

**Board Report**

File #:2015-1608, **File Type:**Policy

Agenda Number:17.

**EXECUTIVE MANAGEMENT COMMITTEE
NOVEMBER 19, 2015**

**SUBJECT: LONG RANGE TRANSPORTATION PLAN - POTENTIAL BALLOT MEASURE
FRAMEWORK, ASSUMPTIONS, AND INPUT**

**ACTION: APPROVE POTENTIAL BALLOT MEASURE FRAMEWORK AND WORKING
ASSUMPTIONS**

RECOMMENDATION

CONSIDER:

- A. APPROVING the 2017 **Long Range Transportation Plan (LRTP) Update Proposed Performance Metrics Framework** (Attachment A) to be used in analyzing all proposed major transit and highway projects (including Measure R projects not yet under construction) in order to develop a Potential Ballot Measure Expenditure Plan; and,
- B. RECEIVING AND FILING the LRTP Potential Ballot Measure Framework Working Assumptions in Attachment B, the Stakeholder Process Input (through an On-Line Link) in Attachment C, the Subregional Stakeholder Project Priorities in Attachment D, the Regional Facility Provider Needs Lists in Attachment E, and the Roadmap for LRTP Potential Ballot Measure Process in Attachment F.

ISSUE

Since Fall 2012, Metro has explored the feasibility of pursuing a new potential ballot measure in conjunction with updating the 2009 LRTP. By participating in over 190 meetings, Metro staff has worked with subregional representatives and other stakeholders including, but not limited to, business, public health, labor, environmental groups, Active Transportation stakeholders, and numerous other groups. These various stakeholders were asked to submit their priorities and policy input by September 1, 2015.

Adoption of the recommended performance metrics framework, working assumptions, and acceleration parameters is essential to conducting the substantial travel demand and financial analytical staff work that comprises the next steps in our Roadmap process shown in Attachment F. For example, the travel demand modeling we are about to conduct requires complex system coding tasks that will enable us to provide a performance based recommendation to the Metro Board of

Directors. Also, while 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. Deferring these analytical tasks will compromise our ability to provide the proper feedback necessary for a bottoms-up process.

BACKGROUND

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 subregions 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, Los Angeles World Airports (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 subregional 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.

DISCUSSION

Mobility is an essential ingredient necessary to support economic growth spurring job creation and the movement of goods. While Metro is fundamentally responsible for developing a transportation plan that best addresses the county’s mobility needs, this goal is intrinsically linked with the several policy objectives and the accessibility needs of its most vulnerable citizens. The LRTP Potential Ballot Measure Framework and Assumptions were first presented in draft form October 2015. The 2017 LRTP Proposed Performance Metrics Framework now found in Attachment A, if approved, will serve as the basis for evaluating the acceleration of existing major projects and the addition of new major highway and transit corridors in the LRTP.

Metro Travel Demand Model

The staff has identified a set of highway and transit corridors to model after reviewing the 2,300 projects submitted by subregional agencies in the Mobility Matrix process. To achieve mobility and other policy goals, Metro’s Travel Demand Model outputs will require the Performance Metrics Framework to guide staff’s recommendations. The Metro Travel Demand Model will be used to evaluate major transportation projects submitted through the Mobility Matrix process 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). We note that of the 2,300 projects submitted by subregional agencies in the Mobility Matrix process, many are not major projects, and therefore cannot be modeled. Those projects that cannot be modeled may be considered as part of other funding categories or for inclusion based on the priorities from the subregional priority setting process.

In addition to evaluating the performance of these new projects submitted by the subregions, we will also model major Measure R transit and highway projects that are not yet in construction, to use the performance measure analysis to inform the opportunity to accelerate Measure R projects.

Best Practices Framework

The recommended Framework draws from best practices of work done elsewhere in the nation and California. We reviewed performance measures used nationally to implement MAP-21 and the federal Clean Air Act and found that the best of these were modeled on work first performed in California. Specifically, the performance measure process used by the Southern California Association of Governments and the San Francisco Bay Area's Metropolitan Transportation Commission and others were the best fit for the Metro Board's policy objectives. For example, California is now again at the cutting edge of greenhouse gas performance analysis initiated by SB 32 and various state laws. Our work builds on these best practices.

Performance Measure Weights

The performance measures are organized under various themes, including accessibility, economy, mobility, safety, and sustainability/quality of life. Each of these theme groupings have been assigned percentage weights for the purpose of evaluating project performance of new highway and transit corridors, as follows:

- Mobility 35%
 - Easing congestion, increasing active transportation, and improving travel times, system connectivity, throughput, and reliability are all key Metro objectives addressed by mobility improvement. This weight reflects that emphasis.
- Economy 15%
 - Economic output, job creation and retention, goods movement, and addressing disadvantaged communities are goals that can be better achieved by implementing projects and services that address these needs. This weight enables us to identify the project's contribution to economic development.
- Accessibility 20%
 - The needs of the transit dependent, cyclists, youths, pedestrians, seniors, and people with disabilities are addressed here by increasing the population served by Metro facilities. This weight reflects the strong relationships Metro has built with these populations and need to retain and improvement the services provided to them.

- Safety 15%
 - Safety is fundamental to the design, construction, and operation of highway and transit corridors, but it must also be considered in evaluating new highway and transit projects against each other. The relative safety benefit of major transportation capacity enhancement projects is accounted by this theme's weight.
- Sustainability and Quality of Life 15%
 - An important criteria for evaluating a project's impact on reducing greenhouse gases and improving air quality, improving public health, and improving the quality of life, including eliminating urban heat islands, storm water runoff, biological and habitat impact, noise mitigation, and access to parks and open space. This theme has been weighted to identify the project's contribution to addressing sustainability and quality of life.

Purpose, Use, and Limits of Performance Metrics

This evaluation process is intended to evaluate 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 will be used to guide recommendations regarding the potential acceleration of some Measure R projects already in the LRTP relative to other Measure R projects. We are recommending that the Metro Board stipulate 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 here 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 of the potential replacement of the Measure R tax when it sunsets in 2039.

Authorizing Legislation and Expenditure Plan Requirements

The authorizing legislation for the potential ballot measure, SB 767 (de León), requires that an expenditure plan be developed using a transparent process to determine the most recent cost estimates for each project and program identified in the expenditure plan. Metro's transparent, inclusive, and bottoms-up process to date provided high and low cost estimates to aid stakeholders in making their priority setting decisions. Staff will continue to refine these costs in that same transparent manner and plans to use the performance metrics to guide our ultimate recommendations.

SB 767 (de León) was passed on September 15, 2015 and the Governor announced his approval on October 7, 2015. In addition to transparent process requirements, 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. To meet these requirements and the bottoms-up process requirements originally directed by the Metro Board, a number of assumptions must be used in developing the expenditure plan, including a tax increase, tax extension, tax sunset, project cost inflation, revenue

growth, subregional revenue targets, and population and employment data as described in Attachment B, the Framework Working Assumptions.

Potential Ballot Measure Process Characteristics and Results

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 in the year 2040 and beyond for these taxes. Since our working assumption is a 40-year tax measure ending in 2057, there will be about 18 years of Proposition A and Proposition C resources for planning purposes. After establishing a consensus with all the subregional representatives on the Potential Ballot Measure Funding Targets earlier this year, Metro staff initiated the next steps in the process by requesting subregional priorities that were constrained to the Framework Funding Targets.

As of September 1, 2015, Metro received the project priority and policy input found in Attachment C to this report. Attachments D and E contain draft Stakeholder Input project lists that staff has attempted to synthesize in order to summarize the subregional and Regional Facilities priorities. Together, these attachments complete one phase of a multi-phase stakeholder and public input process summarized in the Roadmap in Attachment F. In addition to the input identified in Attachment C, many stakeholders also provided policies for Metro's consideration going forward. These are included in Attachment C as well. These attachments, previously presented to the Board in October 2015, have since been updated as indicated within the attachments.

If the Metro Board of Directors and/or the voters ultimately determine that additional taxes are not necessary at this time, the current LRTP will be updated consistent with that decision. Our LRTP process is scheduled to conclude in the fall of 2017, well after the potential vote, to permit either eventuality.

DETERMINATION OF SAFETY IMPACT

The proposed approval will not have any adverse safety impacts on employees and patrons.

FINANCIAL IMPACT

Approval of the LRTP Potential Ballot Measure Framework in Attachment A and Assumptions in Attachment B has no financial impact for the agency as the necessary funds remain budgeted for FY 2016.

Impact to Budget

Staff will continue to work within existing budgeted resources for development and outreach related

to the LRTP update and potential ballot measure. Potential success of such a ballot measure would have a positive impact to future budgets if placed on the ballot and approved by voters.

NEXT STEPS

Non-Project Needs and Contingencies

Further defining the other funding priorities not captured in the input process to date must now begin. This was reiterated in some of the Stakeholder Input received as part of Attachments C. These needs include, but are not limited to, transit operating and state-of-good repair needs; countywide bus system, Metrolink and paratransit services; local return, including local streets and roads and local transit; highway innovation and operating needs such as ExpressLane system improvements, highway systems and operations management, and other transportation needs not captured in any other way.

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.

Roadmap Process

Consultant support for the LRTP process was secured and kicked-off on September 15, 2015 and staff is now working on travel demand modeling and other related tasks to enable the Potential Ballot Measure Framework in Attachment A and the subsequent Expenditure Plan and Ordinance processes to be completed by June 2016. 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:

1. Continue stakeholder outreach;
2. Finalize non-project needs assessment and constraints in January 2016;
3. Conduct final needs and performance metrics and project scheduling analysis February 2016;
4. Release preliminary Expenditure Plan and Ordinance in March 2016;
5. Subregional and stakeholder outreach in April/May 2016;
6. Approve final Expenditure Plan and Ordinance in June 2016; and
7. Submit final Expenditure Plan and Ordinance to the County of Los Angeles Board of Supervisors in July/August 2016.

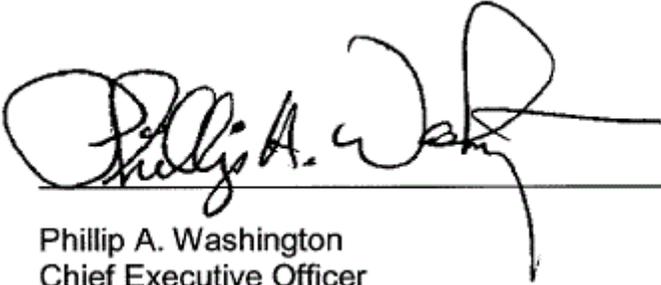
The LRTP update will be finalized and provided to the Board for adoption in 2017, after the results of the potential ballot measure process are known.

ATTACHMENTS

Attachment A - LRTP Potential Ballot Measure Performance Metrics Framework;
Attachment B - LRTP Potential Ballot Measure Framework Working Assumptions;
Attachment C - Stakeholder Process Input (through an On-Line Link);
Attachment D - Subregional Stakeholder Project Priorities;
Attachment E - Regional Facility Provider Needs Lists; and
Attachment F - Roadmap for LRTP Potential Ballot Measure Process.

Prepared by: Wil Ridder, Executive Officer, (213) 922-2887
David Yale, Managing Executive Officer, (213) 922-2469

Reviewed by: Martha Welborne, FAIA, Chief Planning Officer, (213) 922-7267
Stephanie Wiggins, Deputy Chief Executive Officer, (213) 922-1023
Phillip A. Washington, Chief Executive Officer, (213) 922-7555



Phillip A. Washington
Chief Executive Officer

Attachment A

2017 LRTP Update Proposed Performance Metrics Framework

Metro Theme	Goals and Objectives	System Performance Measures	Weight (%)	Highway Project Performance Measures	Transit Project Performance Measures
Mobility	<ul style="list-style-type: none"> • Ease congestion • Increase travel by transit, bicycle, and pedestrians • Improve travel times • Improve system connectivity • Increase person throughput • Improve effectiveness & reliability for core riders 	<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 	35%	<ul style="list-style-type: none"> • Increased person throughput • Reduced person hours of delay 	<ul style="list-style-type: none"> • Increased transit ridership • Increased person throughput • Improved system 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 centers • Increased number of jobs • Improved REMI Model economic benefit results • Reduced vehicle hours of delay for trucks • Dollars invested in disadvantaged communities 	15%	<ul style="list-style-type: none"> • Reduced truck vehicle hours of delay • Improved job access • Dollars invested in disadvantaged communities 	<ul style="list-style-type: none"> • Increased transit oriented development • Improved job access • Dollars invested in disadvantaged communities
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 	<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 	20%	<ul style="list-style-type: none"> • Increased number of disadvantaged population served • Improved access or system connectivity 	<ul style="list-style-type: none"> • Increased number of households served • Increased number of transit dependent households served • Improved system connectivity

Attachment A

Metro Theme	Goals and Objectives	System Performance Measures	Weight (%)	Highway Project Performance Measures	Transit Project Performance Measures
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 	15%	<ul style="list-style-type: none"> • High collision area addressed • Reduced safety conflicts 	<ul style="list-style-type: none"> • Improved transit system safety • High collision area addressed
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> <ul style="list-style-type: none"> • Increased access to parks and open space areas 	15%	<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 • Improved access to healthcare facilities <p>Improve quality of life</p> <ul style="list-style-type: none"> • Reduced noise impacts • Improved access to parks and open space 	<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 • Improved access to healthcare facilities <p>Improve quality of life</p> <ul style="list-style-type: none"> • Reduced noise impacts • Improved access to parks and open space

Long Range Transportation Plan and Potential Ballot Measure Framework Working Assumptions

October 1, 2015

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.

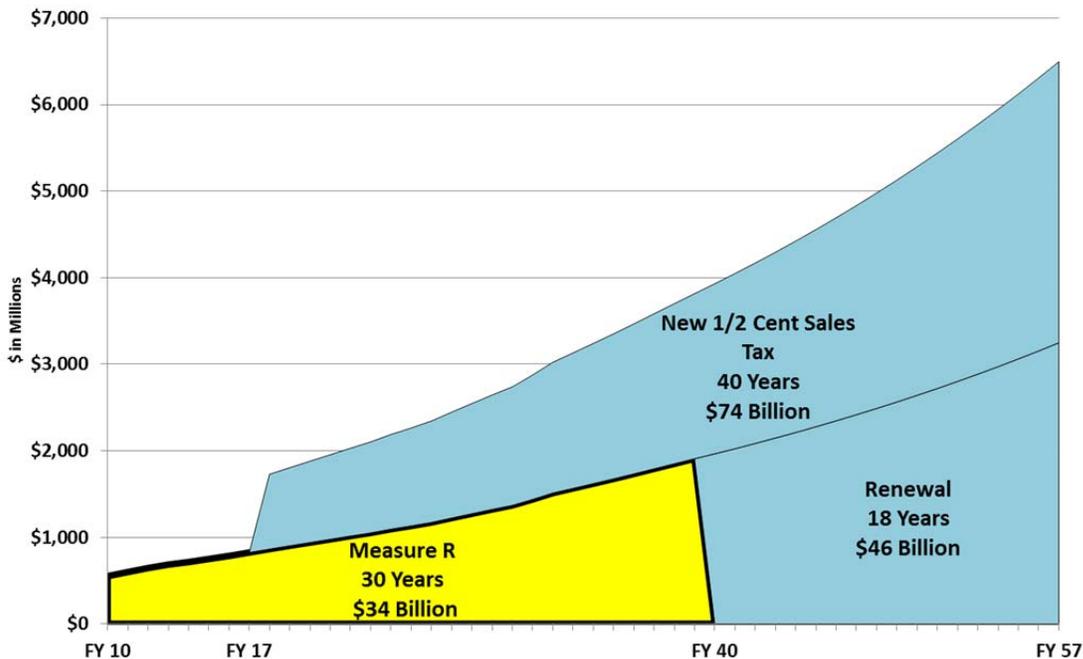
The following considerations led staff to the 2057 LRTP augment, extend, and sunset assumption, as follows:

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

Potential Ballot Measure Structure

Sales Tax Increase with Renewal of Existing



Augmenting Metro's existing transportation sales taxes for at least a 40 year period (through the year 2057) and also extending 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 LRTP 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

Stakeholder Process Input

Document Available Online at:

http://media.metro.net/projects_studies/images/lrtp_stakeholder_input.pdf

Subregional Stakeholder Draft Project Priorities

ATTACHMENT D

(2015 \$ in thousands)

for reference
only - not
priority order

	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	Active Transportation Program	b,c	\$ 65,000	\$ 65,000	\$ -
12	Complete East Valley Transit Corridor Project as LRT		\$ 1,000,000	\$ 1,000,000	\$ -
13	North Hollywood to Pasadena Bus Rapid Transit Corridor	a	\$ 230,000	\$ 230,000	\$ -
14	Orange Line BRT Improvements		\$ 300,000	\$ 300,000	\$ -
15	Orange Line Conversion to Light Rail		\$ 1,400,000	\$ 62,000	\$ 1,338,000
16	Sepulveda Pass Transit Corridor	d	\$ 3,390,000	\$ 1,400,000	\$ 1,990,000
17	San Fernando Valley Subtotal		\$ 6,385,000	\$ 3,057,000	\$ 3,328,000
18	Westside				
19	Active Transportation and First/Last Mile Connections Prog.		\$ 650,000	\$ 650,000	\$ -
20	I-10 Multi-Modal Circulation Improvement Project		\$ 50,000	\$ 50,000	\$ -
21	Crenshaw Line Extension to West Hollywood/Hollywood	e	\$ 580,000	\$ 300,000	\$ 280,000
22	Lincoln Blvd BRT		\$ 307,000	\$ 307,000	\$ -
23	Purple Line Extension to Santa Monica		\$ 2,647,100	\$ 16,000	\$ 2,631,100
24	Sepulveda Pass Transit Corridor	d	\$ 3,390,000	\$ 1,400,000	\$ 1,990,000
25	Westside Subtotal		\$ 7,624,100	\$ 2,723,000	\$ 4,901,100
26	Central City Area				
27	Crenshaw Line Extension to West Hollywood/Hollywood	e	\$ 1,750,000	\$ 1,185,000	\$ 565,000
28	Vermont "Short Corridor" Subway from Wilshire to Exposition		\$ 1,700,000	\$ 425,000	\$ 1,275,000
29	Bus Rapid Transit and 1st/Last Mile Solutions such as DASH	b	\$ 280,000	\$ 280,000	\$ -
30	Freeway Interchange and Operational Improvements	b	\$ 200,000	\$ 200,000	\$ -
31	Historic Streetcar	b	\$ 107,000	\$ 107,000	\$ -
32	LA River Waterway & System Bikepath	b	\$ 370,000	\$ 370,000	\$ -
33	Los Angeles Safe Routes to School Initiative	b	\$ 250,000	\$ 250,000	\$ -
34	LA Streetscape Enhancements & Great Streets Program	b	\$ 470,000	\$ 470,000	\$ -
35	Active Transportation, 1st/Last Mile, & Mobility Hubs	b	\$ 210,000	\$ 210,000	\$ -
36	Traffic Congestion Relief/Signal Synchronization Program	b	\$ 50,000	\$ 50,000	\$ -
37	Public Transit State of Good Repair Program	b	\$ 440,000	\$ 440,000	\$ -
38	Central Cities Subtotal		\$ 5,827,000	\$ 3,987,000	\$ 1,840,000
39	North County				
40	Active Transportation Program	b	\$ 264,000	\$ 264,000	\$ -
41	Arterial Program	b	\$ 378,000	\$ 378,000	\$ -
42	Goods Movement Program	b	\$ 104,000	\$ 104,000	\$ -
43	High Desert Corridor (HDC) Right-of-Way		\$ 270,000	\$ 270,000	\$ -
44	Highway Efficiency Program	b	\$ 349,000	\$ 349,000	\$ -
45	I-5 North Capacity Enhancements (Parker Rd. + 1.5 miles)		\$ 785,000	\$ 268,000	\$ 517,000
46	Multimodal Connectivity Program	b	\$ 239,000	\$ 239,000	\$ -
47	Transit Program	b	\$ 88,000	\$ 88,000	\$ -
48	North County Subtotal		\$ 2,477,000	\$ 1,960,000	\$ 517,000
49	Las Virgenes-Malibu				
50	Active Transportation, Transit, and Technology Program	b	\$ 32,000	\$ 32,000	\$ -
51	Highway Efficiency Program	b	\$ 133,000	\$ 133,000	\$ -
52	Modal Connectivity Program	b	\$ 68,000	\$ 68,000	\$ -
53	Traffic Congestion Relief and Improvement Program	b	\$ 63,000	\$ 63,000	\$ -
54	Las Virgenes-Malibu Subtotal		\$ 296,000	\$ 296,000	\$ -

Subregional Stakeholder Draft Project Priorities

ATTACHMENT D

(2015 \$ in thousands)

for reference only - not priority order	Project	Notes	Cost Assumption	Draft Subregional Target (2015\$)	Difference
55	Gateway Cities				
56	Gold Line Eastside Extension Phase II - Washington Blvd.	f, j	\$ 1,500,000	\$ 543,000	\$ 957,000
57	Green Line Eastern Extension (Norwalk)	j	\$ 500,000	\$ 500,000	\$ -
58	I-5 Corridor Improvements (I-605 to I-710)		\$ 1,100,000	\$ 1,059,000	\$ 41,000
59	I-605 Corridor "Hot Spot" Interchange Improvements	j	\$ 850,000	\$ 300,000	\$ 550,000
60	I-710 South Corridor Project	g, j	\$ 4,000,000	\$ 500,000	\$ 3,500,000
61	SR 60/I-605 Interchange HOV Direct Connectors	h	\$ 260,000	\$ 200,000	\$ 60,000
62	West Santa Ana Branch (Eco Rapid Transit Project)	j	\$ 2,000,000	\$ 1,035,000	\$ 965,000
63	Active Transportation Program	j	Included above (see footnote j)		
64	Gateway Cities Subtotal		\$ 10,210,000	\$ 4,137,000	\$ 6,073,000
65	San Gabriel Valley				
66	Active Transportation Program (Bicycle/Pedestrian Facilities)	b	\$ 231,000	\$ 231,000	\$ -
67	Bus System Improvement Program	b	\$ 55,000	\$ 55,000	\$ -
68	Goods Movement Program (Improvements & RR Xing Elim.)	b	\$ 33,000	\$ 33,000	\$ -
69	Highway Demand Based Program (HOV Ext. & Connectors)	b	\$ 231,000	\$ 231,000	\$ -
70	Highway Efficiency Program	b	\$ 534,000	\$ 534,000	\$ -
71	I-605/I-10 Interchange		\$ 126,000	\$ 126,000	\$ -
72	ITS/Technology Program (Advanced Signal Technology)	b	\$ 66,000	\$ 66,000	\$ -
73	Metro Gold Line Eastside Transit Corridor Phase II - SR-60	f	\$ 1,500,000	\$ 543,000	\$ 957,000
74	Metro Gold Line Foothill Light Rail Extension - Phase 2B	i	\$ 1,130,000	\$ 1,019,000	\$ 111,000
75	First/Last Mile and Complete Streets	b	\$ 198,000	\$ 198,000	\$ -
76	SR 60/I-605 Interchange	h	\$ 130,000	\$ 130,000	\$ -
77	SR-57/SR-60 Interchange Improvements		\$ 205,000	\$ 205,000	\$ -
78	San Gabriel Valley Subtotal		\$ 4,439,000	\$ 3,371,000	\$ 1,068,000
79	South Bay				
80	Green Line Extension to Crenshaw Blvd in Torrance		\$ 607,500	\$ 607,500	\$ -
81	I-105 Hot Lane from I-405 to I-605		\$ 350,000	\$ 350,000	\$ -
82	I-110 Express Lane Ext South to I-405/I-110		\$ 81,500	\$ 81,500	\$ -
83	I-405 South Bay Curve Widening		\$ 120,000	\$ 120,000	\$ -
84	I-405/I-110 Int. HOV Connector Ramps & Intrchg Improv		\$ 355,000	\$ 355,000	\$ -
85	South Bay Highway Operational Improvements		\$ 1,100,000	\$ 350,000	\$ 750,000
87	Transportation System and Mobility Improvements Program	b	\$ 350,000	\$ 350,000	\$ -
88	South Bay Subtotal		\$ 2,964,000	\$ 2,214,000	\$ 750,000
89	GRAND TOTAL		\$ 41,853,100	\$ 23,376,000	\$ 18,477,100

- a. Cost Assumption equals subregional funding share proposed by the Arroyo Verdugo and San Fernando Valley areas.
- b. Cost Assumption equals proposed subregional funding.
- c. Program includes City of San Fernando Bike Master Plan and LA River Bike Path Across the Valley projects.
- d. Final cost, scope, and subregional shares will be determined by the environmental process. The working assumption here for any existing available LRTP funding is 50% San Fernando Valley area and 50% Westside.
- e. Final cost, scope, and subregional shares will be determined by the environmental process. The working assumption here is 75% Central-25% Westside.
- f. Final cost, scope, and subregional shares will be determined by the environmental process. The working assumption here for any existing available LRTP funding (including Measure R) is 50% Gateway area and 50% San Gabriel Valley area.
- g. 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.
- h. 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.
- i. Subregional target does not include full 25% contingency.
- j. These Gateway COG projects will include Active Transportation Program (bicycle/pedestrian) elements.

Regional Facility Provider Draft Needs List

ATTACHMENT E

(2015 \$ in thousands)

Project	Notes	Cost Estimate
Bob Hope Airport		
Burbank/Glendale LRT		\$ 1,604,000
Clybourn Ave: Grade separation at railroad tracks / Vanowen St / Empire Ave		\$ 60,000
Hollywood Way/San Fernando Rd Metrolink station pedestrian bridge		\$ 8,350
I-5/Buena Vista Ave: Reconfigure ramps and connect with Winona Ave	a	\$ 30,000
Metro Red Line Extension: North Hollywood to Burbank Airport		\$ 1,800,000
North Hollywood to Bob Hope Airport to Pasadena Transit Corridor	a, b	\$ 2,550,000
Subtotal		\$ 6,052,350
Long Beach Airport		
3138-Bellflower Blvd./ Spring St. Improv.		\$ 5,000
9078-Lakewood Blvd./ Rosemead Blvd. (59) signals-San Gabriel Blvd. to Stearns St.		\$ 10,325
3137-Lakewood Blvd. / Spring St. Improv.		\$ 5,000
9659-LGB Bicycle access improvements		\$ 50,000
3082-Wardlow Rd. / Cherry Ave. Intersection Widening		\$ 5,000
9094-Willow St. (23) signals from I-710 to I-605		\$ 2,450
Subtotal		\$ 77,775
Los Angeles Airport		
Automated People Mover (APM) system		\$ 175,000
Connection: Manchester Square to I-405 southbound and I-105 eastbound ramp		\$ 450,000
Gateway LAXpress Employee Transport: capital cost of existing/new transit vehicles		\$ 50,000
Gateway LAXpress Employee Transport: Mobility Hubs at Regional Transit Centers		\$ 75,000
Gateway LAXpress Employee IT Platform Services		\$ 250
I-405: Construct LAX Expressway		\$ 1,120,000
Interstate 405 (I-405) Direct High Occupancy Vehicle (HOV) Connector to LAX		\$ 135,000
Provide an on-ramp to I-405 northbound from northbound La Cienega Boulevard		\$ 90,000
Trench Cover (Crenshaw/LAX Transit Corridor)		TBD
Subtotal		\$ 2,095,250
Palmdale Airport		
Bicycle/Pedestrian Connector from the Palmdale Regional Airport		\$ 50,000
High Desert Corridor from SR 14 to 50th Street East	c	\$ 670,000
People Mover from PTC to the Palmdale Regional Airport		\$ 100,000
RVB Roadway Improvements from 15th Street East to 50th Street East		\$ 75,000
Rancho Vista Grade Separation Project from Fairway Drive to 15th Street East		\$ 100,000
Subtotal		\$ 995,000

Regional Facility Provider Draft Needs List

ATTACHMENT E

(2015 \$ in thousands)

Project	POLA Priority	Notes	Cost Estimate
Port of Los Angeles (POLA)			
Terminal Island Container Transfer Facility Expansion (additional loading track)	1	\$	4,000
West Basin Container Terminal Automated/Electrified On-Dock Railyard	2	\$	86,000
Alameda Corridor Terminus - West Basin Track (West Basin 2 nd Mainline Track)	3	\$	5,000
Alameda Corridor POLA/POLB Access Rail (Thenard Junction Connection)	4	\$	20,000
Pier 300 On-Dock Railyard Expansion (2 additional loading tracks)	5	\$	35,000
Pier 400 On-Dock Railyard Expansion (2 additional loading tracks)	6	\$	75,000
Pier 400 Second Lead Track	7	\$	12,000
Alameda Corridor Terminus - Cerritos Channel Bridge (5004)	8	\$	170,000
Alameda Corridor Terminus-West Basin Railyard Expansion (additional tracks)	9	\$	45,000
SR 47/V. Thomas Bridge/Harbor Blvd. Interchange	10	\$	25,000
SR 47/Navy Way Interchange	11	\$	50,000
Alameda Corridor Terminus/SR 47 Rail Crossing Advanced Warning System.	12	\$	5,000
San Pedro Waterfront Regional Access Improvement:	13	\$	41,000
Alameda Corridor Terminus/California Coastal Trail Extension Grade Separation	14	\$	15,000
California Coastal Trail - Ports O' Call Promenade	15	\$	29,000
New Terminal Island On-dock railyard	16	\$	150,000
Terminal Island Rail Support Yard	17	\$	50,000
Container Movement Efficiency Program	18	\$	383,000
Subtotal		\$	1,200,000
Port of Long Beach			
Coastal Trail Gap Closure Projects (Regional Connectivity)		\$	21,800
Gerald Desmond Bridge Replacement Project		\$	200,000
Pico Avenue Freight Corridor Street Improvements		\$	160,000
Port Area Advanced Transportation Management and Information System 2.0		\$	6,000
Port Access Road Improvements		\$	50,015
Rail Efficiency Improvement Project at Pier B		\$	440,000
Rail Efficiency Improvement at Pier G South Rail Yard		\$	66,000
Terminal Island On-Dock Rail Efficiency Improvements		\$	173,710
Subtotal		\$	1,117,525
Union Station			
Los Angeles Union Station-40 year component State of Good Repair Cost		\$	106,260
Southern California Regional Interconnector Project (Metrolink Run-Through)		\$	150,000
Union Station Linkages Program (Connect US Action Plan)		\$	26,000
Union Station Master Plan (USMP) Stage 2A Multi Modal Passenger Concourse		\$	300,000
USMP Enabling Development (Stage 2C)		\$	12,000
USMP Enabling Development and Open Space Network (Stage 2E and 2F)		\$	114,000
USMP Perimeter Improvements (Stage 1)		\$	31,111
USMP Relocated Patsaouras Bus Plaza (Stage 2B)		\$	770,000
Subtotal		\$	1,509,371
GRAND TOTAL		\$	13,047,271

- a. Project also identified as priority in Arroyo Verdugo Subregion project list
- b. Project also identified as priority in San Fernando Valley Subregion project list
- c. Project also identified as priority in North County Subregion project list

Transportation Plan Roadmap

	OCTOBER 2015	NOVEMBER— DECEMBER 2015	JANUARY— MARCH 2016	APRIL— JUNE 2016	JULY— SEPTEMBER 2016	OCTOBER— DECEMBER 2016
EXPENDITURE PLAN 	> Plan Framework	> Finalize Framework	> Evaluate Project Sequencing	> Finalize Project Sequencing	> Submit Ballot Measure	
STAKEHOLDER & COMMUNITY OUTREACH 	> COG Coordination > Stakeholder and Sub-Regional Briefings	> Stakeholder and Sub-Regional Briefings	> Public meetings > Survey > Focus Groups > Community Workshops > Stakeholder and Sub-Regional Briefings	> Stakeholder and Sub-Regional Briefings	> Voter Information Begins	
EDUCATION 	> Annual Report > Launch LRTP Website	> Education Campaign Begins	> Quality of Life Report	> Telephone Town Halls	> Voter Information Begins	
BOARD ACTIVITIES 	> Framework Presented	> Action on Framework	> Expenditure Plan Draft Released	> Final Expenditure Plan Action		