



OPERATIONS COMMITTEE
FEBRUARY 21, 2008

SUBJECT: FY09 CAPITAL PROJECTS

ACTION: ESTABLISH LIFE-OF-PROJECT BUDGETS FOR INCLUSION IN FY09 BUDGET

RECOMMENDATION

Establish the life-of-project (LOP) budgets for the proposed new FY09 capital projects that exceed \$5 million so they may be included in the FY09 budget submittal as follows:

- A. Purchase 260 45 Foot Composite Buses – LOP \$179,129,959
- B. Purchase 53 buses for Contracted Services providers – LOP \$18,600,000
- C. Mid-life Overhaul 188 buses in the FY09 bus mid-life program – LOP \$24,294,186
- D. Purchase and install 110 engines for the FY09 CMS Engine Replacement program – LOP \$7,145,732
- E. Construct a new CNG fueling facility at Division 10 – LOP \$11,673,000
- F. Construct a new CNG fueling facility at Division 18 – LOP \$11,100,000
- G. Complete the Division 3 Master Plan Improvements Phase II-IV – LOP \$13,200,000
- H. Modernize the elevators and escalators at the Civic Center Station – LOP \$12,000,000
- I. Replace the Blue Line power sub-stations – LOP \$82,200,000
- J. Replace the Blue Line overhead catenary systems – LOP \$13,000,000

ISSUE

The Financial Stability Policy adopted by the Board in January 2008 requires that capital projects in excess of \$5 million be presented separately for life-of-project approval prior to inclusion in the annual budget.

DISCUSSION

The purpose of this report is to give the Board an opportunity to examine each significant capital project before it is included in the budget proposal. This methodology, adopted by the Board in FY06, provides staff with a starting point for developing the upcoming year's budget. The life-of-project budget is an estimate of the total cost of the project that provides a long term look of what a project may cost should the Board decide to fund it. This assists in planning for both the ten-year forecast and the Long Range Transportation Plan. Since adoption of this methodology, we have a much better financial plan for a continuing capital program.

Approval of these projects at this time does not preclude future Board-directed changes during the budget adoption process. In fact, nearly all of the projects will return to the Board for further discussion after the preliminary engineering process or for a contract award.

Each project is discussed separately on the attached worksheets including the proposed funding identified for each project. The total capital projects list considered for FY09 funding included 154 bus and rail projects. The 10 projects included in this report plus the Solar Generation project approved in January, represent the highest priority projects that exceed \$5 million. There are an additional 106 new projects with life-of-project budgets less than \$5 million that will be included in the FY09 proposed budget and presented to the Board in May for approval.

ALTERNATIVES CONSIDERED

The Board could choose not to approve some or all of the proposed projects for inclusion in the FY09 budget. If the Board does not approve some, or all of the projects, we will propose alternative projects based on our prioritized list.

The proposed funding can alternatively be used for bus or rail operating expenses. However, in accordance with the Financial Stability Policy, the total proposed capital program represents the minimum investment necessary to maintain the existing transit system current operational levels.

FINANCIAL IMPACT

The annual cost for each of the approved projects will be included in the proposed FY09 budget when presented to the Board in May 2008. Cash flow plans and proposed funding sources have been included for each capital project. The total estimated cost of the FY09 capital program is consistent with the ten-year forecast and the Long Range Transportation Plan.

NEXT STEPS

Incorporate the adopted life-of-project budgets into the FY09 proposed budget.

Attachments

Prepared by: Michelle Lopes Caldwell, Executive Officer
Office of Management and Budget



Terry Matsumoto
Chief Financial Services Officer and Treasurer



Roger Snoble
Chief Executive Officer

ATTACHMENT A

PROJECT NAME: Purchase 260 45 Foot Composite Buses
PROJECT NUMBER: 201013
PROPOSED LOP: \$179,129,959

DESCRIPTION OF PROJECT: New procurement for 260 45-foot composite buses in FY09 and FY10. 260 buses for delivery by June 2010. 210 CNG, 50 hybrid for FY09 and FY10. Procurement is needed to meet service needs to ensure that retirement eligible vehicles are retired and new vehicles are introduced into the fleet to maintain low average fleet age and improve service quality, fleet reliability, and customer appeal.

| Expenses | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|-----------------|---------------------|---------------------|------------------|------------------|------------------|----------------------|
| Labor | \$1,017,598 | \$1,047,348 | \$ 589,913 | \$ 88,005 | \$ 90,645 | \$2,833,509 |
| Acquisition | 85,405,025 | 85,510,601 | - | - | - | 170,915,626 |
| Services | 525,300 | 525,300 | - | - | - | 1,050,600 |
| Travel | 437,750 | 437,750 | - | - | - | 875,500 |
| Contingency | 1,727,362 | 1,727,362 | - | - | - | 3,454,724 |
| TOTAL | \$89,113,035 | \$89,248,361 | \$589,913 | \$ 88,005 | \$ 90,645 | \$179,129,959 |

| Sources of Revenue | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|---------------------------|---------------------|---------------------|------------------|-----------------|-----------------|----------------------|
| Prop 1B Bonds | \$10,221,035 | \$9,778,965 | | | | \$20,000,000 |
| CMAQ | 78,892,000 | 31,176,000 | | | | 116,068,000 |
| TCRP | | 42,293,396 | 589,913 | 88,005 | 90,645 | 43,061,959 |
| | | | | | | |
| | | | | | | |
| TOTAL | \$89,113,035 | \$89,248,361 | \$589,913 | \$88,005 | \$90,645 | \$179,129,959 |

ATTACHMENT B

PROJECT NAME: Contract Services Bus Buy
PROJECT NUMBER: 201054
PROPOSED LOP: \$18,600,000

DESCRIPTION OF PROJECT: Purchase 53 buses, 30 and 32 foot buses at a cost of approximately \$350,000 per bus. Within FY09, contract services will take delivery of 53 buses to replace buses that have exceeded their useful life. Award is anticipated in spring FY08 with construction phase of approx. 9-12 months. The 53 buses are specified as 30-32 foot buses, low-floor CNG to better serve certain contract routes that involve low ridership and/or neighborhood streets. The replacements will help offset higher maintenance costs that would otherwise be incurred due to continued operation of older buses beyond their expected life.

| Expenses | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|-----------------|---------------------|-------------|-------------|-------------|--------------|---------------------|
| Labor | \$80,000 | | | | | \$80,000 |
| Acquisition | 17,432,000 | - | - | - | - | 17,432,000 |
| Services | 530,000 | - | - | - | - | 530,000 |
| Travel | - | - | - | - | - | - |
| Contingency | 558,000 | - | - | - | - | 558,000 |
| Advertising | - | - | - | - | - | - |
| TOTAL | \$18,600,000 | | | | | \$18,600,000 |

| Sources of Revenue | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|---------------------------|---------------------|-------------|-------------|-------------|--------------|---------------------|
| TDA4 | \$18,600,000 | | | | | \$18,600,000 |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| TOTAL | \$18,600,000 | - | - | - | - | \$18,600,000 |

ATTACHMENT C

PROJECT NAME: FY09 Bus Midlife Program
PROJECT NUMBER: 203006
PROPOSED LOP: \$24,294,186

DESCRIPTION OF PROJECT: Provide preventative, mid-life maintenance service to LACMTA buses that have been in service for half of their expected life. This project will include replacement of power train, removal, inspection and replacement of CNG fuel cylinders as needed, suspension work, body repair, painting, interior refurbishment including graffiti abatement and wheel chair lift maintenance.

Complete 188 midlife overhauls in FY09. The production goal is 3.8 buses a week, however, in week 3, Central Maintenance Services (CMS) will begin Metro’s 5300 bus series and in week 51, CMS will begin Metro’s 7000 bus series. When a new bus series are started, an additional 175 hours per bus is required with a 8-12 week ramp down period to establish production standards.

1. Improves performance, reliability and can help extend the service-life of our buses if the LACMTA needs to keep the buses in revenue service.
2. Reduces operating costs: The improved overall condition of the vehicles also helps to reduce maintenance operating costs and the amount of heavy maintenance work performed at the divisions.
3. Makes the best use of resources.
4. Improves customer service: Reduces breakdowns, road calls and appearance of the bus.
5. Provides financial mechanism to handle 1,249 engines estimated to have accumulated 350,000 miles, the target for engine replacement.

| Expenses | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|-----------------|---------------------|-------------|-------------|-------------|--------------|---------------------|
| Labor | \$11,958,611 | | | | | \$11,958,611 |
| Acquisition | - | - | - | - | - | - |
| Contingency | - | - | - | - | - | - |
| Advertising | 3,000 | - | - | - | - | 3,000 |
| M/S Parts | 12,332,575 | - | - | - | - | 12,332,575 |
| TOTAL | \$24,294,186 | | | | | \$24,294,186 |

| Sources of Revenue | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|---------------------------|---------------------|-------------|-------------|-------------|--------------|---------------------|
| TDA4 | \$24,294,286 | | | | | \$24,294,286 |
| | | | | | | - |
| | | | | | | - |
| TOTAL | \$24,294,286 | - | - | - | - | \$24,294,286 |

ATTACHMENT D

PROJECT NAME: FY09 CMS Engine Replacement Program
PROJECT NUMBER: 203016
PROPOSED LOP: \$7,145,732

DESCRIPTION OF PROJECT: Rebuild/purchase and install 110 bus engines. Rebuild and install 30 Cummins L10 engines and purchase for re-power 80 Detroit Diesel Series 50 replacement engines for a total of 110 engine change-outs in FY09. Engine failure analysis indicates that over the next three years, the majority of the engines in the 1,249 buses procured between 1999 and 2001 will have accumulated 350,000 miles, the target for engine replacements. By acquiring the funds needed to purchase, convert and install the 110 engines not included in the mid-life program, the CMS will be able to change-out the engines prior to failure, preventing a major impact on service delivery.

| Expenses | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|-----------------|--------------------|-------------|-------------|-------------|--------------|--------------------|
| Labor | \$2,602,732 | | | | | \$2,602,732 |
| Acquisition | - | - | - | | - | |
| Contingency | - | - | - | - | - | - |
| Advertising | 3,000 | - | - | - | - | 3,000 |
| M/S Parts | 4,540,000 | - | - | - | - | 4,540,000 |
| TOTAL | \$7,145,732 | | - | | | \$7,145,732 |

| Sources of Revenue | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|---------------------------|--------------------|-------------|-------------|-------------|--------------|--------------------|
| TDA4 | \$7,145,732 | | | | | \$7,145,732 |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| TOTAL | \$7,145,732 | - | - | - | - | \$7,145,732 |

ATTACHMENT E

PROJECT NAME: Division 10 – CNG Fueling Facility
PROJECT NUMBER: 202138
PROPOSED LOP: \$11,673,000

DESCRIPTION OF PROJECT: Installation of a new CNG System at Division 10 via public/private partnership (lease payments). The CNG system at Division 10 is one of the first installed by Metro, and is only one of two that are owned and operated by Metro (not a public/private partnership). The CNG system is well beyond its useful life, and requires significant maintenance and staff expense to keep operational. Staff recommends that a new CNG system be constructed on the site using current compression technology, and that the CNG system be provided via a Public/Private Partnership similar to the other Metro bus divisions.

| Expenses | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Labor | \$ 301,989 | \$ 268,424 | \$ 246,840 | \$ 254,239 | \$ 326,481 | \$1,397,973 |
| Acquisition | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 6,000,000 | 10,000,000 |
| Services | | | | | | |
| Contingency | | | | | | |
| Misc Expenses | | | | | 275,027 | 275,027 |
| TOTAL | \$1,301,989 | \$1,268,424 | \$1,246,840 | \$1,254,239 | \$6,601,508 | \$11,673,000 |

| Sources of Revenue | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| TDA4 | \$1,301,989 | \$1,268,424 | \$1,246,840 | \$1,254,239 | \$6,601,508 | \$11,673,000 |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| TOTAL | \$1,301,989 | \$1,268,424 | \$1,246,840 | \$1,254,239 | \$6,601,508 | \$11,673,000 |

ATTACHMENT F

PROJECT NAME: Division 18 – CNG Fueling Facility
PROJECT NUMBER: 202139
PROPOSED LOP: \$11,100,000

DESCRIPTION OF PROJECT: Installation of a new CNG System at Division 18 via public/private partnership (lease payments). The CNG system at Division 18 is one of the first installed by Metro, and is only one of two that are owned and operated by Metro (not a public/private partnership). The CNG system is well beyond its useful life, and requires significant maintenance and staff expense to keep operational. Staff recommends that a new CNG system be constructed on the site using current compression technology, and that the CNG system be provided via a Public/Private Partnership similar to the other Metro bus divisions.

| Expenses | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Labor | \$139,539 | \$115,144 | \$112,046 | \$120,318 | \$326,481 | \$813,528 |
| Acquisition | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 6,000,000 | 10,000,000 |
| Services | - | - | - | - | - | - |
| Travel | - | - | - | - | - | - |
| Contingency | - | - | - | - | - | - |
| Advertising | - | - | - | - | - | - |
| M/S Parts | - | - | - | - | - | - |
| Misc Expenses | | | | | 286,471 | 286,471 |
| TOTAL | \$1,139,539 | \$1,115,144 | \$1,112,046 | \$1,120,318 | \$6,612,952 | \$11,100,000 |

| Sources of Revenue | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| TDA4 | \$1,139,539 | \$1,115,144 | \$1,112,046 | \$1,120,318 | \$6,612,952 | \$11,100,000 |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| TOTAL | \$1,139,539 | \$1,115,144 | \$1,112,046 | \$1,120,318 | \$6,612,952 | \$11,100,000 |

ATTACHMENT G

PROJECT NAME: Division 3 Master Plan Phases II-IV
PROJECT NUMBER: 202260
PROPOSED LOP: \$13,200,000

DESCRIPTION OF PROJECT: Implementation of Division 3 Master Plan (maintenance annex, refurbishment of maintenance bldg, construction of warehouse, transportation bldg improvements, and employee parking).

The scope of work for Phases II through IV (Final Phase) includes the following work items:

Relocation of Tire Shop, Brake Shop, Non-Revenue Repair, and Maintenance Bays

Relocation of all outside storage areas into maintenance building

Replace eight in-ground bus hoists

Remove underground tanks and replace with above-ground tanks within new lube room

Renovate and modify maintenance building to accommodate relocated functions

Construct new fare box repair shop

Construct new steam clean bay

Construct articulated bus repair annex

Addition to the employee parking garage

Modify and renovate Transportation Building

Metro owns and operates the Division 3 bus operations and maintenance facility at 630 Avenue 28 in Cypress Park (Los Angeles), California. The Division 3 facility has been owned and operated by Metro (and/or its predecessors) since 1907. The current improvements at the Division were built between 1970 and 1977 and are approaching 40 years in age. The facility has not been significantly improved since construction between 1970 and 1977.

Division 3 operates and maintains a fleet of buses well above the original design capacity. The facility currently operates a mixed fleet of 220 diesel and CNG buses, and is scheduled to operate 60-foot articulated buses in 2009. When originally design in 1970, the facility was only supposed to operate a fleet of 200 standard buses.

Due to the increased fleet requirements at Division 3, the strategic location of the division within Metro's system, and the age of the Division since significant improvements and modernization, the Division now requires substantial upgrades. Metro's plan is that the proposed improvements will increase the life of this facility at least an additional 25 years.

| Expenses | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|-----------------|--------------------|--------------------|--------------------|-------------|--------------|---------------------|
| Labor | \$384,401 | \$289,243 | \$192,164 | \$0 | \$0 | \$865,808 |
| Acquisition | 2,000,000 | 6,000,000 | 3,500,000 | - | - | 11,500,000 |
| Services | - | - | - | - | - | - |
| Travel | - | - | - | - | - | - |
| Contingency | 500,000 | 200,000 | 128,192 | - | - | 828,192 |
| Advertising | 3,000 | 3,000 | - | - | - | 6,000 |
| M/S Parts | - | - | - | - | - | - |
| TOTAL | \$2,887,401 | \$6,492,243 | \$3,820,356 | | 0 | \$13,200,000 |

| Sources of Revenue | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|---------------------------|--------------------|--------------------|--------------------|-------------|--------------|---------------------|
| Prop A40% Bonds | \$2,887,401 | \$6,492,243 | \$3,820,356 | \$0 | \$0 | \$13,200,000 |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| TOTAL | \$2,887,401 | \$6,492,243 | \$3,820,356 | \$0 | \$0 | \$13,200,000 |

ATTACHMENT H

PROJECT NAME: Escalator/Elevator Modernization Program – Civic Center Station

PROJECT NUMBER: 202275

PROPOSED LOP: \$12,000,000

DESCRIPTION OF PROJECT: Modernization of escalator units located at Civic Center MRL Station.

Change out existing escalator units located at MRL Civic Center Station. Modernized units will be updated for compliance with the most current standards/codes for heavy duty transportation (APTA Guidelines) & usage rates experienced at this location. Civic Center Station escalators require regular maintenance & repairs to allow safe public use of the facility. Escalators in this location are one of the longest runs in Metro facilities. Repairs result in significant downtime & increased customer complaints due to the fact that no one wants to walk up a long flight of stairs. Increased maintenance requirements are indicative of excessive wear which may result in a safety risk for the public if the escalators should fail in any manner. Modernization of these escalators would result in increased safety, increased reliability, reduced annual maintenance costs and greater overall customer satisfaction levels.

| Expenses | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|-----------------|--------------------|--------------------|------------------|--------------------|--------------|---------------------|
| Labor | \$ 228,683 | \$ 207,134 | \$ 136,556 | | | \$572,374 |
| Acquisition | 2,000,000 | 5,500,000 | 725,000 | 2,300,000 | | 10,525,000 |
| Services | 300,000 | | | | | 300,000 |
| Travel | | | | | | |
| Contingency | 250,000 | 300,000 | 52,626 | | | 602,626 |
| Advertising | | | | | | |
| M/S Other | | | | | | |
| TOTAL | \$2,778,683 | \$6,007,134 | \$914,182 | \$2,300,000 | \$0 | \$12,000,000 |

| Sources of Revenue | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|---------------------------|--------------------|--------------------|------------------|--------------------|--------------|---------------------|
| Prop A35% Bonds | \$2,778,683 | \$6,007,134 | \$914,182 | \$2,300,000 | | \$12,000,000 |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| TOTAL | \$2,778,683 | \$6,007,134 | \$914,182 | \$2,300,000 | | \$12,000,000 |

(Rail Rehabilitation Project)

ATTACHMENT I

PROJECT NAME: MBL Traction Power Sub-Stations Rehabilitation
PROJECT NUMBER: 205066
PROPOSED LOP: \$80,000,000

DESCRIPTION OF PROJECT: The purpose of this project is to replace the twenty-one existing Metro Blue Line main line and yard traction power substations with state of the art power rectification and distribution equipment, including an Energy Management System, protective relays, AC and DC switch gears, incoming utility switch gear, transformers, rectifiers, uninterruptible power supplies, automatic transfer switches, Supervisory Control and Data Acquisition (SCADA) interface, climate control, fire suppression and fire alarm system, emergency trip system (ETS), transfer trip, etc. so that the complete new system is in compliance with all applicable, federal, state, local and regulatory codes, standards and recommendations at the start of construction. This will improve efficiency ad reliability of the system and minimize energy consumption.

The existing Metro Blue Line traction power substations are approximately 20 years old. The reliability of these substations is decreasing and requires increasing maintenance to retain normal operation. In addition, substation parts are difficult to find since the manufacturer is no longer supplying parts. The energy consumption also increases due to the aging equipment.

Upon completion of the study phase, additional Metro staff (FTE's) may be required to support the project management and consultant oversight.

Phase 1: Procure a consultant to conduct a study to review the existing power system and perform a load-flow analysis. Consultant will also prepare a plan for implementation of state-of-the-art technology, project staging and project scheduling.

Phase 2: Prepare bid documents to procure equipment and installation contract after Rail Operations review of the phase 1 assessment. Assist agency in determining the successful contractor and equipment.

Phase 3: Provide construction management and final testing/certification.

| Expenses | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|-----------------|--------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| Labor | \$455,733 | \$572,333 | \$588,049 | \$605,691 | \$623,857 | \$2,845,663 |
| Acquisition | - | 6,006,000 | 6,006,000 | 6,006,000 | 10,511,000 | 28,529,000 |
| Services | 492,000 | 8,316,000 | 8,316,000 | 8,316,000 | 15,770,000 | 41,210,000 |
| Travel | - | - | - | - | - | - |
| Contingency | 49,267 | 1,470,098 | 1,470,098 | 1,470,098 | 2,940,777 | 7,400,338 |
| Advertising | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 15,000 |
| TOTAL | \$1,000,000 | \$ 16,367,431 | \$ 16,383,147 | \$ 16,400,789 | \$ 29,848,634 | \$80,000,000 |

| Sources of Revenue | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|---------------------------|--------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| Prop A35% Bonds | \$1,000,000 | \$ 16,367,431 | \$ 16,383,147 | \$ 16,400,789 | \$ 29,848,634 | \$80,000,000 |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| TOTAL | \$1,000,000 | \$ 16,367,431 | \$ 16,383,147 | \$ 16,400,789 | \$ 29,848,634 | \$80,000,000 |

Rail Rehabilitation Project

ATTACHMENT J

PROJECT NAME: MBL OCS Rehabilitation
PROJECT NUMBER: 205067
PROPOSED LOP: \$13,000,000

DESCRIPTION OF PROJECT: The purpose of this project is to upgrade and replace the Overhead Catenary System (OCS) wires and associated components on the Metro Blue Line, which will include the MBL yard which are approximately 20 years old. Project will upgrade single trolley cable in street running territory along Flower Street to Low Profile Overhead Catenary System. Replace both messenger & contact wires including associated components on the mainline and in Division 11 yard.

In 1994, 200 rail cars per day, per direction depended on the Blue Line OCS for power (100 trips per day, per direction using two-car trains). In 2007, 366 rail cars per day, per direction, depend on the Blue Line OCS for power (100 trips per day, per direction, using two car trains). The OCS system has become less reliable which makes it vulnerable to incidents such as contact wire entanglement with the train pantograph. These incidents interrupt revenue service causing inconvenience for the public and compromises public safety.

Upon completion of the study phase, additional Metro staff (FTE's) may be required to support the project management, consultant oversight and installation.

Phase 1: Procure a consultant to conduct a study to determine the state of the repair of the existing overhead catenary system to include, but not limited to wire wear, pole and registration assemblies, air gaps, section insulators, constant tension, variable tension, hard spots, hangers, pulley assemblies, yoke plates, etc.

Phase 2: Based on the results of this study, and in conjunction with Metro Rail Operations, the consultant will prepare bid documents, which procures equipment and enlists the services of an installation contractor to rebuild the OCS.

| Expenses | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|-----------------|--------------------|--------------------|--------------------|--------------------|--------------|---------------------|
| Labor | \$ 291,828 | \$ 1,089,798 | \$ 1,122,492 | \$ 946,703 | | \$3,450,820 |
| Acquisition | | 1,667,952 | 1,111,968 | 2,779,920 | | 5,559,840 |
| Services | 610,000 | 444,787 | 444,787 | 900,000 | | 2,399,574 |
| Travel | | | | | | |
| Contingency | 98,172 | 618,063 | 500,154 | 373,377 | | 1,589,766 |
| Advertising | | | | | | |
| TOTAL | \$1,000,000 | \$3,820,600 | \$3,179,401 | \$5,000,000 | \$0 | \$13,000,000 |

| Sources of Revenue | FY09 | FY10 | FY11 | FY12 | FY13+ | TOTAL |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------|---------------------|
| Prop A35% Bonds | \$1,000,000 | \$3,820,600 | \$3,179,401 | \$5,000,000 | \$0 | \$13,000,000 |
| | | | | | | - |
| | | | | | | - |
| | | | | | | - |
| TOTAL | \$1,000,000 | \$3,820,600 | \$3,179,401 | \$5,000,000 | \$0 | \$13,000,000 |