <b>\$3,408</b> | <b>\$3,396</b> |

Table 3-34: LACMTA O&M Sources and Uses of Funds Through 2040 for Bus (including Municipal Operators) (YOE \$M) (continued)

| Bus Uses                                    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2021    | 2022    | 2023    | 2024    | 2025    | 2026    | 2027    | 2028    | 2029    | 2030    | 2031    | 2032    | 2033    | 2034    | 2035    | 2036    | 2037    | 2038    | 2039    | 2040    |
|---------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Bus Operations-Countywide                   | \$1,376 | \$1,371 | \$1,356 | \$1,387 | \$1,433 | \$1,488 | \$1,542 | \$1,594 | \$1,658 | \$1,707 | \$1,791 | \$1,842 | \$1,892 | \$1,964 | \$2,058 | \$2,147 | \$2,195 | \$2,281 | \$2,343 | \$2,432 | \$2,493 | \$2,556 | \$2,622 | \$2,690 | \$2,760 | \$2,832 | \$2,907 | \$2,985 | \$3,060 | \$3,139 |
| BSIP-Countywide                             | \$14.1  | \$14.4  | \$14.7  | \$15.1  | \$15.4  | \$15.8  | \$16.2  | \$16.5  | \$16.9  | \$17.2  | \$17.5  | \$17.9  | \$18.2  | \$18.5  | \$18.9  | \$19.2  | \$19.6  | \$20.0  | \$20.4  | \$20.8  | \$21.2  | \$21.6  | \$22.0  | \$22.4  | \$22.9  | \$23.3  | \$23.8  | \$24.3  | \$24.8  | \$25.3  |
| Bus Security-Countywide                     | \$32.9  | \$33.8  | \$34.7  | \$35.8  | \$36.8  | \$38.0  | \$39.1  | \$40.1  | \$41.2  | \$42.2  | \$43.3  | \$44.4  | \$45.4  | \$46.5  | \$47.6  | \$48.7  | \$49.8  | \$51.0  | \$52.2  | \$53.4  | \$54.5  | \$55.7  | \$56.9  | \$58.2  | \$59.5  | \$60.8  | \$62.2  | \$63.6  | \$64.9  | \$66.3  |
| Expansion Costs-Countywide                  | \$57.2  | \$62.0  | \$66.1  | \$69.9  | \$75.1  | \$79.4  | \$85.3  | \$94.3  | \$97.6  | \$101.0 | \$104.6 | \$107.9 | \$111.2 | \$114.6 | \$118.1 | \$121.7 | \$125.2 | \$128.9 | \$132.6 | \$136.2 | \$139.6 | \$143.1 | \$146.7 | \$150.5 | \$154.3 | \$158.1 | \$162.1 | \$166.2 | \$170.1 | \$74.5  |
| Other Eligible Operators (Prop A 40% Alloc) | \$27.4  | \$27.9  | \$28.6  | \$22.8  | \$23.4  | \$24.0  | \$24.5  | \$25.0  | \$25.6  | \$26.1  | \$26.6  | \$27.1  | \$27.6  | \$28.1  | \$28.6  | \$29.2  | \$29.7  | \$30.3  | \$30.9  | \$31.5  | \$32.1  | \$32.7  | \$33.4  | \$34.0  | \$34.7  | \$35.4  | \$36.1  | \$36.9  | \$37.6  | \$38.3  |
| Paratransit (TDA Article 8)                 | \$14.6  | \$17.5  | \$17.8  | \$18.8  | \$20.0  | \$21.2  | \$22.4  | \$23.6  | \$24.9  | \$26.2  | \$27.5  | \$28.7  | \$29.9  | \$31.2  | \$32.5  | \$33.8  | \$35.1  | \$36.4  | \$37.8  | \$39.1  | \$40.2  | \$41.4  | \$42.7  | \$44.0  | \$45.3  | \$46.6  | \$48.0  | \$49.4  | \$50.7  | \$52.0  |
| Total Uses                                  | \$1,522 | \$1,527 | \$1,518 | \$1,550 | \$1,603 | \$1,666 | \$1,730 | \$1,794 | \$1,865 | \$1,920 | \$2,011 | \$2,068 | \$2,124 | \$2,202 | \$2,303 | \$2,400 | \$2,454 | \$2,548 | \$2,617 | \$2,713 | \$2,781 | \$2,850 | \$2,923 | \$2,999 | \$3,077 | \$3,157 | \$3,240 | \$3,325 | \$3,408 | \$3,396 |
| Cash Balance                                |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Beginning Fiscal Year Cash Balance          | \$99.7  | \$6.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   |
| Annual Net Change to Cash Balance           | -\$93.7 | -\$6.0  | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   |
| Ending Fiscal Year Cash Balance             | \$6.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   |

## 4.0 SUMMARY OF KEY PERFORMANCE INDICATORS

### 4.1 Key Performance Measures

Four key measures were used to reflect LACMTA's financial capacity to implement the Westside Subway Extension Project while continuing to operate, maintain, expand, and enhance the existing transit system over the FY 2010 to FY 2040 period. These measures include consideration of FTA New Starts Financial criteria appropriate for the Westside Subway Extension at this stage of project development:

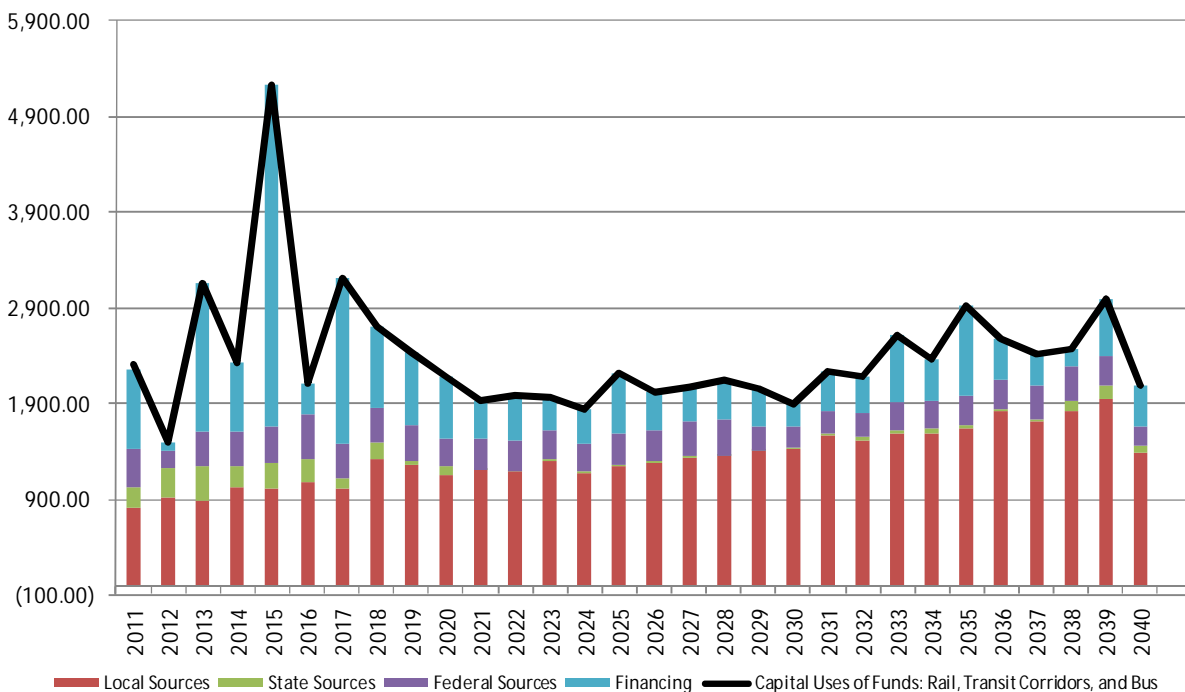
- Adequacy of Annual Funding Available for Capital, including
  - Proposed Non-New Starts Share; and
  - Stability and Reliability of the Capital Plan;
- Adequacy of Annual Funding Available for Operations and Maintenance, including Stability and Reliability of the Operating Plan;
- Conformance with LACMTA Debt Policies; and
- Achieved Levels of System Farebox Recovery.

#### 4.1.1 Adequacy of Annual Funding Available for Capital

As described in detail in the Countywide Financial Forecasting Model and in Section 3 of this document, LACMTA has the financial capacity to fully fund the annual costs of the Countywide Rail, Transit Corridors, Bus capital programs, including debt service over the FY 2010 to FY 2040 period.

Figure 4-1 summarizes the combination of local, State, and federal sources proposed to fund annual capital costs in combination with bond proceeds to be repaid with local sales tax revenues. As shown in the figure, local funds are the primary source of capital funding, providing 55.5 percent of revenues on a cash basis and 27.5 percent in the form of locally-repaid financing proceeds. Federal sources provide 13.3 percent, with State sources contributing the remaining 3.7 percent of capital funding.

Figure 4-1: Funding Sources for Countywide Rail, Transit Corridors, and Bus Capital Programs – FY 2011 to FY 2040 (YOE \$M)



As summarized below, LACMTA also performs well with respect to the Capital Plan measures related the FTA New Starts Financial Performance criteria:

- Proposed Non-New Starts Share: A 58 percent non-New Starts funding share is proposed for the Westside Subway Extension project (including finance charges). Based on FTA criteria, this level of participation should qualify the project for a Medium-High rating.
- Stability and Reliability of the Capital Plan:
  - Overall strengths related to this measure include:
    - LACMTA has strong bond ratings;
    - The capital financial plan is strong, with more than 95 percent of the non-New Starts funds committed;
    - The Westside Subway Extension project capital cost estimate is based on LACMTA experience and includes a 27 percent contingency; and
    - System-wide capital cost estimates are realistic and include funding for system preservation and state of good repair.
  - Offsetting these factors are the following:
    - Projections of sales tax revenues required to fund the system assume rapid economic recovery following consecutive years of decline over the FY 2007 to FY 2009 period. This

projection is consistent with the 3.6 percent increase in FY 2010 compared to FY 2009 for Proposition A, Proposition C, and Measure R sales tax reflect revenues

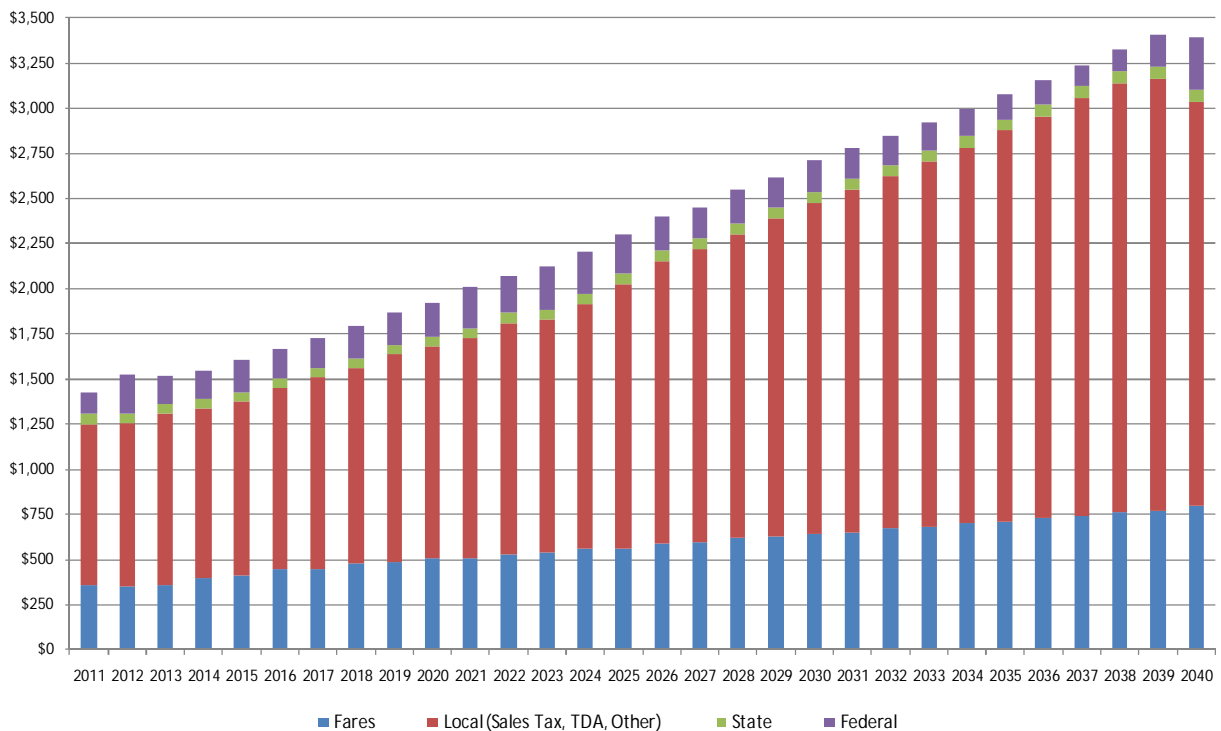
#### 4.1.2 Adequacy of Annual Funding Available for Bus and Rail Operations and Maintenance

As reflected in the Countywide Financial Forecasting Model and summarized in Section 3 of this document, LACMTA maintains a balanced program to adequately fund the annual O&M costs of countywide bus and rail services, including paratransit, security, and preventive maintenance.

With respect to bus services, LACMTA is responsible for assuring annual funding for the operation and maintenance of the countywide bus and paratransit program, including both LACMTA-operated service and services provided by other operators within the county. As shown in Figure 4-2 below, countywide bus O&M costs are fully funded on an annual basis through a combination of fares; local sources, including Proposition A, Proposition C, and Measure R sales taxes, TDA, and other non-system revenues (advertising, lease revenue); State sources, consisting of State Transit Assistance (STA) and TDA Article 8 for paratransit; and federal sources, consisting of CMAQ, FTA Section 5307 for preventive maintenance, and RSTP funding.

Figure 4-2 depicts the annual composition of the revenues used to fully fund countywide bus operations and maintenance. As shown in the figure, local funding sources comprise the largest share of annual revenues (65.8 percent), followed by fares (24.2 percent), federal funding (7.5 percent), and state sources (2.5 percent).

Figure 4-2: Sources Used to Fund Annual Countywide Bus O&M Costs – FY 2011 to FY 2040 (YOE \$M)

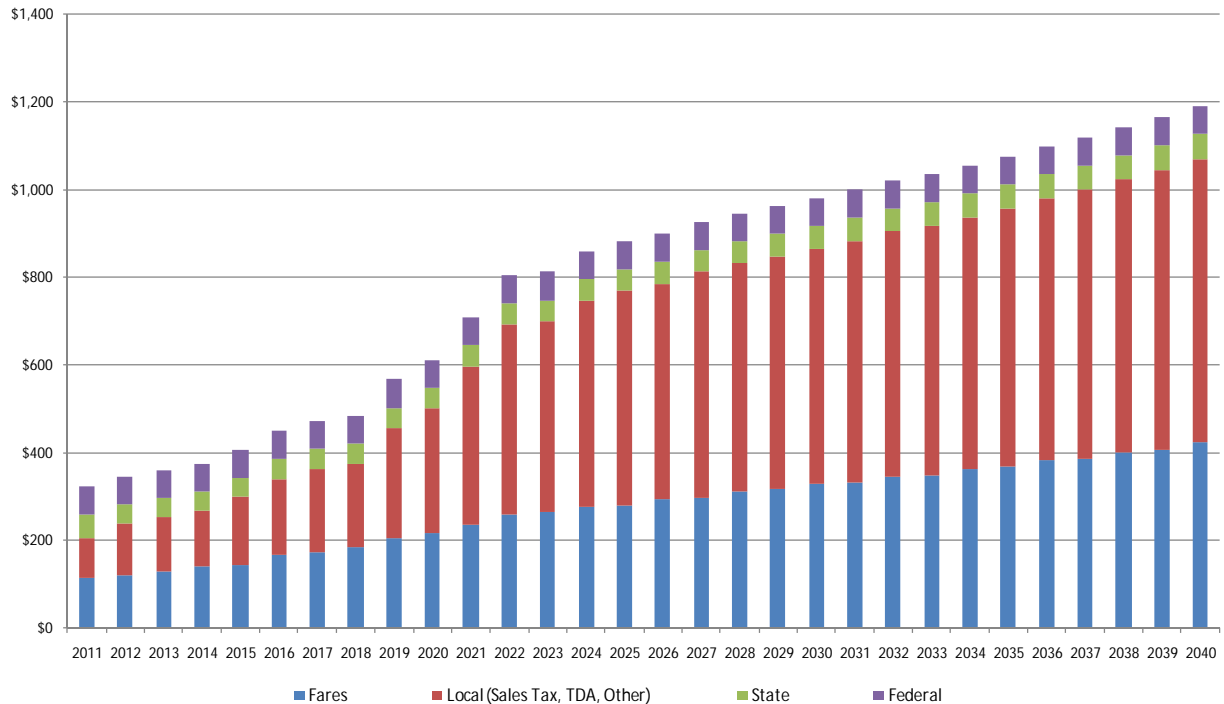


With respect to rail services, LACMTA is responsible for assuring annual funding for the operation and maintenance of the LACMTA light and heavy rail lines and for providing an annual operating subsidy for Metrolink commuter rail service. As shown in Figure 4-3 below, countywide bus O&M costs are fully funded on an annual basis through a combination of fares; local sources, including Proposition A, Proposition C, and Measure R sales taxes, TDA, and other non-system revenues (advertising, lease revenue); State sources, consisting of State Transit Assistance (STA); and federal sources, consisting of CMAQ, FTA Section 5307 for preventive maintenance, and RSTP funding.

Figure 4-3 depicts the annual composition of the revenues used to fully fund rail service, including the Westside Subway Extension and the other new lines to be constructed as part of America Fast Forward.

As shown in the figure, local funding sources comprise the largest share of annual revenues (51.7 percent), followed by fares (34.1 percent), federal sources (7.9 percent), and State funding (6.3 percent).

Figure 4-3: Sources Used to Fund Annual Countywide Rail O&M Costs – FY 2011 to FY 2040 (YOE \$M)



LACMTA also performs well with respect to the O&M-related FTA New Starts Financial Performance criteria:

- **Stability and Reliability of the Operating Plan:**
  - Overall strengths related to this measure include:
    - LACMTA's strong current operating condition and operating ratio of 3.59;
    - LACMTA has historical and projected positive cash flows, with no annual shortfalls;
    - Over 90.0 percent of the funds needed for system-wide O&M are existing and committed. These funds (63.4 percent) are derived primarily from LACMTA's three existing transit sales taxes, two of which continue in perpetuity. Additionally, projected fare revenue accounts for approximately 26.7 percent of operating revenue;
    - O&M cost growth rates for system-wide bus service are conservatively estimated based on a cost per hour factor lower than that experienced over the past ten years; rail O&M cost growth rate per mile is slightly higher than the past ten years but is still relatively low.
    - As of June 30, 2011, LACMTA has approximately \$1.5 billion of cash on hand, including \$237 million in liquid reserves in discretionary accounts. The liquid reserves can be used

for operating or capital costs. Additional information about LACMTA’s reserves is included in the supporting documentation.

#### 4.1.3 Conformance with LACMTA Debt Policies

As shown in Table 4-1, LACMTA has four categories of local sales tax revenues under Proposition A and Proposition C against which it may currently issue debt, in addition to Measure R. For each of these categories, the LACMTA Board has adopted debt affordability targets governing the percentage of annual revenues that may be used for payment of debt service. To assure that revenues will be sufficient to cover costs, the Board has also established minimum annual debt service coverage ratios (DSCRs) governing the level to which annual sales tax revenues must exceed annual debt service payments.

Table 4-1: LACMTA Debt Affordability Targets and Minimum Debt Service Coverage Ratios (DSCR) (YOE \$ M)

| Category      | Affordability Target<br>(% of Annual Revenues) | Minimum DSCR |
|---------------|------------------------------------------------|--------------|
| Proposition A |                                                |              |
| Rail 35%      | 87%                                            | 1.15         |
| Proposition C |                                                |              |
| 25%           | 60%                                            | 1.176        |
| 40%           | 40%                                            | 2.5          |
| 10%           | 40%                                            | 2.0          |

Based on the levels of debt issuance anticipated in the LACMTA Countywide Financial Forecasting Model, LACMTA is projected to have at least 10 percent remaining debt capacity with which it could issue additional debt. In addition, as shown in Figure 4-4 through Figure 4-7, LACMTA is projected to exceed the Board-adopted minimum annual debt service coverage ratios established for each category of sales tax revenue.

The Proposition C 25 percent (Transit and Highways) and Proposition C 10 percent (Commuter Rail) debt policy caps that the Board established previously may require a later action to raise them from 60 percent to 80 percent or 85 percent, and from 40 percent to 50 percent, respectively. While similar assumptions have been made in the past and were ultimately not necessary due to project delays unrelated to funding, it is likely that the Board will need to raise the caps as early as FY 2015 for Proposition C 25 percent and FY 2021 for Proposition C 10 percent based on the current financial forecast.

Figure 4-4: Proposition A 35 Percent Projected Annual DSCR – FY 2011 to FY 2040

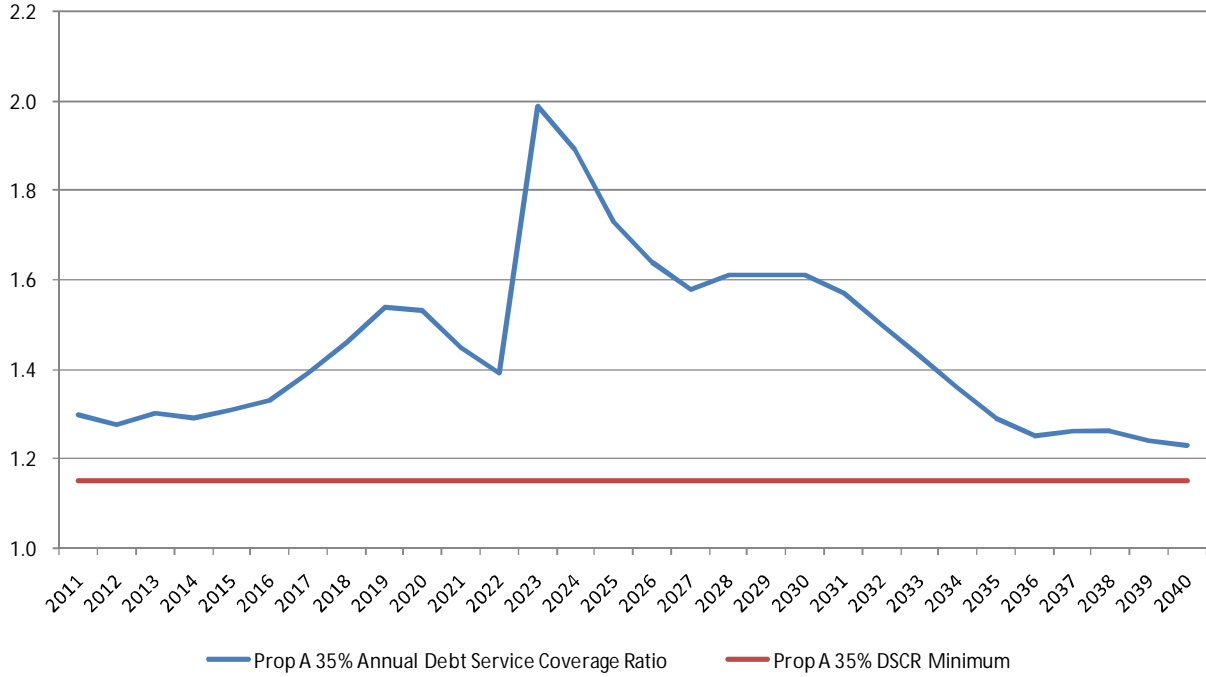


Figure 4-5: Proposition C 25 Percent Projected Annual DSCR – FY 2011 to FY 2040

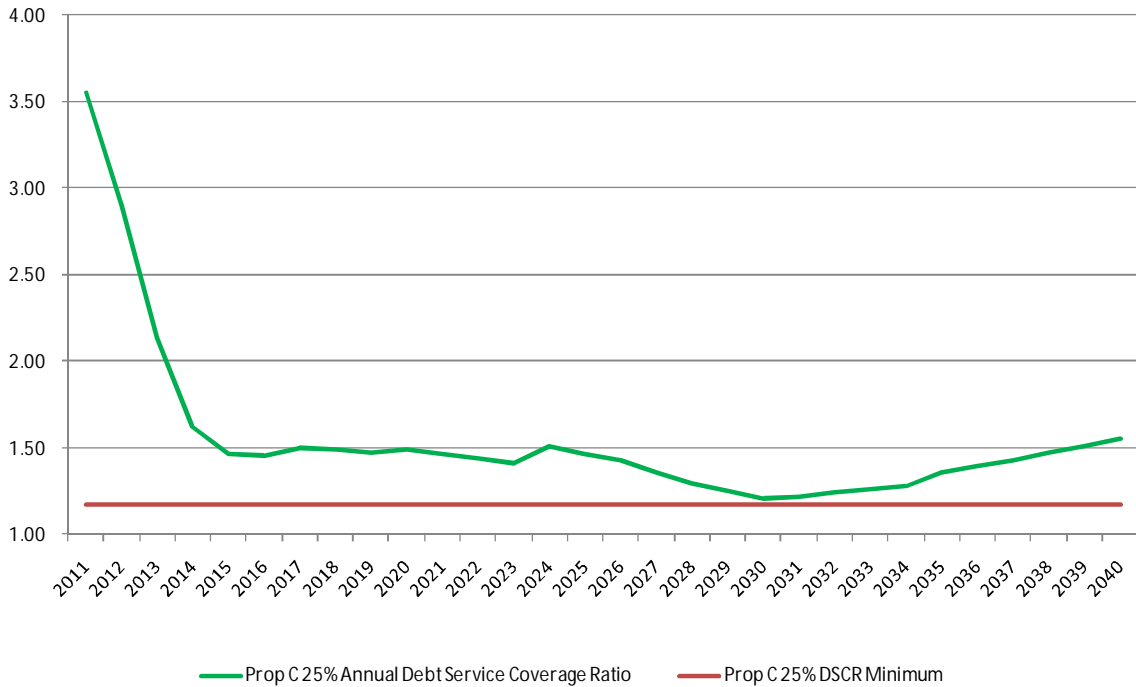


Figure 4-6: Proposition C 40 Percent Projected Annual DSCR – FY 2011 to FY 2040

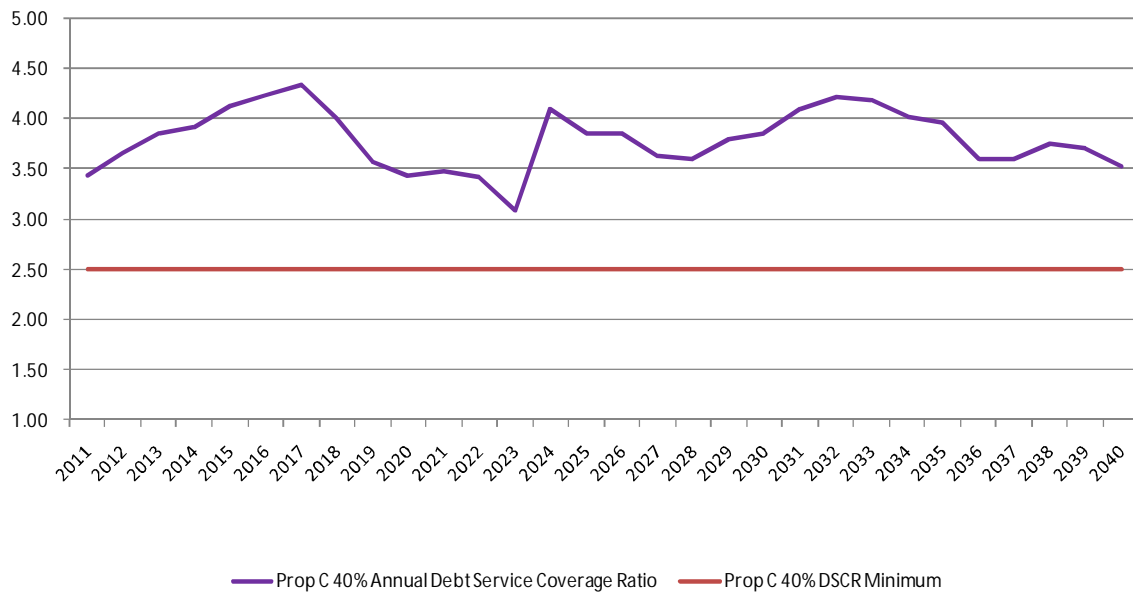
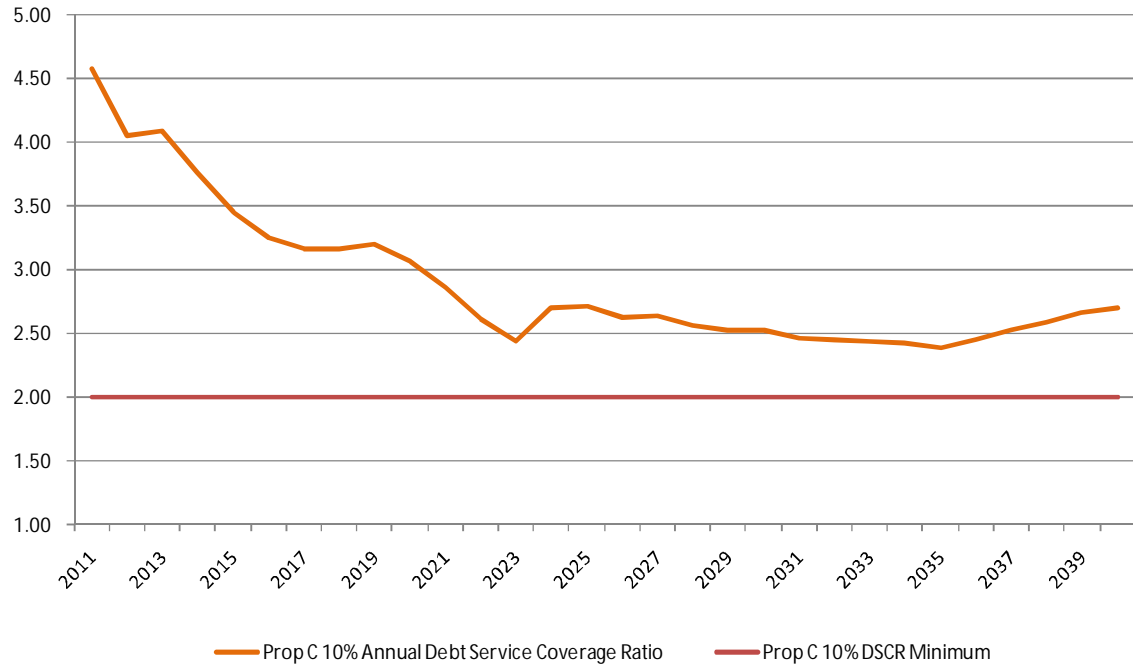
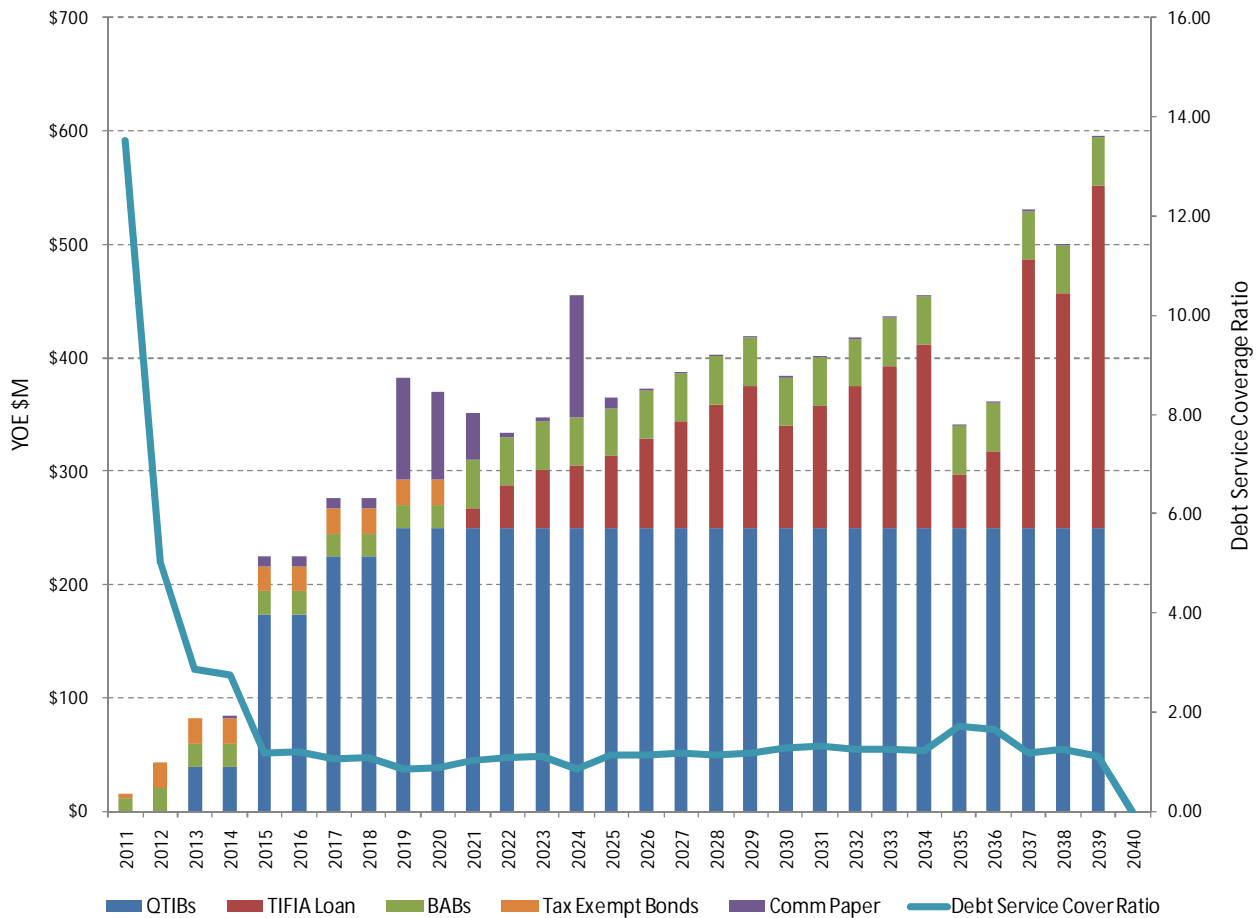


Figure 4-7: Proposition C 10 Percent Projected Annual DSCR – FY 2011 to FY 2040



As described in Section 3 of this document and illustrated in Figure 4-8, with respect to Measure R, LACMTA is projected to maintain an annual debt service coverage ratio ranging from 0.84 to over 13.51 over the FY 2011 to FY 2040 period.

Figure 4-8: Measure R 35 Percent Projected Annual DSCR – FY 2011 to FY 2040



#### 4.1.4 Achieved Levels of System-Wide Farebox Recovery

With respect to the bus and rail services operated by LACMTA, the goal of the agency is to achieve a system-wide farebox recovery of 30.0 percent by FY 2015, up from its current farebox recovery rate of 27.8 percent. The LACMTA Board has taken action toward achieving this target, with approval of fare increases in July 2008, and again in July 2010.

Figure 4-9 and Figure 4-10 reflect the projected O&M costs for the LACMTA-operated bus and rail services over the FY 2011 to FY 2040 period, and the share of O&M costs projected to be funded with fare revenues. As shown in Figure 4-10, through cost management and continued periodic fare increases, LACMTA is expected to achieve its 30.0 percent farebox recovery target by FY 2014 (30.2 percent), and to maintain and exceed 30.0 percent level through FY 2040.

Figure 4-9: Annual O&M Costs of LACMTA Operated Bus and Rail Services in Comparison to Fare Revenues – FY 2011 to FY 2040 (YOE \$M)

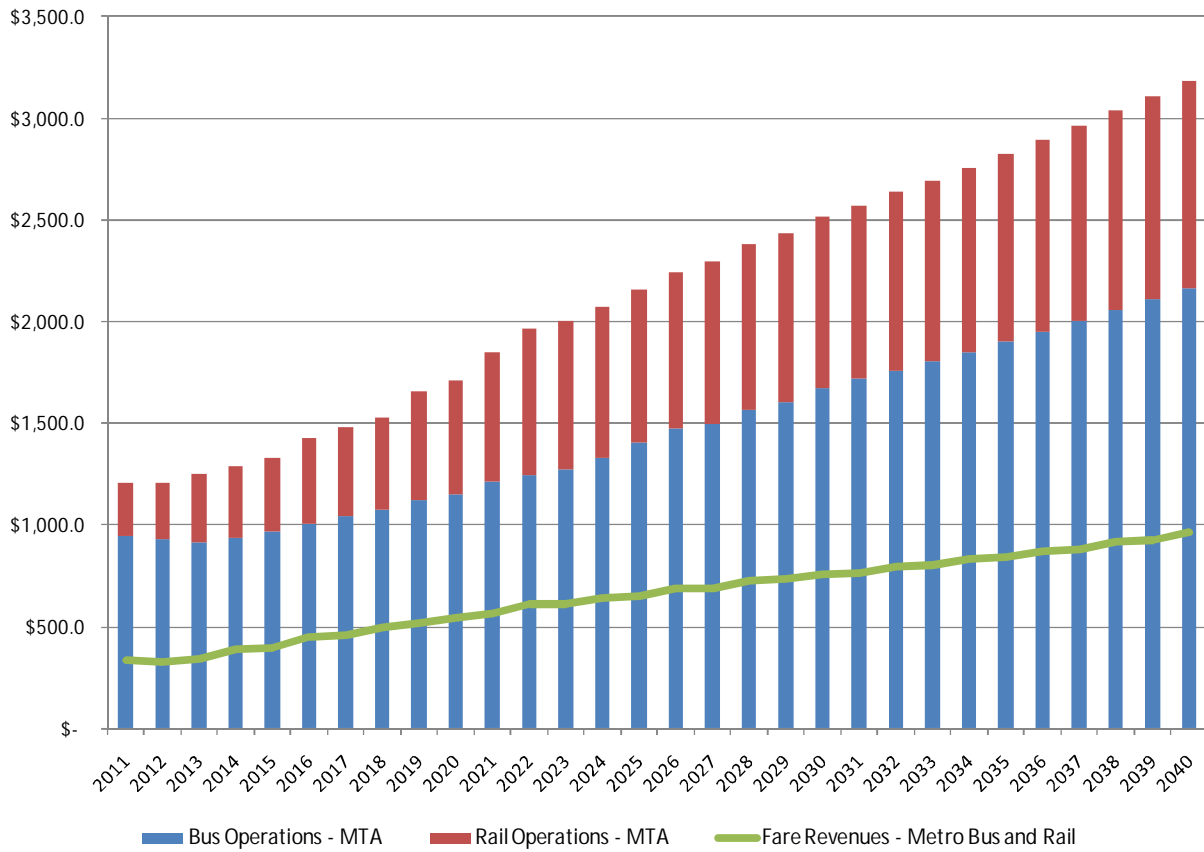
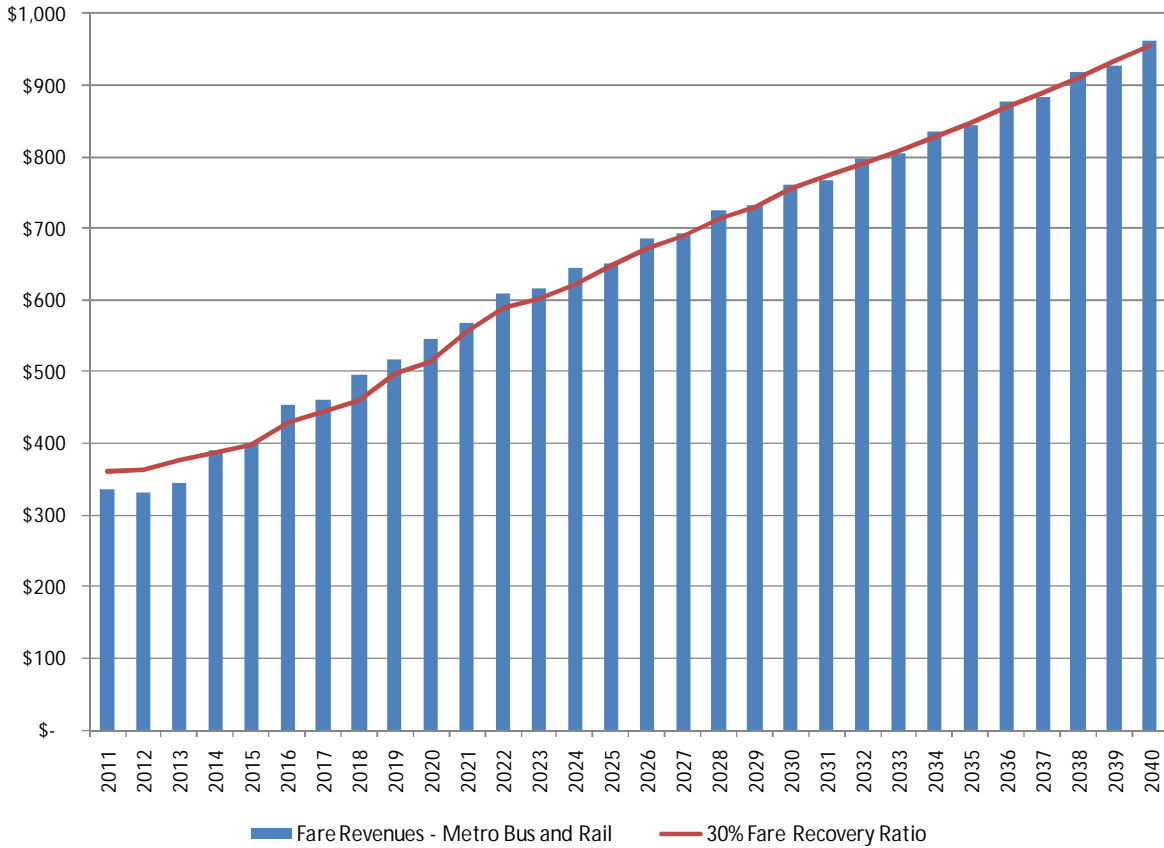


Figure 4-10: Annual Farebox Revenues Relative to Achieving a 30 Percent Farebox Recovery Ratio for LACMTA Operated Bus and Rail Services – FY 2011 to FY 2040 (YOE \$M)





## 5.0 RISK ANALYSIS

The analysis presented in this Financial Plan provides LACMTA's working assumptions for revenues and costs. This section identifies the primary risks and uncertainties surrounding the key assumptions, and presents strategies for mitigating these risks for several risk scenarios. This risk analysis is intended to address the financial risk to a level appropriate with the status of a project entering preliminary engineering. As the project continues through preliminary engineering and final design, and the legislative status of America Fast Forward matures, LACMTA will continue to evaluate the financial risk and address them in future submissions of the financial plan.

### 5.1 LACMTA Policy Regarding Cost and Revenue Risk

After Preliminary Engineering is completed, project risks from cost increases and revenue decreases cannot be eliminated completely, especially considering the innovative project delivery and funding ideas embodied in America Fast Forward. LACMTA understands that many of these innovative ideas must take clearer shape in the form of legislation, regional approvals, and local actions.

LACMTA enacted several financial policies in preparation for the Eastside Extension of the Gold Line. In fact, the high bond ratings this agency still enjoys is due in large measure to the adherence to the policy efforts put in place at that time.

Some of these policies are already in place, like the agency's Financial Stability Policy. LACMTA also has adopted a new policy referred to as the "Unified Cost Management Process and Policy" for Measure R projects, which was approved by the LACMTA Board in January 2011. This policy describes the actions that LACMTA will take, and the order in which they will be taken, in the event of cost increases or revenue decreases for any of the Measure R projects including the Westside Subway Extension. The "Unified Cost Increase Policy..." recommended to the LACMTA Board reads, in part, as follows:

*"If increases in cost estimates occur at any of the milestones..., the MTA will address the issue prior to taking any action necessary to permit the project to move to the next milestone. Increases in cost estimates will be measured against the 2009 Long Range Transportation Plan as adjusted by subsequent actions on cost estimates taken by the MTA Board. Shortfalls will first be addressed at the project level prior to evaluation for any additional resources using these methods in this order:*

- a. Value engineering and/or scope reductions;*
- b. New local agency funding resources;*
- c. Shorter segmentation;*
- d. Other cost reductions within the same transit corridor (see Attachment B);*
- e. Other cost reductions within the same sub-region (see Attachment B); and,*
- f. Countywide transit cost reductions and/or other funds will be sought using pre-established priorities, as follows:*

- Where applicable, Measure R Transit Capital Subfund Contingency-Escalation Allowance funds (Measure R Expenditure Plan, Page 2 of 4, Line 18); and,
- Where Line 18 is not applicable, the LRTP Near-Term Strategies and Priority Setting Criteria will be followed (Item 9, as Adopted by the Board of Directors in March of 2010)."

In May 2011, LACMTA enacted the "Fiscal Responsibility Policy for Measure R Transit and Highway Project Contingencies." This policy outlines specific procedures and processes for the use of Measure R contingency funds for debt service, particularly if debt is greater than forecasted in the LRTP. The policy also specifies that America Fast Forward and other similar financing must not adversely affect second and third decade Measure R projects.

With respect to revenue decreases, the LACMTA Board action dated March 10, 2010 established 20 tranches of priorities to apply to projects in the LRTP. These will be used to determine funding priorities, in the event that revenues decline or expand further than forecasted. In all, the program of projects governed by the policy adopted in March 2010 is forecasted to cost \$20 billion. The policy focuses first on projects already under construction or advertised for construction, then on projects with completed designs that are ready to enter the right-of-way acquisition phase. After these first priorities, which comprise \$3.2 billion of the \$20 billion total, the LACMTA Board elected to place \$2.2 billion in project development work as the next priority. This high priority for project development includes \$990 million for transit corridor projects and reflects the LACMTA's Board's emphasis on preparing for America Fast Forward. The remaining three quarters of the \$20 billion program of projects is for construction, with "Safety and New Starts" projects shown at the top of the construction category.

Together, the cost increase and revenue decrease discipline at the LACMTA is strong and points to an agency culture that can accomplish its capital program.

## 5.2 Discussion of Major Sources of Risk and Uncertainty

As with any large infrastructure project in its planning stages, the Westside Subway Extension includes several sources of risks and uncertainties that could potentially affect the capital and operating financial plans.

From a capital cost perspective, they include inflationary risks, the construction schedule, scope, and the cost and schedule of the other America Fast Forward projects. On the revenue side, major risks include Measure R revenue shortfalls, the inability to obtain necessary financing terms, and the availability and timing of FTA New Starts funds.

The Operating Plan risks can also be broken down into O&M cost and O&M revenue categories. Key areas of risk from an O&M cost perspective are related to cost escalation for labor or fuel and real increases in unit O&M costs for the project or system upon completion. From a revenue perspective, areas of uncertainty include ridership and fare revenue forecasts and tax revenues.

## 5.2.1 Capital Plan

### 5.2.1.1 Capital Cost Risks

Typical areas of capital cost risk for projects in PE include the potential for scope changes that will increase the project's capital costs; higher than expected inflation, which can increase year of expenditure costs; and schedule changes that impact the project's capital costs.

#### Scope Risk

The Westside Subway Extension cost estimate reflects a conceptual level of design prepared to support the selection of the LPA adopted prior to entry into PE locally preferred alternative, with supplemental conceptual engineering conducted to refine the alignment.

LACMTA is currently evaluating eight possible configurations that are possible for the locally preferred alternative, depending on which station options are selected in Century City, Westwood/UCLA, and Westwood/VA Hospital stations. The capital costs estimate for the various configurations for the locally preferred alternative could vary by up to \$82 million (\$2011). LACMTA intends to submit a revised cost estimate that will incorporate the costs of the selected station configuration following the completion of PE.

Current cost estimates are based on an approximate 10-percent level of engineering completion. As the project progresses into preliminary engineering and design, the estimate will become more precise as the project is refined. Cost increases could occur as a result of unexpected soil conditions and geotechnical issues, the need for unexpected utility relocations, or the presence of tar sands, unanticipated groundwater and other environmental impacts and mitigation measures, particularly associated with the underground alignment. Issues relating to tunneling technologies, for example, can change the estimated costs. The current cost estimate includes contingencies to cover these and other potential changes.

The identification of risks will continue as the project develops through the various stages of project delivery. During PE and final design a risk management plan will be developed to ensure risks are reviewed and managed, and procedures are developed to reduce or eliminate their impacts to the project. As the project develops through Final Design, risks which remain will be allocated in part or whole through the contractual arrangements and bidding process, conscious always that risks should be assigned and owned by the party best able to manage that risk.

#### Inflation

Inflation is a key risk for mega-projects, as it typically represents a large share of the capital cost when project development is stretched over several years. A large part of cost inflation is driven by demand and supply at global and regional levels, factors that are beyond the control of project sponsors.

As described in chapter 2, the project's capital cost estimate assumes that the rate of inflation growth will increase by 3 percent annually. This assumes a gradual increase in economic growth in the Los Angeles region. The risk assessment will evaluate the forecasted cost escalation rates in more details and evaluate different escalation rates for different commodity types.

In general, commodity prices tend to be particularly sensitive to global economic pressures. A notable example is steel, whose price peaked in the third quarter of 2008 (after a steep run up), significantly dropped for three straight quarters, and then increased 5.7 percent between the second and third quarters of 2009. Because steel is an easily transportable, high-value commodity that is essential for a wide range of manufacturing and construction uses, its price is influenced by changes in production as well as speculation of future economic demand. Crude oil, which after processing is used in one form or another for many elements of a construction project, is similar. Other commodity components (e.g., concrete) are less transportable so they tend to be influenced more by regional economic factors; however, they also represent a notable share of rail transit construction costs and their price variations will impact the project costs.

Right-of-way costs are highly correlated with property values, which have recently declined after many years of growth at rates that were higher than historical averages. It is currently unknown when the real estate market will fully recover. This, along with site-specific factors that can influence the cost of acquisitions, creates considerable uncertainty regarding right-of-way costs.

Although it is not anticipated to be an issue, the availability of qualified labor is another potential source of capital cost inflation. If there is insufficient qualified labor, capital cost escalation can occur through unit cost increases (due to insufficient competition or the need to bring qualified labor into the region) and/or schedule delays. To mitigate this risk, the LACMTA currently anticipates performing a more detailed study of market conditions and the availability of qualified labor during PE.

#### Westside Subway Extension Schedule

Scheduling delays can lead to cost increases that may impact the financial plan for a project, both in additional cost escalation and increased professional services costs. Schedule changes might result from scope changes, local permitting and approval processes, agreement negotiations, right-of-way acquisition, the availability of qualified labor, procurement delays, vehicle manufacturing delays, and construction delays.

The risk assessment also evaluated the project's baseline project schedule, and estimated that there was a 75 percent probability that LACMTA would achieve the estimated revenue operations date. As preliminary engineering proceeds and LACMTA refines the construction and procurement schedule, the financial plan will be updated to reflect any changes in schedule risk.

#### Cost and Schedule of other America Fast Forward Projects

As shown in the LRTP, LACMTA intends to construct the Westside Subway Extension concurrently with several other transit and highway construction projects using Measure R funding. Both the capital costs and schedules of the other America Fast Forward projects are subject to the same uncertainties outlined above for the Westside Subway Extension. As all projects are expected to be constructed around the same time period, cost increases or schedule modifications for other projects could impact the availability of capital funds for the Westside Subway Extension.

### 5.2.1.2 Capital Revenue Risks

#### Measure R Revenue

Measure R revenues are generated as a sales tax. Sales taxes tend to move in tandem with the overall economy. As such, Measure R revenues are solely dependent on the ebbs and flows of the local economy. This could potentially lead to future Measure R shortfalls during times of economic recession or depression. Any reduction in Measure R funding could impact LACMTA's ability to complete the entire Westside Subway Extension or could impact the delivery of other capital projects. However, the reverse is also true, as Measure R revenues will potentially exceed projections in times of robust economic activity.

As described in Section 3, the accelerated America Fast Forward project schedules require LACMTA to leverage their anticipated Measure R revenues using innovative financing tools. In some cases, these tools, including QTIBs, are subject to legislative approval. Should the proposed QTIB legislation fail to come to fruition, LACMTA will need to consider other means of raising the financing necessary to complete the twelve America Fast Forward projects.

### 5.2.1.3 FTA Funds

The Westside Subway Extension financial plan assumes certain levels of Federal funds through the Section 5307, Section 5309 New Starts, Section 5309 Fixed Guideway Modernization, and Section 5309 Bus and Bus Facilities grant programs. Federal legislation that authorizes these programs (SAFETEA-LU) will expire September 30, 2011. While these programs have been in place for many years (the Section 5309 program has existed since the 1960s), through authorization bills there is a possibility that Congress could increase or decrease the amount of funds available, impose new rules on project eligibility, or revise the criteria that FTA is directed to use for evaluating potential projects.

New Starts funding is also subject to appropriation uncertainties. The amount of the FTA Section 5309 contribution would be identified in a Full Funding Grant Agreement between FTA and the LACMTA. The FFGA would also identify the amount to be made available each year, subject to annual appropriations legislation. Although history has shown that Congress ultimately honors and appropriates the full amount spelled out in an FFGA, Congress could delay funding for the project by reducing or stretching out the annual appropriations. Any delay could necessitate additional borrowing or schedule delays.

The FFGA would also identify the amount of New Starts funds to be made available each year, subject to annual appropriations legislation. For the purpose of this financial plan, LACMTA has assumed that the project would receive not more than \$150 million per year. In order to mitigate the timing gap between the receipt of New Starts funds and project cash flow needs, LACMTA would issue Capital Grant Receipt Revenue Bonds that would be repaid by New Starts funds as they are received. This change will cause LACMTA to incur additional finance costs, which are included in the project capital cost estimate. FTA may reconsider the annual funding amounts if increases in the New Starts program are authorized before the FFGA is signed.

## 5.3 Operating and Maintenance Plan

### 5.3.1 Operating and Maintenance Cost Risks

#### O&M Cost Increase

In general O&M unit costs are subject to many macroeconomic factors, including fuel prices, commodity prices, labor contracts, and security costs. These factors are all subject to the macroeconomic environment and are largely out of the hands of LACMTA and thus are all potential risks that may have impacts on operating costs, either negative or positive. LACMTA has estimated O&M costs as a function of vehicle-revenue hours, and any increase in unit costs could lead to an increase in overall O&M costs.

### 5.3.2 Operating and Maintenance Revenue Risks

#### O&M Revenue Shortfall

Fare revenues make up a notable share of the LACMTA's transit corridor revenue. Ridership and a continuation of current fare levels in real terms could change due to economic conditions, the local job market, population growth or levels of traffic congestion on roads and major highways.

## 5.4 Potential Strategies for Mitigating Cost and Revenue Risks

In the event that any of the cost or schedule risks described above were to materialize, LACMTA has several risk mitigation strategies available. This section focuses on the ability of the financial plan to absorb cost increases or revenue decreases. Three scenarios have been identified that can be used to illustrate the financial capacity of the plan and its associated funding sources to absorb these potential challenges

***Reduction in Measure R Revenues:*** LACMTA has forecasted that sales taxes will increase at an average annual rate of 4.2 percent between FY 2011 and FY 2040. This is based upon the assumption that the Los Angeles region will continue the increased economic growth that occurred in FY 2010. The projected rates of growth are based on forecasts conducted by the UCLA Anderson Forecast, and are consistent with past rates of construction cost growth excluding the boom-and-bust period of the late 2000's.

If Measure R revenues increase at a lower rate than forecasted, LACMTA may not be able to issue as much Measure R-backed debt as projected in this financial plan. Several options are available to complete the projects identified in the capital plan. LACMTA's forecast for debt policy conformance indicates that there is sufficient capacity to cover additional needs in the long-term capital plan. Alternatively, LACMTA could shift some lower-priority capital projects in the long-range plan to future years in order to free up additional state or local funding for the Westside Subway Extension.

***Increase in Capital Costs of the Regional Connector:*** As the project completes PE and goes into design, the estimate will become more precise as the project is refined. The current cost estimate includes approximately 27 percent in contingencies, which should be adequate to cover these and other potential changes.

In the event of a cost increase in any of the Measure R Transit Projects in America Fast Forward, LACMTA could choose to utilize other sources of State and local funding, and issue additional Proposition A or Proposition C-backed debt to fund projects in the long range capital plan.

***Increase in O&M Unit Costs per Revenue Hour:*** As described above, O&M unit costs may be susceptible to underlying economic conditions, particularly for fuel and commodity prices. In the event that O&M costs grow at a lower rate than forecasted, LACMTA will seek opportunities to reduce costs and eliminate unproductive services. If additional revenues are needed, LACMTA may utilize additional Proposition A or Proposition C revenues, or may utilize additional federal funding (such as Section 5307) for preventive maintenance activities.

## 5.5 Next Steps:

As the Westside Subway Extension completes preliminary engineering, LACMTA will continue to review and revise the financial plan to take into account cost and schedule changes, federal funding opportunities, and financial market conditions. Future iterations of the financial plan will present more detailed plans to mitigate cost and revenue risk. During PE and final design LACMTA will continue to engage in the risk assessment process with FTA and its Project Management Oversight Contractor, which will result in revised contingency levels and a detailed risk management plan to be implemented during final design and construction.