



Board Report

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REVISED
REGULAR BOARD MEETING
MARCH 24, 2016

**SUBJECT: LONG RANGE TRANSPORTATION PLAN - DRAFT POTENTIAL BALLOT
MEASURE EXPENDITURE PLAN**

ACTION: RELEASE EXPENDITURE PLAN DRAFT FOR PUBLIC REVIEW

RECOMMENDATION

CONSIDER:

- A. RECEIVING AND FILING the **Draft Potential Ballot Measure Expenditure Plan** (Attachment A); and
- B. AUTHORIZING the CEO to release the Draft Potential Ballot Measure Expenditure Plan, including a 45-year and 50-year plan option, for public review.

ISSUE

Los Angeles County is expected to grow by 2.4 million people by 2057. Metro is updating its Long Range Transportation Plan (LRTP) to enhance mobility and quality of life for LA County to position the region for future growth and meet transportation needs.

The foundation for the updated LRTP is a draft Expenditure Plan which provides a vision, through nine categories of funding, for the variety of transit related infrastructure and programs needed to build and operate a balanced multi-modal transportation system.

Specifically, the draft Expenditure Plan identifies major highway and transit projects evaluated and sequenced based on performance metrics approved by the Metro Board of Directors at its December 2015 meeting. The draft Expenditure Plan also includes projects identified by staff that are necessary to improve and enhance system connectivity; promote bicycling and walking; support Americans with Disabilities Act (ADA)/paratransit services for the disabled; discounts for students and seniors; investments to fund bus and rail operations; ongoing system maintenance and repair, including repair of bridges and tunnels; and funds for repair and enhancement of local streets and roads. To fund these projects and programs, Metro is considering a ballot measure for November 2016 that would augment the Measure R with a new half-cent sales tax, and extend the current Measure R tax rate to 2057.

Metro has approached the LRTP planning process through a collaborative, bottoms-up approach. After modeling major highway and transit projects identified by key stakeholders in the county's sub-regions, and working with other regional transportation partners to identify other necessary programs to enhance mobility, staff is now prepared to release a draft Expenditure Plan for public review.

Upon release by the Metro Board, staff will conduct an extensive public input process on the draft plan and report the summarized feedback to the Board. The process will include a round of community meetings, a series of telephone town hall meetings, presentations across the county, and opportunities to submit comments through Metro's website and social media channels.

BACKGROUND

The pie chart on page one of Attachment A summarizes the draft Expenditure Plan.

The draft Plan anticipates approximately \$120+ billion (year of expenditure (YOE)) over a 40+-year period. It relies on the following funding assumptions: a ½ cent sales tax augmentation to begin in FY18; an extension of an existing ½ cent sales tax rate beyond the current expiration of Measure R in 2039; with a combined 1 cent sales tax sunset in the year 2057 and a partial extension for on-going repairs, operations, and debt service. Assumptions for project cost inflation, tax revenue growth, sub-regional revenue targets, and population and employment data are described in Attachment B, the Working Assumptions Framework.

A 45-year plan, through 2062, and a 50-year plan, through 2067, is also recommended for consideration, which would allow for the expediting of major transit projects in order to address the region's most critical infrastructure in a more timely manner.

If the Metro Board of Directors and/or the voters ultimately do not support the augmenting and extension of taxes at this time, the 2009 LRTP will be updated consistent with that decision. Metro's new 2017 LRTP process is scheduled to conclude in the fall of 2017, well after the potential vote in November 2016, to permit either eventuality.

Authorizing Legislation and Expenditure Plan Requirements

The State Legislature passed SB 767 (de León) on September 15, 2015, which authorizes Metro to place a transportation measure on the ballot for voters consideration. The Governor announced his approval on October 7, 2015 making it effective January 1, 2016. This authorizing legislation requires that an Expenditure Plan be developed using a transparent process.

In addition, SB 767 (de León) requires that the Expenditure Plan include the following elements: the most recent cost estimates for each project and program; the identification of the accelerated cost, if applicable, for each project and program; the approximate schedule during which Metro anticipates funds will be available for each project and program; and, the expected completion dates for each project and program within a three-year range. Metro's process to date, included coordination with the Council of Governments (COGs) for each region, who submitted funding requests for major transit and highway priority projects in their subregion. In order to assist the COGs, staff provided high and low cost estimates to aid in making their priority setting decisions.

In our continuing effort to conduct a transparent process, staff has now refined project cost estimates and analyzed major projects using the Board approved performance metrics.

Geographic Equity Measures and Process

The Potential Ballot Measure Funding Targets examined current (2017) and projected (2047) population and employment figures, which were given to each subregion to inform their ultimate funding target. As discussed in detail in Attachment B, if current population was the highest percentage figure for a specific subregion, that figure was used to develop that subregion's target. If another subregional percentage figure was higher, such as future employment, that figure was used instead. This funding allocation formula was deemed feasible because Metro staff anticipates that a portion of existing funding resources will be available beyond the year 2039. For example, Proposition A and Proposition C do not sunset, and no planning has yet occurred for the year 2040 and beyond for these taxes. Since the working assumption is a 40-year tax measure ending in 2057, there will be about 18 years of Proposition A and Proposition C resources potentially available that have been incorporated in the draft Expenditure Plan for planning purposes.

After establishing a consensus with all the subregional representatives on the Potential Ballot Measure Funding Targets in Spring 2015, staff initiated the next steps in the process by requesting subregional priorities that were constrained to the Framework Funding Targets.

Performance-Based Planning Improves System-wide Results

In order to honor the "bottoms-up" process established by the Board, staff initiated the performance analysis process by reviewing the projects identified by the subregional agencies. The Metro Travel Demand Model was then used to evaluate major transportation projects from the Mobility Matrix and the 2009 LRTP Strategic (unfunded Plan), including major transit projects (bus rapid transit, light rail, or heavy rail transit corridor projects) and major highway projects (carpool lanes, managed lanes, or mixed flow lanes).

Major highway and transit projects were evaluated based on the evaluation criteria adopted by the Board in December 2015 (Attachment C). The Board identified five performance themes: Mobility, Economy, Accessibility, Safety, and Sustainability & Quality of Life. Performance weights were adopted for each theme to guide the scoring of performance measures within each theme. Performance measure analysis was conducted based on a combination of qualitative and quantitative data. Highway and transit projects (including projects provided by the COGs in Attachment D) were evaluated separately and the project scores provide a relative ranking for each mode. Attachment E reflects the adjustments made by staff (reflected in the draft Expenditure Plan) and a side-by-side comparison with all the Sub-Regional planning area project lists submitted by the COGs.

Staff also conducted travel demand model analysis of funded 2009 LRTP major highway and major transit projects not yet under construction, to assess opportunities to accelerate LRTP projects based on performance, while not impacting the 2009 LRTP schedule of any LRTP project. The performance of these projects was assessed using the same methodology used for new projects described above.

For the major highway and transit projects, two underlying system networks were used, one

unconstrained, or “Unfunded” for new projects, and one constrained, or “Partially Funded” for existing LRTP projects. The “Unfunded” system network included all modeled projects in the completed network for the horizon year of 2057. The “Partially Funded” system network included a smaller set of projects in the completed network. This distinction is important to the Potential Ballot Measure Expenditure Plan Draft because the performance metric data that resulted from the two very different system networks could not be simply merged for project comparison and sequencing purposes. The performance metric results for our Partially Funded (existing LRTP projects) and Unfunded (new projects), transit and highway system networks break down into four lists, as shown in Attachment F.

Projects that could not be modelled were assessed using the same performance themes as used for the major highway and transit projects, but using the “Harvey ball” scoring system of the Mobility Matrix process. The relative performance of these projects is shown in Attachment G.

Sequencing of Projects is first based upon the raw performance score for each category of project. Then, two key Board policy assumptions are applied. The first policy assumption is that the Gold Line Extension from Claremont to Azusa is a priority project for any new non-federal funding. The second policy assumption is that the potential acceleration of some Measure R projects already in the LRTP be considered by staff only to the extent that other existing LRTP projects remain on their current LRTP funding schedules and no later. The intent is to prevent any existing LRTP project delays, while at the same time enabling the possible acceleration of highly beneficial major projects. As a result, each subregion has at least one major transit or highway project in the first 15 year period.

Public Support for Expanded Transportation Investment

Over the last 12 months, various information channels have been explored to assess interest in expanding infrastructure investment. Staff has worked closely with the COGs as well as other stakeholder groups to determine their priorities and policy considerations. Executive staff attended many productive meetings with coalitions of leadership representatives from business, environmental, active transportation, and disadvantaged community organizations. These leaders jointly expressed significant support for a potential ballot measure if it properly balances their mobility, economic development, and environmental justice concerns.

Staff conducted general public opinion research to develop a solid understanding of Los Angeles County resident perspectives on transportation concerns to guide development of the potential ballot measure. In the past year, three research efforts have been completed. The first was conducted in February 2015 and consisted of four focus groups to help shape a planned survey questionnaire. Common themes shared by focus group participants included: traffic congestion is a serious problem and is getting worse; the public transportation system needs to be better connected; and there is a need for new funding which included general support for a sales tax measure.

In March 2015, a follow-up public opinion survey of 1,400 respondents was conducted with statistically significant sub-samples representing sub-areas of the County. This was not a traditional voter poll, but a representative sample of County residents. The poll also included a sub-sample of self-reported likely November 2016 voters. Some of the key findings included: concern over the growth in traffic congestion; the belief that a transportation plan must include a mix of local road,

freeway and public transportation projects; and the programs that resonated most with respondents included, traffic congestion relief, freeway improvements, keeping senior/disabled/student fares low, bridge safety improvements and repaving local streets. The survey also found that support for a transportation ballot measure appeared relatively strong, slightly above the two-thirds threshold.

The third effort was conducted in September 2015. Fourteen focus groups were held at seven locations (two focus groups per location) across the County to gain further qualitative data from residents regarding transportation concerns and feedback on concepts to communicate the benefits of Metro's LRTP. Overall, participants agreed that traffic congestion has gotten significantly worse; expressed support for a proposed ballot measure; had limited awareness of Metro's responsibilities; and responded positively to LRTP informational materials including a map depicting projects completed, under construction or planned.

As part of Metro's LRTP update, staff is planning to conduct additional public opinion research to provide the Metro Board of Directors with another layer of information as they consider placing a sales tax measure on the November 2016 ballot.

DISCUSSION

Fund Elements of the Plan

Major Transit Construction Projects - 35% Allocation

The major transit construction fund includes a 33% allocation for new rail and Bus Rapid Transit (BRT) capital projects, whose final project definition will be determined following completion of an environmental review process. Rail yards, rail cars, and start-up clean fuel buses are also eligible for this fund.

In addition to the elements listed above, the Major Transit Construction Fund includes a sub-category of \$350 million for additions to the Countywide Bus Rapid Transit system. Bus Rapid Transit lines include enhanced speeds gained through protected rights-of-way, signal priority, and bus stop enhancements that reduce dwell time at each stop. During each decade, Bus Rapid Transit lines will be added to enhance Metro's existing system already in place. Eligibility for the funds available includes advanced planning, environmental, and construction related costs.

A total of \$35 million is included for Streetcar and Circulator projects such as those proposed in Downtown Los Angeles, Glendale and other locales around the County. This allocation is eligible for capital only and will leverage operating and maintenance commitments as seed funding for Streetcar and Circulator type project sponsors.

This category also includes \$20 million in seed money for visionary projects, such as an express connection between the Los Angeles World Airport and Union Station in downtown Los Angeles or extending the Sepulveda Pass from LAX to Long Beach. These visionary ideas are important to foster as Los Angeles County grows.

For project descriptions on the Transit Construction Projects and maps, see Attachment H. An additional 2% of the funds are recommended for Transit System Connectivity Projects such as

described in Attachment I.

Major Highway Projects - 17% Allocation

The major highway construction fund includes a 15% allocation for safety enhancements, bottleneck relief, and capacity projects, whose final project definition will be determined based upon the completion of an environmental review process. Environmental studies, plans, specifications, and estimates, right-of-way acquisition, and construction are also eligible for this fund.

For project descriptions and maps on the Highway Construction Projects, see Attachment H. An additional 2% of the funds are recommended for Highway System Connectivity Projects such as ground access to seaports and airports described in Attachment I.

Transit Operations - 20% Allocation

The transit operations fund includes a 20% allocation to support countywide transit operations (consistent with ridership patterns) for Metro and Municipal Operators. The funds will improve system safety, provide faster, frequent, reliable, accessible services, and improve customer service. Estimated to generate \$23.9 billion during the term of the proposed new sales tax, this fund is critical to continue to grow the service and create a balanced more flexible multi-modal transit system. During the early years of the draft Plan, when transit expansion has not yet been fully implemented, some of these revenues can be used to address the transit State of Good repair backlog. For example, some of these funds could be used to meet bus system related repair. For detail information on the Transit Operations, see Attachment J.

Local Return - 16% Allocation

The 88 cities and the County of Los Angeles are responsible for building, improving, operating and maintaining much of the transportation infrastructure throughout Los Angeles County; a 15% local return allocation of the existing ½ cent Measure R sales tax provides a key revenue source for needs, such as, potholes, curb cuts, sidewalks, and active transportation projects. The existing program is structured to provide maximum flexibility for local jurisdictions to meet their transportation priorities and needs and staff recommends that the additional local return allocation maintain this flexibility.

In recent months, Metro has taken several steps to go beyond the traditional transit-oriented development focus to the creation of “Transit Oriented Communities” (TOC). TOCs represent an approach to development focused on compact, walkable and bikeable places in a community context (rather than focusing on a single development parcel), integrated with transit. Implementing TOCs requires coordination with local jurisdictions, as such, the draft Expenditure Plan proposes that the Local Return allocation include an expansion of the eligible use of funds for TOC development.

Metro has also taken several steps to elevate our response to storm water needs both for our own projects and programs, as well as in collaboration with communities around the County. In particular, last month the Metro Board adopted the following:

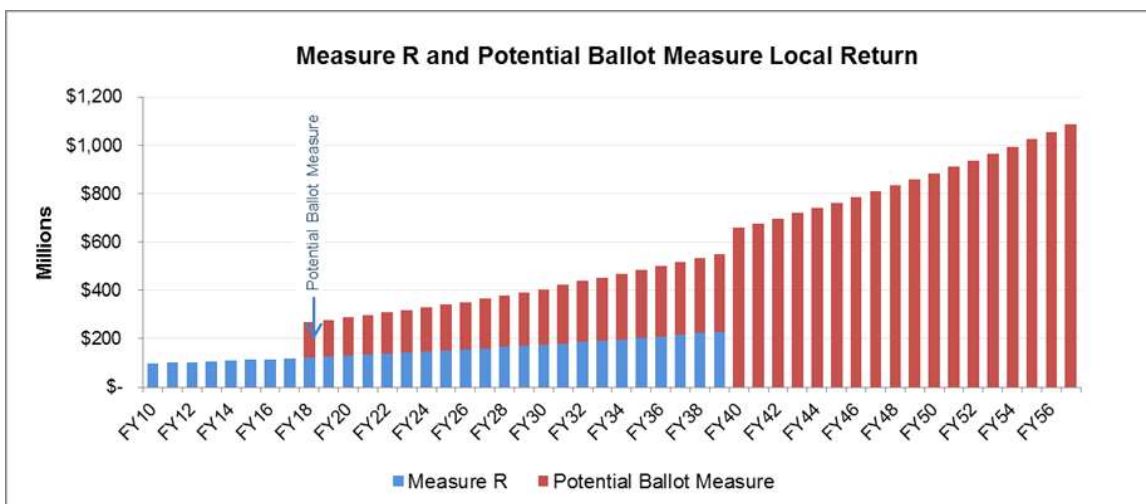
- Created a new requirement that all Metro construction projects implement methods to capture

and treat storm water;

- Required that design and construction projects incorporate sustainability best practices; and
- Expanded the Urban Greening Implementation Action Plan along with planning and technical tools to aid in project implementation.

Consistent with the recent policy initiatives, the draft Expenditure Plan proposes that the Local Return allocation also include an expansion of the eligible use of funds for “Green Streets”.

Estimated to generate \$19.1 billion during the term of the proposed new sales tax, it is important to note that the recommended fund allocation of 16% for Local Return results in a more than doubling of existing Measure R Local Return funds between FY18 and FY39 and extends the tax for another 18 years. Specifically, beginning in FY18, the proposed new fund allocation of 16% for Local Return will be added to the 15% Local Return currently generated by Measure R. The amount of Local Funds will exponentially grow beyond that during the later years of the new Measure (FY2039-FY2057) as illustrated in the table below.



Metro Rail Operations - 5% Allocation

Metro Rail is the backbone of the County’s transit network, providing service in highly congested corridors and moving riders at greater speeds. Historically, every time a rail line opens, transit ridership has increased, doubling in that rail corridor. As new rail projects open and the Metro Rail network expands, dedicated funding is needed to operate and maintain the service necessary to serve the expanding mobility needs of the region. During the early years of the draft Plan, when rail expansion has not yet been fully implemented, these revenues can be used to address the rail transit State of Good repair backlog. For example, some of these funds could be used to meet Blue Line repair needs and as well as the needs of other rail lines opened in the 1990s. The 5% allocation is estimated to generate \$5.9 billion during the term of the proposed new sales tax.

Metro State of Good Repair (SGR), Safety Improvements, & Aging Infrastructure - 2% Allocation

This new category is critical given the aging nature of Metro's system and is closely aligned with

safety and security. An emphasis on SGR is necessary to keep the expanding transit system in top form. The fund will help ensure safety, earthquake retrofitting of infrastructure, and minimize breaks in service delivery or unanticipated equipment failures during the course of providing transit service.

Specifically, the combination of older and newer rail systems places increased loads on the older rail infrastructure to service new destinations. To address this, Metro must ensure maintenance of the existing Metro Rail system, which in some corridors is over a quarter century old and does not have a dedicated funding source for its increasing SGR needs. The 2% allocation is estimated to generate \$2.4 billion during the term of the proposed new sales tax.

Transit Operations (20%) and Rail Operations (5%) are eligible to fund state of good repair needs. In addition, Metro is developing an asset management plan that evaluates the age and condition of assets. The draft Expenditure Plan also proposes a provision where Metro Board may, after fiscal year 2039, increase the SGR percentage allocation based on the condition of the transportation assets. These provisions will help mitigate funding needs for state of good repair.

~~The draft Expenditure Plan also proposes a provision where Metro Board may, after fiscal year 2039, increase the SGR percentage allocation based on the condition of the transportation assets.~~

Americans with Disabilities Act (ADA) Paratransit Service for the Disabled; Discounts for Seniors and Students - 2% Allocation

Proposed as a new category of funds, ADA-mandated Paratransit Service is a mobility lifeline for disabled residents. Currently, no dedicated funding for ADA-mandated paratransit exists, yet ADA ridership is expected to more than double in the next decade. The projected growth is due to the aging population of baby boomers and the cuts in federal human services transportation funding. This portion of funding could also include funding for discounting Metro transit passes for students and seniors. The 2% allocation is estimated to generate \$2.4 billion during the term of the proposed new sales tax.

Regional Rail - 1% Allocation

The regional rail fund includes a 1% allocation (or \$1.2 billion) as supplementary funding for improvements to regional rail service within Los Angeles County, with service in Antelope Valley as a first priority. Regional rail operations, maintenance, expansion, and State of Good Repair are eligible uses of these funds. The proposed 1% allocation builds upon the existing 3% Measure R commuter rail allocation. Specifically, beginning in FY18, the proposed new fund allocation of 1% for Regional Rail will build upon the existing Measure R 3% allocation for Regional Rail for a combined total of 4% of 4 1/2 cent until 2039. The draft Expenditure Plan also proposes a provision where the Metro Board can, after FY2039, increase the Regional Rail percentage up to an additional 1% based on verifiable service improvements and need. In addition, Metrolink Capital Projects are eligible for Transit System Connectivity funds as outlined in Attachment I.

Regional Active Transportation Program (ATP) - 2% Allocation

The Regional Active Transportation program is a multimodal program of regionally significant projects that encourage, promote and facilitate environments that promote walking, bicycling, rolling modes and transit use, as part of a robust and integrated countywide transportation system. To support this

effort, and in response to stakeholders, Metro has created a 2% portion of the draft Expenditure Plan, which is expected to generate \$17 million annually in the first year and more than \$2.4 billion over the 40-year life of the measure.

Approximately half of the 2% allocated ATP funds would be used to fund Projects that would be consistent with Metro's Active Transportation Strategic Plan. Potentially eligible projects including include Safe Routes to Schools, complete streets improvements, and first/last mile connections with public transit such as bicycle facilities including bike hubs, protected bike lanes connecting the transportation network, and the countywide bike share program. These funds, administered by Metro, will be available for the purposes of implementing the Countywide Active Transportation Network, as identified in Metro's Active Transportation Strategic Plan. Additional information about ATP and Regional ATP eligibility criteria is available in Attachment K. The other half of this 2% allocation will go towards two major LA River Bike Path projects: Complete LA River Bike Path - San Fernando Valley Gap Closure; and LA River Bike Path - Central Connector.

Regional ATP fund allocation can leverage and enhance local investments being made through the Local Return allocation from Proposition A, Proposition C, and Measure R. Over the last six years, \$443.8 million of Local Return funds (Prop A, Prop C, & Measure R) have been spent on Active Transportation. The Local Return of the Potential Ballot Measure is intended to be eligible for municipal ATP projects. Furthermore, subregions have identified active transportation projects as part of their subregional priorities in the Framework Funding Targets (Attachment D). An additional \$2.853 billion (in 2015 dollars) in active transportation projects were selected by the subregions. In total, the amount of funding utilized for ATP is approximately 4.5% or \$5.4 billion. All told approximately 4.5 to 5% of the draft Expenditure Plan funds are projected to be utilized for ATP projects, exclusive of any Local Return Funds used of for ATP projects.

~~The draft Expenditure Plan assumes that approximately half of the 2% ATP allocation funds two major Los Angeles River projects ATP projects earmarked in the draft Expenditure Plan as well as a portion of the costs of ATP projects submitted by the COGs and included in the draft Expenditure Plan. The 1% or \$1.2 billion Regional ATP fund allocation can leverage and enhance local investments being made through the Local Return allocation from Proposition A, Proposition C, and Measure R. Over the last five years, \$443.8 million of Local Return funds (Prop A, Prop C, & Measure R) have been spent on Active Transportation. The Local Return of the Potential Ballot Measure is intended to be eligible for municipal ATP projects.~~

Administration - 1.5%

Up to one and one-half percent (1.5%) of gross sales tax revenues may be appropriated by to Metro for administrative costs related to the measure. The magnitude of the projects to be delivered through the new Potential Ballot Measure require additional oversight, infrastructure, and other related resources, to ensure a timely and cost effective delivery. Examples of eligible costs are: audits and audit-related functions, development and adoption of criteria, guidelines, rules and regulations, administrative and procedural responsibilities, planning and feasibility studies, compliance monitoring, and other associated costs of administering the measure. In no case shall the gross sales tax revenues appropriated for such costs exceed more than one and one-half percent (1.5%) of the gross sales tax revenues in any one year.

Recommended 45-Year and 50-Year Plan Considerations

Included in the draft Plan for public comment will be a recommended 45 year plan option and 50 year plan option, to address major capital projects that cannot be fully built in the first 40 years. The 45 year option generates \$6 billion in current dollars (\$23 billion YOE) permits additional long term project needs to be included in the plan and considered for possible acceleration. For example, Crenshaw Line Northern Extension acceleration dollars and the High Desert Multi-Purpose Corridor which could connect Las Vegas and Victorville into the City of Palmdale, taking full advantage of the right-of-way preservation proposed as an early part of the draft Expenditure Plan. The 50 year option generates \$11 billion in current dollars (\$28 billion YOE) and permits additional projects such as, the proposed Eastside Gold Line Extension (2nd alignment) and the Purple Line Extension to Bundy. Other visionary projects could be considered in this scenario as well, such as the South Bay Congestion Relief from LAX to Long Beach. If 45-year or 50-year plans are selected, the final projects would be based on Board direction.

Benefits of Draft Expenditure Plan

The list of major highway and transit improvements included in the draft Expenditure Plan were analyzed using Geographic Information Systems (GIS) and Metro's Travel Demand Model to forecast the estimated mobility, accessibility and quality of life benefits for the package of projects.

The analysis estimated that the proposed major highway and transit projects funded through the draft Expenditure Plan would both ease congestion and improve mobility countywide. The model forecasts a 15 percent reduction in daily person hours of delay for roadway travel while reducing the daily hours of truck delay by 15 percent. Benefits for the transit system include forecasted boardings on high-capacity Metro transit (HRT, LRT and BRT) to increase by about 80 million additional transit boardings per year or 3.2 billion additional riders during the 40 year period. Additionally, this will increase transit mode shares currently at 7% to a projected 20-30%. The number of miles traveled by transit riders each day increases by 2.5 million with the projects included in the draft Expenditure Plan.

The major projects are estimated to improve accessibility by increasing access to high-capacity, fixed guideway transit by 28 percent (to over a million more residents) and access to transit dependent travelers by 42 percent. In addition, the projects are estimated to provide new high-capacity transit access to over 650,000 jobs, a 26% increase of jobs within a half mile of transit stations. The new plan will nearly double the mileage of existing fixed guideway transit. The major projects are estimated to reduce vehicle miles traveled (VMT) by nearly 5 million daily (regionwide), resulting in greenhouse gas (GHG) reductions of four percent.

Additional benefits of the Potential Ballot Measure are acceleration or expansion of existing LRTP projects. In the draft Expenditure Plan, LRTP transit and highway projects are accelerated or expanded as follows. Specifically, the transit projects include: the Westside Purple Line; the West Santa Ana Transit Corridor; the Sepulveda Pass Transit Corridor; Airport Metro Connector Station/Green Line Extension to LAX; and South Bay Green Line Extension to Torrance. Additionally, two highway projects that will be accelerated are: the Interstate 5 North Capacity Enhancements

(from State Route 14 to Lake Hughes Road); and State Route 71 (from Interstate 10 to Rio Rancho Road).

DETERMINATION OF SAFETY IMPACT

Releasing the Plan for public comment will not have any adverse safety impacts on employees and patrons.

FINANCIAL IMPACT

L RTP Revenue Assumptions

Metro's Long Range Transportation Program (LRTP) revenue assumptions include both Metro controlled revenues and other local, state, and federal discretionary revenues based upon Metro's historic and/or anticipated success in securing these funds. For the period from FY 2017 to 2040, all Metro controlled and federal New Starts discretionary revenues are assumed to be committed to existing and planned projects in the adopted 2009 LRTP and Measure R program. For the period FY 2041-FY 2057, on-going administration, operations of all transit projects in the adopted 2009 LRTP, and on-going and new Proposition A and Proposition C debt service, at cost growth rates similar to FY 2040, are assumed funded from the continuing sales tax revenues, fare revenues, State Transit Assistance funds, Federal transit formula funds, Federal Regional Surface Transportation Program formula, and other funds.

A successful ballot measure will improve Metro's ability proved expanded service, or at least to avoid funding related service cuts in the event of an economic downturn. This service reliability feature of the Potential Ballot Measure is extremely important to the transit dependent, who rely on Metro and do not have alternative means of transportation.

New Metro Controlled LRTP Revenues

Metro-controlled LRTP revenues are assumed to continue past the 2009 LRTP horizon of FY 2040. These revenues include Proposition A, Proposition C, and Transportation Development Act sales taxes; fare revenues; State Transit Assistance formula funds; State Transportation Improvement Program formula funds; Federal highway formula funds; and Federal transit formula funds. Growth rates assumed are modest for sales tax revenues and minimal for State and Federal funds. Fare revenue growth and cost controls are assumed to maintain a 33% fare recovery ratio. The schedules shown in Attachment A assume a reasonable level of borrowing (bonds) that will be modeled during the public review period and presented to the Metro Board of Directors as part of the final staff recommendation.

Cash and bond revenues available for new transit and highway capital projects and state of good repair are forecasted at \$23.5 15.4 billion for FY 2041-FY 2057 in year of expenditure dollars. IN 2015 dollars, this represents a value of approximately \$5.6 billion. This ~~\$23.5~~ 15.4 billion averages about \$900 million ~~\$1.38 billion~~ per year and consists of ~~\$8.7~~ 5.6 billion in Proposition C discretionary funds, ~~\$8.2~~ 5.6 billion in new Proposition C 25% transit-related highway funds bonds, ~~\$4.0 billion~~ 1.47 billion in new Proposition A 35% rail bonds funds, \$1.6 billion in regional State Regional Improvement

Program formula funds, and \$1.0 billion in regional Federal Congestion Mitigation and Air Quality (CMAQ) formula funds. Annual details are found in Attachment L below. As was done for Measure R, local agency contribution revenues of 3% of costs are assumed to help fund the package of new major transit projects. ~~Attachment L shows these revenue assumptions.~~

For the 11-year period of FY 2047-FY 2057, about \$400 million per year of Proposition A 35% bonding is assumed with debt service equaling about 20% of those sales tax revenues annually. For the entire 17-year period of FY 2041-FY 2057, an average of \$482 million per year of Proposition C 25% bonding is assumed with debt service equaling about 82% of those sales tax revenues annually.

New Discretionary Revenue Assumptions

The major new discretionary revenue assumptions over the 40-year Expenditure Plan period include State Cap-and-Trade, Federal New Starts (FY 2041-FY 2057), and Federal freight funds. Based on historic success in securing Federal New Starts funds, revenues of \$200 million per year for the period FY 2041-FY 2057, totaling \$3.4 billion, are also assumed to be available for new major transit capital projects. We assume that the New Starts funds would fund up to the maximum, which is 50% of a project's cost.

The State's Cap-and-Trade Program, which provides for the auction of emission allowances purchased by greenhouse gas emitters and deposits the proceeds in the Greenhouse Gas Reduction Fund (GGRF) for expenditure on greenhouse gas reducing projects, presents a significant opportunity to fund and accelerate the planned expansion of the public transit system in Los Angeles County as well as complementary Transit Oriented Communities (TOC) development, first/last mile connections, and goods movement enhancements.

In addition to non-capital project needs, a contingency strategy will be needed to handle fluctuations in project costs and revenue forecasts that will arise over a four decade planning horizon. A reliable strategy to make allowances for variations in revenue and cost uncertainties, contingencies, escalation and assumptions in debt service costs will be developed within the recommended sequencing plan and then incorporated as necessary in the recommended Expenditure Plan to support the potential ballot measure and LRTP update.

Innovative Finance

Metro will make every effort to accelerate, improve, and reduce the costs of projects that have the potential to be delivered using innovative financing strategies. Innovative finance includes the ability infuse private sector dollars into projects. This can work under a revenue-risk model, where the private sector return on investment is contingent on tolls, or an availability payment model where the return is based on scheduled payments and performance. Either way, a private sector financing role can substantially reduce our risk on major construction projects. Private sector financing is only appropriate under certain circumstances, but it can also be a way to bring innovation to a construction project by giving the contractor, designer, and operator a financial stake in the outcome. Our unsolicited proposal policy seeks to advance this idea by enabling the private sector to indicate where they might be able to add value. Under the new policy, private sector construction and finance interests may see projects in the LRTP where they can play an effective role, and submit a proposal

that could accelerate the timeline for these projects.

Impact to Budget

The recommendation will have no impact on the FY 2016 Budget as the necessary expenditures have already been included in the FY 2016 Budget.

ALTERNATIVES CONSIDERED

The Metro Board of Directors could suspend further public review of the draft Expenditure Plan or ask staff to return with an alternate program of projects. We do not recommend delaying this effort as there will not be ample time to seek public review and make any necessary revisions to the plan in order to meet the schedule if the Metro Board of Directors decide to pursue a potential ballot measure this year. Returning to the Metro Board of Directors at a later date with a draft Expenditure Plan compromises the schedule necessary to seek public review, finalize the Expenditure Plan and submit the potential ballot measure to the County Registrar for placement on the November 2016 ballot.

NEXT STEPS

Though staff proposes a final decision by the Metro Board of Directors on whether to support the agendizing of a November 2016 Ballot Measure in June 2016, the Metro Board must make a go/no go decision no later than the regularly scheduled meeting in July 2016 in order to ensure placement on the November 2016 ballot. The next steps in the LRTP and potential ballot measure framework are as follows:

Draft Ordinance Outline

The draft ordinance outline is shown in Attachment M. Several key issues need to be defined in the ordinance going forward including formal use of revenue definitions, maintenance of effort requirements, and oversight provisions. The use of revenue definitions will put in place restrictions on each part of the proposed Expenditure Plan sub-funds, like local return, transit capital, highway capital, state-of-good repair, regional rail, transit operating, rail operating, and paratransit categories. Maintenance of effort requirements are clearly defined in Proposition A, Proposition C, and Measure R, and are anticipated to be included in this potential ballot measure.

Taxpayers Oversight

Metro will incorporate strong accountability requirements to ensure funds are spent in accordance with the authorizing legislation. Past research conducted on sales tax measures have repeatedly found that residents want such requirements embedded in tax measures. Staff is developing oversight provisions that will be governed by the proposed measure ordinance and subsequent guidelines after reviewing accountability requirements from other transportation measures in California. Evaluating various approaches compared to the Measure R accountability effort provides Metro with an opportunity to build upon the agency's current oversight programs to ensure adequate oversight.

The Measure R Taxpayer Oversight provisions are implemented through a committee comprised of three retired state or federal judges. The Committee meets twice a year to review an independent audit of Measure R revenues and expenditures, including local return, and makes recommendations on proposed ordinance amendments and debt financing. The judges also consult with an advisory panel consisting of representatives from six transportation industry expertise areas. Staff plans to build on the solid foundation of the Measure R oversight provisions, which have received positive feedback, while proposing additional oversight responsibilities. These would include review of the budget and expenditures of each program funded by the proposed tax measure and an analysis of program spending consistent with the ordinance and expenditure plan. This review will also include an analysis of reasonableness of project cost, capital project cost increases, and effectiveness and efficiency of the program. Staff will also propose that the committee meet with the advisory panel on a quarterly basis.

Public Input and Outreach Process Summary

Upon release of the draft Expenditure Plan by the Metro Board, the roadmap to educate the public about the draft Expenditure Plan and provide opportunities for public input will occur through three main sectors of the community: Key Stakeholder Engagement, Public Engagement, and Media Engagement. The process will include elected officials' and key stakeholders' briefings; community meetings; a virtual community meeting; telephone town hall meetings; community group presentations; media briefings; online/digital engagement; and opportunities to provide comments through Metro website and social media channels. The input will be compiled and presented to the Board of Directors as another tool to assist the Board in its decision about whether to pursue a sales tax measure in November. See Attachment N for the whole plan.

Upcoming Public Opinion Research

A final round of research will be conducted in Spring 2016. Several focus groups will be held to ensure that information being developed to describe the draft Expenditure Plan and LRTP update is understood clearly. A public opinion survey will then be conducted as follow-up to the survey conducted in March 2015 to identify the current level of support for the proposed ballot measure. This information can be used to assist the Board in determining whether support is strong enough to warrant placing a measure on the November 2016 ballot.

ATTACHMENTS

Attachment A - Draft Expenditure Plan

Attachment B - Working Assumptions Framework

Attachment C - Performance Metrics Framework for Major Projects

Attachment D - Subregional Stakeholder Project Priorities

Attachment E - Comparison of Draft Expenditure Plan with Sub-Regional Planning Area Input and Cost Information

Attachment F - Performance Analysis Results: Modeled Projects

Attachment G - Performance Analysis Results: Non-modeled Attachment D Projects

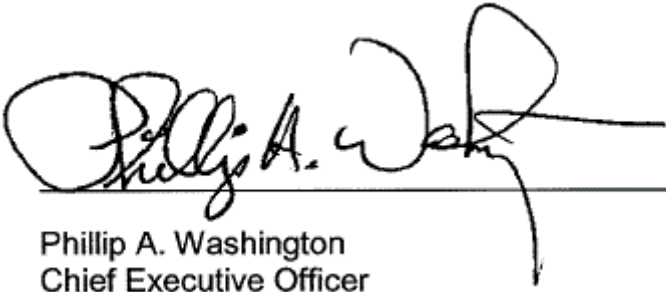
Attachment H - Project Descriptions

Attachment I - Systemwide Connectivity for Passengers and Goods

Attachment J - Operations and Other Programs
Attachment K - Regional Active Transportation Program
Attachment L - Revenue Assumptions/Updates from December 2015
Attachment M - Draft Ordinance Outline
Attachment N - Public Outreach Process

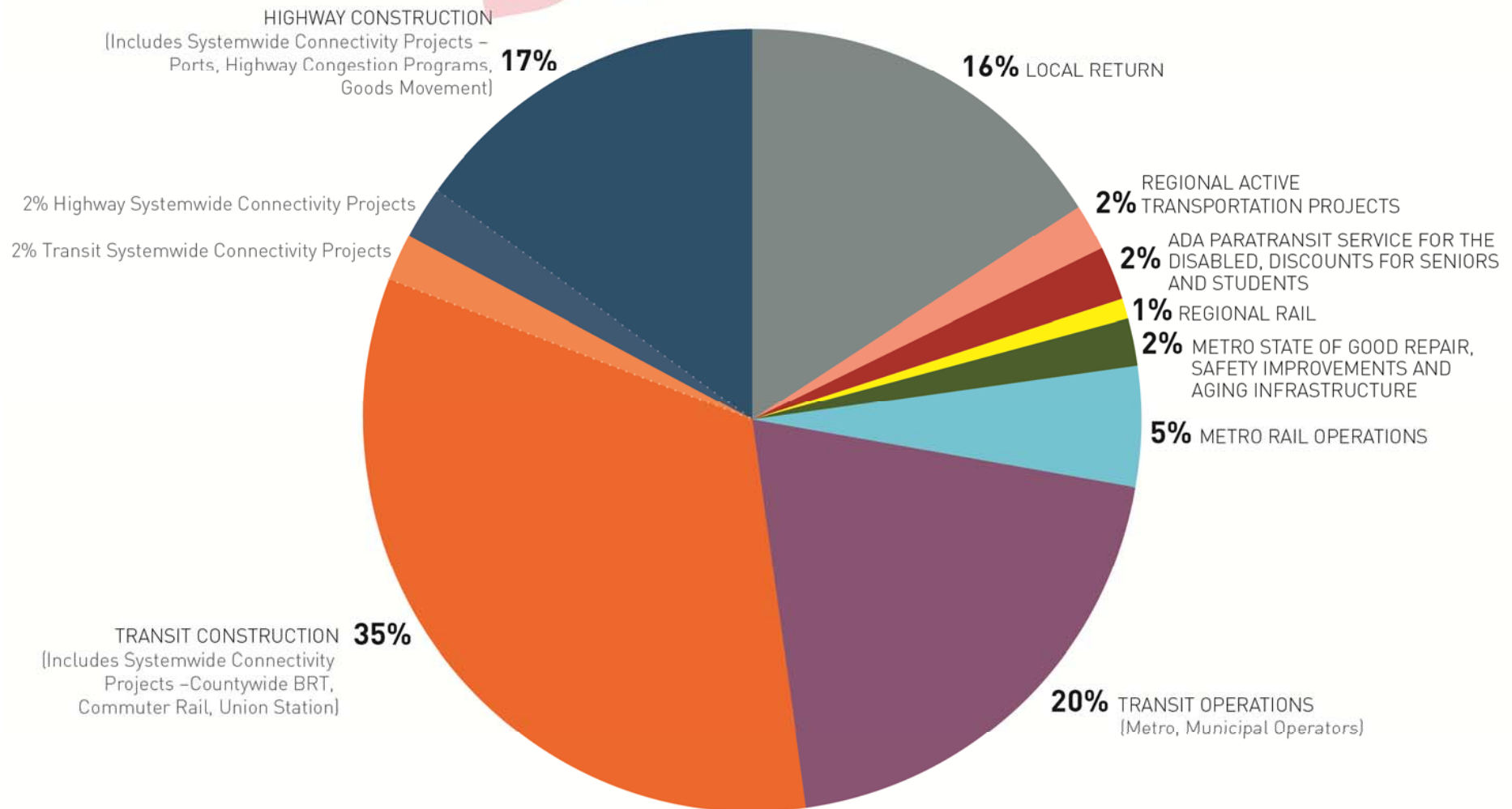
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Phillip A. Washington
Chief Executive Officer

Potential Ballot Measure Expenditure Plan



Proposed One-Half Cent Sales Tax for Transportation Outline of Expenditure Categories

**ATTACHMENT A
DRAFT**

40-Years: Fiscal Year (FY) 2018 - 2057, Escalated Dollars
(millions)

Subfund	Program	% of Sales Tax (net of Admin)	First Year Amount	First 15 Year Period	Second 15 Year Period	Final 10 Year Period	40-Year Amount*
Local Return	Local Return (Local Projects and Transit Services)	16%	\$ 136	\$ 2,610	\$ 7,480	\$ 9,090	\$ 19,180
Highway, Active Transportation, Complete Streets (Capital)	Highway Construction (includes 2% System Asset Projects - Ports Highway Congestion Programs, Goods Movement)	17%	\$ 144	\$ 3,420	\$ 8,100	\$ 8,810	\$ 20,400
	Metro Active Transportation Program (Bicycle, Pedestrian, Complete Streets)	2%	\$ 17	\$ 470	\$ 940	\$ 980	\$ 2,400
Transit, First/Last Mile (Capital)	Transit Construction (Includes 2% System Asset Projects - Airports and Transit Stations)	35%	\$ 296	\$ 12,140	\$ 10,096	\$ 19,665	\$ 41,900
	Metro State of Good Repair	2%	\$ 17	\$ 350	\$ 910	\$ 1,140	\$ 2,400
Transit Operating & Maintenance	Metro Rail Operations	5%	\$ 42	\$ 820	\$ 2,300	\$ 2,860	\$ 5,980
	Transit Operations (Metro & Municipal Providers)	20%	\$ 169	\$ 3,270	\$ 9,340	\$ 11,380	\$ 23,990
	ADA Paratransit for the disabled; Metro discounts for seniors and students	2%	\$ 17	\$ 350	\$ 960	\$ 1,090	\$ 2,400
	Regional Rail	1%	\$ 8	\$ 180	\$ 460	\$ 560	\$ 1,200
TOTAL PROGRAMS			\$ 847	\$ 23,610	\$ 40,586	\$ 55,575	\$ 119,850
1.5% for Administration		1.50%	\$ 13	\$ 354	\$ 609	\$ 834	\$ 1,800
GRAND TOTAL			\$ 860	\$ 23,964	\$ 41,195	\$ 56,409	\$ 121,650

* All totals are rounded; numbers presented in this document may not always add up to the totals provided.

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Potential Ballot Measure Expenditure Plan
for Public Review

ATTACHMENT A
Groundbreaking Sequence
(Exceptions Noted)

(2015 \$ in thousands)

For Reference Only	Project (Final Project to be Defined by the Environmental Process)	Notes	Approximate Schedule of Funds Available		Subregion*	2016 - 2057 LRTP / Other Funding 2015\$	PBM funding 2015\$	Most Recent Cost Estimate 2015\$**
			Ground- breaking Start Date	Expected Completion Date (3 year range)				
	All Major Projects Included in the Potential Ballot Measure			1 st yr of Range				
1	Airport Metro Connect 96th St. Station/Green Line Ext LAX ®	a	2018	2024	sc	\$233,984	\$337,716	\$581,000
2	Westside Purple Line Extension Section 3 ®	b	2018	2024	w	\$986,139	\$994,251	\$1,980,390
3	High Desert Corridor (HDC) Right-of-Way ®		2019	2021	nc	\$100,000	\$170,000	\$270,000
4	I-5 N Cap. Enhancements (SR-14 to Lake Hughes Rd) ®		2019	2023	nc	\$544,080	\$240,000	\$784,080
5	Gold Line Foothill Extension to Claremont ®	c	2019	2025	sg	\$78,000	\$1,019,000	\$1,097,000
6	BRT Connector Orange/Red Line to Gold Line		2020	2022	av	\$0	\$133,500	\$133,500
7	BRT Connector Orange/Red Line to Gold Line		2020	2022	sf	\$0	\$133,500	\$133,500
8	East SF Valley Transit Corridor Project ®	d	2021	2027	sf	\$520,500	\$810,500	\$1,331,000
9	Crenshaw/LAX Track Enhancement Project	e	2022	2024	sc	\$0	\$48,154	\$48,154
10	SR-71 Gap from I-10 to Mission Blvd.		2022	2026	sg	\$80,057	\$26,443	\$110,000
11	SR-71 Gap from Mission Blvd. to Rio Rancho Rd.		2022	2026	sg	\$165,000	-	\$165,000
12	LA River Waterway & System Bikepath		2023	2025	cc	\$0	\$365,000	\$365,000
13	Complete LA River Bikepath		2023	2025	sf	\$0	\$60,000	\$60,000
14	West Santa Ana Transit Corridor LRT Ph 1 ®	b,d	2023	2029	gc	\$500,000	\$535,000	\$1,035,000
15	Sepulveda Pass Transit Corridor (Ph 1) ®	b,f	2024	2026	sf	\$0	\$130,000	\$130,000
16	Sepulveda Pass Transit Corridor (Ph 1) ®	b,f	2024	2026	w	\$0	\$130,000	\$130,000
17	Vermont Transit Corridor		2024	2028	cc	\$400,000	\$25,000	\$425,000
18	Orange Line BRT Improvements		2024	2028	sf	\$0	\$286,000	\$286,000
19	SR-57/SR-60 Interchange Improvements	d	2025	2031	sg	\$565,000	\$205,000	\$770,000
20	I-710 South Corridor Project (Ph 1) ®	d,h	2026	2032	gc	\$150,000	\$250,000	\$400,000
21	I-105 Express Lane from I-405 to I-605		2027	2029	sb	\$0	\$175,000	\$175,000
22	Sepulveda Pass Transit Corridor (Ph 2) ®	b,f	2024	2033	sf	\$1,567,000	\$1,270,000	\$2,837,000
23	Sepulveda Pass Transit Corridor (Ph 2) ®	b,f	2024	2033	w	\$1,567,000	\$1,270,000	\$2,837,000
24	Gold Line Eastside Extension (One Alignment) ®	d	2029	2035	gc	\$957,000	\$543,000	\$1,500,000
25	Gold Line Eastside Extension (One Alignment) ®	d	2029	2035	sg	\$957,000	\$543,000	\$1,500,000
26	Green Line Extension to Crenshaw Blvd in Torrance ®	d,g	2031	2035	sb	\$153,500	\$737,500	\$891,000
27	I-710 South Corridor Project (Ph 2) ®	h	2032	2041	gc	\$658,500	\$250,000	\$908,500
28	West Santa Ana Transit Corridor LRT Ph 2 ®		2038	2047	gc	\$982,500	\$500,000	\$1,482,500
29	West Santa Ana Transit Corridor LRT Ph 2 ®		2038	2047	cc	\$1,082,500	\$400,000	\$1,482,500
30	I-5 Corridor Improvements (I-605 to I-710)		2041	2047	gc	\$46,060	\$1,059,000	\$1,105,060
31	I-405/I-110 Int. HOV Connect Ramps & Intrchnng Improv ®		2042	2044	sb	\$0	\$250,000	\$250,000
32	I-605/I-10 Interchange		2043	2047	sg	\$472,400	\$126,000	\$598,400
33	SR 60/I-605 Interchange HOV Direct Connectors		2043	2047	sg	\$360,600	\$130,000	\$490,600
34	I-110 Express Lane Ext South to I-405/I-110 Interchange		2044	2046	sb	\$228,500	\$51,500	\$280,000
35	I-405 South Bay Curve Improvements		2045	2047	sb	\$250,840	\$150,000	\$400,840
36	Sepulveda Pass Westwood to LAX (Ph 3)		2048	2057	sc	\$3,800,000	\$65,000	\$3,865,000
37	Crenshaw Northern Extension	i	2049	2055	cc	\$495,000	\$1,185,000	\$1,680,000
38	Crenshaw Northern Extension	i	2049	2055	w	\$0	\$560,000	\$560,000
39	Lincoln Blvd BRT		2050	2054	w	\$0	\$102,000	\$102,000
40	Orange Line Conversion to Light Rail		2051	2057	sf	\$1,067,000	\$362,000	\$1,429,000
42	Green Line Eastern Extension (Norwalk)		2051	2057	sc	\$770,000	\$0	\$770,000
42	City of San Fernando Bike Master Plan		2052	2054	sf	\$0	\$5,000	\$5,000
43	Historic Downtown Streetcar		2053	2057	cc	\$0	\$200,000	\$200,000
44	All Major Projects Included in the Potential Ballot Measure Subtotal					\$19,738,160	\$15,833,064	\$35,584,024

Footnotes on following page.

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Potential Ballot Measure Expenditure Plan
for Public Review

ATTACHMENT A
Groundbreaking Sequence
(Exceptions Noted)

(2015 \$ in thousands)

For Reference Only	Project (Final Project to be Defined by the Environmental Process)	Notes	Approximate Schedule of Funds Available		Subregion*	2016 - 2057 LRTP / Other Funding 2015\$	PBM funding 2015\$	Most Recent Cost Estimate 2015\$**
			Ground- breaking Start Date	Expected Completion Date (3 year range)				
45	Multi-Year Subregional Programs							
46	Metro Active Transport, Transit 1st/Last Mile Program	k	2018	2057	sc	\$0	\$600,000	\$600,000
47	Visionary Project Seed Funding		2018	2057	sc	\$0	\$20,000	\$20,000
48	Street Car and Circulator Projects		2018	2022	sc	\$0	\$35,000	\$35,000
49	Active Transportation 1st/Last Mile Connections Prog.		2018	2057	w	\$0	\$361,000	\$361,000
50	Active Transportation Program		2018	2057	nc	\$0	\$264,000	\$264,000
51	Active Transportation Program		2018	2057	gc	\$0	TBD	TBD
52	Active Transportation Program (Including Greenway Proj.)		2018	2057	sg	\$0	\$231,000	\$231,000
53	Active Transportation, 1st/Last Mile, & Mobility Hubs		2018	2057	cc	\$0	\$215,000	\$215,000
54	Active Transportation, Transit, and Tech. Program		2018	2057	lvm	\$0	\$32,000	\$32,000
55	Highway Efficiency Program		2018	2057	lvm	\$0	\$133,000	\$133,000
56	Bus System Improvement Program		2018	2057	sg	\$0	\$55,000	\$55,000
57	First/Last Mile and Complete Streets		2018	2057	sg	\$0	\$198,000	\$198,000
58	Highway Demand Based Prog. (HOV Ext. & Connect.)		2018	2057	sg	\$0	\$231,000	\$231,000
59	I-605 Corridor "Hot Spot" Interchange Improvements ®		2018	2057	gc	\$240,000	\$1,000,000	\$1,240,000
60	Modal Connectivity and Complete Streets Projects		2018	2057	av	\$0	\$202,000	\$202,000
61	South Bay Highway Operational Improvements		2018	2057	sb	\$600,000	\$500,000	\$1,100,000
62	Transit Program		2018	2057	nc	\$500,000	\$88,000	\$588,000
63	Transit Projects		2018	2057	av	\$0	\$257,100	\$257,100
64	Transportation System and Mobility Improve. Program		2018	2057	sb	\$0	\$350,000	\$350,000
65	Countywide BRT Projects Ph 1 (All Subregions)	i	2020	2022	sc	\$0	\$50,000	\$50,000
66	Countywide BRT Projects Ph 2 (All Subregions)	i	2030	2032	sc	\$0	\$50,000	\$50,000
67	Active Transportation Projects		2033	2057	av	\$0	\$136,500	\$136,500
68	Los Angeles Safe Routes to School Initiative		2033	2057	cc	\$0	\$250,000	\$250,000
69	Multimodal Connectivity Program		2033	2057	nc	\$0	\$239,000	\$239,000
70	Countywide BRT Projects Ph 3 (All Subregions)	i	2040	2042	sc	\$0	\$50,000	\$50,000
71	Arterial Program		2048	2057	nc	\$0	\$726,130	\$726,130
72	BRT and 1st/Last Mile Solutions e.g. DASH		2048	2057	cc	\$0	\$250,000	\$250,000
73	Freeway Interchange and Operational Improvements		2048	2057	cc	\$0	\$195,000	\$195,000
74	Goods Movement (Improvements & RR Xing Elim.)		2048	2057	sg	\$0	\$33,000	\$33,000
75	Goods Movement Program		2048	2057	nc	\$0	\$104,000	\$104,000
76	Goods Movement Projects		2048	2057	av	\$0	\$81,700	\$81,700
77	Highway Efficiency Program		2048	2057	nc	\$0	\$128,870	\$128,870
78	Highway Efficiency Program		2048	2057	sg	\$0	\$534,000	\$534,000
79	Highway Efficiency, Noise Mitig. and Arterial Projects		2048	2057	av	\$0	\$602,800	\$602,800
80	ITS/Technology Program (Advanced Signal Tech.)		2048	2057	sg	\$0	\$66,000	\$66,000
81	LA Streetscape Enhance. & Great Streets Program		2048	2057	cc	\$0	\$450,000	\$450,000
82	Modal Connectivity Program		2048	2057	lvm	\$0	\$68,000	\$68,000
83	Public Transit State of Good Repair Program		2048	2057	cc	\$0	\$402,000	\$402,000
84	Traffic Congestion Relief and Improvement Program		2048	2057	lvm	\$0	\$63,000	\$63,000
85	Traffic Congestion Relief/Signal Synchronization		2048	2057	cc	\$0	\$50,000	\$50,000
86	Arroyo Verdugo Projects to be Determined		2048	2057	av	\$0	\$217,400	\$217,400
87	Countywide BRT Projects Ph 4 (All Subregions)	i	2050	2052	sc	\$0	\$100,000	\$100,000
88	Countywide BRT Projects Ph 5 (All Subregions)	i	2060	2062	sc	\$0	\$100,000	\$100,000
89	Multi-Year Subregional Programs Subtotal					\$1,340,000	\$9,719,500	\$11,059,500
90	GRAND TOTAL					\$21,078,160	\$25,552,564	\$46,643,524

- a. Interface station to LAX sponsored Automated People Mover includes an extended Green Line Terminus and a consolidated bus interface for 13 Metro and Municipal bus lines. Bicycle, passenger, and other amenities are also included. Funding does not include prior year costs.
- b. Project acceleration based on high performance.
- c. Identified as a priority per the Metro Board Motion in October 2009.
- d. Project funded on LRTP schedule, per Dec. 2015 Board Policy.
- e. Federally-approved environmental document requires these enhancements when funds become available.
- f. Sepulveda Pass Ph. 1 from Orange Line/Van Nuys to Westwood. Includes early delivery of highway ExpressLane/Busway.
- g. Green Line to Redondo (initial phase) is funded from 2029 to 2036 in the LRTP. This initial Phase costs are not shown in the table above.
- h. I-710 So. Project assumes an additional \$2.8 billion in goods movement fees; not shown here with the cost or revenues for the project.
- i. While these Council of Government descriptions vary, both are included in the "Crenshaw Northern Extension Project".
- j. Initial phases funded in performance order, second phase funded later.
- k. Lump sum would be provided in the first 5 years for initial capital costs only. Project sponsors responsible for ongoing operations & maintenance.
- l. Acceleration of Lincoln BRT project eligible as Countywide BRT Program. Any funds freed up from accelerations returns to Countywide BRT Program.

* Subregion Abbreviations:

sc = System Connectivity Projects
 av = Arroyo Verdugo
 lvm = Las Virgenes Malibu
 cc = Central City Area
 sg = San Gabriel Valley

nc = North County
 sb = South Bay
 w = Westside
 gc = Gateway Cities
 sf = San Fernando Valley

® Indicates Measure R-related Projects

** The most recent cost estimate equals the accelerated cost.

3/17/2016

(\$ in thousands)

for reference only - not
priority order

Sub-fund	Potential Project in Alphabetical Order by Category (project definition depends on final environmental process)	Subregion	Cost Estimate in Year of Expenditure	Cost Estimate	Potential Ballot Measure Funding FY 2015\$	Other Funding (LRTP) FY15\$	Ground- Breaking Start Date	Expected Ribbon Cutting	
Highway Capital Projects			Escalated \$	2015\$				1 st Year	3 rd Year
	Highway Projects: Including Express Lanes, HOV Connectors, Highway Interchanges and Major Street Programs								
	Arterial Program	nc	\$1,949,393	\$726,130	\$726,130	\$0	2048	10 Year Program	
	Crenshaw/LAX Track Enhancement Project	sc	\$54,213	\$48,154	\$48,154	\$0	2022	2024 - 2026	
	First/Last Mile and Complete Streets	sg	\$390,821	\$198,000	\$198,000	\$0	2018	40 Year Program	
	Freeway Interchange and Operational Improvements	cc	\$523,503	\$195,000	\$195,000	\$0	2048	10 Year Program	
	High Desert Corridor (HDC) Right-of-Way ®	nc	\$278,173	\$270,000	\$170,000	\$100,000	2019	2021 - 2023	
	Highway Demand Based Prog. (HOV Ext. & Connect.)	sg	\$455,958	\$231,000	\$231,000	\$0	2018	40 Year Program	
	Highway Efficiency Program	nc	\$345,969	\$128,870	\$128,870	\$0	2048	10 Year Program	
	Highway Efficiency Program	sg	\$1,433,594	\$534,000	\$534,000	\$0	2048	10 Year Program	
	Highway Efficiency Program	lvm	\$262,521	\$133,000	\$133,000	\$0	2018	40 Year Program	
	Highway Efficiency, Noise Mitig. and Arterial Projects	av	\$1,618,297	\$602,800	\$602,800	\$0	2048	40 Year Program	
	I-105 Express Lane from I-405 to I-605	sb	\$228,395	\$175,000	\$175,000	\$0	2027	2029 - 2031	
	I-110 Express Lane Ext South to I-405/I-110 Interchange	sb	\$604,004	\$280,000	\$51,500	\$228,500	2044	2046 - 2048	
	I-405 South Bay Curve Improvements	sb	\$890,615	\$400,840	\$150,000	\$250,840	2045	2047 - 2049	
	I-405/I-110 Int. HOV Connect Ramps & Intrchnng Improv ®	sb	\$508,332	\$250,000	\$250,000	\$0	2042	2044 - 2046	
	I-5 Corridor Improvements (I-605 to I-710)	gc	\$2,374,316	\$1,105,060	\$1,059,000	\$46,060	2041	2047 - 2049	
	I-5 N Cap. Enhancements (SR-14 to Lake Hughes Rd) ®	nc	\$839,762	\$784,080	\$240,000	\$544,080	2019	2023 - 2025	
	I-605 Corridor "Hot Spot" Interchange Improvements ®	gc	\$2,447,568	\$1,240,000	\$1,000,000	\$240,000	2018	40 Year Program	
	I-605/I-10 Interchange	sg	\$1,302,809	\$598,400	\$126,000	\$472,400	2043	2047 - 2049	
	I-710 South Corridor Project (Ph 1) ®	gc	\$551,638	\$400,000	\$250,000	\$150,000	2026	2032 - 2034	
	I-710 South Corridor Project (Ph 2) ®	gc	\$1,519,897	\$908,500	\$250,000	\$658,500	2032	2041 - 2043	
	ITS/Technology Program (Advanced Signal Tech.)	sg	\$177,186	\$66,000	\$66,000	\$0	2048	10 Year Program	
	LA Streetscape Enhance. & Great Streets Program	cc	\$1,208,085	\$450,000	\$450,000	\$0	2048	10 Year Program	
	Modal Connectivity and Complete Streets Projects	av	\$398,717	\$202,000	\$202,000	\$0	2018	40 Year Program	
	Modal Connectivity Program	lvm	\$190,179	\$68,000	\$68,000	\$0	2048	10 Year Program	
	South Bay Highway Operational Improvements	sb	\$2,171,229	\$1,100,000	\$500,000	\$600,000	2018	40 Year Program	
	SR 60/I-605 Interchange HOV Direct Connectors	sg	\$1,068,112	\$490,600	\$130,000	\$360,600	2043	2047 - 2049	
	SR-57/SR-60 Interchange Improvements	sg	\$1,030,974	\$770,000	\$205,000	\$565,000	2025	2031 - 2033	
	SR-71 Gap from I-10 to Mission Blvd.	sg	\$93,693	\$110,000	\$26,443	\$83,557	2022	2026 - 2028	
	SR-71 Gap from Mission Blvd. to Rio Rancho Rd.	sg	\$295,897	\$165,000	\$0	\$165,000	2022	2026 - 2028	
	Traffic Congestion Relief and Improvement Program	lvm	\$169,132	\$63,000	\$63,000	\$0	2048	10 Year Program	
	Traffic Congestion Relief/Signal Synchronization	cc	\$134,232	\$50,000	\$50,000	\$0	2048	10 Year Program	
	Arroyo Verdugo Projects to be Determined	av	\$583,639	\$217,400	\$217,400	\$0	2048	10 Year Program	
	Subtotal Highway Capital Projects:			\$26,100,856	\$12,960,834	\$8,496,297	\$4,464,537		

Proposed One-Half Cent Sales Tax for Transportation: Expenditure Plan
40 Years, Fiscal Year (FY) 2017 - 2057

(\$ in thousands)

for reference only - not
priority order

Sub-fund	Potential Project in Alphabetical Order by Category (project definition depends on final environmental process)	Subregion	Cost Estimate in Year of Expenditure	Cost Estimate	Potential Ballot Measure Funding FY 2015\$	Other Funding (LRTP) FY15\$	Ground- Breaking Start Date	Expected Ribbon Cutting	
			Escalated \$	2015\$				1 st Year	3 rd Year
Transit Projects: New Rail and/or Bus Rapid Transit Capital Projects.									
33	Airport Metro Connect 96th St. Station/Green Line Ext LAX ®	sc	\$634,582	\$581,000	\$337,716	\$243,284	2018	2024 - 2026	
34	BRT and 1st/Last Mile Solutions e.g. DASH	cc	\$699,189	\$250,000	\$250,000	\$0	2048	10 Year Program	
35	BRT Connector Orange/Red Line to Gold Line	av	\$141,671	\$133,500	\$133,500	\$0	2020	2022 - 2024	
36	BRT Connector Orange/Red Line to Gold Line	sf	\$141,671	\$133,500	\$133,500	\$0	2020	2022 - 2024	
37	Bus System Improvement Program	sg	\$108,561	\$55,000	\$55,000	\$0	2018	40 Year Program	
38	Countywide BRT Projects Ph 1 (All Subregions)	sc	\$53,060	\$50,000	\$50,000	\$0	2020	2022 - 2024	
39	Countywide BRT Projects Ph 2 (All Subregions)	sc	\$71,309	\$50,000	\$50,000	\$0	2030	2032 - 2034	
40	Countywide BRT Projects Ph 3 (All Subregions)	sc	\$95,833	\$50,000	\$50,000	\$0	2040	2042 - 2044	
41	Countywide BRT Projects Ph 4 (All Subregions)	sc	\$257,583	\$100,000	\$100,000	\$0	2050	2052 - 2054	
42	Countywide BRT Projects Ph 5 (All Subregions)	sc	\$346,170	\$100,000	\$100,000	\$0	2060	2062 - 2064	
43	Crenshaw Northern Extension	w	\$1,527,532	\$560,000	\$560,000	\$0	2049	2055 - 2057	
44	Crenshaw Northern Extension	cc	\$4,582,596	\$1,680,000	\$1,185,000	\$495,000	2049	2055 - 2057	
45	East SF Valley Transit Corridor Project ®	sf	\$1,586,858	\$1,331,000	\$810,500	\$520,500	2021	2027 - 2029	
46	Gold Line Eastside Extension (One Alignment) ®	gc	\$2,265,421	\$1,500,000	\$543,000	\$957,000	2029	2035 - 2037	
47	Gold Line Eastside Extension (One Alignment) ®	sg	\$2,265,421	\$1,500,000	\$543,000	\$957,000	2029	2035 - 2037	
48	Goods Movement (Improvements & RR Xing Elim.)	sg	\$92,293	\$33,000	\$33,000	\$0	2048	10 Year Program	
49	Goods Movement Program	nc	\$290,863	\$104,000	\$104,000	\$0	2048	10 Year Program	
50	Goods Movement Projects	av	\$228,495	\$81,700	\$81,700	\$0	2048	10 Year Program	
51	Green Line Eastern Extension (Norwalk)	sc	\$2,228,268	\$770,000	\$0	\$770,000	2051	2057 - 2059	
52	Green Line Extension to Crenshaw Blvd in Torrance ®	sb	\$1,366,445	\$891,000	\$737,500	\$153,500	2031	2035 - 2037	
53	Historic Downtown Streetcar	cc	\$587,710	\$200,000	\$200,000	\$0	2053	2057 - 2059	
54	Lincoln Blvd BRT	w	\$274,298	\$102,000	\$102,000	\$0	2050	2054 - 2056	
55	Gold Line Foothill Extension to Claremont ®	sg	\$1,145,143	\$1,097,000	\$1,019,000	\$78,000	2019	2025 - 2027	
56	Multimodal Connectivity Program	nc	\$527,214	\$239,000	\$239,000	\$0	2033	25 Year Program	
57	Orange Line BRT Improvements	sf	\$356,632	\$286,000	\$286,000	\$0	2024	2028 - 2030	
58	Orange Line Conversion to Light Rail	sf	\$4,135,318	\$1,429,000	\$362,000	\$1,067,000	2051	2057 - 2059	
59	Public Transit State of Good Repair Program	cc	\$1,124,296	\$402,000	\$402,000	\$0	2048	10 Year Program	
60	Sepulveda Pass Transit Corridor (Ph 1) ®	sf	\$155,272	\$130,000	\$130,000	\$0	2024	2026 - 2028	
61	Sepulveda Pass Transit Corridor (Ph 1) ®	w	\$155,272	\$130,000	\$130,000	\$0	2024	2026 - 2028	
62	Sepulveda Pass Transit Corridor (Ph 2) ®	sf	\$4,058,470	\$2,837,000	\$1,270,000	\$1,567,000	2024	2033 - 2035	
63	Sepulveda Pass Transit Corridor (Ph 2) ®	w	\$4,058,470	\$2,837,000	\$1,270,000	\$1,567,000	2024	2033 - 2035	
64	Sepulveda Pass Westwood to LAX (Ph 3)	sc	\$10,627,675	\$3,865,000	\$65,000	\$3,800,000	2048	2057 - 2059	
65	Street Car and Circulator Projects	sc	\$36,602	\$35,000	\$35,000	\$0	2018	2022 - 2024	
66	Transit Program	nc	\$1,160,621	\$588,000	\$88,000	\$500,000	2018	40 Year Program	
67	Transit Projects	av	\$507,476	\$257,100	\$257,100	\$0	2018	40 Year Program	
68	Transportation System and Mobility Improve. Program	sb	\$690,846	\$350,000	\$350,000	\$0	2018	40 Year Program	
69	Vermont Transit Corridor	cc	\$529,960	\$425,000	\$25,000	\$400,000	2024	2028 - 2030	
70	Visionary Project Seed Funding	sc	\$39,477	\$20,000	\$20,000	\$0	2018	40 Year Program	
71	West Santa Ana Transit Corridor LRT Ph 1 ®	gc	\$1,309,106	\$1,035,000	\$535,000	\$500,000	2023	2029 - 2031	
72	West Santa Ana Transit Corridor LRT Ph 2 ®	gc	\$3,085,156	\$1,482,500	\$500,000	\$982,500	2038	2047 - 2049	
73	West Santa Ana Transit Corridor LRT Ph 2 ®	cc	\$3,085,156	\$1,482,500	\$400,000	\$1,082,500	2038	2047 - 2049	
74	Westside Purple Line Extension Section 3 ®	w	\$1,756,637	\$2,328,000	\$1,980,390	\$994,251	\$986,139	2018	2024 - 2026
Subtotal Transit Capital:			\$58,390,630 \$58,961,992	\$31,163,190	\$14,536,767	\$16,626,423			

Proposed One-Half Cent Sales Tax for Transportation: Expenditure Plan
40 Years, Fiscal Year (FY) 2017 - 2057

(\$ in thousands)

for reference
only - not

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Active Transportation Related Highway Capital and/or
Transit Capital Subfunds

Sub-fund	Potential Project in Alphabetical Order by Category (project definition depends on final environmental process)	Subregion	Cost Estimate in Year of Expenditure	Cost Estimate	Potential Ballot Measure Funding FY 2015\$	Other Funding (LRTP) FY15\$	Ground- Breaking Start Date	Expected Ribbon Cutting
			Escalated \$	2015\$			1 st Year	3 rd Year
Active Highway and Transit Projects: Bicycle, Pedestrian, and Other Active Transportation Programs								
	Active Transportation 1st/Last Mile Connections Prog.	w	\$712,558	\$361,000	\$361,000	\$0	2018	40 Year Program
	Active Transportation Program	gc	\$0	TBD	TBD	\$0	2018	40 Year Program
	Active Transportation Program	nc	\$521,095	\$264,000	\$264,000	\$0	2018	40 Year Program
	Active Transportation Program (Including Greenway Proj.)	sg	\$455,958	\$231,000	\$231,000	\$0	2018	40 Year Program
	Active Transportation Projects	av	\$301,108	\$136,500	\$136,500	\$0	2033	25 Year Program
	Active Transportation, 1st/Last Mile, & Mobility Hubs	cc	\$424,377	\$215,000	\$215,000	\$0	2018	40 Year Program
	Active Transportation, Transit, and Tech. Program	lvm	\$63,163	\$32,000	\$32,000	\$0	2018	40 Year Program
	City of San Fernando Bike Master Plan	sf	\$13,663	\$5,000	\$5,000	\$0	2052	2054 - 2056
	Complete LA River Bikepath	sf	\$69,575	\$60,000	\$60,000	\$0	2023	2025 - 2027
	LA River Waterway & System Bikepath	cc	\$423,246	\$365,000	\$365,000	\$0	2023	2025 - 2027
	Los Angeles Safe Routes to School Initiative	cc	\$551,479	\$250,000	\$250,000	\$0	2033	25 Year Program
	Metro Active Transport, Transit 1st/Last Mile Program	sc	\$1,184,307	\$600,000	\$600,000	\$0	2018	40 Year Program
Subtotal Active Transport. Highway and Transit:			\$4,720,528	\$2,519,500	\$2,519,500	\$0		
	Total (FY2018 - FY2057)		\$89,212,014 \$89,785,003	\$46,644,969	\$25,554,008	\$21,090,960		

Long Range Transportation Plan and Potential Ballot Measure Framework Working Assumptions

Mobility Matrices/Bottoms-Up Process

Through various correspondences, meetings, and actions, the Metro Board directed that a proposed ballot measure follow a “bottoms-up” process that began with the Mobility Matrix process. The Mobility Matrices, as directed by the Board in February 2014, were completed in collaboration with the sub-regions and received by the Board in April 2015. The work began with an inventory of projects that was drawn from prior planning processes, such as the LRTP Strategic (unconstrained) Plan, but went further to identify any new needs not identified previously. In January 2015, the Metro Board also created a Regional Facilities category that includes Burbank Bob Hope Airport, LAX, Long Beach Airport, Palmdale Airport, the Ports of Long Beach and Los Angeles, and Union Station. Continuing discussions are being held with Regional Facilities representatives and other Stakeholders on the appropriate role for Metro in addressing the presence of these facilities within Los Angeles County. In the end, this process identified over 2,300 projects totaling over \$273 billion in 2015 dollars.

Concurrent with the work of the sub-regional and regional facilities groups, staff worked closely with other stakeholder groups described above to determine their priorities and policy considerations. Metro executives attended several productive meetings with coalitions of leadership representatives from environmental, active transportation, business, and disadvantaged community organizations. These leaders jointly expressed significant support for a potential ballot measure, if it properly balances their mobility, economic development, and environmental justice concerns. In December 2015, the Board adopted performance metrics framework for analysis of proposed projects.

Performance Based Planning Improves Systemwide Results

The evaluation process for the elements of the Plan above was intended to determine whether to include and how to sequence new projects to be added to the plan relative to other new projects. In addition, the Performance Metrics were used to guide recommendations regarding the potential acceleration of some Measure R projects already in the LRTP relative to other Measure R projects. The Metro Board of Directors also stipulated that these acceleration recommendations be considered by staff only to the extent that other existing LRTP projects remain on their current LRTP funding schedules and no later. The intent is to prevent any existing LRTP project delays, while at the same time enabling the possible acceleration of highly beneficial major projects.

Subregional Input on Project Priorities

As of September 1, 2015, Metro received the project priority and policy input from the Sub-Regional Planning Areas. Attachments D contains draft Stakeholder Input project lists that

staff has synthesized in order to summarize the subregional input. Attachment D completed one phase of the multi-phase stakeholder and public input process, except for the Westside Cities Council of Governments (COG). The Westside Cities COG submitted an unconstrained list of transportation priorities December 1, 2015. Attachment D now reflects that unconstrained request along with the amount requested in excess of their target. The staff recommendation is to remain constrained to no more than the working assumption target provided to the Westside Cities COG.

The subregional targets, as well as other working assumptions for the Ballot Measure framework that were presented to the Board in December 2015 include the following:

Augment, Extend, and Sunset Assumptions

The 2017 LRTP is currently assumed to cover the time period from 2017 – 2057 (forty years) and incorporate projects funded by the Metro Board in the 2009 LRTP that sunsets in the year 2039 with Measure R. The three principle alternatives to this assumption revolve around these decisions: extend the existing tax or not; augment the existing tax or not; and place a sunset on the new tax or not.

SB 767 (de León) provides the Metro Board maximum flexibility for all three of these alternatives. For example, the Metro Board could alternatively elect to propose an extension only, like Measure J, or it could elect to propose only an increase, without an extension, like Measure R. Finally, the Metro Board could change the sunset year of the tax (now tentatively assumed to be 2057) or eliminate it altogether, like Proposition A and Proposition C.

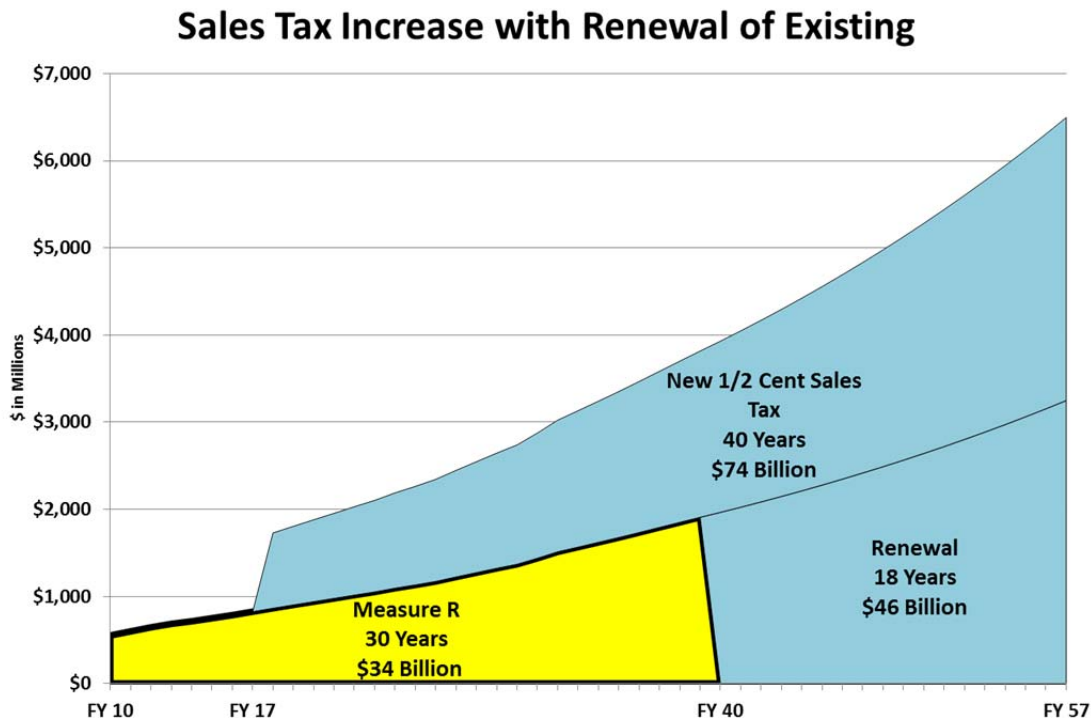
The following considerations led staff to the 2057 LRTP augment, extend, and sunset assumption, as follows:

- Unmet transportation infrastructure improvement needs: The Mobility Matrix process concluded that the entire inventory of needs for transportation capital improvements countywide was between \$157 and \$273 billion (in 2015 dollars). Shorter sunsets did not provide enough resources to develop the necessary level of consensus given this need;
- Market research indicates public support for transportation improvements: Past statistically reliable quantitative surveys conducted found no significant advantage to including a sunset clause in a Los Angeles County transportation sales tax ballot measure;
- Alameda County super majority: In November 2014, 70% of voters in Alameda County approved a ballot measure that augmented an existing ½ cent transportation sales tax while at the same time extending the original ½ cent transportation sales tax when it expired; and

- Subregional feedback included a desire to accelerate existing Measure R priority projects, which could be facilitated, in part by replacing the Measure R tax when it sunsets.

As a result of these considerations, the LRTP Framework assumes an augment and

Potential Ballot Measure Structure



extend approach similar to the Alameda County strategy, as shown in Table 1 below:

Augmenting Metro's existing transportation sales taxes for at least a 40 year period (through the year 2057) and also replacing an existing sales tax (Measure R) expiring in 2039 will provide the best opportunity to secure the necessary resources to address the public's desire for transportation improvements. Prior to making a final decision next year, the results of further market research will be provided to the Metro Board.

Project Cost Inflation and Sales Tax Revenue Growth Assumptions

The SB 767 (de León) expenditure plan requirement to schedule projects and show approximate completion dates raises the need to assume the impact of inflation over time on project and program costs. The initial project costs were requested in 2015 dollars and our cost inflation assumption is 3% per year.

The sales tax revenue growth assumption is 3.8% per year through 2040 and 3% thereafter. The difference between inflation cost growth and revenue growth through 2040 is primarily economic growth from the UCLA Anderson School Forecast of taxable sales

for Los Angeles County. Countywide Planning staff has found the UCLA Anderson School Forecast to be the best available for our long term planning needs.

Optimal Subregional Target Assumptions

The transparent process required by SB 767 (de León) and the bottoms-up process directed by the Metro Board required Countywide coordination of subregional revenue assumptions. To prioritize the enormous unmet transportation capital needs identified in the Mobility Matrix process, the subregions needed to know roughly what they could expect for capital improvements from the assumed augment and extend approach to the potential ballot measure.

Staff worked with the subregions to develop subregional revenue targets they could use for their priority setting process. To divide revenues into subregional targets, staff considered prior discussions with the subregions before developing a new approach. The purely current population and employment approach in Measure R led to later disagreements about extending that approach beyond 2039 in Measure J. Representatives from high population and/or employment growth areas felt the 2005 data used for Measure R was inequitable for taxes that would extend well beyond 2039, as proposed in Measure J.

To respond to these very valid concerns, staff interpolated Southern California Association of Governments 2008 population and 2035 employment information to establish 2017 and 2047 population and employment data points, as shown in Table 2:

Basis for Optimal Targets Vary by Subregion

Optimization Will Require Supplemental Non-Measure Funds by the L RTP Horizon Year							
40 Years		12.11% =				\$4.5 billion	
Subregion	Population		Employment		Pop/Emp, 2017/2047 Blend	Optimal Sub- Regional Share %	Δ%
	2017	2047	2017	2047			
Arroyo Verdugo	4.99%	4.79%	7.54%	7.82%	6.28%	7.82%	1.53%
Central Los Angeles	18.98%	19.12%	18.05%	18.01%	18.54%	19.12%	0.58%
Gateway Cities	19.84%	19.27%	16.63%	16.15%	17.97%	19.84%	1.87%
Las Virgenes/Malibu	0.85%	0.81%	1.38%	1.42%	1.12%	1.42%	0.30%
North Los Angeles County	7.42%	9.40%	5.42%	6.84%	7.27%	9.40%	2.13%
San Fernando Valley	14.66%	14.19%	14.21%	14.09%	14.29%	14.66%	0.37%
San Gabriel Valley	16.17%	16.14%	13.10%	12.76%	14.54%	16.17%	1.63%
South Bay	10.62%	10.13%	10.60%	10.16%	10.38%	10.62%	0.24%
Westside Cities	6.46%	6.14%	13.06%	12.75%	9.60%	13.06%	3.46%
Grand Total	100.00%	100.00%	100.00%	100.00%	100.00%	112.11%	12.11%

- Source Data: SCAG RTP12 Socio-economic Data (SED)
- 2017 and 2047 year data interpolated/extrapolated from SCAG 2008 and 2035 Projections. Back-up data available on request.
- In this version, Arroyo Verdugo consists of Burbank, La Crescenta-Montrose, La Canada Flintridge, Glendale, Pasadena and South Pasadena. That means both Pasadena and South Pasadena have been taken out of San Gabriel Valley to be included in Arroyo Verdugo subregion.

REVISION #3

As one can see from the data in Table 2, at least one subregion had a credible argument to use each of four differing basis for the targets. To avoid disagreements over the basis of the targets to be used, Metro staff offered a blended approach and an optimal approach. The blended approach added-up to 100%, but the optimal approach would not at 112%. This meant the optimal approach would require approximately \$4.5 billion in non-measure funds from existing taxes beyond the 2009 LRTP planning horizon of 2039, but within the new LRTP planning horizon of 2057. The subregion's all preferred the optimal target approach and Metro staff found it to be workable and concurred, making the optimal basis the consensus choice for the initial subregional priority setting exercise.

Before calculating the subregional revenue targets, assumptions were also needed about how much of the anticipated revenue from the augment and extend approach might be dedicated to multi-modal capital improvement purposes. Measure R had 55% dedicated to these purposes. It should be emphasized that for discussion purposes, staff assumed that roughly half of the new tax, about \$60 billion, could go for multi-modal capital improvement purposes, though we cautioned that this was ultimately a decision expressly reserved for the Metro Board when more information about all needs were known.

Roughly half the tax, about \$60 billion, is on a year of expenditure basis while the project cost data identified in the Mobility Matrices is based on current year dollars instead. This required that the value of the \$60 billion, again roughly half the tax, be deescalated before being made available to each subregion as a target on a current dollar basis. This enabled the subregions to directly compare their target to the project cost data they already possessed.

Table 3 shows the end result of the target setting consensus, subregional targets in deescalated dollars comparable to project cost data on the same basis:

Table 3, Consensus Subregional Targets:

Optimal Capital Improvement Targets

Year of Expenditure \$'s (includes inflation) vs. Current \$'s (excludes inflation)

Subregion	Optimal Sub-regional Share %	Pay-Go (YOE, No Bonds)			De-escalated to Current 2014 \$		
		Tier 1 - New 1/2 Cent 40 Years (FY 18-57)	Tier 2 - 1/2 Cent Renewal 18 Years (FY 39-57)	Total	Tier 1 - New 1/2 Cent 40 Years (FY 18-57)	Tier 2 - 1/2 Cent Renewal 18 Years (FY 39-57)	Total
Arroyo Verdugo	7.82%	\$ 2,889	\$ 1,772	\$ 4,661	\$ 1,125	\$ 506	\$ 1,631
Central Los Angeles	19.12%	\$ 7,062	\$ 4,332	\$ 11,394	\$ 2,750	\$ 1,237	\$ 3,987
Gateway Cities	19.84%	\$ 7,328	\$ 4,495	\$ 11,823	\$ 2,853	\$ 1,284	\$ 4,137
Las Virgenes/Malibu	1.42%	\$ 525	\$ 322	\$ 842	\$ 204	\$ 92	\$ 296
North LA County	9.40%	\$ 3,472	\$ 2,130	\$ 5,602	\$ 1,352	\$ 608	\$ 1,960
San Fernando Valley	14.66%	\$ 5,415	\$ 3,321	\$ 8,736	\$ 2,108	\$ 949	\$ 3,057
San Gabriel Valley	16.17%	\$ 5,973	\$ 3,663	\$ 9,636	\$ 2,325	\$ 1,046	\$ 3,371
South Bay Cities	10.62%	\$ 3,923	\$ 2,406	\$ 6,329	\$ 1,527	\$ 687	\$ 2,214
Westside	13.06%	\$ 4,824	\$ 2,959	\$ 7,783	\$ 1,878	\$ 845	\$ 2,723
Subregional Total	112.11%	\$ 41,411	\$ 25,399	\$ 66,810	\$ 16,123	\$ 7,255	\$ 23,378

- 1) Optimal targets are each subregion's share of the proposed revenues based on the greatest percentage of four possible measures: i) current population; ii) future population; iii) current employment; or, iv) future employment. The following table has more information.
- 2) Dollars in millions.
- 3) YOE = Year of Expenditure.
- 4) Santa Clarita included in North LA County.
- 5) Arroyo Verdugo includes Burbank, Glendale, Pasadena, So. Pasadena and La Canada-Flintridge, and La Crescenta-Montrose.

Financial Constraints

All projects submitted are anticipated to be included in the LRTP update, they must be categorized in one of two ways: financially constrained (funding plan) or financially unconstrained (no funding plan). These financial constraints are defined in federal planning regulations as revenues that can be reasonably expected to be available. The assumptions focus on revenues reasonably expected to be available. Tax and other revenues not yet authorized in law or by a policy body can only be included if based on reasonable assumptions, such as a pattern of periodic authorizations by the applicable legislature or policy making body. Aggressive assumptions that have no reasonable basis are not permitted by the Clean Air Act and other policy actions of the federal government. For transit agencies seeking New Starts funds, periodic reviews of financial capacity reasonableness are also required. These reviews can be stricter than regulatory reviews stemming from the federal planning regulations.

Cost Effectiveness

One key performance metric that is applied to all major highway and transit projects is an evaluation of costs versus benefits, with the benefits defined as those in the Performance

Metrics Framework. While a specific cost effectiveness measure is not shown in Attachment A, it will be calculated through the performance evaluation process using the other measures of project benefit. This explains why a specific weight is not assigned to cost effectiveness, even though it is important that all projects recommended through this process meet cost effectiveness criteria.

Attachment C

2017 LRTP Update Metro Board Adopted Performance Metrics Framework for Major Projects

Metro Theme	Goals and Objectives	System Performance Measures	Weight (%)	Highway Project Performance Measures	Transit Project Performance Measures
Mobility	<ul style="list-style-type: none"> • Relieve congestion • Increase travel by transit, bicycle, and pedestrians • Improve travel times • Improve system connectivity • Increase person throughput • Improve effectiveness & reliability for core riders • Address operating & life cycle costs • Extend life of facility & equipment 	<ul style="list-style-type: none"> • Reduced person hours of delay • Increased person throughput • Reduced single-occupant vehicle mode share • Increased annual boardings per mile • Increased annual hours of delay savings/mile • Improve roadway condition rating • Reduced portion of transit assets passed useful life 	45%	<ul style="list-style-type: none"> • Increased person throughput • Reduced person hours of delay² 	<ul style="list-style-type: none"> • Increased transit ridership • Increased person throughput • Improved travel time reliability • Improved service frequency
Economy	<ul style="list-style-type: none"> • Increase economic output • Support job creation & retention • Support goods movement • Invest in disadvantaged communities 	<ul style="list-style-type: none"> • Improved linkages to major employment/activity centers¹ • Increased number of jobs • Improved REMI Model economic benefit results • Reduced vehicle hours of delay for trucks • Dollars invested in transportation projects in disadvantaged communities 	12.5%	<ul style="list-style-type: none"> • Reduced truck vehicle hours of delay² • Improved job access • Dollars invested in transportation projects in disadvantaged communities 	<ul style="list-style-type: none"> • Increased transit oriented development • Improved job access • Dollars invested in transportation projects in disadvantaged communities

¹ Employment/activity centers include major employment centers, retail centers, education facilities, and healthcare facilities

² Reduced person and truck hours will serve as the best proxy available for person and truck travel time reliability for Highway project.

Attachment C

Metro Theme	Goals and Objectives	System Performance Measures	Weight (%)	Highway Project Performance Measures	Transit Project Performance Measures
Accessibility	<ul style="list-style-type: none"> • Increase population served by facility • Increase service to transit-dependent, cyclist, pedestrian populations including youth, seniors, and people with disabilities • Improve first-last mile connections • Utilize technology 	<ul style="list-style-type: none"> • Job accessibility by population subgroup • Mode choice by income quintile • SB 535 Disadvantaged Communities mapping (CalEnviroScreen) • Increased number of households with access to transit • Increased number of households with access to bicycle infrastructure • Increased number of households with disabled persons with access to transit • Increased access to parks and open space areas 	17.5%	<ul style="list-style-type: none"> • Increased number of disadvantaged population served • Improved access or system connectivity • <u>Improved access to parks and open space</u> • See note 3 	<ul style="list-style-type: none"> • Increased number of population served by frequent transit • Increased number of transit dependent households served • Improved system connectivity • Improved access to parks and open space • See note 3
Safety	<ul style="list-style-type: none"> • Reduce incidents • Improve personal safety 	<ul style="list-style-type: none"> • Fatalities by mode • Injuries by mode • Fatalities per capita 	12.5%	<ul style="list-style-type: none"> • High fatal and severe injury collision area addressed • Reduced safety conflicts 	<ul style="list-style-type: none"> • Improved transit system safety • High collision area addressed ⁴

³ Metro considered measuring “increased network connectivity for walking and biking” and found that while major highway and transit projects may offer accommodations for bicycling and walking, the improvements to bicycle and pedestrian system connectivity will likely be minimal, and impossible to compare effectiveness quantitatively from one project to another.

⁴ The Statewide Integrated Traffic Records System (SWITRS) is maintained by the California Highway Patrol (CHP), and does not log severe injuries and fatalities on the transit system.

Attachment C

Metro Theme	Goals and Objectives	System Performance Measures	Weight (%)	Highway Project Performance Measures	Transit Project Performance Measures
Sustainability & Quality of Life	<p>Improve environmental quality</p> <ul style="list-style-type: none"> • Reduce greenhouse gas (GHG) emissions • Reduce urban heat island effect • Reduce storm water runoff impacts • Reduce biological and habitat impact <p>Improve public health</p> <p>Improve quality of life</p> <ul style="list-style-type: none"> • Improve access to parks and recreation • Reduce noise impacts 	<p>Improve environmental quality</p> <ul style="list-style-type: none"> • Reduced VMT per capita • Reduced GHG per capita • Reduced impact on habitat preservation and open space areas <p>Improve public health</p> <ul style="list-style-type: none"> • Reduced EPA air quality conformity criteria pollutants • Increased bike, pedestrian, and transit trips <p>Improve quality of life</p>	12.5%	<p>Reduced impact on environment</p> <ul style="list-style-type: none"> • Reduced GHG emissions • Reduced urban heat island effect • Reduced storm water runoff impact • Reduced impact on habitat preservation and open space areas <p>Improved public health</p> <ul style="list-style-type: none"> • Support for active transportation <p>Improve quality of life</p> <ul style="list-style-type: none"> • Reduced noise impacts 	<p>Reduced impact on environment</p> <ul style="list-style-type: none"> • Reduced GHG emissions • Reduced VMT • Reduced urban heat island effect • Reduced storm water runoff impact • Reduced impact on habitat preservation and open space areas <p>Improved public health</p> <ul style="list-style-type: none"> • Support for active transportation <p>Improve quality of life</p> <ul style="list-style-type: none"> • Reduced noise impacts

Subregional Stakeholder Draft Project Priorities

ATTACHMENT D

(2015 \$ in thousands)

for reference
only - not
to be used

	Project	Notes	Cost Assumption	Draft Subregional Target (2015\$)	Difference
1	Arroyo Verdugo				
2	North Hollywood to Pasadena Bus Rapid Transit Corridor	a	\$ 283,000	\$ 283,000	\$ -
3	Active Transportation Projects		\$ 136,500	\$ 136,500	\$ -
4	Goods Movement Projects		\$ 81,700	\$ 81,700	\$ -
5	Highway Efficiency, Noise Mitigation and Arterial Projects		\$ 602,800	\$ 602,800	\$ -
6	Modal Connectivity and Complete Streets Projects		\$ 202,000	\$ 202,000	\$ -
7	Transit Projects		\$ 257,100	\$ 257,100	\$ -
8	Unprogrammed		\$ 67,900	\$ 67,900	\$ -
9	Arroyo Verdugo Subtotal		\$ 1,631,000	\$ 1,631,000	\$ -
10	San Fernando Valley				
11	City of San Fernando Bike Master Plan	b	\$ 5,000	\$ 5,000	
12	Complete LA River Bike Path Across the Valley	b	\$ 60,000	\$ 60,000	
13	Complete East Valley Transit Corridor Project as LRT		\$ 1,000,000	\$ 1,000,000	\$ -
14	North Hollywood to Pasadena Bus Rapid Transit Corridor	a	\$ 230,000	\$ 230,000	\$ -
15	Orange Line BRT Improvements		\$ 300,000	\$ 300,000	\$ -
16	Orange Line Conversion to Light Rail		\$ 1,400,000	\$ 62,000	\$ 1,338,000
17	Sepulveda Pass Transit Corridor	d	\$ 3,390,000	\$ 1,400,000	\$ 1,990,000
18	San Fernando Valley Subtotal		\$ 6,385,000	\$ 3,057,000	\$ 3,328,000
19	Westside				
20	Active Transportation and First/Last Mile Connections Prog.	c	\$ 700,000	\$ 700,000	\$ -
21	Crenshaw Line Extension to West Hollywood/Hollywood	e	\$ 580,000	\$ 1,400,000	\$ (820,000)
22	Lincoln Blvd BRT		\$ 307,000	\$ 307,000	\$ -
23	Purple Line Extension to Santa Monica	k	\$ 2,647,100	\$ 1,400,000	\$ 1,247,100
24	Sepulveda Pass Transit Corridor	d	\$ 3,390,000	\$ 1,400,000	\$ 1,990,000
	Westside Requested Subtotal		\$ 7,624,100	\$ 5,207,000	\$ 2,417,100
25	Amount Requested in Excess of Constrained Target		N/A	\$ (2,484,000)	\$ 2,484,000
26	Westside Subtotal		\$ 7,624,100	\$ 2,723,000	\$ 4,901,100
27	Central City Area				
28	Crenshaw/Purple Line/Vermont Corridor to West Hollywood/Hollywood	e	\$ 1,750,000	\$ 1,185,000	\$ 565,000
29	Vermont "Short Corridor" Subway from Wilshire to Exposition		\$ 1,700,000	\$ 425,000	\$ 1,275,000
30	Bus Rapid Transit and 1st/Last Mile Solutions such as DASH	b	\$ 250,000	\$ 250,000	\$ -
31	Freeway Interchange and Operational Improvements	b	\$ 195,000	\$ 195,000	\$ -
32	Historic Streetcar	b	\$ 200,000	\$ 200,000	\$ -
33	LA River Waterway & System Bikepath	b	\$ 365,000	\$ 365,000	\$ -
34	Los Angeles Safe Routes to School Initiative	b	\$ 250,000	\$ 250,000	\$ -
35	LA Streetscape Enhancements & Great Streets Program	b	\$ 450,000	\$ 450,000	\$ -
36	Active Transportation, 1st/Last Mile, & Mobility Hubs	b	\$ 215,000	\$ 215,000	\$ -
37	Traffic Congestion Relief/Signal Synchronization Program	b	\$ 50,000	\$ 50,000	\$ -
38	Public Transit State of Good Repair Program	b	\$ 402,000	\$ 402,000	\$ -
39	Central Cities Subtotal		\$ 5,827,000	\$ 3,987,000	\$ 1,840,000
40	North County				
41	Active Transportation Program	b	\$ 264,000	\$ 264,000	\$ -
42	Arterial Program	b	\$ 726,130	\$ 726,130	\$ -
43	Goods Movement Program	b	\$ 104,000	\$ 104,000	\$ -
44	High Desert Corridor (HDC) Right-of-Way		\$ 270,000	\$ 170,000	\$ 100,000
45	Highway Efficiency Program	b	\$ 128,870	\$ 128,870	\$ -
46	I-5 North Capacity Enhancements (Parker Rd. + 1.5 miles)		\$ 785,000	\$ 240,000	\$ 545,000
47	Multimodal Connectivity Program	b	\$ 239,000	\$ 239,000	\$ -
48	Transit Program	b	\$ 88,000	\$ 88,000	\$ -
49	North County Subtotal		\$ 2,605,000	\$ 1,960,000	\$ 645,000

Subregional Stakeholder Draft Project Priorities

ATTACHMENT D

(2015 \$ in thousands)

for reference
only - not
to be used

	Project	Notes	Cost Assumption	Draft Subregional Target (2015\$)	Difference
50	Las Virgenes-Malibu				
51	Active Transportation, Transit, and Technology Program	b	\$ 32,000	\$ 32,000	\$ -
52	Highway Efficiency Program	b	\$ 133,000	\$ 133,000	\$ -
53	Modal Connectivity Program	b	\$ 68,000	\$ 68,000	\$ -
54	Traffic Congestion Relief and Improvement Program	b	\$ 63,000	\$ 63,000	\$ -
55	Las Virgenes-Malibu Subtotal		\$ 296,000	\$ 296,000	\$ -
56	Gateway Cities				
57	Gold Line Eastside Extension Phase II - Washington Blvd.	f	\$ 1,500,000	\$ 543,000	\$ 957,000
58	Green Line Eastern Extension (Norwalk)		\$ 500,000	\$ 500,000	\$ -
59	I-5 Corridor Improvements (I-605 to I-710)		\$ 1,100,000	\$ 1,059,000	\$ 41,000
60	I-605 Corridor "Hot Spot" Interchange Improvements		\$ 850,000	\$ 300,000	\$ 550,000
61	I-710 South Corridor Project	g	\$ 4,000,000	\$ 500,000	\$ 3,500,000
62	SR 60/I-605 Interchange HOV Direct Connectors	h	\$ 260,000	\$ 200,000	\$ 60,000
63	West Santa Ana Branch (Eco Rapid Transit Project)		\$ 2,000,000	\$ 1,035,000	\$ 965,000
64	Active Transportation Program (ATP)	j		To be determined	
65	Gateway Cities Subtotal		\$ 10,210,000	\$ 4,137,000	\$ 6,073,000
66	San Gabriel Valley				
67	Active Transportation Program (Bicycle/Pedestrian Facilities)	b	\$ 231,000	\$ 231,000	\$ -
68	Bus System Improvement Program	b	\$ 55,000	\$ 55,000	\$ -
69	Goods Movement Program (Improvements & RR Xing Elim.)	b	\$ 33,000	\$ 33,000	\$ -
70	Highway Demand Based Program (HOV Ext. & Connectors)	b	\$ 231,000	\$ 231,000	\$ -
71	Highway Efficiency Program	b	\$ 534,000	\$ 534,000	\$ -
72	I-605/I-10 Interchange		\$ 126,000	\$ 126,000	\$ -
73	ITS/Technology Program (Advanced Signal Technology)	b	\$ 66,000	\$ 66,000	\$ -
74	Metro Gold Line Eastside Transit Corridor Phase II - SR-60	f	\$ 1,500,000	\$ 543,000	\$ 957,000
75	Metro Gold Line Foothill Light Rail Extension - Phase 2B	i	\$ 1,130,000	\$ 1,019,000	\$ 111,000
76	First/Last Mile and Complete Streets	b	\$ 198,000	\$ 198,000	\$ -
77	SR 60/I-605 Interchange	h	\$ 130,000	\$ 130,000	\$ -
78	SR-57/SR-60 Interchange Improvements		\$ 205,000	\$ 205,000	\$ -
79	San Gabriel Valley Subtotal		\$ 4,439,000	\$ 3,371,000	\$ 1,068,000
80	South Bay				
81	South Bay Highway Operational Improvements		\$ 1,100,000	\$ 500,000	\$ 600,000
82	I-405 South Bay Curve Widening		\$ 150,000	\$ 150,000	\$ -
83	I-405/I-110 Int. HOV Connector Ramps & Intrchnng Improv		\$ 355,000	\$ 355,000	\$ -
84	I-110 Express Lane Ext South to I-405/I-110		\$ 81,500	\$ 51,500	\$ 30,000
85	I-105 Hot Lane from I-405 to I-605		\$ 350,000	\$ 200,000	\$ 150,000
86	Green Line Extension to Crenshaw Blvd in Torrance		\$ 607,500	\$ 607,500	\$ -
87	Transportation System and Mobility Improvements Program	b	\$ 350,000	\$ 350,000	\$ -
88	South Bay Subtotal		\$ 2,994,000	\$ 2,214,000	\$ 780,000
89	GRAND TOTAL		\$ 42,011,100	\$ 23,376,000	\$ 18,635,100

- Cost Assumption equals subregional funding share proposed by the Arroyo Verdugo and San Fernando Valley areas.
- Cost Assumption equals proposed subregional funding.
- Includes the I-10 Roberson/National Area Multimodal Circulation Improvement Project. Additional funds may be available from other regional/state/federal active transportation-related funding.
- Final cost, scope, and subregional shares will be determined by the environmental process. The WSCCOG is co-committed with the SFVCOG to contributing funds for the Sepulveda Pass Corridor Project. The working assumption for cost shown here for any existing available L RTP funding is 50% San Fernando Valley area and 50% Westside.
- Final cost, scope, and subregional shares will be determined by the environmental process. The WSCCOG is co-committed with Central LA to contributing funds for the Crenshaw Line Extension to West Hollywood/Hollywood Project. The working assumption for cost shown here is 75% Central-25% Westside.
- Final cost, scope, and subregional shares will be determined by the environmental process. The working assumption here for any existing available L RTP funding (including Measure R) is 50% Gateway area and 50% San Gabriel Valley area.
- At least \$3.5 B in funding needs for this project is not shown here. We are pursuing a strategy to fund 12.5% from existing resources, 12.5% from State resources, 12.5% from Federal resources, & 12.5% from subregional target. The remaining 50% is to come from private tolls or fees originating from freight.
- Final cost, scope, & subregional shares will be determined by the environmental process. The working assumption here is 2/3 Gateway & 1/3 San Gabriel Valley.
- Subregional target does not include full 25% contingency.
- The ATP is to be based upon the Gateway COG's Strategic Transportation Plan.
- WSCCOG proposes funding to support the alignment study and construction of the project from Westwood/VA Hospital to City of Santa Monica.

Current as of February 22, 2016

Attachment E reflects the constrained staff recommendation for public comment and a side-by-side comparison with all the Sub-Regional planning area project lists, including the Westside Cities COG. The comparisons capture the impacts of the end result of numerous moving parts, including refined cost estimates, updated performance results, project phasing assumptions necessary due to financial constraints, and changes to the overall structure of the working assumptions with respect to proposed multi-modal capital and operating divisions of the entire tax revenue pie. Overlaid on these changes is the impact of the Metro Board of Director's adopted Performance Metrics, which guided the proposed project schedules required by SB 764 (de León). Each of these changes is explained where it impacted a subregional list, as indicated herein.

Of note are the refined cost estimates for the West Santa Ana Transit Corridor and the Metro Gold Line Eastside Extension projects. Previous estimates from 2010 were updated to reflect inflation to the current year, market conditions, actual cost experience on similar projects, comprehensive categories of cost including soft costs, changes in infrastructure type and other project characteristics and adequate levels of contingency. Additional cost information is included in a separate attachment to this report. As a result, the draft plan only provides a phased implementation of the West Santa Ana Transit Corridor and only one alignment for the Gold Line Eastside Extension can be constructed in the 40 year plan scenario. With a 50 year plan scenario, the second alignment for the Gold Line Eastside Extension can be constructed, or the subregion where the first alignment was not selected can act to identify a replacement project(s) valued at \$1.5 billion, the amount conceded to the other subregion for the first alignment. The Metro Board of Directors must concur with the replacement project(s) recommendation.

Expenditure Plan DRAFT for Public Comment

ATTACHMENT E - Difference Sheet

(2015 \$ in thousands)

Project	Attach D Cost Assumption 2015\$	Attach D Target Amount 2015\$	Most Recent Cost Estimate 2015\$*	PBM funding 2015\$	Changes from Attachment D		
					Cost Difference b/w Attach D & Most Recent Estimate	Difference b/w PBM Funding and Target Amount 2015\$	Notes
Arroyo Verdugo							
BRT Connector Orange/Red Line to Gold Line	\$283,000	\$283,000	\$133,500	\$133,500	(\$149,500)	(\$149,500)	Cost Reduction; See Attached
Active Transportation Projects	\$136,500	\$136,500	\$136,500	\$136,500	\$0	\$0	
Goods Movement Projects	\$81,700	\$81,700	\$81,700	\$81,700	\$0	\$0	
Highway Efficiency, Noise Mitig. and Arterial Projects	\$602,800	\$602,800	\$602,800	\$602,800	\$0	\$0	
Modal Connectivity and Complete Streets Projects	\$202,000	\$202,000	\$202,000	\$202,000	\$0	\$0	
Transit Projects	\$257,100	\$257,100	\$257,100	\$257,100	\$0	\$0	
Arroyo Verdugo Projects to be Determined	\$67,900	\$67,900	\$217,400	\$217,400	\$149,500	\$149,500	Adjusted to ensure appropriate equity
Arroyo Verdugo Subtotal:	\$1,631,000	\$1,631,000	\$1,631,000	\$1,631,000	\$0		
San Fernando Valley							
City of San Fernando Bike Master Plan	\$5,000	\$5,000	\$5,000	\$5,000	\$0	\$0	
Complete LA River Bikepath	\$60,000	\$60,000	\$60,000	\$60,000	\$0	\$0	
East SF Valley Transit Corridor Project @	\$1,000,000	\$1,000,000	\$1,331,000	\$810,500	\$331,000	(\$189,500)	\$ Spread added from LRTP \$'s §
BRT Connector Orange/Red Line to Gold Line	\$230,000	\$230,000	\$133,500	\$133,500	(\$96,500)	(\$96,500)	Cost Reduction; See Attached
Orange Line BRT Improvements	\$300,000	\$300,000	\$286,000	\$286,000	(\$14,000)	(\$14,000)	Cost Reduction; See Attached
Orange Line Conversion to Light Rail	\$1,400,000	\$62,000	\$1,429,000	\$362,000	\$29,000	\$300,000	Cost increase, paid with add'l LRTP\$
Sepulveda Pass Transit Corridor (Ph 1) @	\$0	\$0	\$130,000	\$130,000	\$130,000	\$130,000	Project phased
Sepulveda Pass Transit Corridor (Ph 2) @	\$3,390,000	\$1,400,000	\$2,837,000	\$1,270,000	(\$553,000)	(\$130,000)	Cost Reduc.; Project Phased
San Fernando Valley Subtotal:	\$6,385,000	\$3,057,000	\$6,211,500	\$3,057,000	(\$173,500)	\$0	
Westside							
Active Transportation 1st/Last Mile Connections Prog.	\$700,000	\$700,000	\$361,000	\$361,000	(\$339,000)	(\$339,000)	Reduced request to match target
Crenshaw Northern Extension	\$580,000	\$1,400,000	\$560,000	\$560,000	(\$20,000)	(\$840,000)	Cost Reduction; See Attached
Lincoln Blvd BRT	\$307,000	\$307,000	\$102,000	\$102,000	(\$205,000)	(\$205,000)	Cost Reduction; See Attached
Purple Line Extension to Bundy	\$2,647,100	\$1,400,000	\$2,647,100	\$0	\$0	(\$1,400,000)	Not funded to match target & perform.
Sepulveda Pass Transit Corridor (Ph 1) @	\$0	\$0	\$130,000	\$130,000	\$130,000	\$130,000	Project phased
Sepulveda Pass Transit Corridor (Ph 2) @	\$3,390,000	\$1,400,000	\$2,837,000	\$1,270,000	(\$553,000)	(\$130,000)	Cost Reduc.; Project Phased
Westside Requested Subtotal:	\$7,624,100	\$5,207,000	\$6,637,100	\$2,423,000	(\$987,000)	(\$2,784,000)	
Amount Requested in Excess of Constrained Target	N/A	\$ (2,484,000)	N/A	N/A			
Westside Subtotal:	\$7,624,100	\$2,723,000	\$6,637,100	\$2,423,000	(\$1,974,000)	(\$300,000)	\$300 million in LRTP added for equity
Central City Area							
Crenshaw Northern Extension	\$1,750,000	\$1,185,000	\$1,680,000	\$1,185,000	(\$70,000)	\$0	Cost reduction
Vermont Transit Corridor	\$425,000	\$425,000	\$425,000	\$25,000	\$0	(\$400,000)	Cost increase, paid with LRTP\$
BRT and 1st/Last Mile Solutions e.g. DASH	\$250,000	\$250,000	\$250,000	\$250,000	\$0	\$0	Central Area re-balancing request. See February 5, 2016 Letter from Central Subregion.
Freeway Interchange and Operational Improvements	\$195,000	\$195,000	\$195,000	\$195,000	\$0	\$0	
Historic Downtown Streetcar	\$200,000	\$200,000	\$200,000	\$200,000	\$0	\$0	
LA River Waterway & System Bikepath	\$365,000	\$365,000	\$365,000	\$365,000	\$0	\$0	
Los Angeles Safe Routes to School Initiative	\$250,000	\$250,000	\$250,000	\$250,000	\$0	\$0	
LA Streetscape Enhance. & Great Streets Program	\$450,000	\$450,000	\$450,000	\$450,000	\$0	\$0	
Active Transportation, 1st/Last Mile, & Mobility Hubs	\$215,000	\$215,000	\$215,000	\$215,000	\$0	\$0	
Traffic Congestion Relief/Signal Synchronization	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$0	
Public Transit State of Good Repair Program	\$402,000	\$402,000	\$402,000	\$402,000	\$0	\$0	
West Santa Ana Transit Corridor LRT Ph 2 @	\$0	\$0	\$1,482,500	\$400,000	\$1,482,500	\$400,000	
Central City Area Subtotal:	\$4,552,000	\$3,987,000	\$5,964,500	\$3,987,000	(\$70,000)	(\$400,000)	
North County							
Active Transportation Program	\$264,000	\$264,000	\$264,000	\$264,000	\$0	\$0	
Arterial Program	\$726,130	\$726,130	\$726,130	\$726,130	\$0	\$0	
Goods Movement Program	\$104,000	\$104,000	\$104,000	\$104,000	\$0	\$0	
High Desert Corridor (HDC) Right-of-Way @	\$270,000	\$170,000	\$270,000	\$170,000	\$0	\$0	
Highway Efficiency Program	\$128,870	\$128,870	\$128,870	\$128,870	\$0	\$0	
I-5 N Cap. Enhancements (SR-14 to Lake Hughes Rd) @	\$785,000	\$240,000	\$784,080	\$240,000	(\$920)	\$0	Cost Reduction
Multimodal Connectivity Program	\$239,000	\$239,000	\$239,000	\$239,000	\$0	\$0	
Transit Program	\$88,000	\$88,000	\$588,000	\$88,000	\$500,000	\$0	High performer, \$ added for geo equity
North County Subtotal:	\$2,605,000	\$1,960,000	\$3,104,080	\$1,960,000	\$499,080	\$0	

* The most recent cost estimate equals the accelerated cost.

Expenditure Plan DRAFT for Public Comment

ATTACHMENT E - Difference Sheet

(2015 \$ in thousands)

Project	Attach D Cost Assumption 2015\$	Attach D Target Amount 2015\$	Most Recent Cost Estimate 2015\$*	PBM funding 2015\$	Changes from Attachment D		
					Cost Difference b/w Attach D & Most Recent Estimate	Difference b/w PBM Funding and Target Amount 2015\$	Notes
Las Virgenes-Malibu							
Active Transportation, Transit, and Tech. Program	\$32,000	\$32,000	\$32,000	\$32,000	\$0	\$0	Accelerated for geographic equity
Highway Efficiency Program	\$133,000	\$133,000	\$133,000	\$133,000	\$0	\$0	
Modal Connectivity Program	\$68,000	\$68,000	\$68,000	\$68,000	\$0	\$0	
Traffic Congestion Relief and Improvement Program	\$63,000	\$63,000	\$63,000	\$63,000	\$0	\$0	
Las Virgenes-Malibu Subtotal:	\$296,000	\$296,000	\$296,000	\$296,000	\$0	\$0	
Gateway Cities							
Gold Line Eastside Extension (One Alignment) ®	\$1,500,000	\$543,000	\$1,500,000	\$543,000	\$0	\$0	Low perf. transferred to system asset
Green Line Eastern Extension (Norwalk)	\$500,000	\$500,000	\$770,000	\$0	\$270,000	(\$500,000)	
I-5 Corridor Improvements (I-605 to I-710)	\$1,100,000	\$1,059,000	\$1,105,060	\$1,059,000	\$5,060	\$0	
I-605 Corridor "Hot Spot" Interchange Improvements ®	\$850,000	\$300,000	\$1,240,000	\$1,000,000	\$390,000	\$700,000	
I-710 South Corridor Project (Ph 1) ®	\$4,000,000	\$500,000	\$400,000	\$250,000	(\$3,600,000)	(\$250,000)	Goods mvmt fee excluded from equity
I-710 South Corridor Project (Ph 2) ®	incl. above		\$908,500	\$250,000	\$0	\$250,000	Goods mvmt fee excluded from equity
SR 60/I-605 Interchange HOV Direct Connectors	\$260,000	\$200,000	\$0	\$0	(\$260,000)	(\$200,000)	Geo equity adjustment
West Santa Ana Transit Corridor LRT Ph 1 ®	\$ 2,000,000	\$ 1,035,000	\$1,035,000	\$535,000	(\$965,000)	(\$500,000)	Project built in separate phases
West Santa Ana Transit Corridor LRT Ph 2 ®	incl. above		\$1,482,500	\$500,000	\$0	\$500,000	Project built in separate phases
Active Transportation Program	TBD	TBD	TBD	TBD	TBD	TBD	
Gateway Cities Subtotal:	\$10,210,000	\$4,137,000	\$8,441,060	\$4,137,000	(\$4,159,940)	\$0	
San Gabriel Valley							
Active Transportation Program (Including Greenway Proj.)	\$231,000	\$231,000	\$231,000	\$231,000	\$0	\$0	
Bus System Improvement Program	\$55,000	\$55,000	\$55,000	\$55,000	\$0	\$0	
Goods Movement (Improvements & RR Xing Elim.)	\$33,000	\$33,000	\$33,000	\$33,000	\$0	\$0	
Highway Demand Based Prog. (HOV Ext. & Connect.)	\$231,000	\$231,000	\$231,000	\$231,000	\$0	\$0	
Highway Efficiency Program	\$534,000	\$534,000	\$534,000	\$534,000	\$0	\$0	See Attached
I-605/I-10 Interchange	\$126,000	\$126,000	\$598,400	\$126,000	\$472,400	\$0	
ITS/Technology Program (Advanced Signal Tech.)	\$66,000	\$66,000	\$66,000	\$66,000	\$0	\$0	
Gold Line Eastside Extension (One Alignment) ®	\$1,500,000	\$543,000	\$1,500,000	\$543,000	\$0	\$0	
Gold Line Foothill Extension to Claremont ®	\$1,130,000	\$1,019,000	\$1,097,000	\$1,019,000	(\$33,000)	\$0	Cost reduction; see Attached
First/Last Mile and Complete Streets	\$198,000	\$198,000	\$198,000	\$198,000	\$0	\$0	See Attached
SR 60/I-605 Interchange HOV Direct Connectors	\$130,000	\$130,000	\$490,600	\$130,000	\$360,600	\$0	
SR-57/SR-60 Interchange Improvements	\$205,000	\$205,000	\$770,000	\$205,000	\$565,000	\$0	
San Gabriel Valley Subtotal:	\$4,439,000	\$3,371,000	\$5,804,000	\$3,371,000	\$1,365,000	\$0	
South Bay							
South Bay Highway Operational Improvements	\$1,100,000	\$500,000	\$1,100,000	\$500,000	\$0	\$0	See Attached
I-405 South Bay Curve Improvements	\$150,000	\$150,000	\$400,840	\$150,000	\$250,840	\$0	
I-405/I-110 Int. HOV Connect Ramps & Intrchnng Improv ®	\$355,000	\$355,000	\$250,000	\$250,000	(\$105,000)	(\$105,000)	
I-110 Express Lane Ext South to I-405/I-110 Interchange	\$81,500	\$51,500	\$280,000	\$51,500	\$198,500	\$0	
I-105 Express Lane from I-405 to I-605	\$350,000	\$200,000	\$175,000	\$175,000	(\$175,000)	(\$25,000)	Cost reduction; see Attached
Green Line Extension to Crenshaw Blvd in Torrance ®	\$607,500	\$607,500	\$891,000	\$737,500	\$283,500	\$130,000	See Attached; funding rebalance
Transportation System and Mobility Improve. Program	\$350,000	\$350,000	\$350,000	\$350,000	\$0	\$0	
South Bay Subtotal:	\$2,994,000	\$2,214,000	\$3,446,840	\$2,214,000	\$452,840	\$0	
GRAND TOTAL	40,736,100	23,376,000	41,536,080	23,076,000	(\$3,073,520)	\$0	

§ Spread is the difference between cost increase and revenue decrease.

* The most recent cost estimate equals the accelerated cost.

* The most recent cost estimate equals the accelerated cost.



COMPARISON OF COST ESTIMATES - HIGHWAY PROJECT (2015\$)

Line #	Dec 2015 Board Item 17 Attachment D Line Item	Highway Projects	Total Project Cost Metro Estimates	Dec 2015 Board Item 17 Attachment D	Difference
1	59	I-605 Corridor "Hot Spot" Interchange Improvements	\$ 1,540,000,000	\$ 850,000,000	\$ 690,000,000
2	77	SR-57/SR-60 Interchange Improvements	\$ 770,000,000	\$ 205,000,000	\$ 565,000,000
3	71	I-605/I-10 Interchange	\$ 598,400,000	\$ 126,000,000	\$ 472,400,000
4	81	I-405 South Bay Curve Widening	\$ 400,840,000	\$ 150,000,000	\$ 250,840,000
5	83	I-110 Express Lanes Extension South to I-405/I-110	\$ 280,000,000	\$ 81,500,000	\$ 198,500,000
6	60	I-710 South Corridor Project	\$ 4,108,500,000	\$ 4,000,000,000	\$ 108,500,000
7	61	SR-60/I-605 Interchange HOV Direct Connectors	\$ 490,600,000	\$ 390,000,000	\$ 100,600,000
8	58	I-5 Corridor Improvements (I-605 to I-710)	\$ 1,105,060,000	\$ 1,100,000,000	\$ 5,060,000
9	43	High Desert Corridor (HDC) Right-of-Way	\$ 270,000,000	\$ 270,000,000	\$ -
10	80	South Bay Highway Operational Improvements	\$ 1,100,000,000	\$ 1,100,000,000	\$ -
11	45	I-5 North Capacity Enhancements (Parker Rd. + 1.5 miles)	\$ 784,080,000	\$ 785,000,000	\$ (920,000)
12	82	I-405/I-110 Interchange HOV Connector Ramps and Interchange Improvements	\$ 250,000,000	\$ 355,000,000	\$ (105,000,000)
13	84	I-105 Hot Lane from I-405 to I-605	\$ 175,000,000	\$ 350,000,000	\$ (175,000,000)
Total Highway Projects:			\$ 11,872,480,000	\$ 9,762,500,000	\$ 2,109,980,000



COMPARISON OF COST ESTIMATES - TRANSIT PROJECT (2015\$)

Line #	Dec 2015 Board Item 17 Attachment D Line Item	Transit Corridor Projects	Total Project Cost Metro Estimates	Dec 2015 Board Item 17 Attachment D	Difference
1	12	East San Fernando Valley Transit Corridor Project as LRT	\$ 1,331,000,000	\$ 1,000,000,000	\$ 331,000,000
2	28	Vermont "Short Corridor" Subway from Wilshire to Exposition	\$ 2,006,000,000	\$ 1,700,000,000	\$ 306,000,000
3	85	Green Line Extension to Crenshaw Blvd in Torrance	\$ 891,000,000	\$ 607,500,000	\$ 283,500,000
4	57	Green Line Eastern Extension (Norwalk) LRT	\$ 770,000,000	\$ 500,000,000	\$ 270,000,000
5	23	Purple Line Extension to Santa Monica	\$ 2,730,000,000	\$ 2,647,100,000	\$ 82,900,000
6	15	Orange Line Conversion to Light Rail (Phased with Line 14)	\$ 1,429,000,000	\$ 1,400,000,000	\$ 29,000,000
7	56	Metro Gold Line Eastside Transit Corridor Phase II - Washington Alignment	\$ 3,000,000,000	\$ 1,500,000,000	\$ -
8	73	Metro Gold Line Eastside Transit Corridor Phase II - SR-60		\$ 1,500,000,000	
9	62	West Santa Ana Branch (Eco Rapid Transit Project) - Total Project	\$ 2,000,000,000	\$ 2,000,000,000	\$ -
10	14	Orange Line BRT Improvements	\$ 286,000,000	\$ 300,000,000	\$ (14,000,000)
11	74	Metro Gold Line Foothill Light Rail Extension - Phase 2B	\$ 1,097,000,000	\$ 1,130,000,000	\$ (33,000,000)
12	21	Crenshaw Line Extension to West Hollywood/Hollywood LRT	\$ 2,240,000,000	\$ 2,330,000,000	\$ (90,000,000)
13	22	Lincoln Blvd BRT	\$ 102,000,000	\$ 307,000,000	\$ (205,000,000)
14	2	North Hollywood to Pasadena BRT Corridor	\$ 267,000,000	\$ 513,000,000	\$ (246,000,000)
15	16A	Sepulveda Pass Transit Corridor (N) - PLE Westwood/UCLA to Orange Van Nuys Station	\$ 5,934,000,000	\$ 6,780,000,000	\$ (846,000,000)
16	N/A	Westside Purple Line Extension Section 3	\$ 1,980,390,000	N/A	\$ -
Total Transit Projects: \$24,083,000,000			\$ 26,063,390,000	\$ 24,214,600,000	\$ (131,600,000)

Note:

Cost Reduction:

- All Metro Parametric Estimate (MPE) contingencies were reduced to 25% from 35%
- Metro Gold Line Eastside Phase II, use Dec 2015 Board Item #17 Attachment D of \$3 billion, instead of MPE of \$4.81 billion
- West Santa Ana Branch Corridor, use Dec 2015 Board Item #17 Attachment D of \$2 billion, instead of MPE of \$3.74 billion
- Lincoln Blvd BRT, MPE was adjusted lower with less uncertainty than before to replicate with the completed Wilshire BRT project

Cost Increase:

- Orange Line Conversion to LRT, current MPE is for the entire alignment, where the Dec 2015 Board Item #17 Attachment D cost was only for the E-W (N. Hollywood to Warner Center) portion
- Higher Heavy Rail project's ROW and Vehicle costs because of the recent updated information from the Purple Line Extension

Attachment F: Funded Projects - Draft Highway Project Evaluation - Countywide Weighted Scores

Row #	Attach. D	Subregion	Project Name ²	Mobility 45.0%	Economy 12.5%	Access. 17.5%	Safety 12.5%	S & QoL 12.5%	Total Score ¹
1	45	North County	I-5 N Cap. Enhancements (SR-14 to Lake Hughes Rd)	45.0	6.3	5.8	3.1	-1.6	58.6
2		SGV	SR-71 Gap from Mission Blvd. to Rio Rancho Rd.	22.5	10.4	11.7	9.4	-1.6	52.4
3	43	Gateway Cities	I-710 South Corridor Project	11.3	10.4	11.7	12.5	6.3	52.1
3		SGV	SR-71 Gap from I-10 to Mission Blvd.	22.5	4.2	5.8	6.3	-1.6	37.2

¹ Total Scores may not add up due to rounding.

² Project name describes the project scope that was funded. Modeled scope may vary.

Attachment F - Draft **Highway** Project Evaluation - Countywide Weighted Scores

Row #	Attach. D	Subregion	Project Name ²	Mobility 45.0%	Economy 12.5%	Access. 17.5%	Safety 12.5%	S & QoL 12.5%	Total Score ¹
1	43 (ROW only)	North County	High Desert Corridor	33.8	8.3	2.9	12.5	4.7	62.2
2	16, 24	Westside, SFV	Sepulveda Pass Transit Corridor (Ph 1) <i>Re-stripe 2 HOT lanes in each direction</i>	39.4	8.3	11.7	6.3	-7.8	57.8
3	84	South Bay	I-105 Express Lane from I-405 to I-605	33.8	6.3	14.6	3.1	-7.8	49.9
4	58	Gateway Cities	I-5 Corridor Improvements (I-605 to I-710)	28.1	4.2	14.6	6.3	-9.4	43.8
5	83	South Bay	I-110 Express Lane Ext South to I-405/I-110 Interchange	22.5	2.1	11.7	3.1	-7.8	31.6
6	81	South Bay	I-405 South Bay Curve Improvements	16.9	6.3	14.6	0.0	-10.9	26.8

¹Total Scores may not add up due to rounding.

²Project name describes the project scope that was funded. Modeled scope may vary.

Attachment F: Funded Projects - Draft Transit Project Evaluation - Countywide Weighted Scores

Row #	Attach. D	Subregion	Project Name ²	Mobility 45.0%	Economy 12.5%	Access. 17.5%	Safety 12.5%	S & QoL 12.5%	Total Score ¹
1		Westside	Westside Purple Line Extension Section 3 (to Westwood/VA Hospital)	45.0	8.3	10.9	12.5	10.0	86.8
2	62	Central, Gateway Cities	West Santa Ana Transit Corridor (Downtown to Pioneer Bl in Artesia)	45.0	6.3	8.8	6.3	6.3	72.5
3	12	SFV	East San Fernando Valley Transit Corridor (Orange Line to Sylmar)	33.8	4.2	13.1	6.3	7.5	64.8
4	85	South Bay	Green Line Extension to Crenshaw Blvd in Torrance	33.8	4.2	8.8	6.3	3.8	56.7
5	56, 73	SGV	Gold Line Eastside Extension: SR-60 Alignment	22.5	6.3	6.6	6.3	8.8	50.3
6	56, 73	Gateway Cities	Gold Line Eastside Extension: Washington Blvd Alignment	22.5	8.3	6.6	6.3	5.0	48.6

¹ Total Scores may not add up due to rounding.

² Project name describes the project scope that was funded. Modeled scope may vary.

Attachment F: Draft **Transit** Project Evaluation - Countywide Weighted Scores

Row #	Attach. D	Subregion	Project Name ²	Mobility 45.0%	Economy 12.5%	Access. 17.5%	Safety 12.5%	S & QoL 12.5%	Total Score ¹
1	2, 13	SFV, Arroyo Verdugo, SGV	BRT Connector Orange/Red Line to Gold Line	45.0	8.3	15.3	6.3	8.8	83.6
2	16, 24	SFV, Westside	Sepulveda Pass Transit Corridor	45.0	4.2	10.9	12.5	10.0	82.6
3	28	Central	Vermont Transit Corridor	39.4	6.3	13.1	12.5	8.8	80.0
4	21, 27	Westside, Central	Crenshaw Northern Extension	33.8	10.4	15.3	9.4	10.0	78.9
5	22	Westside	Lincoln Blvd BRT	39.4	10.4	15.3	6.3	3.8	75.1
6	23	Westside	Westside Purple Line Extension - Section 4 to Bundy	33.8	8.3	13.1	12.5	6.3	74.0
7	74	SGV	Gold Line Foothill Extension Phase to Claremont	45.0	6.3	6.6	6.3	6.3	70.3
8	57	Gateway Cities	Green Line Eastern Extension (Norwalk)	39.4	8.3	6.6	9.4	5.0	68.6
9	15	SFV	Orange Line Conversion	33.8	2.1	2.2	9.4	7.5	54.9












































































¹ Total Scores may not add up due to rounding.

² Project name describes the project scope that was funded. Modeled scope may vary.

COG Priorities Not Modeled from Attachment D, by rank

RANK Project			Subregion	Mobility 45.0%	Economy 12.5%	Access. 17.5%	Safety 12.5%	S & QoL 12.5%	Total Score 100%
1	Highway Demand Based Program	San Gabriel Valley	<div><div></div></div> 45.0	<div><div></div></div> 3.1	<div><div></div></div> 5.3	<div><div></div></div> 3.1	<div><div></div></div> 3.1	59.6	
2	Transit Projects	Arroyo Verdugo	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 17.5	<div><div></div></div> 3.1	<div><div></div></div> 12.5	58.8	
3	Transportation System and Mobility Improvements Program	South Bay	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 17.5	<div><div></div></div> 3.1	<div><div></div></div> 12.5	58.8	
4	I-605 Corridor "Hot Spot" Interchange Improvements	Gateway	<div><div></div></div> 45.0	<div><div></div></div> 6.3	<div><div></div></div> 0.0	<div><div></div></div> 3.1	<div><div></div></div> 0.0	54.4	
5	Highway Operational Improvements	South Bay	<div><div></div></div> 45.0	<div><div></div></div> 3.1	<div><div></div></div> 0.0	<div><div></div></div> 3.1	<div><div></div></div> 3.1	54.4	
6	Transit Program	North County	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 17.5	<div><div></div></div> 3.1	<div><div></div></div> 6.3	52.5	
7	Bus System Improvement Program	San Gabriel Valley	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 17.5	<div><div></div></div> 3.1	<div><div></div></div> 6.3	52.5	
8	Modal Connectivity and Complete Streets Projects	Arroyo Verdugo	<div><div></div></div> 22.5	<div><div></div></div> 0.0	<div><div></div></div> 8.8	<div><div></div></div> 6.3	<div><div></div></div> 12.5	50.0	
9	Active Transportation and First/Last Mile Connections Program	Westside	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 8.8	<div><div></div></div> 3.1	<div><div></div></div> 12.5	50.0	
10	Active Transportation, 1st/Last Mile & Mobility Hubs	Central	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 8.8	<div><div></div></div> 3.1	<div><div></div></div> 12.5	50.0	
11	Active Transportation Program	North County	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 8.8	<div><div></div></div> 3.1	<div><div></div></div> 12.5	50.0	
12	Active Transportation, Transit, and Technology Program	Las Virgenes Malibu	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 8.8	<div><div></div></div> 3.1	<div><div></div></div> 12.5	50.0	
13	Active Transportation Program	Gateway	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 8.8	<div><div></div></div> 3.1	<div><div></div></div> 12.5	50.0	
14	Active Transportation Program	San Gabriel Valley	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 8.8	<div><div></div></div> 3.1	<div><div></div></div> 12.5	50.0	
15	First/Last Mile and Complete Streets	San Gabriel Valley	<div><div></div></div> 22.5	<div><div></div></div> 0.0	<div><div></div></div> 8.8	<div><div></div></div> 6.3	<div><div></div></div> 12.5	50.0	
16	Los Angeles Safe Routes to School Initiative	Central	<div><div></div></div> 11.3	<div><div></div></div> 0.0	<div><div></div></div> 17.5	<div><div></div></div> 12.5	<div><div></div></div> 6.3	47.5	

COG Priorities Not Modeled from Attachment D, by rank






RANK	Project	Subregion	Mobility 45.0%	Economy 12.5%	Access. 17.5%	Safety 12.5%	S & QoL 12.5%	Total Score 100%
17	Multimodal Connectivity Program	North County	 11.3	 0.0	 17.5	 6.3	 12.5	47.5
18	Active Transportation Projects	Arroyo Verdugo	 22.5	 0.0	 8.8	 3.1	 12.5	46.9
19	Complete LA River Bike Path Across the Valley	San Fernando Valley	 22.5	 0.0	 8.8	 3.1	 12.5	46.9
20	LA River Waterway & System Bikepath	Central	 22.5	 0.0	 8.8	 3.1	 12.5	46.9
21	Orange Line BRT Improvements	San Fernando Valley	 22.5	 3.1	 5.3	 3.8	 6.3	40.9
22	Highway Efficiency, Noise Mitigation and Arterial Projects	Arroyo Verdugo	 22.5	 6.3	 5.3	 3.1	 3.1	40.3
23	Highway Efficiency Program	North County	 22.5	 6.3	 4.4	 3.1	 3.1	39.4
24	Highway Efficiency Program	Las Virgenes Malibu	 22.5	 6.3	 4.4	 3.1	 3.1	39.4
25	Traffic Congestion Relief and Improvement Program	Las Virgenes Malibu	 22.5	 6.3	 4.4	 3.1	 3.1	39.4
26	BRT and 1st/Last Mile Solutions such as DASH	Central	 11.3	 3.1	 8.8	 3.1	 12.5	38.8
27	LA Streetscape Enhancements & Great Streets Program	Central	 11.3	 6.3	 8.8	 6.3	 6.3	38.8
28	Multimodal Connectivity Program	Las Virgenes Malibu	 11.3	 0.0	 8.8	 6.3	 12.5	38.8
29	Highway Efficiency Program	San Gabriel Valley	 22.5	 3.1	 5.3	 3.1	 3.1	37.1
30	ITS/Technology Program	San Gabriel Valley	 22.5	 3.1	 4.4	 3.1	 3.1	36.3
31	SR-60/I-605 Interchange HOV Direct Connectors	Gateway	 22.5	 6.3	 0.0	 6.3	 0.0	35.0






Attachment G:

COG Priorities Not Modeled from Attachment D, by rank

RANK Project			Subregion	Mobility 45.0%	Economy 12.5%	Access. 17.5%	Safety 12.5%	S & QoL 12.5%	Total Score 100%
32	Freeway Interchange and Operational Improvements	Central	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 4.4	<div><div></div></div> 3.1	<div><div></div></div> 0.0	33.1	
33	Public Transit State of Good Repair Program	Central	<div><div></div></div> 22.5	<div><div></div></div> 0.0	<div><div></div></div> 4.4	<div><div></div></div> 3.1	<div><div></div></div> 3.1	33.1	
34	Historic Streetcar	Central	<div><div></div></div> 11.3	<div><div></div></div> 6.3	<div><div></div></div> 8.8	<div><div></div></div> 3.1	<div><div></div></div> 3.1	32.5	
35	SR-60/I-605 Interchange	San Gabriel Valley	<div><div></div></div> 22.5	<div><div></div></div> 6.3	<div><div></div></div> 0.0	<div><div></div></div> 3.1	<div><div></div></div> 0.0	31.9	
36	SR-57/SR-60 Interchange Improvements	San Gabriel Valley	<div><div></div></div> 22.5	<div><div></div></div> 6.3	<div><div></div></div> 0.0	<div><div></div></div> 3.1	<div><div></div></div> 0.0	31.9	
37	I-405/I-110 Interchange/HOV Connector Ramps & Interchange Improvements	South Bay	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 0.0	<div><div></div></div> 6.3	<div><div></div></div> 0.0	31.9	
38	Goods Movement Program	Arroyo Verdugo	<div><div></div></div> 11.3	<div><div></div></div> 12.5	<div><div></div></div> 0.0	<div><div></div></div> 6.3	<div><div></div></div> 0.0	30.0	
39	Goods Movement Program	North County	<div><div></div></div> 11.3	<div><div></div></div> 12.5	<div><div></div></div> 0.0	<div><div></div></div> 6.3	<div><div></div></div> 0.0	30.0	
40	Goods Movement Program	San Gabriel Valley	<div><div></div></div> 11.3	<div><div></div></div> 12.5	<div><div></div></div> 0.0	<div><div></div></div> 6.3	<div><div></div></div> 0.0	30.0	
41	Arterial Program	North County	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 0.0	<div><div></div></div> 3.1	<div><div></div></div> 0.0	28.8	
42	I-605/I-10 Interchange	San Gabriel Valley	<div><div></div></div> 22.5	<div><div></div></div> 3.1	<div><div></div></div> 0.0	<div><div></div></div> 3.1	<div><div></div></div> 0.0	28.8	
43	City of San Fernando Bike Master Plan	San Fernando Valley	<div><div></div></div> 11.3	<div><div></div></div> 0.0	<div><div></div></div> 4.4	<div><div></div></div> 3.1	<div><div></div></div> 6.3	25.0	

COG Priorities Not Modeled from Attachment D, by rank

RANK Project		Subregion	Mobility 45.0%	Economy 12.5%	Access. 17.5%	Safety 12.5%	S & QoL 12.5%	Total Score 100%
44	Traffic Congestion Relief/Signal Synchronization Program	Central	 11.3	 0.0	 4.4	 3.1	 3.1	21.9
45	Unprogrammed	Arroyo Verdugo	N/A	N/A	N/A	N/A	N/A	N/A

To Achieve the following score in a single theme:	Project must meet the corresponding criterion:
 HIGH BENEFIT	Significantly benefits one or more theme goals or metrics on a <u>subregional</u> scale
 MEDIUM BENEFIT	Significantly benefits one or more theme goals or metrics on a <u>corridor or activity center</u> scale
 LOW BENEFIT	Addresses one or more theme goals or metrics on a <u>limited/localized</u> scale (e.g., at a single intersection)
 NEUTRAL BENEFIT	Has no cumulative positive or negative impact on theme goals or metrics
 NEGATIVE IMPACT	Results in cumulative negative impact on one or more theme goals or metrics

HIGH BENEFIT = 1.0
MEDIUM BENEFIT = 0.5
LOW BENEFIT = 0.25
NEUTRAL BENEFIT = 0.0

Metro Transit & Highway Projects: 40-Year Buildout

Highway Projects		
First 15 Years	1 High Desert Corridor Project (Right-of-Way) (P3 Candidate) [NC]	
	2 I-5 N Capacity Enhancements (SR-14 to Lake Hughes Rd) [NC]	
	3 SR-71 Gap: I-10 to Rio Rancho Rd [SC]	
	4 SR-57/SR-60 Interchange Improvements [SC]	
	5 I-105 Express Lane: I-405 to I-605 [SB]	
	6 Sepulveda Pass Corridor (Busway) (P3 Candidate) [SF, W]	
	7 I-710 South Corridor Project Phase 1 (P3 Candidate) [CC]	
Second 15 Years	15 I-605/I-10 Interchange [SC]	
	16 I-5 Corridor Improvements: I-605 to I-710 [CC]	
	17 I-405 South Bay Curve Improvements [SB]	
	18 I-710 South Corridor Project Phase 2 (P3 Candidate) [CC]	
	19 I-110 Express Lanes Extension to I-405/I-110 Interchange [SB]	
	20 SR-60/I-605 Interchange HOV Direct Connectors [SC]	
	26 I-405/I-110 Interchange HOV Connect Ramps & Interchange Improvements [SB]	
Transit Projects		
First 15 Years	8 Airport Metro Connector/Green Line Extension [SA]	
	9 East San Fernando Valley Transit Corridor [SF]	
	10 BRT Connector Orange/Red Line to Gold Line [AV, SF]	
	11 Gold Line Foothill Extension Phase 2B [SC]	
	12 Purple Line Extension Transit Project Section 3 [W]	
	13 West Santa Ana Transit Corridor Phase 1 [CC]	
	14 Orange Line BRT Improvements (Locations TBD) [SF]	
	23 Vermont Transit Corridor [C]	
	Not shown: Crenshaw/LAX Track Enhancement Project [SA], Complete LA River Bike Path [SF] and LA River Waterway and System Bike Path [C]	
	Second 15 Years	21 Gold Line Eastside Extension Phase 2 (one alignment) [SC, CC]
22 Green Line Extension to Crenshaw Blvd in Torrance [SB]		
24 Sepulveda Pass Corridor (Rail) (P3 Candidate) [SF, W]		
25 West Santa Ana Transit Corridor Phase 2 [C, CC]		
Final 10 Years	27 Crenshaw Line Northern Extension [C, W]	
	28 Orange Line Conversion to Light Rail [SF]	
	29 Lincoln Blvd Bus Rapid Transit [W]	
	30 Green Line to Norwalk Metrolink Station [CC]	
	31 Sepulveda Pass Corridor Westwood to Airport Metro Connector (P3 Candidate) [W]	
	Not shown: City of San Fernando Bike Master Plan [SF] and Historic Downtown Streetcar [C]	



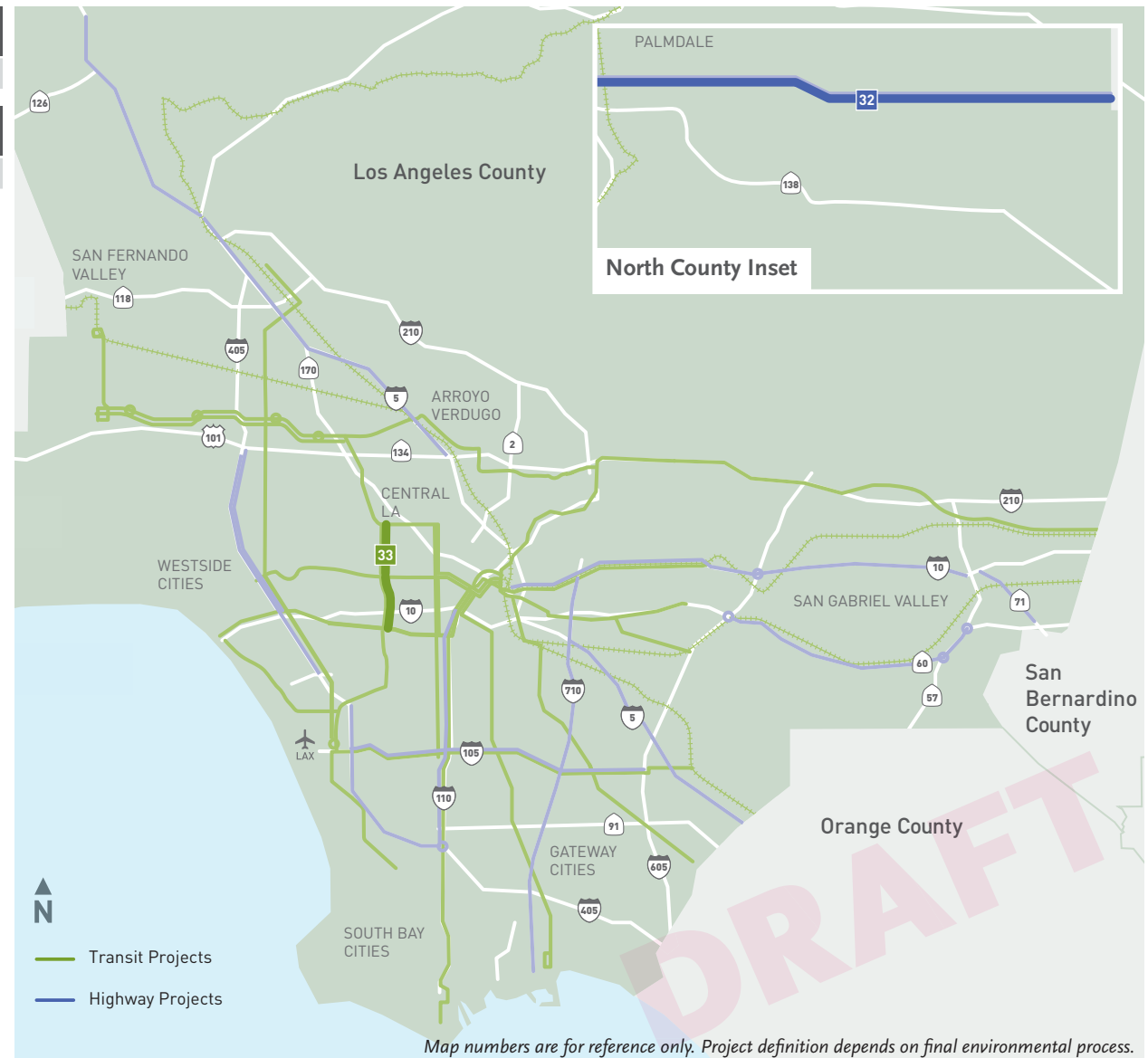
Metro Transit & Highway Projects: 45-Year Scenario

Highway Projects

32 High Desert Corridor Project (Construction) (P3 Candidate) [NC]

Transit Projects

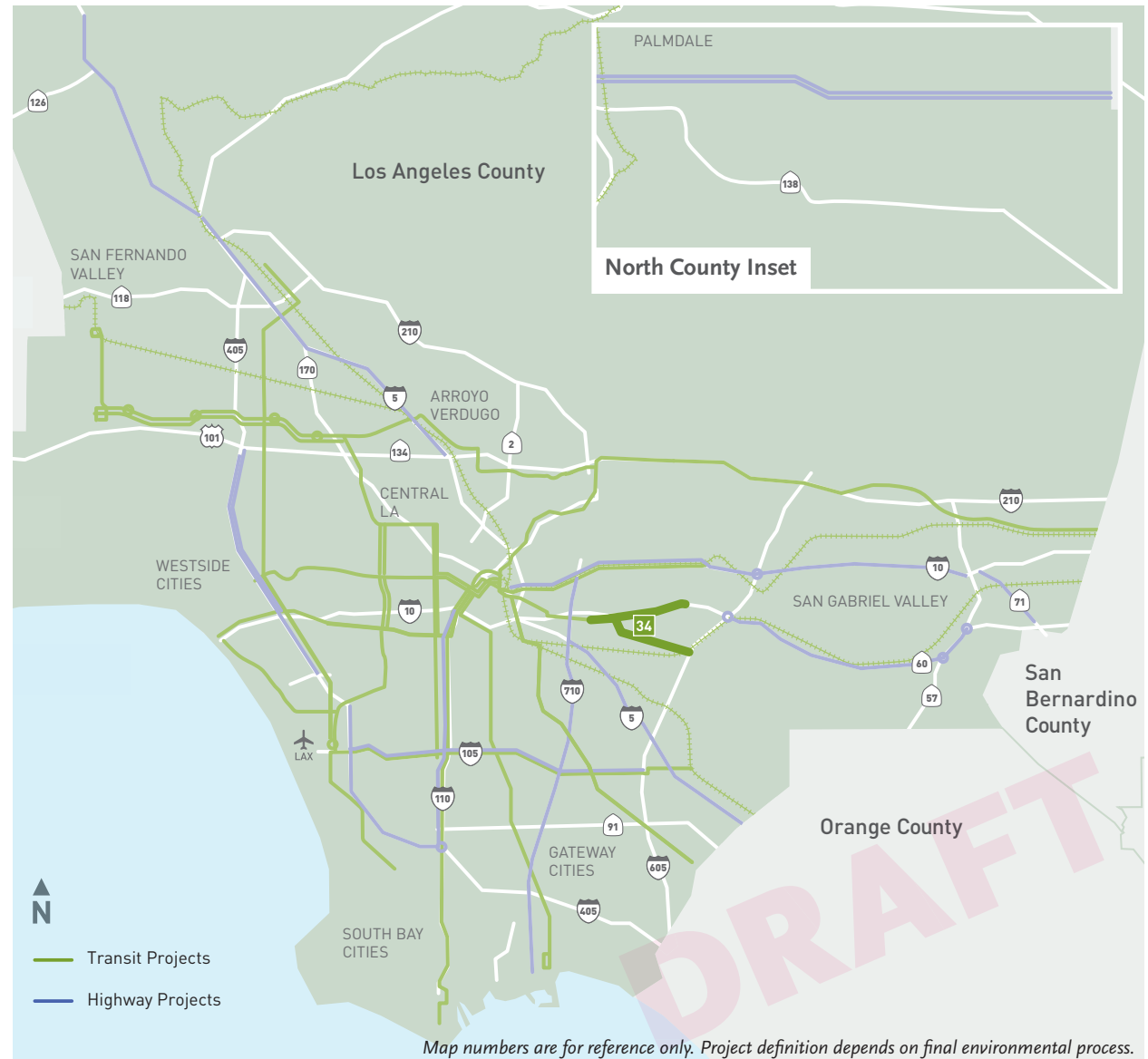
33 Crenshaw Line Northern Extension (Accelerated) [C,W]



Metro Transit & Highway Projects: 50-Year Scenario

Transit Projects

34 Gold Line Eastside Extension Phase 2
(funding for second alignment) [SG, GC]



MAJOR TRANSIT AND HIGHWAY CONSTRUCTION PROJECT DESCRIPTIONS

Major Highway Construction Projects

(Map 1) **®High Desert Corridor (ROW only) - ROW only funding requested by the subregion.** The project extends from SR-14 in LA County to SR-18 in San Bernardino County. It consists of 4 components: Freeway (SR-14 to 100th St.: up to 4 mixed-flow lanes in each direction and from 100th St. to SR-18: 3 mixed-flow lanes in each direction), High Speed Rail connection between CA HSR in Palmdale and XpressWest in Victorville, Energy corridor that runs parallel to the freeway, and bicycle component along the entire freeway. From east to west, respectively; first 10 miles and last 10 miles will be non-tolled; the middle 30 miles will be tolled.

(Map 2) **I-5 North Capacity Enhancements (from SR-14 to Lake Hughes Rd.)** – Existing facility is 4 Mixed-Flow lanes in each direction. The new project starts from SR-14/I-5 Interchange to Lake Hughes Rd. in Castaic along I-5 for a total of 14 miles. The new project consists of adding 1 Truck lane and 1 HOV lane in each direction, while maintaining existing mixed-flow lanes.

(Map 3) **SR-71 from I-10 to Rio Rancho Rd.** – The number of existing Mixed Flow lanes varies from 2 to 3 in each direction through this segment of the SR-71. The new project adds 1 Mixed-Flow lane in each direction on the SR-71, from I-10 to Rio Rancho Rd. for a total of 3 miles. The project will provide 3 Mixed Flow lanes throughout with 4 Mixed Flow lanes in segments.

(Map 4) **SR-57/SR-60 Interchange Improvements** – The project includes adding a new westbound on-ramp to the SR-60 at Grand Ave., street widening improvements in the vicinity of Grand Ave. and Golden Springs Dr., a new westbound off-ramp to the SR-60 and auxiliary lane to Grand Ave., freeway mainline improvements and by-pass connectors, for a total of 2 miles.

(Map 5) **I-105 Express Lanes from I-405 to I-605** – Existing facility is 1 HOV and 3 to 4 Mixed-Flow lanes in each direction. The new project re-stripes the existing HOV lane to create 2 Express Lanes in each direction for a total of 16 miles, while maintaining current number of mixed flow lanes in each direction.

(Map 6/24) **®Sepulveda Pass Transit Corridor** –MODE NOT SPECIFIED – Could be a new high capacity transit mode connecting the Orange Line Van Nuys station underneath the Sepulveda Pass, with a station at UCLA, terminating at Wilshire/Westwood Purple Line station. Approximately 8.8 miles. Existing facility is 4 Mixed-Flow lanes and 1 HOV lane in each direction. If private revenue to fund the project is needed, restriping the HOV lanes within the existing Right of Way to add 2 ExpressLanes in each direction (while maintaining the current 4 Mixed-Flow Lanes), from US-101 to I-10 for a total of 10 miles will be considered.

(Map 7/18) **@I-710 South Corridor Project** – Existing facility is 4 Mixed-Flow lanes in each direction. The new project will add 2 Zero Emission Truck lanes in each direction, from Pico/Anaheim in Long Beach to Bandini/Washington in Commerce for a total of 18 miles, while maintaining current mixed flow lanes.

(Map 15) **I-605/I-10 Interchange** – The new project will improve interchanges from Eastbound I-10 to Southbound I-605, Westbound I-10 to Southbound I-605, Northbound I-605 to Eastbound I-10, and Northbound I-605 to Westbound I-10.

(Map 16) **I-5 South Corridor Improvements (I-605 to I-710)** – Existing facility is 4 Mixed-Flow lanes in each direction. The new project will add 1 Mixed-Flow lane and 1 HOV lane in each direction, from I-710 to I-605 for a total of 7 miles, for a total of 5 Mixed-Flow lanes and 1 HOV lane in each direction.

(Map 17) **I-405 South Bay Curve Improvements** – Existing facility is 4 Mixed-Flow lanes and 1 HOV lanes in each direction. The project will add segments of an Auxiliary Lane in each direction to address existing bottleneck and to improve the weaving movements at on/off ramps, from Florence Ave. to I-110 for a total of 10.4 miles, while maintaining current mixed-flow lanes.

(Map 19) **I-110 Express Lane Ext South to I-405/I-110 Interchange** – Existing facility is 5 Mixed-Flow lanes in each direction. The new project is to extend the existing I-110 Express Lanes southward to the I-405, for a total of 1 mile. This will create a total of 5 Mixed-Flow lanes and 1 Express Lane for that mile.

(Map 20) **SR-60/I-605 Interchange HOV Direct Connectors** – The new project is from the North and Southbound on I-605 from Rose Hills to I-10 and on East and Westbound SR-60 from Santa Anita to Turnbull Canyon. The Interchange improvements include adding auxiliary lanes, widening lanes and bridges, interchange connectors, ramp improvements and realignments.

(Map 26) **I-405/I-110 Express Lanes Direct Connect Ramps & Interchange Improvements** – The new project provides direct connector ramps between Express Lanes on the I-110 and I-405.

Major Transit Construction Projects

(Map 8) **@Airport Metro Connector (includes Green Line extension terminus)** – 96th Street Station to LAX People Mover with a new Green Line Terminus and consolidated bus interface for 13 Metro and Municipal bus lines. The project includes a terminal building that connects the Metro Regional Rail system to a Los Angeles World Airport sponsored Automated People Mover into LAX, restrooms, wifi, retail, passenger pick-up and drop-off area, and other pedestrian and bicycle amenities (such as a bike hub and future bike share) could be included.

(Map 9) **@East San Fernando Valley Transit Corridor** – A high-capacity transit project, mode to be determined, that connects the Orange Line Van Nuys station to the Sylmar/San Fernando Metrolink Station. Consisting of 14 stations, 9.2 miles.

(Map 10) **Bus Rapid Transit Connector Orange/Red Line to Gold Line** – A bus rapid transit project from North Hollywood Orange/Red Line Station to Pasadena, route to be determined, with a station-to-station connection to the Gold Line. Approximately 15.3 miles.

(Map 11) **Gold Line Foothill Extension to Claremont** – A light rail extension of the Gold Line from its current terminus at Citrus College Station to the Claremont Metrolink Station through the cities of Claremont, Glendora, La Verne, Pomona, and San Dimas. Consisting of 5 stations, 11 miles.

(Map 12) **@Westside Purple Line Extension to Westwood/VA Hospital (Section 3)** – This is an extension of Purple Line Subway Section 2 along Wilshire Blvd from Avenue of the Stars in Century City west to Westwood/VA Hospital. Connection to Sepulveda Pass Subway (HRT) at Westwood/UCLA Station. Consisting of 2 stations, 2.5 miles.

(Map 13/25) **@West Santa Ana Transit Corridor** – New light rail connection from the City of Artesia to Union Station spanning 20 miles using city streets, Metro, and ports owned rail right-of-way.

(Map 14) **Orange Line BRT Improvements**

OPERATION SHOVEL READY PROJECT: Grade separations, at critical intersections, along the Metro Orange Line which would allow buses to operate over or under the cross-streets without having to stop for signals, and greatly improve travel times through key intersections, in addition to other improvements.

(Map 23) **Vermont Transit Corridor**– A 12.5 mile high capacity bus rapid transit corridor from Hollywood Blvd to 120th Street, just south of the Metro Green Line.

(Map 21) **@Metro Gold Line Eastside Phase II (one alignment)** – Extension of the existing Gold Line Eastside light rail corridor beginning at the existing Gold Line Atlantic Station eastward either SR60 to South El Monte (6.9 miles) or Washington Blvd to Whittier (9.5 miles). A single alignment is to be determined based on the environmental process.

(Map 22) **@South Bay Green Line Extension to Torrance Transit Center/Crenshaw Blvd** – Extension of a light rail line from its current terminus at the Redondo Beach Station to the Torrance Transit Center at Crenshaw Blvd. Consisting of up to 4 stations, 4.7 miles.

(Map 27) **Crenshaw Light Rail Northern Extension to West Hollywood** – A light rail line from the terminus of the current project at Exposition and Crenshaw to the Red Line at Hollywood/Highland, route to be determined. Approximately 6 to 9 miles.

(Map 28) **Orange Line Conversion to Light Rail** – A conversion of the existing Orange Line BRT to LRT, from Warner Center to North Hollywood. Consisting of 14 stations, 14.5 miles.

(Map 29) **Lincoln Blvd BRT Connecting LAX to Santa Monica** – A bus rapid transit corridor from the Airport Metro Connector (96th St Station) north along Lincoln Blvd, terminating at 4th/Colorado (Expo Line). Approximately 8.8 miles.

(Map 30) **Green Line to Norwalk Metrolink Station** – A 2.8 mile light rail extension of the Metro Green Line from its existing terminus at the I-605 in Norwalk/Santa Fe Springs Metrolink Station.

(Map 31) **Sepulveda Pass Corridor – Westwood to LAX** – An approximately 10 mile extension from the Metro Purple Line Wilshire/Westwood Station to the Airport Metro Connector Station at 96th Street/Aviation Blvd at LAX.

(Not Shown on Map) **Crenshaw/LAX Track Enhancement Project** – The Crenshaw/LAX project is a light rail line, currently under construction, a portion of which runs in a trench adjacent to the LAX runways and the LAX Runway Protection Zone. Metro is installing a cover over the portion of the below grade trench that are currently open. The Final Environmental Statement/Final Environmental Impact Report (FEIS/FEIR) describes this condition and requires that this trench be covered in its entirety when funding becomes available.

(Not Shown on Map) **Complete LA River Bike Path – San Fernando Valley Gap Closure** – This project will close approximately 12 miles of gaps in the existing LA River Bike Path--from Canoga Park to the City of Glendale--where it will connect to an existing path that ends in Elysian Valley, north of Downtown LA, yielding 26 miles of continuous bike path. (Combined with completion of the 8-mile LA River Bike Path Central Connector, the 51-mile LA River Bike Path--from Canoga Park to Long Beach--would be completed.)~~This project, connecting Downtown Los Angeles to the San Fernando Valley, would complete the LA River Bike Path.~~

(Not Shown on Map) **LA River Waterway & System Bike Path – Central Connector** – This project will close an approximately 8 mile gap in the existing LA River Bike Path from Elysian Valley through Downtown Los Angeles and the City of Vernon to the City of Maywood, yielding 31 miles of continuous path. (Combined with completion of the 12-mile LA River Bike Path San Fernando Valley Connector, the 51-mile LA River Bike Path--from Canoga Park to Long Beach--would be completed.)~~This project will connect Canoga Park to Elysian Valley and close 12 miles of gaps along the LA River.~~

(Not Shown on Map) **City of San Fernando Bike Master Plan** – This project will create a bike path to run along the Pacoima Wash.

(Not Shown on Map) **Historic Downtown Streetcar** – This streetcar project is located in downtown Los Angeles with a round-trip length of approximately 3.8 miles. It would run within existing traffic lanes from 1st Street on the north to 11th Street on the south.

Systemwide Connectivity for Passengers and Goods

Central to the efficient performance of the county transportation system is ensuring connections to major facilities that attract and generate significant vehicle and truck travel. These regional facilities for passengers and goods include airports, seaports, central rail stations, and the modernization of highway and transit infrastructure that serve these facilities. This program is intended to support systemwide highway improvements, access to airports and seaports, and transit connectivity and modernization. Systemwide highway improvements include improved technology to better manage traffic flow on freeways and roadways, freeway construction projects that eliminate key bottlenecks and enable increased volumes of commuters to travel on freeways at faster speeds through new carpool lanes, and expanded services that eliminate bottlenecks created by traffic incidents such as Freeway Service Patrol. Access improvements to the Los Angeles County airports and seaports include projects that improve the direct access to the airports and seaports from the highway system, improving the flow of goods and passengers on the highway system while reducing the impact of truck and vehicle traffic to the surrounding communities through projects that use technology to reduce air pollution emitted from truck traffic. Transit connectivity and modernization projects include improved transit connections to Los Angeles County airports, between Metro and Metrolink rail services and other enhancements to the aging passenger rail system to allow service to meet growing travel demand.

Funding and Eligible Projects

Funding for the Systemwide Connectivity program will come from a special designation from the Highway Capital Projects (2% of 17%) and the Transit Capital Projects (2% of 32%) for a total of 4% of the total sales tax revenues. Funding from this program is divided over projects with direct commitments of funding as identified in the Expenditure Plan and those projects to be identified through a future planning process. The following list identifies projects representative of those types of projects eligible for funding from the Systemwide Connectivity program through the future planning process. Funding for these projects is intended to be made available on a competitive basis over the life of the sales tax measure to support the leveraging of local, state, and federal freight funds. Projects with direct commitments of funding from the Systemwide Connectivity program include: (1) the Airport Metro Connector/96th Street Station/Green Line Extension to LAX; (2) the Crenshaw/LAX Track Enhancements; and (3) Countywide Bus Rapid Transit (BRT) Expansion. These project funding amounts and schedules are identified in the Expenditure Plan.

the potential for increasing transit access, improving regional mobility, reducing transportation costs, and easing commutes, all at a relatively limited cost. It provides a cost effective way for ridership to grow prior to instituting major capital investments. In December 2013, Metro Completed the Los Angeles County BRT and Street Design Improvement Study (CBRT) to identify, analyze and develop recommendations for an effective Countywide BRT system. The CBRT Study's overall approach was designed to leverage the success of the Metro Rapid program as well as the Metro Orange and Silver Lines, thereby creating a faster, more seamless,

Systemwide Connectivity - Representative Projects*

* Projects shown are representative of those types of projects eligible for funding over the life of the potential ballot measure through future competitive processes. The identified list of projects is based upon input from the regional facility agencies, including the airports and sea ports, with focus on those projects that provide direct access to and from the state highway system or regional transit system.

Project
Transit
Green Line Extension to Norwalk Metrolink Station
Metrolink Capital Projects
Division 20 Portal Widening and Turnback Facility
Union Station Improvements
Southern California Regional Interconnector Project (Metrolink Run-Through)
Union Station Master Plan (USMP) Infrastructure Improvements
Bob Hope Airport Access Improvements
Metro Red Line Extension: North Hollywood to Burbank Airport
Union Station/Burbank/Glendale Light Rail Transit (LRT)
Highway
Bob Hope Airport Access Improvements
Clybourn Ave: Grade separation at railroad tracks / Vanowen St / Empire Ave
Los Angeles Airport (LAX) Access Improvements
I-405: Construct LAX Expressway
Interstate 405 (I-405) Direct High Occupancy Vehicle (HOV) Connector to LAX
Provide an on-ramp to I-405 northbound from northbound La Cienega Boulevard
Palmdale Airport Access Improvements
Rancho Vista Grade Separation Project from Fairway Drive to 15th Street East
Long Beach Airport Access Improvements
Bellflower Blvd / Spring St. Freeway Approaches
Lakewood Blvd. / Spring St. Freeway Approaches
Wardlow Rd. / Cherry Ave. Intersection Widening and Freeway Approaches
Port of Los Angeles (POLA) Improvements
Alameda Corridor Terminus - West Basin Track (West Basin 2 nd Mainline Track)
SR 47/V. Thomas Bridge/Harbor Blvd. Interchange
SR 47/Navy Way Interchange
Port of Long Beach Improvements
Port Area Advanced Transportation Management and Information System 2.0
Goods Movement Technology - FRATIS, ZE/NZE Emissions Technology
Systemwide Highway Improvements
I-210 HOV Lanes (I-5 to SR-134)
SR-57 HOV Lanes (SR-60 to I-210)
SR-2 HOV Lanes (SR-134 to Glendale Blvd)
I-405 Express Lanes (I-110 to I-105)
Downtown I-5 Flyover at the I-10/US-101 Interchange
I-5 HOV Lanes (SR-134 to I-110)
SR-60 HOV Lanes (US-101 to I-605)
Freeway Service Patrol Expansion
Highway TSM&O and Freeway Smart Corridors

Potential Ballot Measure: Operations and other Programs

Introduction

This potential ballot measure is designed to ease congestion by expanding LA County's transportation network. Los Angeles is building the best, most innovative, balanced, customer-focused transportation system in the world. Thanks to Measure R, two more rail lines are opening this year and three more are under construction. The entire region is involved: each city, each transit operator and all the regional stakeholders are shaping the landscape of Los Angeles County.

The region faces many challenges in easing congestion and traffic. With population expected to grow by $\frac{3}{4}$ of a million people in the next decade, it is vital that LA invests in its' transit infrastructure, building and maintaining assets now and for the next century.

A ballot measure designed to provide funding for an integrated, connected, multimodal transportation network to serve all residents of Los Angeles County must include reasonable funding levels for all categories, including countywide transit operations, Metro Rail operations, state of good repair, commuter rail, ADA-mandated paratransit service, and local return.

To reflect the ongoing transportation needs of the region, to seek input from all stakeholders and to establish need-based recommendations for transit operations and other programs categories, a working group of representatives from ten transit agencies (seven of whom are part of cities), two cities and the County of Los Angeles was set up (the "Working Group"). **The intent of the Working Group was to reflect and represent the ongoing transportation needs of the region.**

The results of the Working Group were presented to Metro staff for use as a starting point for the Operating and other programs Category funding in the expenditure plan draft (included at the end of this attachment). The next section details Metro's staff recommendation, including descriptions, justifications, projected need and projected funding allocations for each of the categories.

Metro Staff Recommendation

Transit Operations 20%	<i>For countywide transit operations (consistent with ridership patterns), Metro and Municipal Operators, allocated through the Formula Allocation Procedure (FAP). Funding will improve system safety and customer service, and fund state of good repair while providing faster, frequent, reliable and accessible services, while prioritizing enhanced services in transit dependent areas.</i>
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Los Angeles County requires a robust, accountable and sustainable plan to meet the transportation needs of its 10.4 million residents. In addition to being one of the most populous, Los Angeles County is also the most congested region in the nation after Washington, DC. Los Angeles County residents, on average, spend 80 hours of their time and 19 gallons of fuel in traffic jams each year. With the population expected to grow by another 750,000 people in the next decade, alternatives to driving alone are needed now more than ever in order to ease congestion in the region. In order to encourage use of public transit, improvements must be made in the following areas:

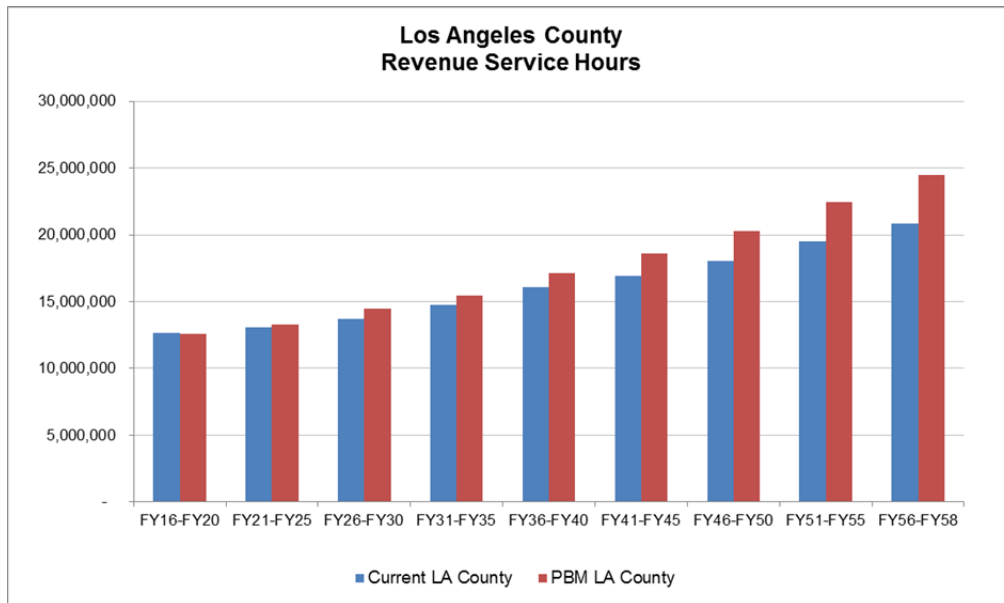
- **Faster Service:** Investing in more BRT services, expanded freeway bus services and other, more direct and on demand “emerging transit alternatives”, will decrease travel times for our customers. In addition, bus stop dwell times will be reduced through additional off board fare payment options and street improvements such as bus stop bulb out (curb extension).
- **Frequent Service:** Establishing all-day frequent bus service on high demand corridors will increase the convenience, usability, and attractiveness of the transit network.
- **Reliable and Accessible Service:** With improved line management, more fixed guideways, transit priorities, and accessibility to more transit services, this provides residents with greater public access, that they can count on, to all parts of the County.
- **System safety:** Providing a safe system for our riders and our communities is essential. The safety of our system includes the maintenance and improvement of our infrastructure (from vehicles, transit facilities, bus stops, stations, etc.) as well as the safety of our patrons.
- **Customer experience:** Enhancing the overall customer experience is essential in attracting more riders to our expanding system. As emerging technology becomes the foundation of everyday life for a changing demographic, we need to ensure the system is simple to use, convenient, and provides instant information. Advancements in technology that not only provides real-time information on schedules and service alerts, but also for promotions relevant to location, time of day, day of week, or discounted fares based on real time service demand, will ensure that our system stays ahead of the technology curve that will be expected from LA County residents and visitors alike.

Focusing on these areas will improve the overall customer experience and provide the region with better transportation options and a balanced transit system for the next century.

With the expansion of Metro Rail service throughout the county, municipal operator systems are critical feeder services and first/last mile connections to new infrastructure expansion. Throughout the region, funding from the potential ballot measure would also be used to expand the regional transportation system in innovative new ways to accommodate demographic and demand shifts. By creating a balanced, more flexible multi-modal

transportation system, more people will be able to travel at the same time, easing congestion and speeding up travel time countywide.

As service expands and mobility improves throughout the region, ridership is projected to increase over the next 40 years. The chart below illustrates the projected increase in revenue service hours throughout the county over the next 40 years.



Transit services (bus services – Metro and Municipal Operators, BRT, and Metro Rail) throughout the county will have the capacity to double, with transit usage and ridership potentially tripling. With faster, frequent, reliable, accessible services available, shifts in current travel modes to public transit will reduce single occupancy vehicles and ease congestion throughout the county.

Transit Operations			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	20% of 1/2 cent	\$170.2	\$5,796.0
Potential Ballot Measure Addition			
FY18 - FY39	20% of 1/2 cent	170.2	5,796.0
FY40 - FY57	20% of 1 cent	340.4	18,127.0
Total PBM Addition			\$23,923.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$29,719.0

The Potential Ballot Measure will provide up to an additional \$23.9 Billion, over the next 40 years to ease congestion throughout the county. Transit operations funds will be distributed to Metro and the Municipal Operators according to the Formula Allocation Process (FAP).

Recommendation – 20% over the life of the expenditure plan, providing approximately \$23.9 Billion in year of expenditure.

Local Return 16%	<i>For 88 local jurisdictions and Los Angeles County, allocated by population. Funds are used for communities' transportation needs, including transit, streets and roads, storm drains, "Green" streets, Active Transportation Projects, Transit Oriented Communities' Investments and other unmet transit needs.</i>
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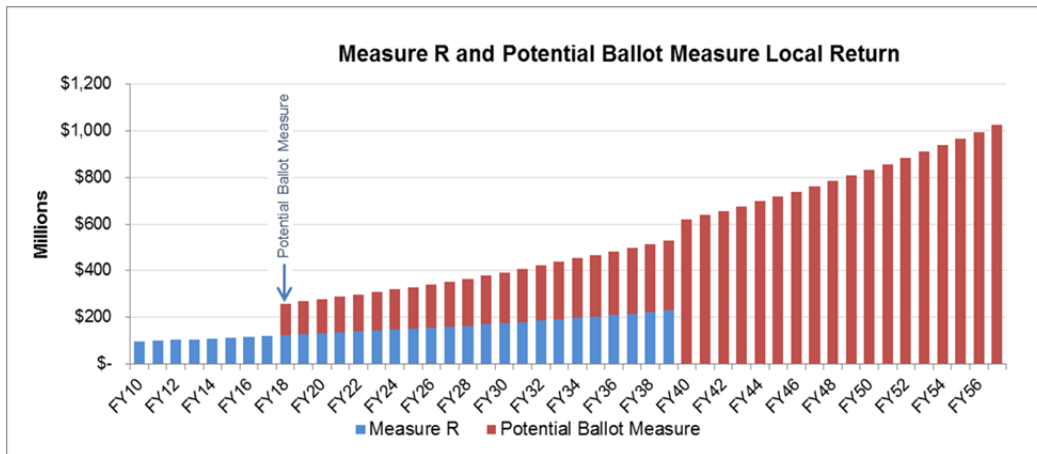
Each of Metro's sales tax measures includes a dedicated funding source for allocation to local jurisdictions throughout Los Angeles County. These funds are used by 88 cities and the County of Los Angeles for their transit services, transportation projects and infrastructure improvements. There are more than 4700 miles of major roads and local streets with hundreds of traffic control devices such as traffic signals, pedestrian crossing signs, and signal synchronization systems.

The Potential Ballot Measure will more than double the Measure R Local Return funds from 2017 to 2057 (forty years), with 15% of Measure R sales tax receipts plus 16% of the new ballot measure's receipts going to Local Return. These additional funds will be used to improve local neighborhoods and communities with projects such as major street resurfacing and rehabilitation, pothole repair, left turn signals, Active Transportation Projects (ATP) such as bikeways, pedestrian improvements, and traffic control measures such as signal synchronization, technological innovations. They will also provide additional funding for local transit services, such as those represented by the LTSS and Tier 2 operators.

Local Return			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	15% of 1/2 cent	\$127.7	\$4,347.0
Potential Ballot Measure Addition			
FY18 - FY39	16% of 1/2 cent	\$136.2	4,637.0
FY40 - FY57	16% of 1 cent	272.4	14,501.0
Total PBM Addition			\$19,138.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$23,485.0

The Potential Ballot Measure will provide up to an additional \$19.1 Billion, over the next 40 years to pursue each local cities' transportation priorities and needs.

Currently, 9% of the Measure R Local Return funds are used for public transit. The Potential Ballot Measure provides maximum flexibility for local jurisdictions for use of these funds, allowing jurisdictions to potentially double the amount they can allocate for local transit or for other transit projects, based on their priorities and needs.



As part of the Local Return program, oversight and maintenance of efforts will be developed, with annual audits, providing for strict oversight and full transparency on the use of these funds to ensure compliance with the ordinance. Local Return program guidelines will be developed through a Working Group that is represented by the cities. The guidelines will provide for flexible financing options, allowing local jurisdictions to issue its own debt or work with Metro to issue bonds on their behalf.

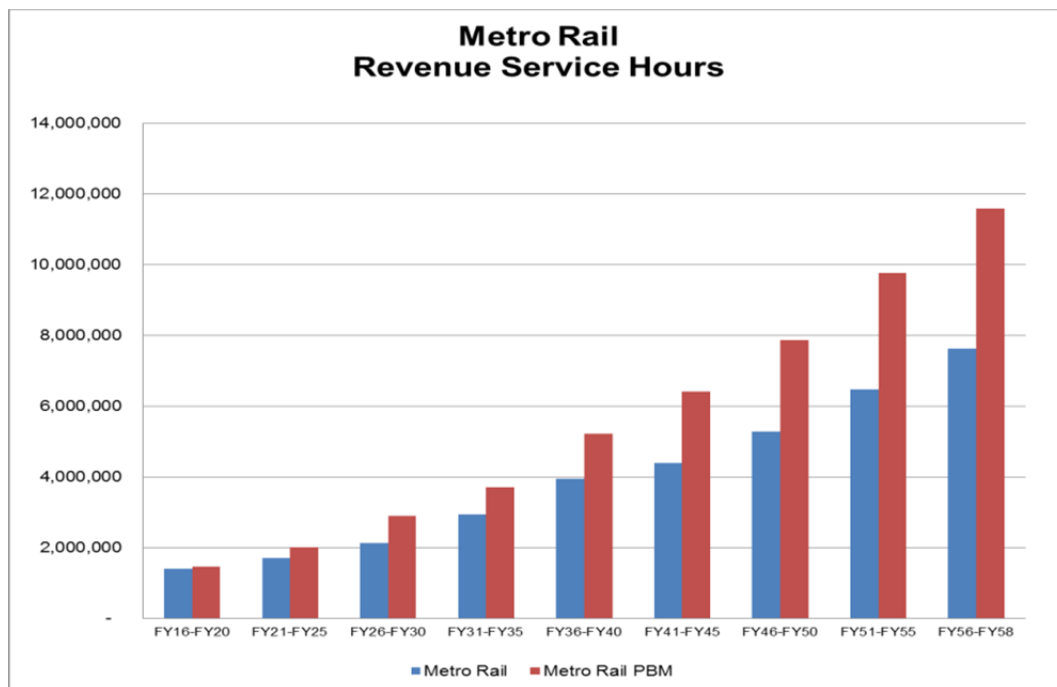
Recommendation – 16% over the life of the expenditure plan, providing approximately \$19.1 Billion in year of expenditure.

Metro Rail Operations**5%**

For Metro Rail Operations, emphasizing system safety, improved customer service and faster, frequent, reliable and accessible services. To fund growing rail operating needs and rail state of good repair due to the expansion of the rail system.

Metro Rail is the backbone of the county's transit network, providing service in highly congested corridors and moving more riders at greater speeds. Historically, every time a rail line opens, transit ridership has increased, doubling in that corridor. Rail service is provided on fixed guideways, resulting in faster and more reliable service. Not only does rail relieve congestion by offering another transit option, it also transforms communities by presenting transit-oriented development opportunities around rail stations. As these projects open and the Metro Rail network expands, dedicated funding will be needed to operate and maintain the service necessary to serve the mobility needs of the region. Funds can be used to supplement rail state of good repair needs.

In FY15, the Metro Rail system consisted of six lines and 87 route miles. Within the next few months, it will expand to 106 route miles, and by 2030 grow to over 125 route miles. The new ballot measure will provide even more: over 100 more route miles, over 20 light and heavy rail lines and over 70 more stations. New funding dedicated to Metro Rail operations will address this need. Supplementing the 5% allocation for Metro Rail operations from Measure R with another 5% and ensuring the funding will continue until at least 2057 are critical steps to the success of the plan for Metro Rail expansion.



Over the next 40 years, rail service has the capacity to increase up to 10 times, with frequent service allowing for 2 minute headways and more car consists to meet ridership demands. With this expansion and increase, rail service could represent half of the county's transit services. Rail service increases system speed and capacity for transit, allowing for more boardings per hour and per mile, to ease congestion and traffic in the county.

Metro Rail Operations			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	5% of 1/2 cent	\$42.6	\$1,449.0
Potential Ballot Measure Addition			
FY18 - FY39	5% of 1/2 cent	42.6	1,449.0
FY40 - FY57	5% of 1 cent	85.2	4,532.0
Total PBM Addition			\$5,981.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$7,430.0

The Potential Ballot Measure will provide up to an additional \$5.9 Billion, over the next 40 years to ease congestion throughout the county.

Recommendation – 5% over the life of the expenditure plan, this would provide approximately \$5.9 Billion.

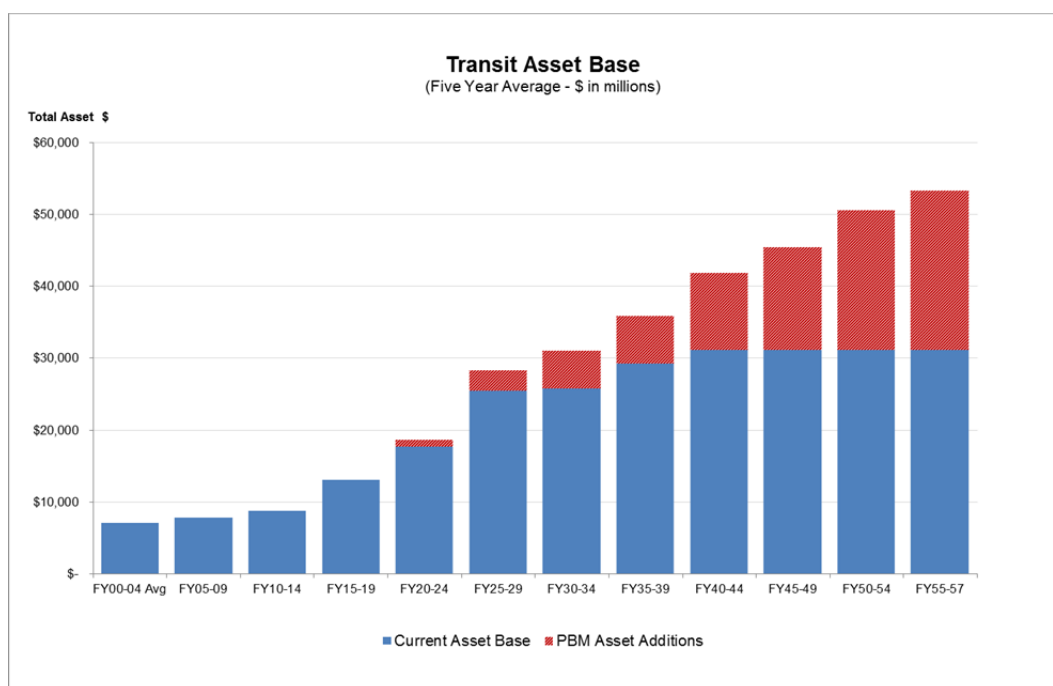
Metro State of Good Repair, Safety Improvements and Aging Infrastructure

2%

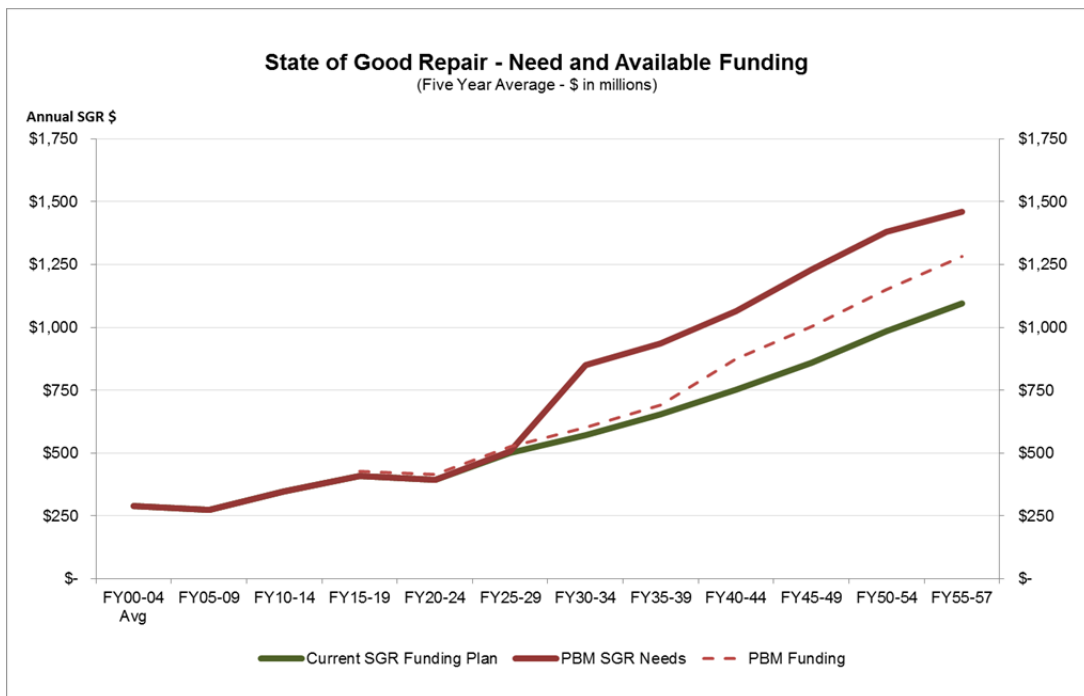
(NEW) A robust state of good repair program is necessary to keep the current aging infrastructure, such as Blue Line, and expanding system in top form. A dedicated funding source will allow for quality, reliable, on-time, and uninterrupted services for our riders. Currently no dedicated funding for state of good repair exists.

State of Good Repair is closely aligned with safety and security and is the first mega-trend that all transit agencies are facing. While we continue to expand, it is critical to take care of what we have and what we will build to prevent safety issues. An emphasis on SGR is critically necessary to keep the expanding transit system in top form. A robust SGR funding program is a top tier priority to ensure safety, earthquake retrofitting of infrastructure, and to prevent breaks in service delivery or unanticipated equipment failures during the course of providing transit service for Metro's 1.4 million average daily boardings.

Thanks to Measure R, the Metro Rail transit infrastructure will grow to over 125 route miles by 2030. This combination of older and newer rail systems places increased loads on our older rail infrastructure to service the new destinations. To address this, Metro must ensure that we maintain the existing Metro Rail system, which in some corridors is over a quarter century old and does not have a dedicated funding source for its increasing SGR needs. In addition, our asset base continues to expand as we build new lines, and SGR expenses for new services will increase accordingly.



The asset base will continue to grow as Measure R projects are completed and as older assets are replaced. For the FY15-FY19 time frame, the estimated asset base will be over \$14 billion and is estimated to be over \$50 billion, after the term of the new ballot measure. The chart below shows the projected funding need to maintain these assets in a state of good repair. The red line denotes our projected funding need, the green line denotes our current funding plan, the gap between these two lines is the funding gap.



The resources needed to maintain this expanding system will need to grow. Assuming an average asset lifespan of 25 years, revenue sources will be insufficient to keep up with the costs associated with State of Good Repair efforts. In recent years, Metro has been diverting Operations eligible funding to supplement SGR project resources. While this is helping to restore assets in a state of good repair, it is not a sustainable practice. A 2% allocation of the potential ballot measure will alleviate near term funding pressures to maintain SGR. However, with the continued asset growth due to transit expansion beyond Measure R, the 2% allocation is also not a long term solution to the SGR problem as costs to maintain growing Metro assets is expected to outpace available SGR dedicated resources. Metro is taking steps to further mitigate this funding gap in the Asset Management Plan by utilizing a condition-based asset approach, which will assess the assets' condition rather than just the age of the asset.

State of Good Repair, Safety Improvements and Aging Infrastructure			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	None	-	-
Potential Ballot Measure Addition			
FY18 - FY39	2% of 1/2 cent	17.0	580.0
FY40 - FY57	2% of 1 cent	34.0	1,813.0
Total PBM Addition			\$2,393.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$2,393.0

The Potential Ballot Measure will provide up to \$2.4B over the next 40 years to maintain our expanding and aging infrastructure. This dedicated funding source will allow us to leverage federal and state grants and bond financing.

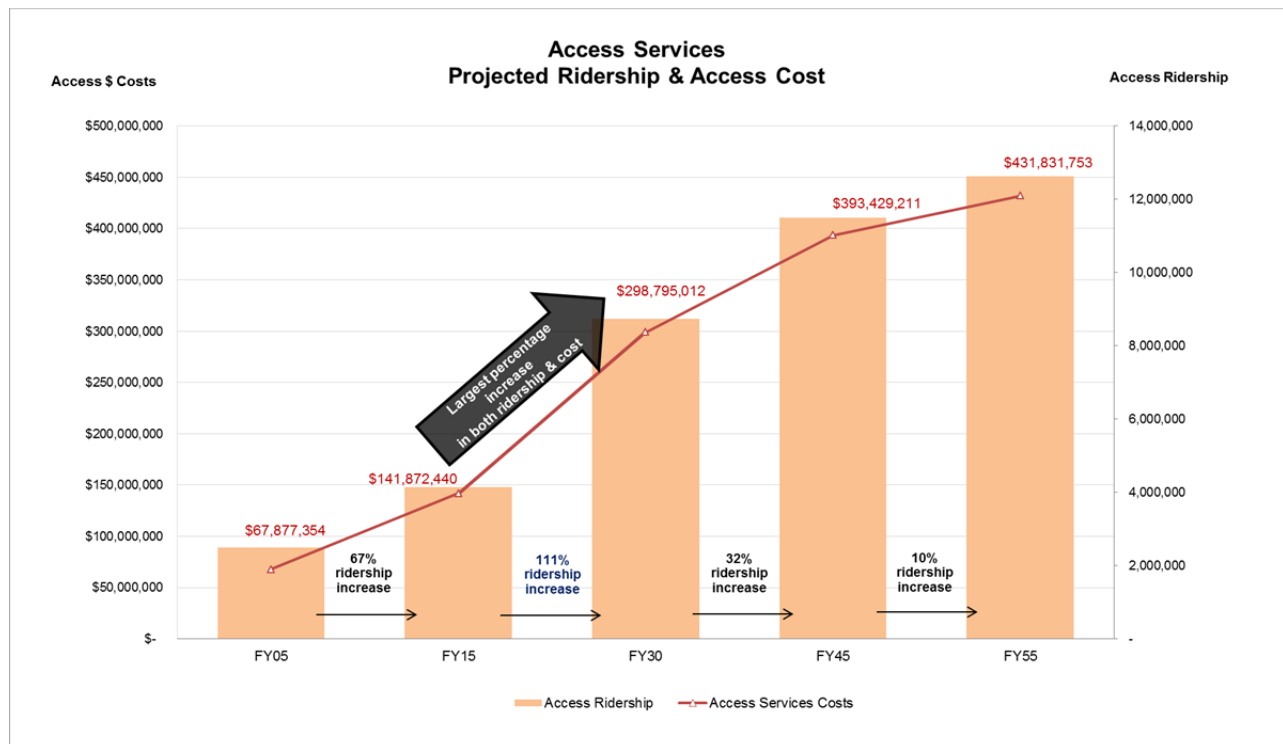
Recommendation – 2% over the life of the expenditure plan, providing approximately \$2.4 Billion in year of expenditure. Note: Create provision where Metro Board can increase State of Good Repair percentage after 2039, based on the condition of assets, when approximately 15 rail lines will be in operation.

Americans with Disabilities Act (ADA) Paratransit Services for the Disabled; Discounts for Seniors and Students
2%

(NEW) To fund paratransit services mandated by the American with Disabilities Act (ADA) and student discounts. Currently no dedicated funding for ADA-mandated paratransit exists.

Paratransit services are mandated by the Americans with Disabilities Act (ADA). In Los Angeles County, ADA paratransit is currently provided by Access Services (Access) on behalf of 44 fixed-route operators including Metro. No funding for ADA paratransit service was included in previous ballot measures. ADA paratransit costs and demands are growing due to demographic shifts of an aging population of baby boomers and cuts in human services transportation funding.

The provision of compliant ADA-mandated paratransit services is considered a civil right under federal law and must be appropriately funded. Access has traditionally been funded using federal and local funds which have not been growing at the same rate as ADA paratransit demand. From 2005 through 2015, demand for ADA paratransit services has increased by 67% and is expected to continue growing at a significant rate in the years ahead, as seen in the graph below. Over the next 15 years, ADA ridership is expected to significantly increase by 111%, with projected costs doubling to \$298M in FY30.



In order to minimize the impact of funding for other fixed route services, there is a pressing need for a new, dedicated source of funding to maintain a quality, compliant ADA paratransit system.

ADA Paratransit Service for the Disabled; Discounts for Seniors and Students			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	None	-	-
Potential Ballot Measure Addition			
FY18 - FY39	2% of 1/2 cent	17.0	580.0
FY40 - FY57	2% of 1 cent	34.0	1,813.0
Total PBM Addition			\$2,393.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$2,393.0

The Potential Ballot Measure will provide up to \$2.4B over the next 40 years to serve our seniors and people with disabilities in the coming decades, which is one of the primary challenges to transit systems on both an operational and financial basis.

Recommendation – 2% over the life of the expenditure plan, providing approximately \$2.4 Billion in year of expenditure.

Regional Rail 1%	<i>Improvements for regional rail service within Los Angeles County, includes operating, maintenance, expansion, and state of good repair</i>
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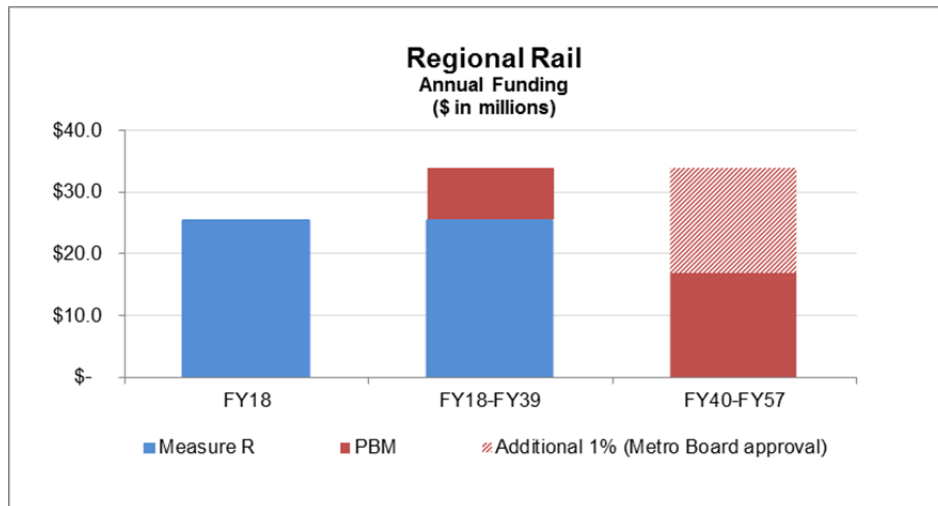
Metrolink is the only inter-county commuter rail system, providing connectivity for Los Angeles County residents with long distance travel options between six counties in Southern California. Commuter Rail funding will be eligible for operating, maintenance, expansion and state of good repair improvements within Los Angeles County.

As Metrolink's largest partner, Metro is seeking to increase services and safety investments throughout Los Angeles County. Funds will be used to provide strategic investments in additional track capacity, grade crossing and other safety improvements and enhance service levels in the Antelope, San Fernando, and San Gabriel Valleys. Proposed projects include pedestrian and vehicle crossing improvements in the cities of Lancaster, Palmdale, and Santa Clarita and the continued implementation of Sealed Corridor improvements on Metro owned rights-of-way through the San Fernando Valley. Additional projects include track expansion improvements in the San Fernando Valley to allow increases in system speeds and increase service capacity. With increased services the need for vital safety improvements, Metro has also targeted over 160 railroad crossings in Los Angeles County that are in need of vital improvements to enhance the safety of residents, pedestrians, and passengers alike.

Additional service expansion is also expected on the Antelope Valley, as a first priority and San Bernardino Lines, carrying the largest number of Los Angeles County residents. Increased mid-day and nighttime services are necessary to address the reverse peak and off-peak service as Metrolink transitions to a more balanced regional rail system offering bi-directional travel.

Metro currently provides the largest commuter rail funding contribution to the commuter rail agency, Metrolink, among all of the Member Agencies. However, this funding amount is not in alignment with Metrolink's governance structure. As a partner in Metrolink, Metro's contributions are matched by up to an additional \$3 dollars by the other Member Agencies and fare revenues – each dollar can equal up to four. Capital Expenditures are matched up to a dollar for dollar basis by Federal, State or other Local Funds.

Regional Rail			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	3% of 1/2 cent	\$25.5	\$869.0
Potential Ballot Measure Addition			
FY18 - FY39	1% of 1/2 cent	8.5	290.0
FY40 - FY57	1% of 1 cent	17.0	906.0
Total PBM Addition			\$1,196.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$2,065.0



The Potential Ballot Measure will increase Regional Rail allocation by \$8.5M annually from FY17-FY39, for a total of \$1.2 Billion over the life of the measure to pursue vital infrastructure improvements. In addition, Regional Rail capital projects are also eligible to participate in the 2% of the regional asset projects, included in the 32% Transit Construction portion.

Recommendation – 1% over the life of the expenditure plan, providing approximately \$1.2 Billion in year of expenditure. Note: Create provision where Metro Board can increase Regional Rail percentage up to an additional 1% after 2039 based on verifiable service improvements.

Working Group Formation and Process

The final list of categories and Working Group representatives for each category is as follows:

- **Transit Operations:** The Los Angeles County Municipal Operators Association (LACMOA) provided the following representatives:
 - › Art Ida, Culver City Bus Lines
 - › Ed King, Santa Monica Big Blue Bus
 - › Kim Turner, Torrance Transit
- **Metro Rail Operations:**
 - › Melissa Wang, Metro
- **State of Good Repair:**
 - › Greg Kildare, Metro
- **Commuter Rail:**
 - › Art Leahy (replaced by Anne-Louise Rice), Southern California Regional Rail Association (SCRRA)
- **ADA Paratransit:**
 - › Andre Colaiace, Access Service
- **Local Transit Systems:** The Local Transit Systems Subcommittee (LTSS) provided the following representatives:
 - › Justine Garcia, City of Glendora
 - › Sebastian Hernandez, City of Pasadena
- **Tier 2 Operations:**
 - › Kari Derderian, Los Angeles Department of Transportation (LADOT)
 - › Kathryn Engel, City of Glendale
- **Local Return:** The Technical Advisory Committee (TAC) provided the following representatives:
 - › Pat DeChellis (replaced by Pat Proano), Los Angeles County Department of Public Works
 - › Dan Mitchell, LADOT
 - › Mohammad Mostahkami, City of Downey

The Working Group met five times from November 2015 through January 2016. Realizing no single interest group was going to get everything desired, the Working Group negotiated down to three options, each of which had varying levels of support from the representatives, with Option 1 as the preferred option. These three options are presented in the table below.

Working Group Results

The funding breakdowns of the final three options considered by the Working Group are shown in the table below. The augment and extend construct of the Potential Ballot Measure builds on and dovetails with Measure R. For that reason and for comparison purposes, the closest equivalent Measure R categories are also shown.

**Potential Ballot Measure Non-Capital Working Group
Final Funding Breakdown Options and Priority Votes**

Option Number	1	2	3	Measure R (for Comparison)
Option Sponsor	Metro	Local Return	Commuter Rail	
Funding Category				
Transit Operations (Distributed by FAP)	20%	20%	20%	20%
Metro Rail Operations	5%	5%	5%	5%
Metro State of Good repair	6%	3%	1%	2% Rail Imp, \$150M Clean Fuel Buses
Commuter Rail (Ops/Cap Flexible)	1%	1%	5%	3% Capital Only
ADA Paratransit (Ops/Cap Flexible)	3%	1%	2%	0%
Local Transit Systems (LTSS)	0%	0%	1%	0%
Tier 2 Operators	0%	0%	1%	0%
Local Return	15%	20%	15%	15%
Total Percentage of Entire Measure	50%	50%	50%	45%+
Subgroup Priority Ranking (1=highest)				
LACMOA Municipal Operators	1	2	3	
ADA Paratransit	1	3	2	
Commuter Rail	2	3	1	
LTSS/Tier 2	3	2	1	
Local Return	2	1	3	
Metro	1	2	3	
Average Subgroup Priority Score	1.67	2.17	2.17	
Average Subgroup Priority Ranking	1st	2nd (tie)	2nd (tie)	

Limiting the Operations and other Programs funding to 50% of the total created tight constraints for all categories. For example, the Local Return percentage in all three options falls below the 25% level requested by the North County and South Bay COGs in their Initial Stakeholder Input Submittals. In the case of Local Return, the COG's Capital funding requests for Active Transportation Projects and/or Transit projects, eligible categories for Local Return dollars, provides supplemental funding to the percentages listed on this table.

Regional Active Transportation Program (ATP) - 2% Allocation

The Regional Active Transportation program is a multimodal program of regionally significant projects that encourage, promote and facilitate environments that promote walking, bicycling, rolling modes and transit use, as part of a robust and integrated countywide transportation system. Through various policies and programs, Metro both leads the development of active transportation infrastructure and programs, and provides local jurisdictions with technical support needed for local planning efforts and implementation. To continue this effort, and in response to stakeholders, Metro has created a 2% portion of the draft Expenditure Plan, which is expected to generate \$17 million annually in the first year and more than \$2.4 billion over the 40-year life of the measure.

Approximately half of the allocated ATP funds would be used to fund Projects that would be consistent with Metro's Active Transportation Strategic Plan. Potentially eligible projects including Safe Routes to Schools, complete streets improvements, and first/last mile connections with public transit such as bicycle facilities including bike hubs, protected bike lanes connecting the transportation network, and the countywide bike share program.

These funds, administered by Metro, will be available for the purposes of implementing the Countywide Active Transportation Network, as identified in Metro's Active Transportation Strategic Plan to improve access to transit; enhance safety; promote clean transportation options; improve public health; and foster healthy, equitable, and economically vibrant communities where all residents and visitors have greater transportation choices and access to key destinations. These funds will be made available by Metro for projects and programs that implement the Countywide Active Transportation Network, as identified in Metro's Active Transportation Strategic Plan and which specifically improve connectivity among rail and bus lines, other active transportation facilities and population centers to employment and educational centers. Outcome expected include the following:

- Increase the number of trips made by people who walk or bicycle, rather than drive alone;
- Enhance safety and improve the physical environment for people who walk, bicycle, and take transit;
- Implement;
- Provide bicycle education and training;
- Demonstrate innovative, creative, and/or technological approaches that may expedite project implementation; build community support; and foster multi-modal policies and long-term infrastructure improvements;
- Improve coordination between jurisdictions for multi-jurisdictional projects;
- Support Safe Routes to Schools;
- Leverage other sources of funding.

It is intended that these funds be used to match federal, state, local, and private funding to maximize the number of improvements to be implemented. Metro will establish specific project eligibility criteria for this program to be approved by the Board.

The draft Expenditure Plan assumes that approximately half of the 2% ATP allocation funds two major Los Angeles River projects ATP projects earmarked in the draft Expenditure Plan as well as a portion of the costs of ATP projects submitted by the COGs and included in the draft Expenditure Plan. All told approximately 4.5 to 5% of the draft Expenditure Plan funds are projected to be utilized for ATP projects. This excludes Local Return Funds used for ATP projects. The 1% or \$1.2 billion Regional ATP fund allocation can leverage and enhance local investments being made through the Local Return allocation from Proposition A, Proposition C, and Measure R. Over the last five years, \$443.8 million of Local Return funds (Prop A, Prop C, & Measure R) have been spent on Active Transportation.

REVISED ATTACHMENT L[illegible]

(\$ in millions)

[illegible]

Ballot Measure Augmentation & Extension Ordinance Outline

Preamble

1. Title of the Measure
2. Summary of the Measure
3. Definitions
4. Statutory Authority
5. Extension and/or Imposition of Retail Transaction and Use Tax
6. Administration by Board of Equalization
7. Use of Revenues
8. Oversight
9. Maintenance of Effort Requirements
10. Cost of Administration
11. Amendments and Termination
12. Establishment of Bonding Authority
13. Appropriations Limit
14. Election
15. Effective and Operative Dates
16. Severability



Expenditure Plan Public Input and Outreach Process

March 2016 - June 2016

PURPOSE

As the Los Angeles County Metropolitan Transportation Authority (Metro) plans for future growth and transportation needs, educating and engaging the public about Metro's Long-Range Transportation Plan (LRTP) is essential. This plan is designed to guide Metro's public input and outreach process about the draft Expenditure Plan as part of the overall LRTP Education Program.

SITUATION ANALYSIS

Metro is updating its LRTP to improve mobility and quality of life for all Los Angeles County residents. The plan aims to provide a balanced transportation system that positions the county for future growth. The LRTP will articulate the transportation priorities for Los Angeles County for the next 40 years. The foundation for the updated LRTP is a draft Expenditure Plan that identifies major highway and transit projects evaluated and sequenced based on performance metrics, including project costs and schedules through 2057. The draft Expenditure Plan will also include projects to connect the region and enhance goods movement; active transportation; ADA/paratransit services for seniors and the disabled; transit assistance for students; investments to fund bus and rail operations; ongoing system maintenance and repair; and benefits at the local level.

Development of the draft Expenditure Plan has occurred through a bottoms-up process of collaboration with regional stakeholders including the councils of governments (CoGs) from the county's nine sub-regions. Metro will continue this coordination to get the various stakeholders' feedback on the draft plan.

Upon release of the plan by the Metro Board, the roadmap to educate the public about the draft Expenditure Plan and provide opportunities for public input will occur through four main sectors of the community: Elected Officials Engagement, Key Stakeholder Engagement, Public Engagement, and Media Engagement.

ELECTED OFFICIAL INPUT/ENGAGEMENT

Metro Board members and staff will continue to collaborate with local, state and federal elected officials and their staffs to continue the regional dialogue about the Expenditure Plan.

- Local Officials** – Community and Municipal Affairs will continue with the team’s “88 Cities” project including briefings with city leadership and staff and the LA County Division of California League of Cities. Community and Municipal Affairs will also encourage the cities to take a position on the Expenditure Plan that can be shared with Metro’s Board through resolutions. Metro’s “88 Cities Project” was developed to strengthen the important relationships between Metro and the county’s cities, and further connect them to Metro’s regional planning efforts. This established process is an obvious way for staff to guide the cities through a coordinated approach to share their formal positions on the Expenditure Plan and potential ballot measure with Metro officials.
- State Officials** – Metro’s Government Relations Team has continued to keep members of the Los Angeles County’s State Senate and Assembly Delegation and their staffers updated on the status of the Potential Ballot Measure (PBM) and will now expand that education to include the draft Expenditure Plan. The team continues to provide briefings and attend transportation forums in the county at the request of state elected officials. Staff will conduct a series of briefings in Los Angeles and Sacramento for members of the Los Angeles County State Senate and Assembly delegation specifically related to the Draft Expenditure Plan and next steps in the public input process. Government Relations is also leading the process to get the Potential Ballot Measure certified for the November ballot if the Board approves the plan.
- Federal Officials** – Metro’s Government Relations Team has been and will continue to keep members of the Los Angeles County Congressional Delegation and their staffers updated on the status of the Potential Ballot Measure. The team is holding briefings in Los Angeles County and in Washington, DC with congressional aides to provide a detailed update on the status of the future transportation plan process, and will now extend that effort to educate about the Expenditure Plan and the next steps in the public input process. Government Relations will continue to provide frequent updates to members of the Congressional Delegation and their staff.

KEY STAKEHOLDER ENGAGEMENT

In continuing with the bottoms-up process Metro has established with the various key stakeholder groups of LA County, staff will continue to collaborate with regional partners such

as the Councils of Governments (CoGs); the business community; labor and environmental groups; community organizations, faith-based groups and other regional entities.

- **Stakeholder Group Briefings** – Briefings with key stakeholder groups to present the Expenditure Plan and solicit feedback.
- **Community Presentations** – Speakers' bureau to provide widespread community and stakeholder presentations to educate the region about the Expenditure Plan.
- **CEO LRTP's Newsletter** – Continue CEO's monthly LRTP Progress Update to stakeholders.
- **Regional Communicators Briefing** – Briefing with key communications professionals from agencies across the region to share information that they can push out through their communication channels.
- **Messaging Toolkits** – Information, graphics, pre-written social media posts and articles, and talking points to assist partner organizations in messaging the transportation plan.
- **Influencer Marketing** – Encouraging key influencers to help frame the understanding of funding transportation planning and investment through thought leadership communications.

PUBLIC INPUT/ENGAGEMENT

Engaging the public will be a major component of the input process. Metro will implement various feedback mechanisms to solicit the public's opinions and perspectives on the long-term mobility plan for the region. Public polling, focus groups, public meetings and telephone town hall meetings will be part of the input gathering process to ensure that Metro aligns its future transportation plan with the priorities of the public.

- **Public Meetings** – Community Relations staff will plan and host nine (9) community meetings around the county and one (1) virtual community meeting. These meetings will happen in April with weekday meetings occurring in the evening, and one traditional meeting and one virtual meeting each happening on a Saturday during the day.
- **Telephone Town Halls** – Community Relations and Public Relations staff will plan and host 13 one-hour telephone town hall meetings in May – one in each Board director's geographic area. These will occur in the evening with the goal of holding two per evening to streamline resources.
- **Website Engagement** – Staff will update the "Metro Eases Traffic" section of the Metro website as the draft Expenditure Plan process evolves. The Marketing team will develop

different maps to reflect the projects proposed through the life of the Expenditure Plan. Throughout the public input process, the public will be able to submit comments through the website, which will be compiled and evaluated as part of the overall input process.

- **Social Media/Digital Outreach** – The Metro Social Media team will continue to implement the current campaign that features a series of animated graphics highlighting favorable but lesser known programs, services and investments that Metro provides to the region. Additional social media feedback mechanisms will also be utilized.
 - Social media tools to capture comments and questions about the plan.
 - Micro-targeted content highlighting current investments at the local level and promoted within those communities via Facebook and native advertising.
 - Video vignettes of personal stories highlighting common transportation issues and the potential impact of cornerstone projects from the draft Expenditure Plan, promoted via Facebook native video and YouTube.
 - Targeted promotion of public meetings and telephone town halls via Facebook.
 - Informal polls and feedback via Facebook and Twitter.
 - Frequent articles on Metro’s blog, *The Source*, explaining the LRTP process, the expenditure plan and the programs and projects to receive funding. *The Source* will also continue to provide daily media headlines, providing us with the chance to steer readers to outside coverage about the LRTP and PBM and to offer information, context and visuals that voters may find helpful.
- **Focus Groups** – Metro will hold several focus groups in April on proposed transportation improvements.
- **Public Poll** – In May, Metro will conduct a public opinion survey to seek the level of support for additional local investment to fund proposed transportation improvements.
- **Crowdsourcing** – Community engagement through crowdsourcing – online efforts to tap into the collective intelligence of the public at large, enabling Metro to gain deeper insight into their wants and needs.
- **Progress Milestones** – Metro will continue to showcase the visible signs of progress being made through local investment.
- **Community Events** – Staff will have a presence at major community events to share information about the plan and give the public an opportunity to comment.
- **Quality of Life Benefits** – Staff will roll out the results of the Quality of Life (QoL) Report and communicate the real benefits already occurring across the county through transportation investment. The QoL Report will be presented in May.

MEDIA ENGAGEMENT

Traditional and online media are important partners in sharing information about Metro. The media will play an essential role in helping to educate the public about Metro's future transportation plans. Therefore, Metro staff will utilize a number of tactics to engage the media.

- News media briefings
- Editorial board briefings
- Press releases
- FAQs
- Television and radio public affairs programming
- Opinion editorials/guest columns
- Newspaper and digital ads promoting public meetings
- Proactive pitching of news story ideas from the QoL Report
- Metro Motion Cable TV Program coverage
- Metro Briefs

SCHEDULE OF MAJOR ACTIVITIES

March

- Update Metro website with Expenditure Plan information
- Begin elected official briefings
- Begin stakeholder briefings
- Hold regional communicators briefing
- Hold media briefings
- Send news release on public input opportunities
- Schedule public affairs programming opportunities
- Begin community presentations
- Publicize public meetings
- Begin promoting public input opportunities
- Begin social media/digital outreach
- Request city resolutions through "88 Cities Project"

April

- Hold public meetings
- Hold focus groups

- Promote telephone town hall meetings
- Begin social media polls and feedback
- Encourage city resolutions on PBM

May

- Hold telephone town hall meetings
- Conduct public poll
- Showcase results of Quality of Life Report
- Staff information booth and take comments at Crenshaw/LAX Halfway Event
- Compile public input
- Compile city resolutions

June

- Report public input
- Report public and social media poll results
- Send news release on Board's decision



Metro's Plan to Ease Traffic Draft Expenditure Plan Overview

March 24, 2016



Metro

A Collaborative COG Process

- The Metro Board established a process to work with the sub-regional councils of government to identify priority projects
- Metro conducted a bottoms-up process with the nine sub-regions of the county, which submitted projects for evaluation
- Each sub-region was given targets based on their population and employment
- Board adopted highway and transit performance measures; projects scored using weighted themes

Board Approved Performance Metrics

❖ **Mobility: Ease Congestion** **45.0%**

- Improve travel times and reliability; increase active transportation

❖ **Accessibility: Provide Access** **17.5%**

- Increase service to the transit dependent, cyclists, youths, pedestrians, seniors, and people with disabilities; increase those served by Metro; improve first-last mile

❖ **Safety: Improve Safety** **12.5%**

- Enhance personal and public safety; reduce incidents

❖ **Economy: Grow Economic Benefits** **12.5%**

- Create jobs; increase goods movement; invest in disadvantaged communities

❖ **Sustainability and Quality of Life: Enhance Quality of Life** **12.5%**

- Reduce greenhouse gases; improve air quality; positively impact public health



Metro

Modeling and Cost Estimates

- Modeling Process
 - Scored and ranked highway and transit projects separately
 - Applied Board-approved performance methodology
 - Considered high-performing existing projects for acceleration without impacting other projects
- Cost Estimate Methodology
 - Reviewed current studies, engineering plans and cost estimates
 - Applied comparable, actual cost experience to each infrastructure type and cost category
 - Applied factors for soft costs based on historical experience
 - Applied project contingency

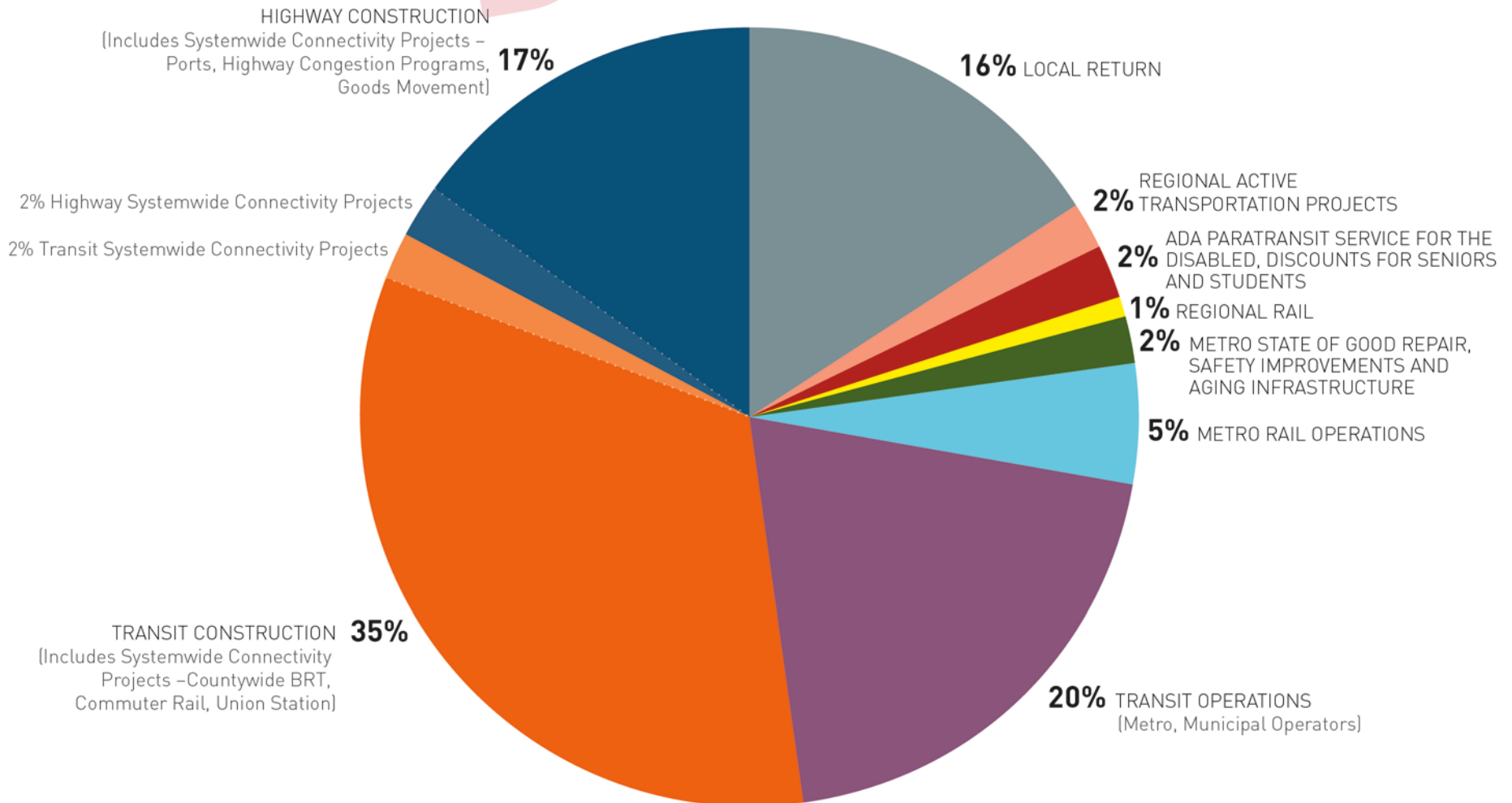
Annual Revenue Assumptions

- New ½ cent tax = \$860 million/year
 - FY18-FY39 – ½ cent building on top of existing Measure R
- New ½ cent and Measure R together – \$1.7 billion/year
 - FY40-FY57 – 1 cent replaces Measure R tax rate
- New revenues would begin in FY18

\$120 billion in YOE dollars would be generated over the 40-year program

Potential Ballot Measure Expenditure Plan

DRAFT





Capital Projects List



Metro

Transit Construction – 35%

- Capital expenses in support of transit capacity improvements specifically listed in the Measure's project Expenditure Plan
- New rail and/or Bus Rapid Transit (BRT) capital projects whose project definition depends upon the final environmental review process
- Rail yards, rail cars, and start-up buses for new BRT lines are eligible
- Includes 2% for systemwide connectivity projects such as airports, countywide BRT, and Union Station

Highway Construction – 17%

- Capital expenses in support of highway project capacity and safety enhancements and/or highway project elements specifically listed in the Measure's project Expenditure Plan, such as environmental studies, plans, specifications, and estimates, right-of-way (including support), construction (including support)
- Examples include High Desert Corridor, I-5 capacity enhancements, SR-71 capacity enhancements, Express Lane expansion, truck lanes, and auxiliary lanes
- Includes 2% for systemwide connectivity Projects such as ports, highway congestion programs, and goods movement

Regional Active Transportation – 2% (NEW)

- Includes 2% for regional ATP projects
- Projects and programs that encourage walking, biking, and rolling modes
- Eligible projects would include Safe Routes to Schools; complete streets improvements; and first/last mile connections with public transit such as bicycle facilities including bike hubs, protected bike lanes connecting the transportation network, and countywide bike share program
- Expected to generate \$17 million annually in the first year and more than \$2.4 billion over the 40-year life of the measure
- Total of 4.5% of PBM funds are projected for ATP (combo of 2% Regional ATP and 2.5% of locally planned ATP investments)



The Maps



Metro





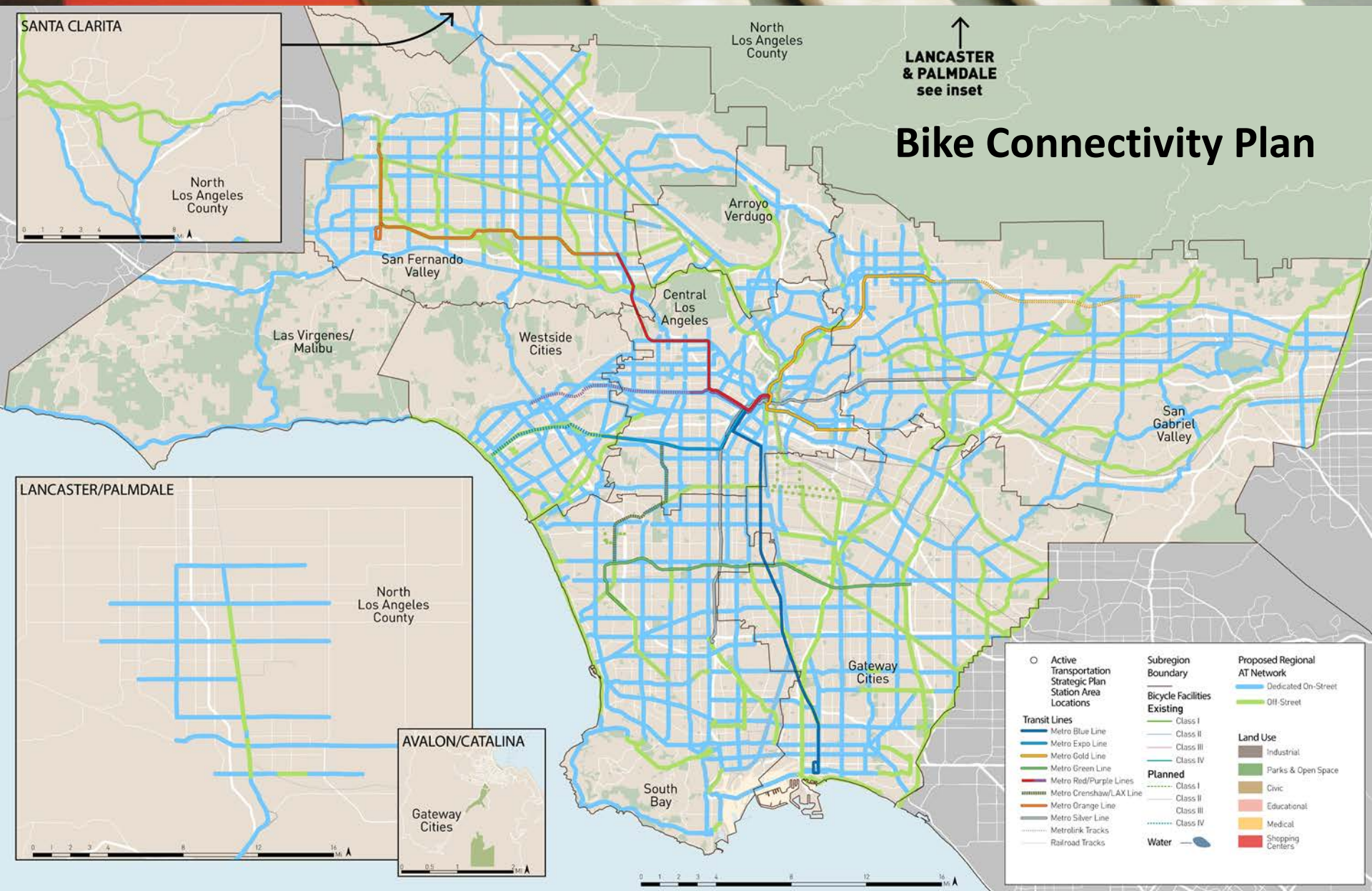




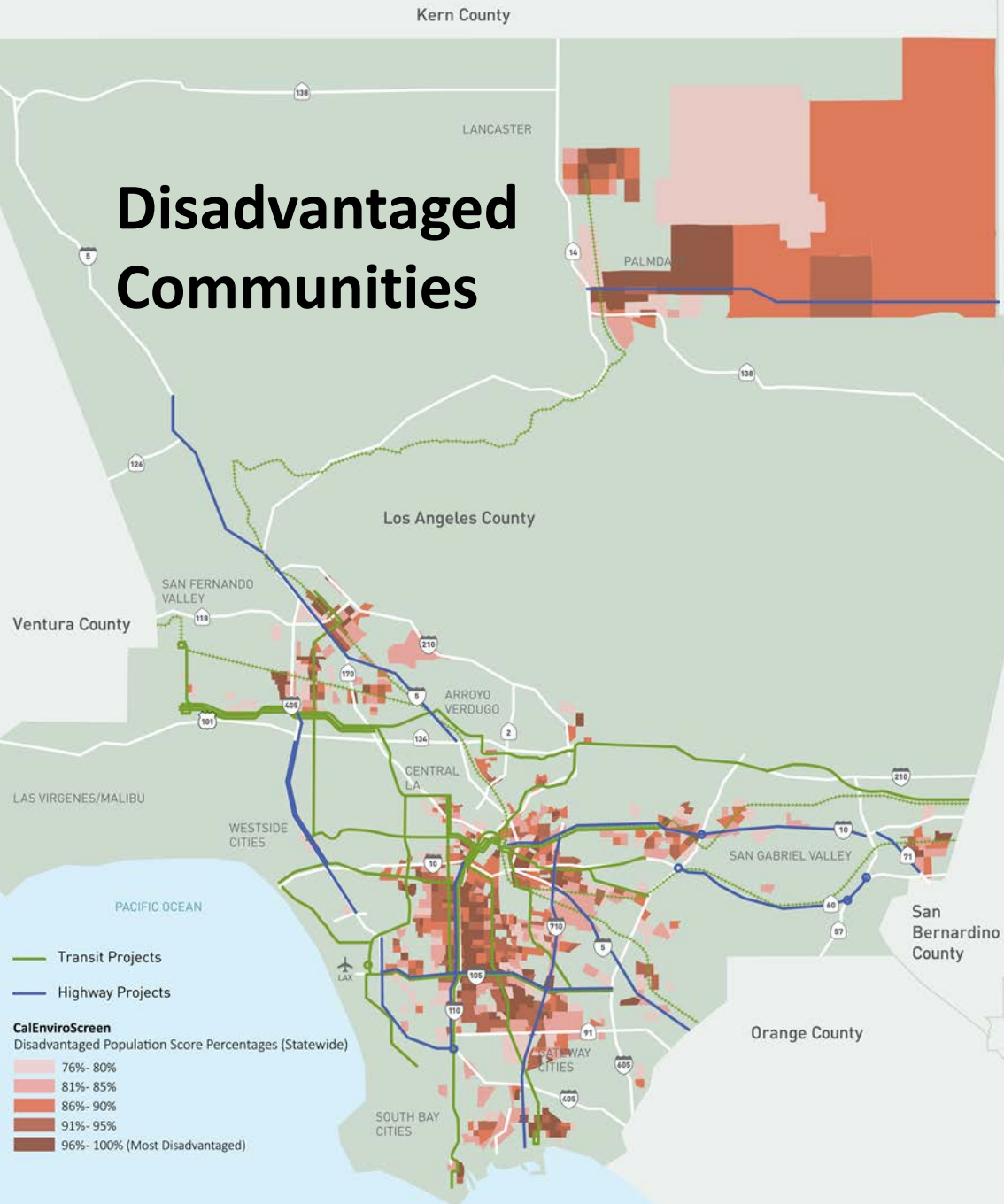








Disadvantaged Communities



Exploration and Innovation

Other Opportunities

- Seed Money for Exploratory and Innovative Projects
 - Express Train from LAX to Union Station
 - South Bay Congestion Relief from LAX to Long Beach
- Countywide BRT Projects
- Streetcar and Circulator Projects
 - Capital only



Operations and other Programs



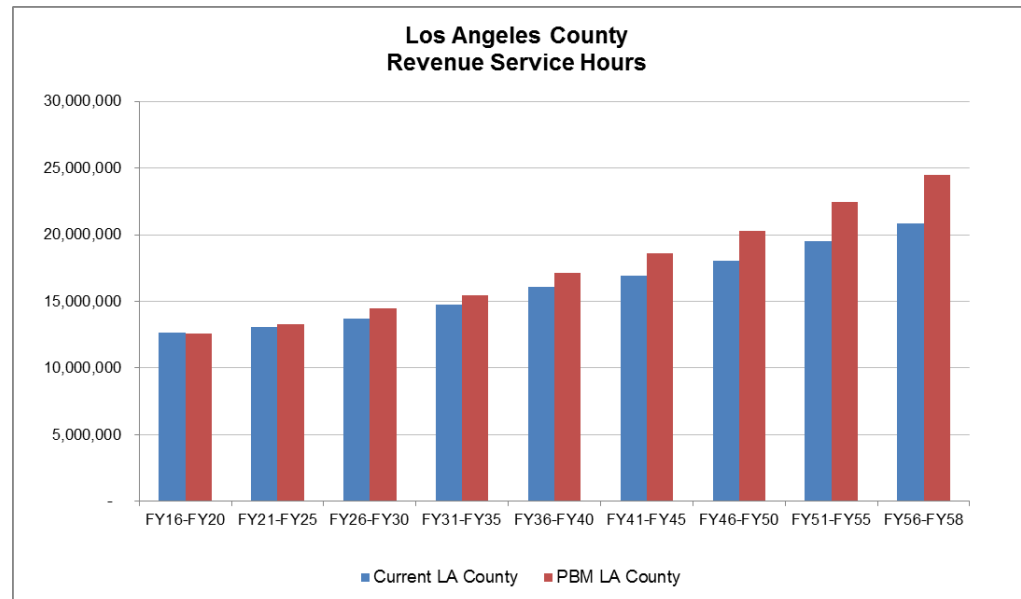
Metro

Transit Operations – 20%

For countywide transit operations (consistent with ridership patterns), Metro and Municipal Operators, allocated through the Formula Allocation Procedure (FAP). Funding will improve system safety, faster/frequent/reliable/accessible services, customer service and fund state of good repair needs

- LA County transit services will more than double, which includes bus rapid transit, Metro rail and municipal operator services
- Increased service levels will have capacity to triple transit usage and ridership
- Metro and municipal operator bus services are critical feeder services and first/last mile connections to new infrastructure expansion
- Shift travel mode to public transit and reduce single occupancy vehicles
- Take advantage of technology advancements to improve customer experience
- Prioritize enhanced services in transit dependent areas
- Improving safety on buses, bus stops, rail lines, and rail stations
- Establishing and improving Express Bus service on freeways

Transit Operations			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	20% of 1/2 cent	\$170.2	\$5,796.0
Potential Ballot Measure Addition			
FY18 - FY39	20% of 1/2 cent	170.2	5,796.0
FY40 - FY57	20% of 1 cent	340.4	18,127.0
Total PBM Addition			\$23,923.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$29,719.0

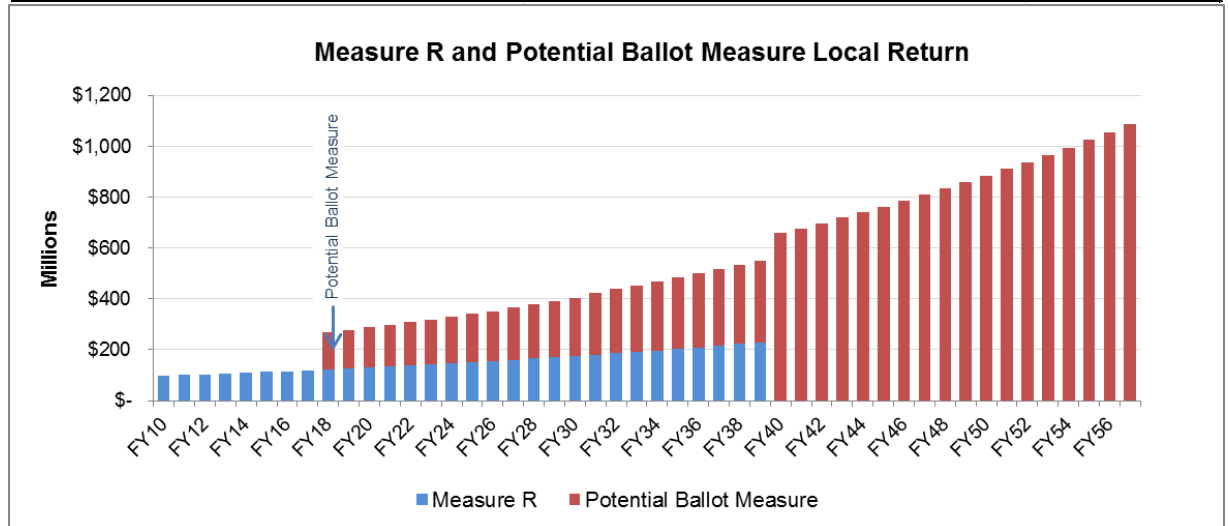


Local Return – 16%

For 88 local jurisdictions and Los Angeles County allocated by population. Funds are used for communities' transportation needs, including transit, streets & roads, "Green" streets, ATP, Transit Oriented Communities' Investments and other unmet needs.

- This will double existing Measure R Local Return funding and extend another 18 years
- Provides maximum flexibility for local jurisdictions to meet their transportation priorities and needs
- Funds will be used for repairing potholes and repaving local streets

Local Return			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	15% of 1/2 cent	\$127.7	\$4,347.0
Potential Ballot Measure Addition			
FY18 - FY39	16% of 1/2 cent	\$136.2	4,637.0
FY40 - FY57	16% of 1 cent	272.4	14,501.0
Total PBM Addition			\$19,138.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$23,485.0

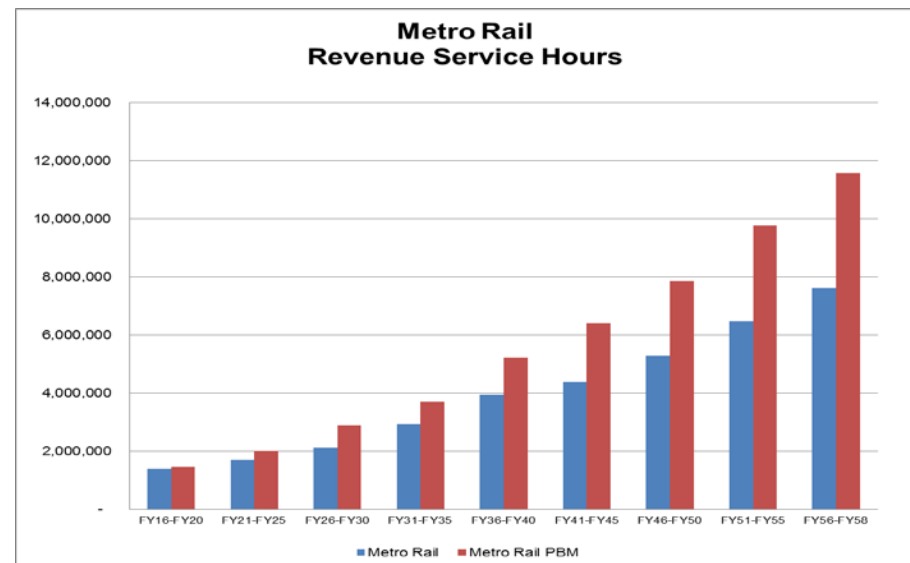


Metro Rail Operations – 5%

For Metro Rail operations, emphasizing system safety, improved customer service and faster, frequent, reliable, and accessible services. To fund growing rail operating needs and rail SGR due to the expansion of the rail system.

- Over the next 40 years, rail service has the capacity to increase up to 10 times, representing half of the county's transit services
- With over 100 more route miles, over 20 light/heavy lines, and 70 more stations, rail usage and ridership can increase up to 12 times
- Rail service increases system speed and capacity for transit, allowing for more boardings per mile and per hour, and easing congestion and traffic
- Funds can be used to supplement rail state of good repair needs

Metro Rail			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	5% of 1/2 cent	\$42.6	\$1,449.0
Potential Ballot Measure Addition			
FY18 - FY39	5% of 1/2 cent	42.6	1,449.0
FY40 - FY57	5% of 1 cent	85.2	4,532.0
Total PBM Addition			\$5,981.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$7,430.0



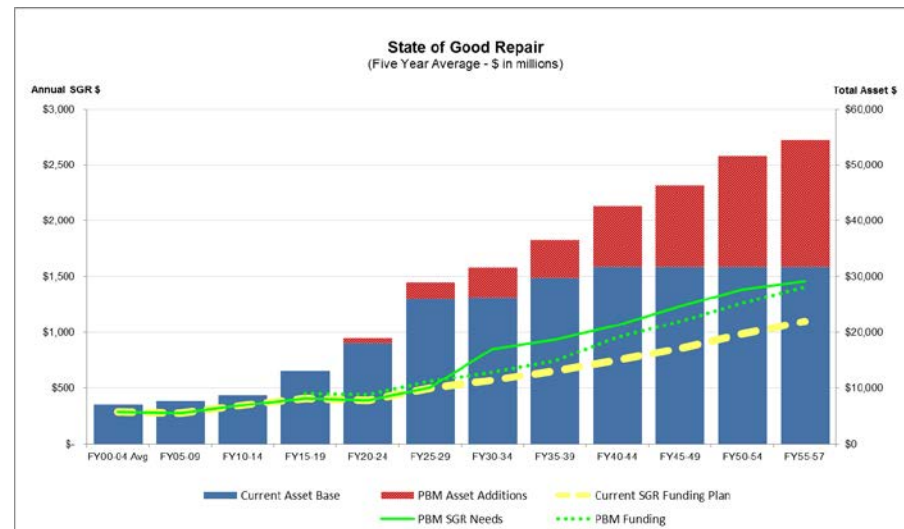
State of Good Repair, Safety Improvements and Aging Infrastructure – 2% (NEW)

A robust SGR funding program is necessary to keep the current aging infrastructure such as Blue Line and the expanding system in top form. A dedicated funding source for SGR will allow us to provide quality, reliable, on-time, and uninterrupted services for our riders. **No dedicated funding for state of good repair exists today.**

- Allocates \$2.39B for SGR
- This dedicated funding will allow us to leverage federal/state grants and bond financing
- The investment in SGR will improve asset condition, safety and extend the useful life of our transit system
- This funding along with the Asset Management Plan (condition-based and asset age-based) will help mitigate the funding gap for SGR
- Earthquake retrofitting bridges, tunnels, and overpasses
- Improving safety on buses, bus stops, rail lines, and rail stations

Note: Create provision where Metro Board can increase SGR percentage based on the condition of assets, after 2039 when approximately 15 rail lines will be in operation.

State of Good Repair, Safety Improvements and Aging Infrastructure			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	None	-	-
Potential Ballot Measure Addition			
FY18 - FY39	2% of 1/2 cent	17.0	580.0
FY40 - FY57	2% of 1 cent	34.0	1,813.0
Total PBM Addition			\$2,393.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$2,393.0



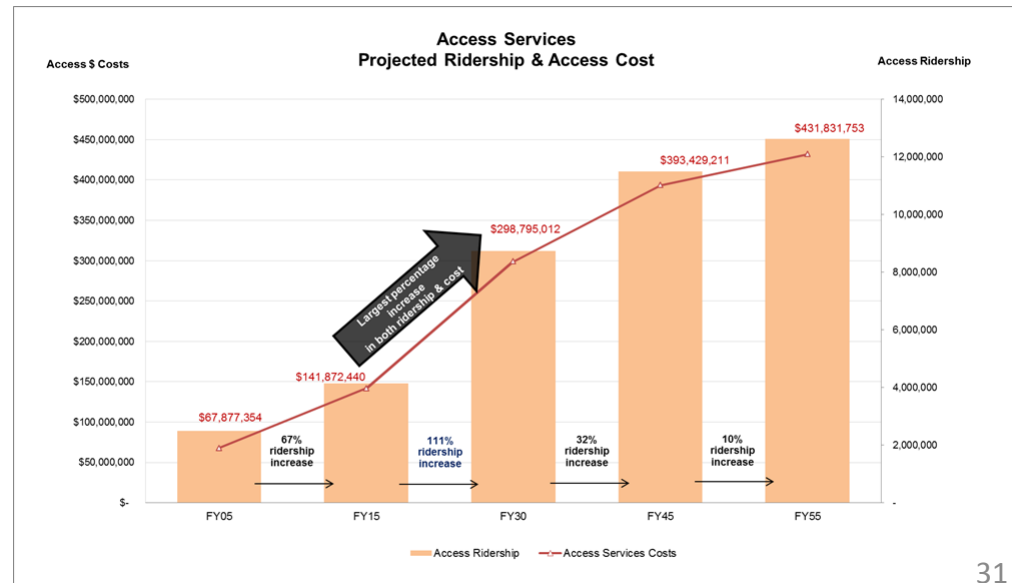
ADA Paratransit Services for the Disabled; Discounts for Seniors and Students– 2% (NEW)

To fund paratransit services mandated by the American with Disabilities Act (ADA).

Currently no dedicated funding for ADA-mandated paratransit exists.

- Secures dedicated funding of \$2.39B for ADA-mandated paratransit services
- Serving people with disabilities is one of the primary challenges of transit systems
- ADA ridership is expected to more than double in the next decade
- Growth is due to aging population of baby boomers and cuts in human services transportation funding

ADA Paratransit Service for the Disabled; Discounts for Seniors and Students			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	None	-	-
Potential Ballot Measure Addition			
FY18 - FY39	2% of 1/2 cent	17.0	580.0
FY40 - FY57	2% of 1 cent	34.0	1,813.0
Total PBM Addition			\$2,393.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$2,393.0



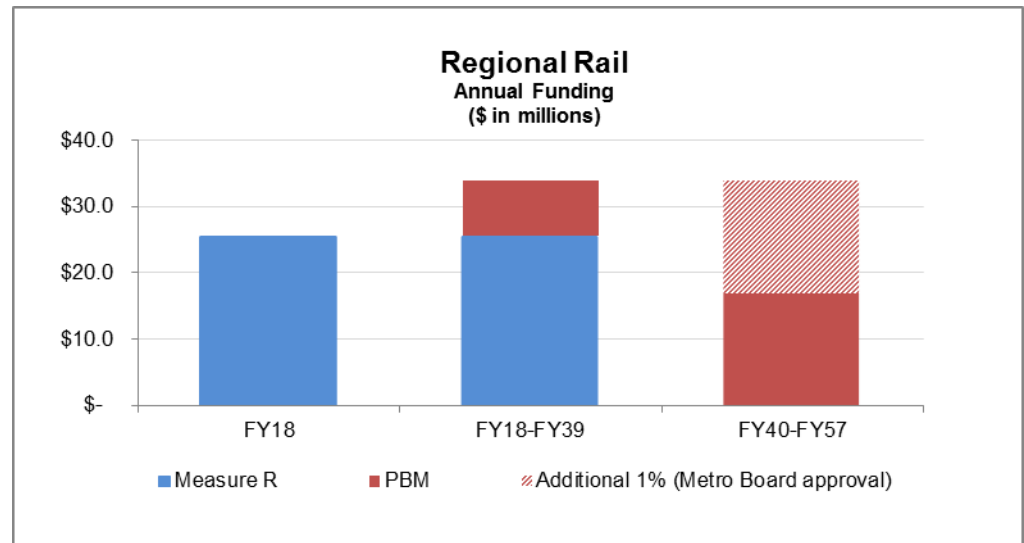
Regional Rail – 1%

Improvements for commuter rail service within LA County, includes operations, maintenance, expansion and state of good repair

- In addition to the 3% allocation from Measure R, adding \$1.19B in total sales tax funding
- Improving & expanding service
- Enhances Regional Rail Service, with an emphasis on Antelope Valley services, providing transit-dependent riders connections from the North County to the LA basin
- Reduced congestion on freeways
- Every \$1 of Metro's operating funds can be matched by \$3 from other member agencies and fare revenues
- Regional Rail capital projects are eligible to participate in 2% of the systemwide connectivity projects, included in 32% Transit Construction slice

Note: Create provision where Metro Board can increase Regional Rail percentage up to an additional 1% after 2039 based on verifiable service improvements.

Regional Rail			
(\$ in millions)	Annual Allocation	Annual (\$FY18)	Total (\$YOE)
Existing Measure R (ends FY39)	3% of 1/2 cent	\$25.5	\$869.0
Potential Ballot Measure Addition			
FY18 - FY39	1% of 1/2 cent	8.5	290.0
FY40 - FY57	1% of 1 cent	17.0	906.0
Total PBM Addition			\$1,196.0
Total Measure R + Potential Ballot Measure (FY18 - FY57)			\$2,065.0





Taxpayer Oversight

- Much like is the case with Propositions A and C and Measure R, an Oversight Committee will monitor the implementation of the Expenditure Plan, including schedule, budget, and use of funds
- Staff has evaluated other oversight committees in California
- Given the success of the Measure R committee, staff will propose ways to build upon the existing committee structure

Proven Acceleration Strategies

- Federal and State Funds
 - New Starts, TIFIA loans, Cap and Trade, etc.
- Local Funds
 - 3% contribution to transit projects based on benefits
 - Third-party investments
- Private Sector Funds
 - Goods movement or vehicle-miles-traveled fees
 - Express lane or other tolls
 - Private financing and innovation
- Dynamic Shovel Ready Plans and Implementation



Preparing for a Transportation Renaissance

- Managing a Massive Program
 - Creating a Program Management Plan
- Developing our Workforce
 - Getting “people ready”
 - Leadership Academy, MAX Program, trainee programs
 - Leveraging the experience being gained through our current program
- Capturing Lessons Learned
 - Learning from past experiences (cost control methods, schedule adherence, annual program evaluations, etc.)
 - Establishing best practices



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Program Benefits

- Eases congestion & improves mobility
- Improves accessibility
- Enhances quality of life
- Expands rail and bus network
- Creates a more balanced, customer-focused transportation system
- Keeps fares low and improves service for seniors, students and people with disabilities
- Enhances investment at the local level for cities to provide alternative modes of transportation
- Increases transit mode share: 7% now; projected to be 20-30% with new infrastructure investments, complete build-out, and innovative marketing and technology

Public Input Process

- Public meetings
 - Nine traditional meetings, one virtual meeting
- Telephone town hall meetings
 - One for each Board member's district
- Public comments through website and social media
- Elected officials' briefings
- Key stakeholders' briefings
- Media briefings
- Community presentations

Looking Beyond 40 Years

What else could we accomplish with more years?

45-Year Plan – \$6B current dollars/\$23B YOE

- High Desert Corridor Construction
- Crenshaw Line Northern Extension

50-Year Plan – \$11B current dollars/\$28B YOE

- Gold Line Eastside Extension Phase 2
- Purple Line Extension to Bundy

○ *Note: Can be any combination of projects based on Board direction*

Staff Recommendation

- The 50-year Plan
 - Secures the funding necessary to build significant transportation improvements across the county and keep our system in good working order as LA County positions itself for the future
- Request that the Board authorize the CEO to release the Draft Potential Ballot Measure Expenditure Plan for public input



Questions?



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