



Metro

Date	March 25, 2015
To	Board of Directors Metro Staff
From	Arthur T. Leahy Chief Executive Officer 
Subject	Significant Policy Issues on the Horizon in the Next 12 Months

I would like to take this opportunity to highlight key policy and funding issues on the horizon. On a number of occasions during the last 12 months at Metro, I have endeavored to alert the Board of these issues, and taken proactive steps to address them. I would like to submit the following items to the Board of Directors and the new Chief Executive Officer (CEO):

Financial Outlook:

While balanced budgets are projected in FY16 and FY17, Metro will face financial challenges in FY18. Measure R has afforded LA County the opportunity to expand the transit infrastructure, Metro must continue to be cognizant of the infrastructure in place and make the necessary plans to maintain these assets in a state of good repair. As our system grows and ages, increased investments will be needed to maintain these assets. Metro's transit assets are projected to triple over the next ten years and the future need to maintain these assets will outpace the funding available.

Metro is evaluating both revenue and expense strategies to help mitigate future deficits. The projected deficit is serious, but extreme measures can be prevented if modest mitigations are acted upon in a timely manner. These strategies include improving operating/organizational efficiencies, reducing operating costs, strengthening cost controls and exploring opportunities for generating alternative revenues. Some specific proposals include adjusting load standards, service rationalizations and staffing efficiencies.

Addressing these financial shortfalls now through small steps will help avoid more extreme measures in the future. A task force should be assembled now to develop and implement strategies to address the financial challenges Metro will begin to face in FY18 and beyond.

APTA Fare and Revenue Peer Review Report:

A Special Board Staff Briefing will be held on Wednesday, March 25 to discuss the results of the APTA peer review panel that convened in January 2015 to review the proposals for phase 2 and 3 of the fare change. The APTA Peer Review Panel provided an independent review of staff's recommendations on Phase 2 and 3 of the fare restructure. The panel found that staff's recommended fare strategies were sound and a model for the industry. I encourage the Board of Directors and the new CEO to use the findings from the APTA Peer Review as a resource and implement their recommendations. The Board-adopted policy on fare ratio recommends a fare box recovery ratio of 33%; Metro's current fare box recovery is 25.5% and will continue to fall. The full funding grant agreements with the FTA are dependent on a 33% farebox recovery, which assures that Metro will be able to operate and sustain new lines.

Timeframe: APTA Peer Review Panel will present to the Board in March 2015.

Access Services:

Access Services provides ADA mandated paratransit services on behalf of Metro. About 50% of funding for Access comes from Prop C 40% funds. The Access draw on PC40 funds is growing faster than the sales tax revenue. Other major sources such as Federal funding are also growing much slower than the Access budget. Access is looking for new sources of funding such as Medicaid, however no other dollars have been confirmed. It is expected that there will be a further increase in the request for PC40 funds in FY 2016 to cover growing demand and mandated programs such as origin to destination service and new requirements for reasonable modification. If the costs continue to grow Metro could be faced with reducing other programs such as regular transit service in order to fund paratransit operated by Access. Steps should be taken to control cost growth in this area.

Operations:

Replacement Bus Buy:

Over the next three years, 843 buses will reach the end of their useful life. It is not legal to continue operating CNG vehicles beyond the expiration of the CNG tank, and it is not practical to replace CNG tanks on buses that have passed the end of their design life.

Buying and maintaining buses is essential and the financing is complex. The purchase of 350 buses, as reported at the February System Safety, Security and Operations Committee, is an option on top of 550 New Flyer Buses approved on January 24, 2013. The 350 buses will be funded with Federal 5307, Federal 5339 and local TDA-4 funds. Staff will continue to identify alternate Federal and Local funding sources to apply to this action as it becomes available. The lead time for new vehicles can take 18-24 months or more; therefore, it is unlikely that new bus procurement could be completed in time to meet FY16-18 fleet replacement needs. Staff does intend to initiate a new solicitation for additional replacement buses in FY16 for buses to be delivered in FY17-18. Staff will be

requesting authority to use a best value procurement approach in April, once funding issues are resolved.

Vehicle procurements are critical as our system simultaneously ages and grows. There are many factors that make financing them complex, including long lead times, changing technologies, and reconciling a forecasted budget deficit with the need to procure billions of dollars worth of vehicles in the near term.

Timeframe:

- 550 New Flyer buses approved in January 2013
- Board Report in February 2015 authorizing the CEO to increase Life of Project (LOP) to include 350 additional buses
- Request to use best value procurement in April 2015
- New solicitation for additional buses in FY16 to be delivered in FY 17-18

Division 13:

Division 13 is expected to open in FY16 for pre-revenue testing, training and commissioning and then revenue service. Division 13 has been designed to optimize Metro's bus transit service throughout Central Los Angeles and the surrounding area, and to ultimately result in long-term operational savings. The bus operators needed for revenue service will be re-allocated from divisions 1, 3, 9 and 10. The lines that will be assigned to Division 13 for the first phase of the activation are 68, 704, 728, 733 and 745. As a result of the opening, staff has determined that our existing centrally located bus divisions (1, 2, 3, and 10) maximize our ability to optimize service levels and reduce system-wide deadhead costs.

While looking at optimization and centralization through the opening of Division 13, staff has also examined other complementary optimization and centralization efforts. The option of reallocating the Non-Revenue Maintenance function from Division 4 in Downey to a more centrally located area, such as Division 10 in Los Angeles in support of centralizing core operations functions, could be linked with the opening of Division 13. Furthermore, preliminary system-wide optimization efforts determined that Division 10 could potentially absorb other operations functions, including Cash Counting (also referred to as Location 29, located at Division 2), as well as other operations functions such as Operations Central Instruction, Facilities Maintenance, and Rail Facilities Maintenance at Vernon Yard (also referred to as Location 34 in the City of Vernon).

Timeframe: Pre-revenue testing, training and commissioning and then revenue service in FY16.

Division 6:

A report went to the February System Safety, Security and Operations Committee detailing that closing Division 6 would significantly increase operating cost and impair Metro's ability to respond to bus and rail service issues.

The division has a potential capacity of over 70 buses. Currently, 36 buses are assigned to the division. Bus lines are assigned to divisions based on the geographic location of the terminals: lines 2, 20, 30, 33, and 534 terminate in the area.

Retaining Division 6 in Venice is essential. This division houses buses, handles road-calls, and will be critical to providing bus bridges for the Expo line when needed. The dead head costs of trying to meet transit needs west of the I-405 and from Division 5 or Division 7 are unsustainable and inefficient. Compromising Division 6's strategic location would negatively affect customer service.

An in depth list of the impacts of closing Division 6 is available in the board report, and include:

- Bus pull-in and pull-out costs would increase by approximately 9,400 bus hours per year and \$1.33 million per year
- Road calls would require an average 1.5 additional hours round trip in travel time to restore service. There were 168 road calls last year. Based on that number, additional costs of \$54,000 were incurred. The most notable impact of longer road call travel times are the delays and extended disruption in bus and Expo service to our customers that would be incurred
- Expo Phase II will be open in early 2016. In 2014, Metro Operations provided 12 bus bridges on Expo Line Phase I. Response time to provide bus bridges from downtown LA or West Hollywood in the event of accidents or car failures further west than Culver City would negatively impact Expo service quality

One option which needs to be carefully evaluated is the potential to locate other potential sites which could function as a suitable replacement for Division 6. Such a site has been searched for for many years and a suitable site has not been identified. In any case, any potential alternative site should be evaluated in terms of capital costs, additional or reduced operating cost, and the impact of the location for service management as regards such necessities as in-service failures, accidents and bus bridges needed in support of the Expo line and Purple lines in the future. A poorly located new Division 6 would result in degraded service management and higher costs.

Opening Two Rail Extensions:

The Expo Line Phase 2 and Gold Line Foothill Extension Phase 2A rail extensions are under construction and scheduled to commence revenue service in FY16. Metro will assume two light-rail Maintenance Facilities, 18.2 route miles, 13 stations, and 78 light-rail vehicles.

Staff has planned the recruitment, hiring and training of personnel into 11 phases (275 positions) spanning 14 months to support project milestones. Staff has initiated three phases of staffing and 101 of the 111 positions or 91% have been filled. These positions provide continued support for Systems Integration Testing and project support activities.

Metro is recruiting for technical positions well in advance of actual needs to satisfy training and qualification requirements. Metro relies on internal promotion, a Joint Apprenticeship Council (JAC) program, and external recruiting to find experienced and qualified candidates for these positions. Training classes are ongoing for these positions.

The Gold Line Systems Integration Testing began in October 2014 and is planned to continue through September 2015.

The Expo Line Systems Integration Testing is planned to begin in April 2015 and will likely continue through March 2016.

Staff has planned for a temporary shortage of light-rail vehicles during pre-revenue service. A history of this issue is outlined in the section below.

To overcome this challenge, staff plans to separate pre-revenue and revenue operations on both lines. By doing so, fewer light-rail vehicles will be needed for the early stages of pre-revenue service. Pre-revenue trains consisting of two or three cars will operate at headways ranging from 6-24 minutes.

As more new light-rail vehicles become available, staff will schedule select revenue trains to operate in test mode over the two rail extensions. This will allow staff to synchronize pre-revenue with existing service and test systems integration with existing lines.

Revenue service for the two rail extensions is scheduled to begin in 2016. At the start, trains may operate every 12 minutes during peak service. As more new light-rail vehicles become available during the fall season, trains will operate every 6 minutes during peak service.

Staff will facilitate safety training for the community within a 1.5 square mile radius of both rail extensions over the next 12 to 14 months. Staff also plans to host a VIP Grand Opening celebration followed by a one day community free ride. This effort will include community celebrations at designated locations along each alignment.

Rail Car Procurement History

In January 2009, former Metro CEO Roger Snoble advised the Board that Metro should forego exercising options for additional vehicles with AnsaldoBreda, and initiate a new procurement for necessary vehicles, citing ongoing concerns over excessive schedule delays, the projected final vehicle being delivered three years late, vehicles being excessively over the contract weight specifications, and inability to be “trainlined” or be coupled with and operate with other Metro LRV’s in a consist. In April 2009, the Board directed staff to negotiate a satisfactory agreement with AnsaldoBreda and staff sought to accomplish this. Simultaneously, Metro staff began preparing a new solicitation in order to be prepared if these negotiations failed.

In July 2009, new Metro CEO Arthur Leahy advised the board that negotiations with AnsaldoBreda's had fallen short on financial guarantees and their failure to comply with requirements in the base car delivery contract and recommended that a new RFP be issued. Mitigating issues with the AnsaldoBreda procurement jeopardized vehicle availability for future line openings and necessitated a compressed vehicle acquisition schedule for the P3010 procurement. In November 2010 the RFP for new P3010 LRVs was released. In March 2012, Metro awarded the P3010 Light Rail Vehicle contract to Kinkisharyo International for 78 base vehicles to be delivered within 53 months from notice to proceed. Kinkisharyo is meeting this aggressive schedule and will be delivering rail cars twice as fast as any other rail car procurement in our agency's history.

Timeframe:

- March 2015 Board Report
- Gold Line Systems Integration Testing began in October 2014 and is planned to continue through September 2015
- Expo Line Systems Integration Testing is planned to begin in April 2015 and will likely continue through March 2016
- Revenue service for the two rail extensions is scheduled to begin in 2016

Transit Passenger Information System:

After Board discussion, \$2,000,000 will no longer be reprogrammed from Transit Passenger Information System. Metro was given a six month extension from California Office of Emergency Services (CalOES) to expend the grant funds, which will be used to address the failures in the current inventory and improve the hardware and software going forward.

Construction:

Consolidated Bus-Rail Control Center:

A report went to the February System Safety, Security and Operations Committee reporting on efforts to consolidate Metro's Bus, Rail and Emergency Operations Control Centers to ensure safe and effective coordination across transit modes. As the system grows, greater coordination, work flow and strong teamwork are required to meet the growing demands of the system. Control centers must leverage technology and streamline communication and coordination across departments to be safe, reliable, efficient and effective.

In the next 10 years, Metro Rail will expand by 32 miles of track and grow to 110 stations, offering approximately 120 miles of service. In the event of service disruptions, natural disasters, civil unrest or acts of terrorism, employees must be positioned to respond with enhanced service recovery plans, law enforcement coordination and quality transportation. Also, with the expanding system, bus bridges are likely to increase, fortifying the need for better coordination between bus and rail control centers. The best

way to facilitate this improvement in communication and teamwork is for bus and rail to be physically adjacent to each other.

Engineering & Construction, Security and Operations are working together to implement a consolidated operations control center. Staff awarded a contract to TigerSwan for a threat and vulnerability assessment in March 2015 to identify risks and recommend mitigation strategies to safely locate this center at Metro headquarters. A Notice to Proceed has been issued with an expected delivery at the end of April.

In addition, two RFPs will be released by June 2015, one to assess human performance, business processes reengineering, information systems and innovative technology, and space requirements for a consolidated center. The other RFP is for preliminary architectural engineering design for a consolidated center.

Timeframe:

- Vulnerability assessment contract award: March 2015
- Release of Human Performance, Business Process Reengineering, Information Systems and Innovative Technology RFP: June 2015
- Release of Space Requirements and Preliminary Architectural Engineering Design for a Consolidated Center RFP: June 2015

Review of Barriers Separating LRT Tracks from Freeway Lanes

There have been two accidents within a one year period along the Foothill Extension I-210 Corridor. In both cases, high profile trucks came over the Caltrans barrier into Metro Right of Way (ROW) causing damage to Metro tracks and train control equipment. As a result of these accidents, Metro staff is developing steps to address the risk associated with freeway vehicles encroaching onto the Metro ROW.

Engineering & Construction, Operations, Risk Management and Corporate Safety are preparing an engineering and risk analysis to evaluate and prioritize specific areas that are vulnerable to vehicle intrusion and to identify best methods of reasonably protecting against freeway vehicle conflicts with stations, tracks, overhead catenary systems and train control equipment.

Current options under consideration:

- Partner with Caltrans to remove and replace Type 50 guard rail currently installed along the I-210 corridor (32" in height) with Type 60 Guard Rail (36" in height)
- Partner with Caltrans to add cable or reinforced concrete to increase height of current barrier railing
- Metro protect exclusively on Metro ROW with reinforced walls, cable railing or other methods for creating a barrier
- Intrusion detection interfacing with train control systems to stop trains if encroachment onto the tracks

- Purchase of spare train control, power and Overhead Catenary System (OCS) equipment to assure service is not impacted by damaged equipment

Metro staff have met with Caltrans to explore options and ways the two agencies can work together to resolve this condition. Topics of discussion included prioritizing resolution of this issue, potential for partnering and cost sharing, barrier types, other methods of protection (cable, adding height to current barrier). Additional meetings with Caltrans will be needed to further discussions and develop solutions/agreements.

Next Steps and Timeframe:

- Identifying specific areas vulnerable to vehicle intrusion onto Metro ROW: May 2015
- Identify best method or methods of protection: July 2015
- Identify funding for design and construction: July 2015
- Begin design: July 2015, Complete Design: December 2015
- Develop and finalize necessary agreements with Caltrans: December 2015
- Procure contractor, begin construction: July 2016

Procure spare equipment:

- Low Risk: Track, OCS poles, Switches, Signals – Short lead time items
- Traction Power Equipment – Foothill Project procure a spare set, develop procedures for quick repair, implement training
- Train control equipment – Four Train Control Cases and One Bungalow, Foothill Authority procure spares for each

Planning:

Subway to East 6th Street:

A report to the Planning and Programming Committee in March outlines the status of extending Metro Red/Purple Line service from the current terminus at Union Station to the eastern edge of Downtown Los Angeles along the west bank of the Los Angeles river. The report explains that expanded rail operations from the Purple Line Extension project as well as SCRIP, High Speed Rail, 6th Street Viaduct Replacement Project, LA River revitalization efforts, West Santa Ana Branch Transit Corridor project, and private sector development in the Arts District are being comprehensively examined through a cross-departmental coordination study scheduled to be completed in the spring of 2015. The study will result in an integrated plan for the area and a roadmap for future implementation. The development of a turn-back facility revenue station and modifications to the existing heavy rail tunnel portal are two near-term critical path items emerging as necessary to support Purple Line Extension operations and must be planned to be compatible with other projects and provide an opportunity to move forward with stations at 1st Street and 6th Street.

This project has the potential to be a cost effective extension of the subway and a valuable addition to the east side of Downtown Los Angeles. Metro needs to extend revenue tracks to stations at 1st Street and 6th Street. Keeping this project simple and focused will help keep it on track.

Timeframe: March 2015 Board Report, coordination study to be completed spring 2015.