



**TRANSPORTATION COMMITTEE
OCTOBER 20, 2017**

ACTION REQUESTED: RECOMMEND

**2019 SAN DIEGO FORWARD: THE REGIONAL PLAN –
PROPOSED REVENUE CONSTRAINED
NETWORK SCENARIOS DEVELOPMENT PROCESS**

File Number 3102000

Introduction

SANDAG currently is updating San Diego Forward: The Regional Plan (Regional Plan). At its October 6, 2017, meeting, the Transportation Committee reviewed the Draft Unconstrained Transportation Network and requested additional discussion on the process to develop the Revenue Constrained Network Scenarios and the lists of ranked projects from the 2015 Regional Plan. This report includes those ranked project lists and feedback received from the Regional Planning Committee on this item at its October 6, 2017, meeting.

Recommendation

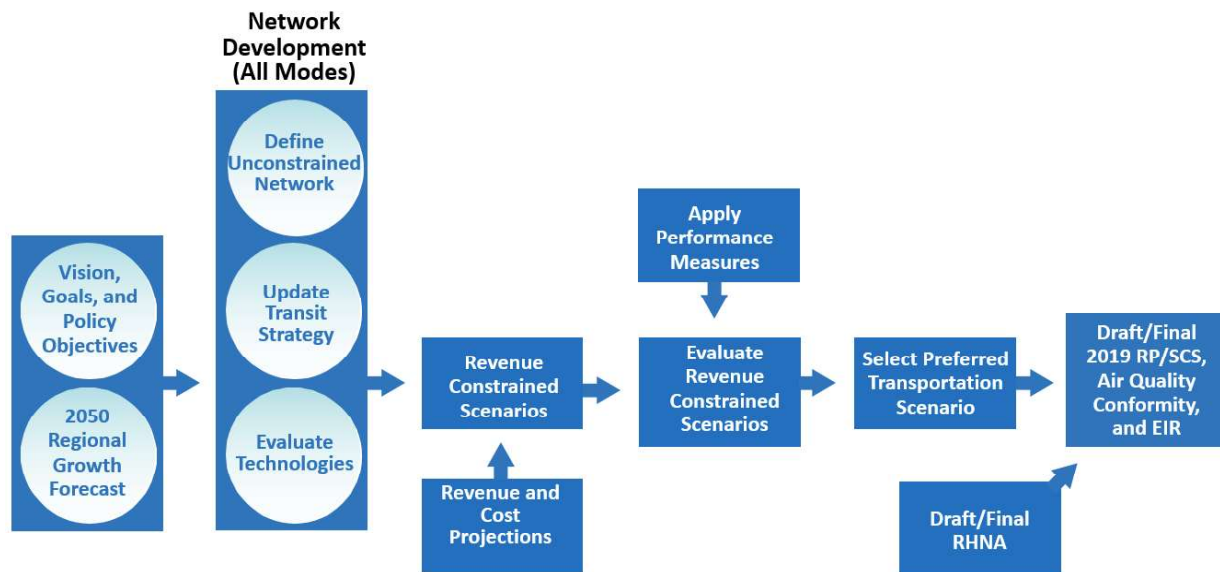
The Transportation Committee is asked to recommend that the Board of Directors accept the proposed process to develop the Revenue Constrained Network Scenarios for use in the development of 2019 San Diego Forward: The Regional Plan, including the existing Unconstrained Transportation Network, project evaluation criteria, and project rankings from the 2015 Regional Plan.

Discussion

The Draft Unconstrained Transportation Network identifies the region’s needs for transit, highway, active transportation, goods movement, arterial improvements, and operations to meet travel demand through 2050. Although not required by state or federal regulations, SANDAG utilizes project evaluation criteria to rank transportation projects in the Unconstrained Transportation Network by mode. These rankings then are used to help form various Revenue Constrained Transportation Network Scenarios.

The Revenue Constrained Transportation Network Scenarios serve as options for the Board of Directors to consider for use in the Regional Plan. Each Revenue Constrained Transportation Network Scenario provides a different combination of projects and programs (i.e., transit, highway, rail, active transportation) that could be implemented with the revenues that are reasonably expected through 2050. Once the scenarios are developed, network performance measures are used to evaluate the various combinations. Based on the findings of this evaluation, the Board selects a Preferred Transportation Scenario, which is the final mix of projects and programs that will be used as the basis of the Regional Plan.

The following flowchart visually depicts the network development process beginning with the Unconstrained Transportation Network, followed by Revenue Constrained Network Scenarios, and culminating with the Preferred Revenue Constrained Transportation Network.



Proposed Revenue Constrained Network Scenarios Development Process

Project Evaluation Criteria

It is recommended that the 2019 Regional Plan use the existing evaluation criteria and start with the current list of ranked projects to begin the complex Revenue Constrained Network Scenarios development process. Attachment 1 includes the lists of ranked projects by mode from the 2015 Regional Plan. This approach would allow the Regional Planning and Transportation Committees and Board of Directors more time to determine what the appropriate mix of projects by mode and location should be for the Regional Plan.

The existing evaluation criteria was developed for the 2015 Regional Plan and incorporated substantial changes in travel demand modeling tools, and the new vision, goals, and policy objectives framework established by the Board of Directors. An extensive effort was conducted to develop the project evaluation criteria with input from the Active Transportation Working Group, Cities/County Transportation Advisory Committee, community-based organization partners, Freight Stakeholders Working Group, Independent Taxpayer Oversight Committee, Public Health Stakeholders Working Group, Regional Planning Technical Working Group, and the Tribal Transportation Working Group. Input also was sought from partner agencies including Caltrans, the Metropolitan Transit System, the North County Transit District, and at the Regional Plan workshops held throughout the region. Additionally, a peer review panel was convened to review and assess the criteria, and to consider feedback and input that was incorporated into the criteria. The panelists, which included experts from academia, other Metropolitan Planning Organizations, and the private sector, provided recommendations for revision and enhancement to the draft criteria.

Revenue Constrained Network Scenarios

There are many new themes to consider in the development of the Revenue Constrained Network Scenarios, including the incorporation of new transportation technologies, considerations from the *TransNet* Ten-Year Review (as required by the *TransNet* Ordinance), and the need to meet potentially more stringent greenhouse gas emission reduction targets currently being updated by the California Air Resources Board. Overall network efficiency, project readiness, and funding availability also will continue to guide the development of the scenarios. In addition, all Revenue Constrained Network Scenarios would be designed to support local land uses as reflected in local land use plans. Of all of the required steps in the Regional Plan process that the Board directs, determining the mix of projects and modes, and assessing the performance of each combination has the most impact on what the final 2019 Regional Plan will look like.

Network Performance Measures

Again, while the project evaluation criteria exclusively are used to rank individual projects by mode, the network performance measures are used to evaluate each Revenue Constrained Network Scenario as a whole. Informed by the Board's vision and goals, the performance measures can help provide a "scorecard" to compare the different Revenue Constrained Network Scenarios. The Policy Advisory Committees and Board of Directors will be asked to provide feedback on updating the performance measures for the 2019 Regional Plan in the coming months. In addition, feedback will be gathered from SANDAG working groups, the network of community-based organizations, the public, potential peer group review, Policy Advisory Committees, and the Board of Directors.

The network performance measures will align with the performance monitoring measures now required by the federal Fixing America's Surface Transportation Act. This act established a new performance and outcome-based program, which includes national performance goals for the federal-aid highway program in the following areas: safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, and environmental sustainability.

Transportation Committee Feedback

At its meeting on October 6, 2017, the Transportation Committee discussed the Draft Unconstrained Transportation Network and proposed process to develop Revenue Constrained Network Scenarios for the 2019 Regional Plan. No revisions were requested to the Draft Unconstrained Transportation Network. The committee requested more time to discuss the 2015 Regional Plan project evaluation criteria and rankings, which subsequently were emailed to all committee members. Additionally, feedback from the Transportation Committee members included a request to add vehicle miles traveled to the performance measures (when developed) and to update the draft unconstrained maps when presented to the Board to reflect projects that have been completed or are under development since adoption of 2015 Regional Plan

Regional Planning Committee Feedback

At its meeting on October 6, 2017, the Regional Planning Committee also discussed this item and requested the 2015 Regional Plan project rankings, which staff subsequently emailed to all committee members.

The Regional Planning Committee supported moving forward with the draft Unconstrained Transportation Network and using the 2015 Regional Plan ranked project lists in the 2019 Regional Plan development process, in order to devote more time for the Revenue Constrained Network Scenarios development process. Members cited the need to better understand the impacts of major emerging transportation opportunities (such as autonomous vehicles, ridesourcing companies such as Uber and Lyft, and electric vehicles) and to focus their energy on identifying different, and more diverse, options for the Revenue Constrained Network Scenarios.

In terms of performance measures, members requested consideration of travel times, vehicle miles traveled, cost-effectiveness, the relationship of solo driving and capacity for freight movements, as well as aligning the mode share analysis with local Climate Action Plan mode share goals.

Next Steps

Pending recommendation by the Transportation Committee and action by the Board of Directors, staff would begin updating the performance measures over the next several months, concurrent with the development of the Emerging Transportation Technologies white paper. Draft performance measures would be brought to the Policy Advisory Committees in early 2018 and include input from SANDAG working groups and the public. Additionally, the Regional Planning and Transportation Committees will be asked to provide input and direction into the revenue estimates that will be used to develop the funding capacity for Revenue Constrained Network Scenarios.

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Attachment: 1. 2015 Regional Plan: Transportation Project Evaluation Criteria and Rankings (Appendix M)

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Appendix M

Transportation Project Evaluation Criteria and Rankings

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Introduction

This Appendix describes the process for developing evaluation criteria for prioritizing highway, Managed Lanes and Managed Lane connectors, freeway connectors, transit service, active transportation, and rail grade separation projects for inclusion in the Preferred Revenue Constrained Transportation Scenario of San Diego Forward: The Regional Plan. This Appendix also includes information on the screening criteria for the regional arterial system.

In past Regional Transportation Plans (RTP), SANDAG utilized transportation project evaluation criteria informed by the plan goals as elements of a multistep process to prioritize and evaluate transportation projects in the development of the preferred revenue constrained transportation network. For the Regional Plan, an extensive update effort was undertaken, which included a comprehensive review of the 2050 RTP criteria, efforts to streamline the criteria, incorporate new goals and policy objectives, and input from the public and a peer review panel.

The Board of Directors approved the transportation project evaluation criteria at its October 11, 2013, meeting. Project evaluation criteria were applied to each modal category of projects in the Unconstrained Transportation Network.

Background

Vision and goals

In early 2013, the Board of Directors provided input to frame questions for a statistically significant telephone survey intended to gauge public opinion and to inform the development of the vision and goals as the policy foundation for the Regional Plan. Based on the results of the telephone survey, the broad categories with the most support, in order of overall preference, included:

- Improving the regional economy, business climate, and local job opportunities
- Maintaining what we've built, including streets, highways, and public facilities
- Protecting the environment, reducing air pollution, and making better use of renewable energy sources
- Improving the transportation system to improve the flow of people and goods
- Locating future housing and new businesses near major employment centers and transit services to reduce commute times and traffic congestion

After discussion of the survey results, the Board crafted the vision and three goals for the plan: (1) Innovative Mobility and Planning, (2) Healthy Environment and Communities, and (3) Vibrant Economy. The Board of Directors accepted the vision and goals for the San Diego Forward: The Regional Plan on May 10, 2013. The vision and goals guide all elements of the Regional Plan, including the project evaluation criteria.

Transportation Project Evaluation Criteria Development Process

Using the evaluation criteria from the 2050 RTP and Sustainable Communities Strategy (SCS) as a starting point, staff initiated the review and refinement of the transportation project evaluation criteria for San Diego Forward: The Regional Plan in February 2013. A consultant team with strong technical expertise assisted in the development of the draft criteria. Revisions to the criteria and methodologies were made to align them with the vision and goals accepted for the Regional Plan and to take advantage of the enhanced modeling tool: the Activity Based Model.

Transportation project evaluation criteria

The project evaluation criteria for San Diego Forward: The Regional Plan is organized within the three goals established by the Board: (1) Innovative Mobility and Planning, (2) Healthy Environment and Communities, and (3) Vibrant Economy. Each individual criterion is nested into one of the three goals. The Transportation Project Evaluation Criteria are included in Tables M.1, M.3, M.5, M.7, M.9, and M.11.

The refinements that were incorporated into the project evaluation criteria for the Regional Plan can be organized into three broad areas: (1) model enhancement-related, (2) new criteria, and (3) reorganized criteria. The majority of proposed changes to the criteria have resulted from newer capabilities of the model enhancements, which allow greater analysis of household travel. Project evaluation criteria that have benefited from model enhancements include: *provides congestion relief, serves daily trips, facilitates FasTrak®/carpool/transit, pedestrian and bike mobility, serves Regional Comprehensive Plan (RCP) Smart Growth areas, provides accessibility, serves goods movement, and project cost-effectiveness*. Other new modal criteria are incorporated, including *physical activity, and access to schools, recreational areas, and beaches*.

Active transportation criteria were also included as a modal category for the first time in the Regional Plan and were developed through similar combined efforts with local jurisdictions, partner agencies, SANDAG working groups, other stakeholders, consultants, and the general public. The majority of the criteria are consistent with other modal categories, including *serves daily trips, safety, greenhouse gas and pollutant emissions, serves RCP Smart Growth areas, physical activity, accessibility, and cost-effectiveness, greenhouse gas reductions, disadvantaged communities¹ served by the project, and cost-effectiveness* criteria were added to the rail grade separation category to provide greater consistency of analysis across modal categories.

SANDAG has been developing active transportation enhancements to the Activity-based Model (ABM). The Active Transportation criteria were intended to be used with the active transportation-enhanced ABM. However, these enhancements were not completed in time to be used in application of the Active Transportation criteria, so the project rankings from *Riding to 2050: The San Diego Regional Bike Plan* was utilized.

Cost-effectiveness and jobs criterion

A more comprehensive cost-effectiveness and jobs criterion was included that builds upon the 2050 RTP/SCS method, which evaluated the person hours saved or ridership of the project relative to its capital costs and operating and maintenance costs. For the Regional Plan, the cost-effectiveness criterion monetized a number of factors such as fuel costs, greenhouse gas emissions, smog-forming pollutants, physical activity, travel time savings, safety, and the value of jobs created by the project, which were compared to the capital, operating, and maintenance cost of the project. While analyses such as the project cost-effectiveness criterion attempt to capture the economic effects of the projects as comprehensively as possible, such analyses may not fully reflect the importance of individual factors to the project prioritization process. As a result, some components of the project cost-effectiveness criterion also are reflected in other evaluation criteria to capture the relative importance of these factors.

Public outreach

SANDAG received input on the project evaluation criteria from regional stakeholders at meetings of the Active Transportation Working Group, Cities and County Technical Advisory Committee, community-based organization partners, Freight Stakeholders Working Group, Independent Taxpayer Oversight Committee (ITOC), Public Health Stakeholders Working Group, Regional Planning Technical Working Group, and the Tribal Transportation Working Group. Staff also sought input from other partner agencies including Caltrans, the Metropolitan Transit System (MTS), and the North County Transit District (NCTD). Input on the prioritization of transportation projects also was solicited from the public at the San Diego Forward: The Regional Plan workshops held throughout the region and at Caltrans

in June 2013. In addition to the workshop series, a public workshop was held on August 5, 2013, with more than 75 participants. More than 400 comments were collected from local jurisdictions, partner agencies, stakeholders, and the general public. This feedback provided valuable information that was considered in development of the final project evaluation criteria.

Peer review

A five-person peer review panel was created to review and assess the criteria, and to consider feedback and input that was proposed to be incorporated into the criteria. Panelists included staff from the San Francisco Bay Area Metropolitan Transportation Commission in Oakland, California and the Puget Sound Regional Council, Seattle, Washington. Experts from academia and the private sector included: Jennifer Dill, Professor, Nohad A. Toulan School of Urban Studies and Planning Director; Oregon Transportation Research & Education Consortium; Portland State University; Marty Wachs, Senior Principal Researcher at RAND, Distinguished Professor Emeritus in Urban Planning, University of California Los Angeles Luskin School of Public Affairs; and Joel Freedman, Manager, Systems Analysis Technical Resource Center, Parsons Brinckerhoff.

Based on the panel's review and comments received from working groups and the public, several refinements were made to the initial draft criteria. Additionally, individual criterion weightings were adjusted to provide greater consistency of common measures across modal categories.

Project evaluation criteria weightings

The project evaluation criteria weighting allocates roughly one-third of the total possible points for each of the goal focus areas. These proposed weightings reflect the highest regional priority areas, which are nested in the goals.

All mode categories have a 100-point scale, with each individual criterion allocated a specified maximum score. Feedback from the ITOC, as well as other SANDAG working group members, stakeholders, and the general public, was considered during the development of the proposed criteria weightings. As a result, additional weight was given to the greenhouse gas and pollutant emissions and cost-effectiveness criteria in the active transportation evaluation criteria, providing greater consistency with weighting of these criteria across modes.

Highway Corridors

SANDAG has used criteria for evaluating and ranking highway corridor projects since 1997. Using the 2050 RTP criteria as a starting point, a set of revised criteria which reflect the Board-adopted goals were developed.

The eleven highway evaluation criteria presented in Table M.1 quantify *congestion relief, project safety, provides access to evacuation routes, facilitates FasTrak/carpool/transit, pedestrian and bike mobility, minimizes habitat and residential impacts, greenhouse gas and pollutant emissions, serves RCP smart growth areas, physical activity, accessibility, serves goods movement and relieves freight system bottlenecks/capacity constraints, and project cost-effectiveness*. The approved highway criteria incorporates a number of refined or new elements including the daily person hours saved for disadvantaged communities; reduction in smog forming pollutants; increase in physical activity; and an expanded accessibility measure which quantifies access to jobs, schools, and recreation.

The highway network corridor evaluation was used to develop the Revenue Constrained Network alternatives and project phasing included in the Regional Plan. The 37 unconstrained highway corridors evaluated for the 2050 Regional Plan are listed in priority order in Table M.2.

The prioritized list of highway projects was used as a tool in assembling logical transportation networks of highway projects that complement transit and arterial projects. Priority order is not necessarily strictly followed. Rather, emphasis is placed upon developing meaningful networks in accordance with the Regional Plan goals and objectives.

Table M.1
Project Evaluation Criteria Highway Corridors

No.	Criteria	Description	Proposed Calculation	Max Score	Total Percent	Policy Objectives
<i>Innovative Mobility & Planning</i>						
1	Provides Congestion Relief	A) What is the number of daily person-hours saved from implementing the project?*	Change in daily person-hours saved	10	35	Mobility Choices
		B) What is the number of daily person-hours saved for disadvantaged communities?	Change in daily person-hours saved for disadvantaged communities population	5		
2	Project Safety	How does the project compare against the statewide average for collisions?*	Project percentage of collisions measured against statewide average	5		Preservation and Safety of the Transportation System
3	Provides Access to Evacuation Routes	How will the project provide evacuation access for regional hazard areas?	Proximity analysis of hazard areas (dam failure, earthquake, flood, landslide, liquefaction, tsunami, and wildfire), weighted by population and employment	5		Preservation and Safety of the Transportation System, Partnerships and Collaboration, Binational Collaboration with Baja California
4	Facilitates FasTrak/ Carpool/Transit, Pedestrian and Bike Mobility	How will the project facilitate FasTrak/carpool/Managed Lane facilities and/or regional or corridor transit services and/or pedestrian and bike access?	Projects will receive points if they include FasTrak/carpool/Managed Lane facility, and/or regional or corridor transit services, and/or pedestrian and bike facilities, which is then weighted by combined carpool person volume + transit person volume	10		Mobility Choices, Complete Communities

Table M.1 (continued)
Project Evaluation Criteria Highway Corridors

No.	Criteria	Description	Proposed Calculation	Max Score	Total Percent	Policy Objectives
<i>Healthy Environment & Communities</i>						
5	Minimizes Habitat and Residential Impacts	How will the project minimize negative habitat and residential impacts?*	Proximity analysis of preserve areas, native habitats, and housing (more than two dwelling units per acre)	5	30	Habitat and Open Space Preservation, Environmental Stewardship
6	Greenhouse gas and Pollutant Emissions	A) What is the reduction in CO ₂ emissions from implementing the project?*	Reduction in CO ₂ emissions	5		Environmental Stewardship, Energy and Climate Change Mitigation and Adaptation
		B) What is the reduction in smog forming pollutants from implementing the project?*	Reduction in smog-forming pollutants	5		
7	Serves RCP Smart Growth Areas	What is the share of trips on the facility serving RCP Smart Growth Areas (Metropolitan Center, Urban Center, and Special Use Center)?*	Share of trips on facility serving existing/planned or potential Metropolitan Center, Urban Center, and Special Use Center is calculated, using select link analysis	10		Complete Communities, Regional Economic Prosperity, Habitat and Open Space Preservation
8	Physical Activity	What is the increase in physical activity?	Increase in time engaged in moderate transportation-related physical activity	5		Mobility Choices, Complete Communities

**Table M.1 (continued)
Project Evaluation Criteria Highway Corridors**

No.	Criteria	Description	Proposed Calculation	Max Score	Total Percent	Policy Objectives
<i>Vibrant Economy</i>						
9	Accessibility	A) What is the improved access to jobs and schools? B) How will the project support access to recreational areas and beaches? C) What percentage of users of the project access Indian reservations?	Weighted average number of jobs and school enrollment accessible in 30 minutes by auto Acres of parkland/recreational areas and beaches within 1/4 mile of project Select link used to determine origins and destinations served, total trips to/from Indian reservation areas	4	35	Mobility Choices, Regional Economic Prosperity Complete Communities, Habitat and Open Space Preservation
10	Serves Goods Movement and Relieves Freight System Bottlenecks/ Capacity Constraints	What is the improved average travel time for freight?*	Total travel time savings for medium and heavy truck classes	5		Mobility Choices, Regional Economic Prosperity, Binational Collaboration with Baja California
11	Project Cost-Effectiveness	What is the cost-effectiveness of the project?*	Enhanced cost-effectiveness measure incorporates the following components: - Project cost - Generalized delay costs - Fuel costs - greenhouse gas emissions - Smog-forming pollutants - Physical activity - Safety	20		Mobility Choices, Regional Economic Prosperity, Complete Communities, Binational Collaboration with Baja California, Preservation and Safety of the Transportation System, Environmental Stewardship, Energy and Climate Change Mitigation and Adaptation

* Provides dual evaluation for both passenger vehicles and trucks.

**Table M.2
Highway Corridor Project Rankings**

<i>TransNet, Early Action Program (EAP)</i>	<i>Freeway/ Highway</i>	<i>From</i>	<i>To</i>	<i>Existing</i>	<i>With Improvements</i>	<i>Unconstrained Cost (\$2014) (millions)</i>	<i>Total Score</i>	<i>Regional Plan Project Rank</i>
EAP (Env)	I-5	La Jolla Village Dr	Vandegrift	8F/10F+2HOV	8F/10F+4ML	\$3,045.2	57.7	1
EAP (Transit/Env)	I-805	SR 905	Carroll Canyon Rd	8F+2HOV	8F+2ML/8F+4ML	\$3,419.0	54.1	2
<i>TransNet</i>	SR 78	I-5	I-15	6F	6F+2ML/Operational	\$959.5	51.4	3
<i>TransNet</i>	I-5	SR 905	SR 15	8F	8F/10F+2HOV	\$651.5	45.2	4
n/a	SR 15	SR 94	I-805	6F	6F+2HOV	\$30.3	45.0	5
<i>TransNet</i>	SR 54	I-5	SR 125	6F	6F/8F+2HOV	\$232.3	37.2	6
<i>TransNet</i>	I-5	I-8	La Jolla Village Dr	8F/10F	8F/10F+2HOV	\$555.5	36.7	7
<i>TransNet</i>	I-5	SR 15	I-8	8F	8F+Operational	\$1,176.7	33.2	8
EAP (Transit)	I-15	I-8	SR 163	8F	8F+2HOV	\$55.6	31.6	9
EAP (Transit)	SR 94	I-5	I-805	8F	8F+2HOV	\$484.8	31.3	10
n/a	I-8	Los Coches	Dunbar Rd	4F/6F	6F	\$131.3	30.5	11
<i>TransNet</i>	SR 94	I-805	SR 125	8F	8F/10F+2ML	\$469.7	30.5	11
n/a	SR 76	I-15	Couser Canyon	2C	4C/6C+Operational	\$131.3	29.8	13
<i>TransNet</i>	I-8	2nd St	Los Coches	4F/6F	6F	\$35.4	29.2	14
<i>TransNet</i>	SR 125	SR 54	SR 94	6F	8F+2HOV	\$146.5	29.2	14
n/a	SR 125	SR 94	I-8	8F	10F+2HOV	\$292.9	29.1	16
n/a	I-8	SR 125	2nd St	6F/8F	6F/8F+Operational	\$166.7	28.9	17
n/a	I-15	Viaduct		8F	8F+2HOV	\$843.4	28.1	18
<i>TransNet</i>	SR 94	SR 125	Avocado Blvd	4F	6F	\$111.1	27.5	19
n/a	SR 52	I-5	I-805	4F	6F	\$111.1	26.5	20

Table M.2 (continued)

Highway Corridor Project Rankings

<i>TransNet, Early Action Program (EAP)</i>	<i>Freeway/ Highway</i>	<i>From</i>	<i>To</i>	<i>Existing</i>	<i>With Improvements</i>	<i>Unconstrained Cost (\$2014) (millions)</i>	<i>Total Score</i>	<i>Regional Plan Project Rank</i>
n/a	SR 15	I-5	SR 94	6F	8F+2HOV	\$136.4	26.3	21
n/a	SR 163	I-805	I-15	8F	8F+2HOV	\$333.3	25.9	22
n/a	SR 52	SR 125	SR 67	4F	6F	\$252.5	25.8	23
n/a	SR 125	SR 905	SR 54	4F	8F	\$232.3	25.2	24
n/a	SR 76	Couser Canyon	SR 79	2C	2C+Operational	\$632.8	25.1	25
n/a	SR 125	I-8	SR 52	6F	6F+2HOV	\$262.6	24.8	26
<i>TransNet</i>	SR 94	Avocado Blvd	Melody Ln	4C/2C	6C/2C+Operational	\$419.2	24.2	27
n/a	SR 905	I-5	I-805	4F	8F	\$156.6	23.6	28
<i>TransNet</i>	SR 56	I-5	I-15	4F	6F+2HOV	\$303.0	23.4	29
n/a	SR 15	Lake Hodges	SR 78	8F/10F	10F	\$232.3	21.7	30
<i>TransNet</i>	SR 67	Mapleview St	Dye Rd	2C/4C	4C	\$575.7	21.1	31
n/a	I-8	I-5	SR 125	8F/10F	8F/10F+Operational	\$666.6	20.7	32
n/a	SR 76	I-5	Melrose Dr	4E	6E	\$232.3	20.6	33
n/a	SR 52	I-805	I-15	6F	6F+2HOV	\$90.9	20.2	34
n/a	SR 67	I-8	Mapleview St	4F/6F	6F/8F	\$141.4	19.2	35
<i>TransNet (2ML(R))</i>	SR 52	I-15	SR 125	4F/6F	6F+3ML(R)	\$454.5	14.5	36
n/a	SR 905	I-805	Mexico	6F	8F	\$202.0	13.5	37

Table M.2 Legend

C = Conventional Highway Lanes

F = Freeway Lanes

HOV = High Occupancy Vehicle Lanes

ML = Managed Lanes

ML(R) = Managed Lanes (Reversible)

T = Toll Lanes

Transit Services

With key input from MTS and NCTD staff, updated criteria was created to prioritize transit service projects. The transit services category incorporates several new or refined criteria which includes providing access to evacuation routes, an expanded accessibility criterion which quantifies access to jobs, schools, and amenities, as well as the percentage of disadvantaged community users, and an expanded project cost-effectiveness criterion. Table M.3 includes the detailed criteria and weighting for prioritizing transit service projects. The 51 unconstrained transit routes evaluated for the Regional Plan are listed in priority order in Table M.4.

Table M.3
Project Evaluation Criteria Transit Services

No.	Criteria	Description	Proposed Calculation	Max Score	Total Percent	Policy Objectives
<i>Innovative Mobility & Planning</i>						
1	Provides Time Competitive/ Reliable Transit Service	What is the percentage of the route located in priority treatment?	Analysis of percentage of transit route within dedicated transit guideway; dedicated arterial lane, interrupted rail, or Managed Lane; or HOV lane or arterial spot treatment	10	35	Mobility Choices, Complete Communities
2	Serves Daily Trips	What is the number of additional daily transit trips resulting from the project?	Change in daily transit linked trips	15		Mobility Choices, Complete Communities
3	Provides Access to Evacuation Routes	How will the project provide evacuation access for regional hazards?	Proximity analysis of hazard areas (dam failure, earthquake, flood, landslide, liquefaction, tsunami, and wildfire), weighted by population and employment	5		Mobility Choices, Partnerships and Collaboration, Binational Collaboration with Baja California, Preservation and Safety of the Transportation System
4	Daily System Utilization	What is the daily transit utilization?	Daily passenger miles/ daily service seat miles (system wide)	5		Mobility Choices, Complete Communities

Table M.3 (continued)
Project Evaluation Criteria Transit Services

No.	Criteria	Description	Proposed Calculation	Max Score	Total Percent	Policy Objectives
<i>Healthy Environment & Communities</i>						
5	greenhouse gas and Pollutant Emissions	A) What is the reduction in CO ₂ emissions from implementing the project? B) What is the reduction in smog forming pollutants from implementing the project?	Reduction in CO ₂ emissions Reduction in smog forming pollutants	5 5	30	Environmental Stewardship, Energy and Climate Change Mitigation and Adaptation
6	Serves RCP Smart Growth Areas	What is the share of trips on the transit service serving RCP Smart Growth areas?	Share of trips on transit service serving all existing/planned or potential Smart Growth Areas is calculated, using select link analysis	10		Complete Communities, Regional Economic Prosperity, Habitat and Open Space Preservation
7	Physical Activity	What is the increase in physical activity?	Increase in time engaged in moderate transportation-related physical activity	10		Mobility Choices, Complete Communities
<i>Vibrant Economy</i>						
8	Accessibility	A) What is the increase in job and school trips by transit? B) How will the project support access to recreational areas and beaches?	Change in daily transit linked work and school trips Acres of parkland/ recreational areas and beaches within 1/4 mile of project	4 3	35	Mobility Choices, Regional Economic Prosperity Complete Communities, Habitat and Open Space Preservation

