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Gary L. Gallegos
Executive Director, SANDAG



TRANSPORTATION COMMITTEE AGENDA

Friday, May 17, 2013
9 a.m. to 12 noon
SANDAG Board Room
401 B Street, 7th Floor
San Diego

AGENDA HIGHLIGHTS

- **INVENTORY OF LOCAL PARKING POLICIES IN THE SAN DIEGO REGION**
- **RELEASE OF SUBSEQUENT MITIGATED NEGATIVE DECLARATION FOR PUBLIC REVIEW AND COMMENT FOR THE INLAND RAIL TRAIL: SAN MARCOS TO VISTA SEGMENT**

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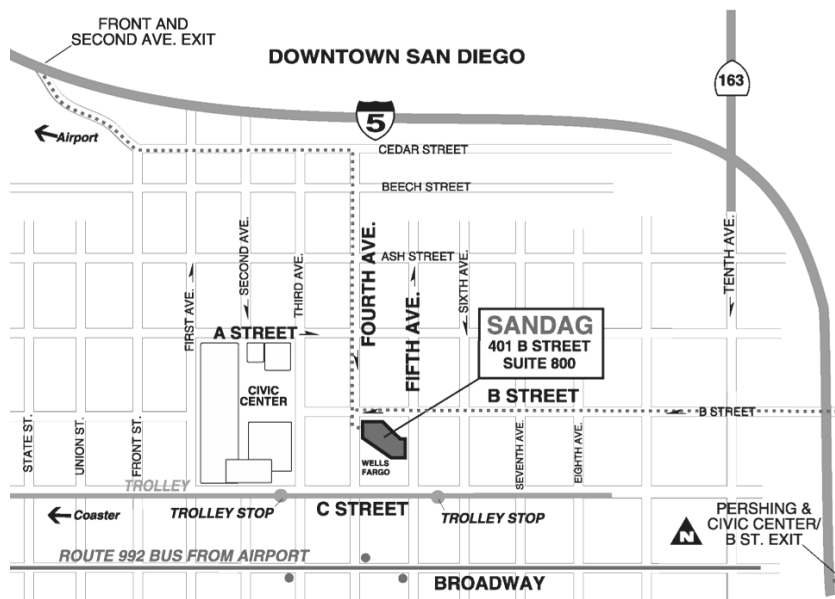
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TRANSPORTATION COMMITTEE

Friday, May 17, 2013

ITEM #		RECOMMENDATION
+1.	APPROVAL OF MEETING MINUTES The Transportation Committee is requested to review and approve the meeting minutes of May 3, 2013.	APPROVE
2.	PUBLIC COMMENTS/COMMUNICATIONS/MEMBER COMMENTS Members of the public will have the opportunity to address the Transportation Committee on any issue within the jurisdiction of the Committee that is not on this agenda. Anyone desiring to speak shall reserve time by completing a "Request to Speak" form and giving it to the Clerk prior to speaking. Public speakers should notify the Clerk if they have a handout for distribution to Committee members. Public speakers are limited to three minutes or less per person. Committee members also may provide information and announcements under this agenda item.	
CHAIR'S REPORT (3)		
3.	2013 BIKE TO WORK DAY May 17th is Bike to Work Day, which is a nationally recognized annual event that supports bicycling as a viable, environmentally friendly commute choice. A brief report on today's Bike to Work activities will be provided.	INFORMATION
REPORTS (4 through 8)		
+4.	<i>TransNet</i> ACTIVE TRANSPORTATION GRANT PROGRAM: PROPOSED GRANT AMENDMENT (Suchi Mukherjee) SANDAG approved the first round of Smart Growth Incentive Program projects under <i>TransNet</i> in May 2009, and the first round of Active Transportation Program grants in June 2009. The Independent Taxpayer Oversight Committee recommends that the Transportation Committee approve a no-cost, time-only schedule amendment of 3.5 months to the City of Escondido's Escondido Creek Bike Path Lighting and Restriping Project.	APPROVE
+5.	2012 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM: AMENDMENT NO. 2; INCLUDING THE AIR QUALITY CONFORMITY ANALYSIS AND REDETERMINATION OF THE 2050 REVENUE CONSTRAINED REGIONAL TRANSPORTATION PLAN (Michelle Merino and Andrea Hoff) On September 28, 2012, the Board of Directors adopted the 2012 Regional Transportation Improvement Program (RTIP) and found it in conformance with the State Implementation Plans; the federal requirement for transportation plans and programs. The 2012 RTIP is the multiyear program	RECOMMEND

of proposed major transportation projects in the San Diego region covering the period FY 2013 to FY 2017. The air quality analysis of Amendment No. 2 was conducted using a new emissions model (EMFAC 2011) and complies with the requirements for the new federal Eight-Hour Ozone standard. The Transportation Committee is asked to recommend that the Board of Directors adopt Resolution No. 2013-25 in substantially the same form as attached to the report, approving Amendment No. 2 to the 2012 RTIP, including the air quality conformity analysis and redetermination of the 2050 Revenue Constrained Regional Transportation Plan.

+6. FY 2014 TRANSPORTATION DEVELOPMENT ACT PRODUCTIVITY IMPROVEMENT PROGRAM (Brian Lane) RECOMMEND

SANDAG is responsible for determining if the transit agencies have made a reasonable effort to implement the productivity improvement recommendations adopted by the Board of Directors for the current fiscal year. This item discusses the transit agency productivity improvements associated with the Transportation Development Act (TDA) Claim for FY 2014. The Transportation Committee is asked to recommend that the Board of Directors find that Metropolitan Transit System and North County Transit District made a reasonable effort to implement productivity improvements during FY 2013.

+7. INVENTORY OF LOCAL PARKING POLICIES IN THE SAN DIEGO REGION (Antoinette Meier and Marisa Mangan) INFORMATION

In December 2010, the Board of Directors directed staff to consider parking policy options in the update of the Regional Comprehensive Plan. In January 2013, staff interviewed all SANDAG member agencies regarding their local parking policies and management strategies. The purpose of the inventory was to establish a baseline for parking practices in the region that can guide future discussions on how parking could be considered in San Diego Forward: The Regional Plan. Staff will present the outcomes of the parking inventory.

+8. RELEASE OF SUBSEQUENT MITIGATED NEGATIVE DECLARATION FOR PUBLIC REVIEW AND COMMENT FOR THE INLAND RAIL TRAIL: SAN MARCOS TO VISTA SEGMENT (Emilio Rodriguez) INFORMATION

SANDAG proposes to construct a seven-mile segment of the Inland Rail Trail Class I bike path within the cities of San Marcos and Vista and unincorporated County of San Diego. This segment is part of the 31-mile Inland Rail Trail project that was originally evaluated pursuant to the California Environmental Quality Act (CEQA) by the City of San Marcos in 1999. Staff has prepared a Subsequent Mitigated Negative Declaration (Subsequent MND) to evaluate changes to the project and environmental conditions since 1999. The Subsequent MND will be released for a 30-day public comment period in late May/early June.

9. CONTINUED PUBLIC COMMENTS

If the five speaker limit for public comments was exceeded at the beginning of this agenda, other public comments will be taken at this time. Subjects of previous agenda items may not again be addressed under public comment.

10. UPCOMING MEETINGS

INFORMATION

The next meeting of the Transportation Committee is scheduled for June 7, 2013, at 9 a.m.

11. ADJOURNMENT

+ next to an agenda item indicates an attachment

TRANSPORTATION COMMITTEE

May 17, 2013

AGENDA ITEM NO.: **1**

Action Requested: APPROVE

TRANSPORTATION COMMITTEE DISCUSSION AND ACTIONS MEETING OF MAY 3, 2013

The meeting of the Transportation Committee was called to order by Chair Todd Gloria (City of San Diego) at 9:00 a.m. See the attached attendance sheet for Transportation Committee member attendance.

1. APPROVAL OF MEETING MINUTES

Action: Upon a motion by Chairman Bill Horn (North County Transit District [NCTD]) and a second by Mayor Cheryl Cox (South County), the Transportation Committee approved the minutes from the April 19, 2013, Transportation Committee meeting.

2. PUBLIC COMMENTS/COMMUNICATIONS/MEMBER COMMENTS

John Wotzka, member of the public, spoke about various transportation matters.

Clive Richard, member of the public, complimented Metropolitan Transit System (MTS) and SANDAG staff for their work on transportation efficiency in the San Diego region.

Supervisor Ron Roberts (County of San Diego) announced the Federal Transit Administration (FTA) has approved the release of the draft environmental document for the Mid-Coast Corridor Transit Project. 500 copies will be mailed out to various stakeholders and people who commented during the scoping period. On May 17 the document will be released to the general public for a 60-day review period. During the review period, SANDAG will hold four meetings along the proposed route, and a public hearing at the June 21, 2013, Transportation Committee meeting.

CONSENT (3 through 5)

3. RECOMMENDATIONS REGARDING FEDERAL SECTION 5310 PROGRAM APPLICATIONS (APPROVE)

Section 5310 of SAFETEA-LU provides federal funds for social service agencies to purchase vehicles and related equipment that are used to transport seniors and persons with disabilities. These funds are available through a statewide competition. The Transportation Committee is asked to concur with the scores for the 51 eligible projects awarded by the Local Review Committee for the FY 2012 federal Title 49 U.S.C. 5310 program funding, and find that: (1) the applications are in conformance with the SANDAG Coordinated Plan; and (2) the requirements of 49 U.S.C. 5310 have been met by all applicants recommended for funding.

4. FY 2013 TRANSPORTATION DEVELOPMENT ACT CLAIM AMENDMENTS (APPROVE)

On February 22, 2013, the Board of Directors approved a revision to the FY 2013 Transportation Development Act (TDA) funds that increased the apportionment. Both NCTD and MTS submitted requests to amend their TDA claims for FY 2013. The Transportation Committee is asked to: (1) adopt Resolution Nos. 2013-21, 2013-22, and 2013-23 approving the FY 2013 Transportation Development Act claim amendments in substantially the same form as Attachments 1 through 3; and (2) direct staff to provide instructions to the County Office of Auditor Controller to revise these claims.

5. *TransNet* ENVIRONMENTAL MITIGATION PROGRAM: LAND MANAGEMENT GRANTS QUARTERLY STATUS UPDATE (INFORMATION)

The Board of Directors has approved five cycles of the *TransNet* Environmental Mitigation Program Land Management Grants Program. This report provides information to the Transportation Committee on the quarterly status of active projects.

Action: Upon a motion by Supervisor Roberts, and a second by Mayor Art Madrid (East County), the Transportation Committee approved consent items 3 through 5.

CHAIR'S REPORT (6)

6. SAN DIEGO FORWARD: THE REGIONAL PLAN: UPCOMING PUBLIC WORKSHOPS (INFORMATION)

Chair Gloria provided information that a series of workshops on the various proposed topic areas of the regional plan will be held from May 17 through July 19. Chair Gloria encouraged Transportation Committee members to attend, to post the invitation on their local websites, and to invite others that might be interested.

Action: This item was presented for information only.

REPORTS (7 through 11)

7. COMPASS CARD PROGRAM UPDATE (RECOMMEND)

James Dreisbach-Towle, Principal Technology Program Analyst, provided an update on the Compass Card program and planning efforts to transition operations to MTS.

Clive Richard, member of the public, said he wanted to hear the report and will speak directly with staff regarding the program.

Action: Upon a motion by Al Ovrom (MTS) and a second by Chair Gloria, the Transportation Committee recommended that the Board of Directors approve the transition of the Compass Card operations to MTS as part of the FY 2014 Budget.

8. *TransNet* ENVIRONMENTAL MITIGATION PROGRAM: LAND MANAGEMENT FY 2013 GRANT FUNDING RECOMMENDATIONS (RECOMMEND)

Katie Levy, Regional Planner I, gave the report.

SANDAG received 34 proposals for the *TransNet* Environmental Mitigation Program (EMP) Land Management Grants FY 2013 Call for Projects on January 29, 2013. Staff presented information on the evaluation process and results at the April 5 Transportation Committee meeting.

Action: Upon a motion by NCTD Chairman Horn, and a second by Chair Gloria, the Transportation Committee recommended that the Board of Directors approve the award of 15 projects under the *TransNet* EMP FY 2013 Land Management Grant Program.

9. *TransNet* SMART GROWTH INCENTIVE PROGRAM: GRANT APPLICATION SCORING RESULTS FOR THE FY 2013 CYCLE (INFORMATION)

SANDAG received 29 applications for the FY 2013 Smart Growth Incentive Program. The projects were reviewed and scored based on the criteria approved by the Board of Directors in September 2012. Stephan Vance, Senior Regional Planner, presented the project rankings that resulted from the scoring process and provided the list of proposals and evaluations to the Transportation Committee. Mr. Vance will request a recommendation at the June meeting.

Action: This item was presented for information only.

10. SAN YSIDRO INTERMODAL TRANSPORTATION CENTER STUDY (INFORMATION)

Rachel Kennedy, Senior Regional Planner, provided an update on the study to develop a concept and implementation strategy for an Intermodal Transportation Center in the vicinity of the San Ysidro Land Port of Entry. SANDAG is working in partnership with the City of San Diego, Caltrans, MTS, and the community to conduct this study.

Action: This item was presented for information only.

11. UPDATE ON FREIGHT PLANNING STUDIES (INFORMATION)

During FY 2013 SANDAG has embarked on three critical freight planning studies: (1) Goods Movement Strategy portion of San Diego Forward: The Regional Plan; (2) Freight Gateway Study Update; and (3) Analysis of Freeway Operational Strategies Related to the Use of Managed Lanes by Trucks. In order to support these efforts, a Freight Stakeholders Working Group was formed.

Christina Casgar, Goods Movement Policy Manager, and Andrea Hoff, Associate Regional Planner, provided information about the Freight Stakeholders Working Group and the studies, including schedule, progress, and next steps.

Action: This item was presented for information only.

12. CONTINUED PUBLIC COMMENTS

There were no additional public comments.

13. UPCOMING MEETINGS

The next meeting of the Transportation Committee is scheduled for Friday, May 17, 2013, at 9 a.m.

14. ADJOURNMENT

Chair Gloria adjourned the meeting at 10:28 a.m.

Attachment: Attendance Sheet

**CONFIRMED ATTENDANCE
 SANDAG TRANSPORTATION COMMITTEE MEETING
 MAY 3, 2013**

GEOGRAPHICAL AREA/ ORGANIZATION	JURISDICTION	NAME	MEMBER/ ALTERNATE	ATTENDING
North County Coastal	City of Encinitas	Lisa Shaffer	Member	Yes
	City of Del Mar	Lee Haydu	Alternate	No
North County Inland	City of Vista	Judy Ritter (Vice Chair)	Member	Yes
	City of Escondido	Sam Abed	Alternate	Yes
East County	City of Lemon Grove	Mary Sessom	Member	No
	City of La Mesa	Art Madrid	Alternate	Yes
South County	City of Chula Vista	Cheryl Cox	Member	Yes
	City of Coronado	Mike Woiwode	Alternate	Yes
City of San Diego	----	Todd Gloria (Chair)	Member	Yes
	----	Marti Emerald	Alternate	No
	----	VACANT	Alternate	No
County of San Diego	----	Ron Roberts	Member	Yes
	----	Greg Cox	Alternate	No
	---	Dianne Jacob	Alternate	No
Metropolitan Transit System	MTS	Harry Mathis	Member	No
	MTS	Al Ovrom	Alternate	Yes
North County Transit District	NCTD	Bill Horn	Member	Yes
	NCTD	Rebecca Jones	Alternate	No
	NCTD	John Aguilera	Alternate	No
San Diego County Regional Airport Authority		Tom Smisek	Member	No
		Lloyd Hubbs	Alternate	No
ADVISORY/LIAISON Caltrans	----	Laurie Berman	Member	Yes
	---	Bill Figge	Alternate	Yes
SCTCA	---	Mark Romero	Member	No
		Allen Lawson	Member	No
Other Attendees		Matt Tucker	NCTD	No
		Paul Jablonski	MTS	Yes
		Jack Dale	Chairman, SANDAG	No

TRANSPORTATION COMMITTEE

May 17, 2013

AGENDA ITEM NO.: **4**

Action Requested: APPROVE

TransNet ACTIVE TRANSPORTATION GRANT PROGRAM:
PROPOSED GRANT AMENDMENT

File Number 3300300

Introduction

This report is a follow-up to the *TransNet* Smart Growth Incentive Program and Active Transportation Program: Grants Status Update presented to the Transportation Committee on April 19, 2013, and provides information regarding a request for an amendment to one of the Active Transportation Grant Program projects.

Recommendation

The Transportation Committee is asked to approve a no-cost, time-only schedule amendment of 3.5 months to the City of Escondido's Escondido Creek Bike Path Lighting and Restriping Project.

Active Transportation Grant Program

In June 2009, SANDAG also awarded \$7.8 million in Transportation Development Act (TDA) and *TransNet* funding to 30 projects (12 planning, parking, and program grants; and 18 capital grants) under the Active Transportation Grant Program. Although this was the first annual cycle of this program under the *TransNet* Extension, SANDAG has been funding bicycle and pedestrian projects with TDA funds since 1972, and bicycle projects under the original *TransNet* Ordinance since FY 1989. The *TransNet* Extension Ordinance specifies that the funds be used "for bikeway facilities and connectivity improvements, pedestrian and walkable community projects, bicycle and pedestrian safety projects and programs, and traffic calming projects."

Policy Governing Timely Use of Grant Funds ("Use-It-or-Lose-It" Policy)

The applicable Use-It-or-Lose-It Policy (Attachment 1), which was in place for these projects prior to the adoption of Board Policy No. 035: Competitive Grant Program Procedures, states that all projects must be completed according to the project schedule provided in the grantee's respective grant agreements, and that, at the latest, capital improvement projects must award a construction contract within two years of an executed grant agreement with SANDAG. The Policy also states that capital projects must be completed within 18 months of an executed construction contract (a maximum of 3.5 years from contract execution). A planning project must award a consultant contract within one year of an executed grant agreement with SANDAG, and complete the project within two years of an executed consultant contract (a maximum of three years from contract execution).

While schedule adjustments of up to 12 months may be approved by SANDAG staff, per Section 3.1.1 of the Use-It-or-Lose-It Policy, Active Transportation Grant Program amendment requests are presented to the *TransNet* Independent Taxpayer Oversight Committee (ITOC) for a recommendation and to the Transportation Committee for approval when the requests meet either one of the following conditions:

- Time requested exceeds 12 months; and/or
- Time requested causes the project to miss a Use-It-or-Lose-It milestone deadline (consultant or construction contract award or project completion).

Proposed Active Transportation Grant Program Amendment

The City of Escondido is requesting an extension of 3.5 months for the Escondido Creek Bike Path Lighting and Restriping Project (Attachment 2). This would extend the grantee's agreement from May 31, 2013, to September 18, 2013. The project had opened for bids in accordance with the schedule previously included in the grant agreement. All bids received, however, exceeded the engineer's estimate and were rejected by the City Council. The project's design specifications have been modified to promote cost reductions, and remain consistent with the conditions of the original grant agreement. In addition, the AMGEN Tour of California event, an eight-day bicycle race scheduled for May 2013, has delayed the anticipated construction date for the bike path. The proposed time extension will allow the grantee to re-advertise the bid, award a contract, and complete the construction of the project. City of Escondido staff will be available at the May 17, 2013, Transportation Committee meeting to answer questions about the project. The ITOC recommended the proposed schedule extension at its May 8, 2013, meeting.

CHARLES "MUGGS" STOLL

Director of Land Use and Transportation Planning

- Attachments: 1. *TransNet* Smart Growth Incentive Program and Bicycle Pedestrian Neighborhood Safety/Traffic Calming Program Use-It-or-Lose-It Requirements
2. City of Escondido Amendment Request

Key Staff Contact: Suchi Mukherjee, (619) 699-7315, suchitra.mukherjee@sandag.org

TransNet Smart Growth Incentive Program and Bicycle Pedestrian Neighborhood Safety/Traffic Calming Program Use-It-or-Lose-It Requirements

1. *Project Milestone and Completion Deadlines*

1.1. This policy applies to all Smart Growth Incentive Program grant funds, whether from *TransNet* or another source. By signing a grant agreement for the Smart Growth Incentive Program, grant recipients agree to the following project delivery objectives.

1.1.1. Capital Grants. The project must be completed according to the schedule provided in the grant agreement, but at the latest, a construction contract must be awarded within *two years* following execution of the grant agreement, and construction must be completed within *eighteen months* following award of the construction contract.

1.1.2. Planning Grants. The project must be completed according to the schedule provided in the grant agreement, but at the latest, a consultant contract must be awarded within *one year* following execution of the grant agreement, and the planning project must be complete within *two years* following award of the consultant contract.

Failure to meet the above deadlines may result in revocation of all grant funds not already expended.

1.2. Grant funds made available as a result of this process may be awarded to the next project on the recommended project priority list from the most recent project selection process, or they may be added to the funds available for the next project funding cycle, at SANDAG's discretion. Any project that loses funding due to failure to meet the deadlines specified in this policy may be resubmitted to compete for funding in a future call for projects.

2. *Project Milestone and Completion Deadlines*

2.1. Grant recipients may receive extensions on their project schedules of up to one year for good cause. Extensions of up to twelve months aggregate that would not cause the project to miss a deadline in Sections 1.1.1 or 1.1.2 may be approved by the SANDAG Program Manager for the Smart Growth Incentive Program. Extensions beyond twelve months aggregate or that would cause the project to miss a deadline in Sections 1.1.1 or 1.1.2 must be approved by the Regional Planning Committee. For an extension to be granted under this Section 2, the following conditions must be met:

2.1.1. For extension requests of up to six months, the grant recipient must request the extension in writing to the SANDAG Program Manager at least two weeks prior to the earliest project schedule milestone deadline for which an extension is being requested.

2.1.2. For extension requests that will cause one or more project milestones to be delayed more than six months, but less than twelve months aggregate, the grant recipient must request an extension in writing to the SANDAG Program Manager at least six weeks prior to the earliest project schedule milestone deadline for which an extension is being requested.

2.1.3. The project sponsor seeking the extension must document previous efforts undertaken to maintain the project schedule, the reasons for the delay, and why they were unavoidable, and demonstrate an ability to succeed in the extended time frame.

2.1.4. If the Program Manager denies an extension request under this Section 2, the project sponsor may appeal within ten business days of receiving the Program Manager's response to the Regional Planning Committee.

2.1.5. Extension requests that are rejected by the Regional Planning Committee will result in termination of the grant agreement and obligation by the project sponsor to return to SANDAG any unexpended funds. Unexpended funds are funds for project costs not incurred prior to rejection of the extension request by the Regional Planning Committee.

3. *Project Delays and Extensions of up to One Year*

3.1. Requests for extensions beyond one year or that will cause a project to miss a deadline in Sections 1.1.1 or 1.1.2 (including those projects that were already granted extensions by the SANDAG Program Manager and are again falling behind schedule) will be considered by the Regional Planning Committee. The Regional Planning Committee will only grant an extension under this Section 3 for extenuating conditions beyond the control of the project sponsor, defined as follows:

3.1.1. Capital Grants

- 3.1.1.1. Environmental. An extension may be granted when, during the environmental review process, the project sponsor discovers heretofore unknown sites (e.g., archeological, endangered species) that require additional investigation and mitigation efforts. The project sponsor must demonstrate that the discovery is new and unforeseen.
- 3.1.1.2. Right-of-Way. Extensions for delays necessary to complete right-of-way acquisition may be granted only when right-of-way needs are identified that could not have been foreseen at the time the grant agreement was signed.
- 3.1.1.3. Permitting. Delays associated with obtaining permits from external agencies may justify an extension when the project sponsor can demonstrate that every effort has been made to obtain the necessary permits and that the delay is wholly due to the permitting agency.
- 3.1.1.4. Construction Schedule. Extensions may be granted when unavoidable construction delays create a conflict with restrictions on construction during certain times of the year (for instance, to avoid nesting season for endangered species).

3.1.1.5. Litigation. Extensions may be granted when a lawsuit has been filed concerning the project being funded.

3.1.1.6. Other. Extensions may be granted due to changes in federal/state policies or laws that can be shown to directly affect the project schedule.

3.1.2. Planning Grants

3.1.2.1. Changed Circumstances. An extension may be granted for a planning project when circumstances not within the control of the grant recipient, such as an action by an outside agency, require a change in the scope of work for the project.

3.2. The grant recipient shall make its request directly to the Regional Planning Committee, providing a detailed justification for the requested extension, including a revised project schedule and work plan, at least six weeks prior to the earliest project schedule milestone deadline, or deadline in Sections 1.1.1 or 1.1.2, for which an extension is being requested.

3.3. Extension requests that are rejected by the Regional Planning Committee will result in termination of the grant agreement and obligation by the project sponsor to return to SANDAG any unexpended funds. Unexpended funds are funds for project costs not incurred prior to rejection of the extension request.



Barbara J. Redlitz, AICP
 Director of Community Development
 Planning Division
 (760) 839-4671, FAX (760) 839-4313

April 19, 2013

Suchitra Mukherjee
 SANDAG | San Diego Association of Governments
 401 B Street, Suite 800
 San Diego, CA 92101

Subject: Amendment to Timeline for Escondido Creek Lighting and Striping Project
 SANDAG Grant No. (5001365)

Dear Suchi:

The City is requesting an amendment to the Grant Agreement for the Escondido Creek Lighting Project to extend the timeline to September 18, 2013. The project was put out to bid in anticipation of the lighting being installed by May 31, 2013 in accordance with the grant schedule. However, all bids received exceeded the engineer's estimate and the City Council rejected all bids. Several modifications to the project specifications and design have been incorporated that have resulted in cost reductions. The project is being re-advertised for bid this month, but award of the contract by the Council would not take place until a decision is made regarding the amendment to the contract.

Installation of the lights also has been delayed due to events scheduled for the upcoming Amgen Tour of California. The City of Escondido was chosen as the host city for the start of the AMGEN race, which will take place on May 12, 2013. Due to prerace activities that will occur along the Escondido Creek bike path, the planned construction date had to be put on hold. Therefore, we are requesting the completion date be extended to September 18, 2013.

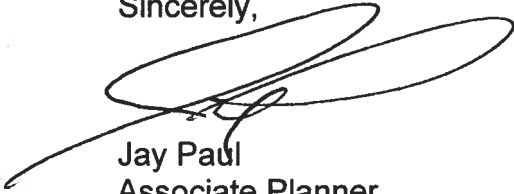
Proposed Revised Schedule

April 23, 2013	Revised project design/specs out to bid
May 17, 2013	SANDAG Transportation Committee decision on Grant Amendment
June 1, 2013	Council award bid
July 1, 2013	Begin construction
September 18, 2013	Installation complete

Thank you for your consideration of this matter. If you have any questions or need additional information, please call me at (760) 839-4537 or e-mail at jpaul@ci.escondido.ca.us.

SANDAG
Suchitra Mukherjee
Timeline Amendment
April 19, 2013

Sincerely,

A handwritten signature in black ink, appearing to read "Jay Paul", with a large, sweeping flourish above the name.

Jay Paul
Associate Planner

cc: Homi Namdari, Engineering Division
Rich Bouquet, Neighborhood Services

TRANSPORTATION COMMITTEE

May 17, 2013

AGENDA ITEM NO.: **5**

Action Requested: RECOMMEND

2012 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM:
AMENDMENT NO. 2; INCLUDING THE AIR QUALITY
CONFORMITY ANALYSIS AND REDETERMINATION OF THE
2050 REVENUE CONSTRAINED REGIONAL TRANSPORTATION PLAN

File Number 1500300

Introduction

On September 28, 2012, the Board of Directors adopted the 2012 Regional Transportation Improvement Program (RTIP), including the regional emissions analysis. The 2012 RTIP is the multiyear program of proposed transportation projects in the San Diego region covering the period FY 2013 to FY 2017. The 2012 RTIP must conform to the State Implementation Plans (SIPs) for air quality. Conformity to the SIP means that transportation activities in the 2012 RTIP will not

create new air quality violations, worsen existing violations, or delay the attainment of the national ambient air quality standards. The 2013 Federal State Transportation Improvement Program (FSTIP), which includes the SANDAG 2012 RTIP, received federal approval on December 14, 2012.

On May 21, 2012, the U.S. Environmental Protection Agency (EPA) designated the San Diego air basin as a non-attainment area for the new 2008 Eight-Hour Ozone standard and classified it as a marginal area. SANDAG is required to conduct a conformity redetermination for the 2050 Regional Transportation Plan (RTP) and the 2012 RTIP for this new standard by July 20, 2013. Amendment No. 2 to the 2012 RTIP is being processed to meet this requirement.

In addition, the U.S. EPA has approved a new model to forecast regional emissions Emission Factors 2011 (EMFAC2011) for conformity purposes effective March 6, 2013. EMFAC2011 was used to conduct this conformity analysis.

With the development of the 2012 RTIP Amendment No. 2, member agencies were provided an opportunity to update their project open to traffic dates to ensure consistency with this air quality conformity analysis. The draft regional emissions analysis for the 2012 RTIP Amendment No. 2 was provided to the San Diego Region Conformity Working Group (CWG) for review and comment on February 26, 2013, and was discussed with the CWG on March 6, 2013. A comment was raised from the CWG regarding listing projects for the year 2018 in the project table B.9 of Attachment 2. After consultation with the U.S. EPA, this was deemed unnecessary since 2018 is not considered a conformity analysis year. The tables in Attachment 2, Appendix B reflect this decision and on shows projects for years 2015, 2025, 2035, 2040, and 2050. This decision was accepted by the CWG.

Recommendation

The Transportation Committee is asked to recommend that the Board of Directors adopt Resolution No. 2013-25 in substantially the same form as shown in Attachment 1, approving Amendment No. 2 to the 2012 RTIP, including the air quality conformity analysis and redetermination of the 2050 Revenue Constrained Regional Transportation Plan.

On April 5, 2013, the Transportation Committee accepted for review and distribution the Draft 2012 Regional Transportation Improvement Program, Amendment No. 2, including its air quality conformity analysis and the draft air quality conformity redetermination of the 2050 Revenue Constrained Regional Transportation Plan for a 30-day public comment period, which closed May 6, 2013, and no comments were received. Amendment No. 2, including its air quality conformity analysis is being brought back to the Transportation Committee for recommendation to the Board for approval to submit to U.S. Department of Transportation.

TransNet Independent Taxpayer Oversight Committee (ITOC)

The ITOC reviewed the 2012 RTIP Amendment No. 2 on April 10, 2013, focusing its review on the *TransNet* Program of Projects including compliance with the Ordinance and requirements of Board Policy No. 031: *TransNet* Ordinance and Expenditure Plan Rules. No comments were received.

Discussion

1997 Eight-Hour Ozone Standard

On April 15, 2004, the U.S. EPA designated the San Diego air basin as non-attainment for the 1997 Eight-Hour Ozone Standard. This designation took effect on June 15, 2004. Several areas that are tribal lands in eastern San Diego County were excluded from the non-attainment designation. La Posta, Cuyapaipe, Manzanita, and Campo are attainment areas for the 1997 Eight-Hour Ozone standard.

Air quality data for 2009, 2010, and 2011 demonstrated that the San Diego air basin attained the 1997 Eight-Hour Ozone Standard. The San Diego County Air Pollution Control District prepared a Maintenance Plan, with a request for redesignation to attainment/maintenance. On December 6, 2012, the California Air Resources Board (CARB) approved the *Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County* for submittal to the U.S. EPA as a SIP revision. The U.S. EPA found the emission budgets in the plan adequate for use in transportation conformity effective April 4, 2013.

New 2008 Eight-Hour Ozone Standard

On May 21, 2012, the U.S. EPA designated the San Diego air basin as a non-attainment area for the new 2008 Eight-Hour Ozone standard and classified it as a marginal area with an attainment date of December 31, 2015. Tribal areas that were previously excluded are now included as part of the San Diego region non-attainment designation. This designation became effective on July 20, 2012. SANDAG is required to determine conformity to the new standard by July 20, 2013.

Carbon Monoxide Standard

The San Diego region also has been designated by the U.S. EPA as a federal maintenance area for the Carbon Monoxide (CO) standard. On November 8, 2004, CARB submitted the 2004 revision to the California SIP for CO to the U.S. EPA. Effective January 30, 2006, the U.S. EPA has approved this maintenance plan as an SIP revision. The U.S. EPA has approved a new model to forecast regional emissions (EMFAC2011) for conformity purposes effective March 6, 2013. EMFAC2011 was used to conduct this conformity analysis.

Attachment 2 provides an update to both the financial capacity and air quality conformity analyses for the 2012 RTIP Amendment No. 2 and conformity redetermination of the 2050 RTP, as well as individual project listings and public participation information. The following is a summary of changes for projects included in this amendment:

2012 RTIP Amendment No. 2 Projects

California Department of Transportation

- **SR 76 East (CAL29B)** – This amendment proposes to revise the open to traffic date to Phase 1 (interchange at SR 76 and I-15) from July 2014 to August 2013 and add a second phase (roadway from South Mission to Old Highway 395) to this project with a scheduled open to traffic date of December 2015. Total project remains at \$201,549,000.
- **I-5/Genesee Interchange and Widening (CAL75)** – This amendment proposes to revise the open to traffic date from June 2015 to February 2016. Total project remains at \$93,129,000.
- **I-5/I-8 Connector (CAL77)** – This amendment proposes to revise the open to traffic date from January 2016 to June 2015. Total project remains at \$23,905,000.

City of Chula Vista

- **Heritage Road Bridge (CHV69)** – This amendment proposes to add this capacity increasing bridge project to the 2012 RTIP. This project will widen and lengthen the bridge over Otay River along Heritage Road and is scheduled to be open to traffic March 2017. Total project is \$17,500,000.

City of Escondido

- The City of Escondido will be updating two of its projects with an open to traffic date that is consistent with the 2050 RTP, but that is beyond the current FY 2013–FY 2017 RTIP cycle. The open to traffic dates for these projects were originally scheduled during the 2018 analysis year and have been updated to 2025. The projects are **Felicita Avenue/Juniper Street (ESC08)** and **Ninth Avenue (ESC09)** and remain at \$3,830,000 and \$161,000, respectively.

City of Oceanside

- **SR 76 Widening at Rancho Del Oro Boulevard (O26)** – This amendment proposes to change this project from a capacity increasing project to a non-capacity increasing project as the City has decided that this project will not move beyond the engineering phase. Total project decreases to \$77,000.

Various Agencies

- **State Route 11 (V11)** – This amendment proposes to update the open to traffic date for Phases 2 and 3 from December 2016 to April 2017. The Phase 1 date remains December 2015. Each phase corresponds to a segment included in the project description. Total project remains at \$722,901,000.

Fiscal Constraint Analysis

Federal regulations require the 2012 RTIP to be a revenue-constrained document with programmed projects based upon available or committed funding and/or reasonable estimates of future funding. Chapter 2 of Attachment 2 provides updated program summaries including a comparison from the

prior approved 2012 RTIP amendment, Amendment No. 1. The data for the current amendment includes changes made through Amendment No. 5, approved by the Board on April 26, 2013. Based upon the analysis, the projects contained within the 2012 RTIP, including Amendment No. 2, are reasonable when considering available funding sources.

Air Quality Conformity Requirements for the 2012 RTIP

On September 28, 2012, SANDAG found the 2012 RTIP in conformance with the Regional Air Quality Strategy/SIP for the San Diego region. All of the required regionally significant capacity increasing projects were included in the quantitative emissions analysis conducted for the 2050 San Diego Regional Transportation Plan: Our Region Our Future and the 2012 RTIP. The Federal Highway Administration and the Federal Transit Administration jointly approved the conformity determination for the 2012 RTIP and the conformity redetermination for the 2050 RTP on December 13, 2012.

Projects in RTIP Amendment No. 2 meet the conformity provisions of the Transportation Conformity Rule (40 CFR §93.122(g)). An additional air quality analysis was conducted for all capacity increasing projects in Amendment No. 2 through a quantitative emissions analysis included in Chapter 3 and Appendix B of Attachment 2. All other projects not included in the air quality conformity analysis are either non-capacity increasing or are exempt from the requirement to determine conformity according to the Transportation Conformity Rule (40 CFR §93.122 (b) and 93.122(c)). SANDAG followed interagency consultation procedures to determine which projects are exempt. Amendment No. 2 does not interfere with the timely implementation of Transportation Control Measures. The 2012 RTIP, including Amendment No. 2, remains in conformance with the SIPs.

The quantitative emissions analyses for 2012 RTIP Amendment No. 2 and for the conformity redetermination for the 2050 RTP indicate that they meet the air quality conformity requirements. The CWG reviewed the draft air quality conformity assessment on March 6, 2013.

Schedule

The draft 2012 RTIP Amendment No. 2, including its air quality conformity analysis and the draft air quality conformity redetermination of the 2050 Revenue Constrained Regional Transportation Plan was posted for a 30-day public review comment period; no comments were received. Pending the Transportation Committee recommendation, the Board will be asked to make a finding of conformity for the 2012 RTIP Amendment No. 2 and a conformity redetermination for the 2050 RTP and approve Amendment No. 2 to the 2012 RTIP, on May 24, 2013. Staff will then submit this amendment, along with the air quality redetermination of the 2050 RTP to the U.S. Department of Transportation for an anticipated federal approval date of July 2013.

ANDRE DOUZDJIAN
Director of Finance

Attachments: 1. Draft Resolution No. 2013-25
2. 2012 Regional Transportation Improvement Program Amendment No. 2

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RESOLUTION

NO. 2013-25

APPROVING AMENDMENT NO. 2 TO THE 2012 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM

WHEREAS, on September 28, 2012, SANDAG adopted the 2012 Regional Transportation Improvement Program (RTIP) and found the 2012 RTIP in conformance with the applicable State Implementation Plans (SIPs), and with the 2009 Regional Air Quality Strategy (RAQS), in accordance with California law; and

WHEREAS, on December 13, 2012, the United States Department of Transportation (USDOT) determined the 2012 RTIP and 2050 San Diego Regional Transportation Plan: *Our Region Our Future* (2050 RTP) in conformance to the applicable SIPs in accordance with the provisions of 40 Code of Federal Regulations (CFR) Parts 51 and 93; and

WHEREAS, this amendment is consistent with the metropolitan transportation planning regulations per 23 CFR Part 450; and

WHEREAS, this amendment is consistent with the 2050 RTP and regionally significant capacity increasing projects have been incorporated into the quantitative air quality emissions analysis and conformity findings conducted for the 2050 RTP and the 2012 RTIP; and

WHEREAS, Amendment No. 2 to the 2012 RTIP continues to provide for timely implementation of transportation control measures contained in the adopted RAQS/SIP for air quality and a quantitative emissions analysis demonstrates that the implementation of the RTIP projects and programs meet all the federally required emissions budget targets; and

WHEREAS, projects in Amendment No. 2 satisfy the transportation conformity provisions of 40 CFR 93.122(g) and all applicable transportation planning requirements per 23 CFR Part 450; and

WHEREAS, the 2012 RTIP Amendment No. 2 projects are fiscally constrained as shown in Tables 2-1a through 2-1c (Attachment 2); and

WHEREAS, the amendments are consistent with the Public Participation Policy adopted by the SANDAG Board of Directors; and

NOW THEREFORE

BE IT RESOLVED, that the SANDAG Board of Directors does hereby approve Amendment No. 2 to the 2012 RTIP; and

BE IT FURTHER RESOLVED, that SANDAG finds the 2012 RTIP, including Amendment No. 2, is consistent with the 2050 RTP, is in conformance with the applicable SIPs, and with the 2009 RAQS for the San Diego region, is consistent with SANDAG Intergovernmental Review Procedures, and is consistent with SANDAG Public Participation Policy, as amended.

BE IT FURTHER RESOLVED, that all regionally significant capacity-increasing projects included in Amendment No. 2 to the 2012 RTIP are included in the 2050 RTP.

PASSED AND ADOPTED this 24th day of May 2013.

CHAIRPERSON

ATTEST: _____

SECRETARY

MEMBER AGENCIES: Cities of Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach, Vista, and County of San Diego.

ADVISORY MEMBERS: California Department of Transportation, Metropolitan Transit System, North County Transit District, Imperial County, U.S. Department of Defense, San Diego Unified Port District, San Diego County Water Authority, Southern California Tribal Chairmen's Association, and Mexico.

**2012
REGIONAL TRANSPORTATION
IMPROVEMENT PROGRAM (RTIP)
AMENDMENT NO. 2**

May 24, 2013



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DRAFT

Chapter 1
EXECUTIVE SUMMARY

Chapter 1

EXECUTIVE SUMMARY

OVERVIEW

The 2012 Regional/Federal Transportation Improvement Program (RTIP) is a multi-billion dollar, five-year program of major transportation projects funded by federal, state, *TransNet* local sales tax, and other local and private funding covering Fiscal Year (FY) 2012/2013 to FY 2016/2017. The 2012 RTIP, which includes the air quality emissions analysis for all regionally significant projects, requires approval by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The 2013 Federal State Transportation Improvement Program (FSTIP), which includes the SANDAG 2012 RTIP, received federal approval on December 14, 2012.

The 2012 RTIP is a prioritized program designed to implement the region's overall strategy for providing mobility and improving the efficiency and safety of the transportation system, while reducing transportation related air pollution in support of efforts to attain federal and state air quality standards for the region. The 2012 RTIP also incrementally implements the Regional Transportation Plan (RTP), the long-range transportation plan for the San Diego region. A summary of major transit, highway, local street and road, and other projects is provided in Table 1-1.

The 2012 RTIP, published in September 2012, fully documents the RTIP development process, project listings, financial capacity analysis, and the air quality conformity analysis. This report focuses on updated fiscal capacity analysis and new regional air quality emissions analysis for conformity purposes. Amendment No. 2 revises existing capacity increasing projects and reflects changes to project schedules which have been updated for consistency with the air quality analysis for the new 2008 Eight-Hour Ozone standard. Additionally, the U.S. Environmental Protection Agency (EPA) has approved a new model to forecast regional emissions (EMFAC2011) for conformity purposes effective March 6, 2013. The EMFAC2011 was used to conduct this conformity analysis. The Final 2012 RTIP document as well as all subsequent amendments are available on the SANDAG website at www.sandag.org/2012rtip.

Consistency with the 2050 RTP

On October 28, 2011, the SANDAG Board of Directors found the SANDAG 2050 revenue constrained RTP entitled, *2050 San Diego Regional Transportation Plan: Our Region. Our Future.* (2050 RTP), in conformance with federal air quality and planning regulations, and adopted the 2050 RTP. The FHWA and the FTA issued a finding of conformity for the 2050 RTP on December 2, 2011. The 2012 RTIP, including Amendment No. 2, is consistent with the 2050 RTP. As a financially-constrained document, the 2012 RTIP contains only those major transportation projects listed in the revenue-constrained plan of the 2050 RTP.

Financial Capacity Analysis

Federal regulations require the 2012 RTIP to be a revenue-constrained document with programmed projects based upon available or committed funding and/or reasonable estimates of future funding. Funding assumptions are generally based upon: (1) authorized or appropriated levels of federal and state funding

from current legislation; (2) conservative projections of future federal and state funding based upon a continuation of current funding levels; (3) the most current revenue forecasts for the *TransNet* program; and (4) the planning and programming documents of the local transportation providers.

Chapter 4 of the Final 2012 RTIP discusses in detail the financial capacity analysis of major program areas including discussion of available revenues. Chapter 2 of this report provides updated program summaries. Table 1-3 includes the projects proposed for Amendment No. 2. Tables 2-1a to 2-1c demonstrate that the 2012 RTIP is fiscally constrained. Based upon this analysis, the projects contained within the 2012 RTIP, including the projects in Amendment No. 2, are reasonable when considering available funding sources.

Air Quality Conformity Determination

Federal metropolitan planning and air quality regulations prescribe the process for determining air quality conformity. These regulations require that the proposed RTIP: (1) provide for the timely implementation of transportation control measures (TCMs); (2) include a quantitative emissions analysis of projects programmed in the RTIP, including all regionally significant projects; and (3) be within the region's emissions budgets (targets) included in the approved State Implementation Plan (SIP).

The 2012 RTIP Amendment No. 2 programs substantial funds for the implementation of the four TCMs. The four TCMs (identified as "T-tactics") were adopted in the 1982 Regional Air Quality Strategy (RAQS) and subsequent revisions, and were approved by the San Diego Air Pollution Control Board (APCB) and included in the 1982 SIP for air quality improvement. The four TCMs/T-tactics have been fully implemented. As shown in Table 1-2, the TCMs/T-tactic projects programmed for implementation total approximately \$5.2 billion, or approximately 41 percent of the total funds programmed. Included are \$35.4 million for Ridesharing, \$4.9 billion for Transit Improvements, \$95 million for Bicycle Facilities and Programs, and \$115 million for Traffic Flow Improvements. Based upon this analysis, the 2012 RTIP Amendment No. 2 provides for the expeditious implementation of the four existing TCMs in the 2009 RAQS, which remain the federally approved TCMs for the San Diego region.

Quantitative air quality emissions analyses were conducted for the years 2015, 2018 (for carbon monoxide only), 2020 (for reactive organic gases and nitrogen oxides only), 2025, 2035, and 2040 revenue constrained transportation scenarios, as shown in Chapter 3. A quantitative air quality emissions analysis was also conducted for the year 2050 for information purposes. A draft report that documents the results of this analysis was reviewed by the San Diego Region Conformity Working Group (CWG) on March 6, 2013. The Transportation Committee approved the release of the draft report for public comment on April 5, 2013. The 2012 RTIP Amendment No. 2 meets the conditions for determining conformity with the applicable SIP for air quality. Chapter 3 of this report summarizes the air quality conformity analysis conducted. A detailed description of the regional emissions analysis and modeling procedures conducted is included in Appendix B.

Public Participation

It is the policy of SANDAG to engage public participation in the development of agency planning and programming activities. SANDAG has various working groups made up of stakeholders and other members of the public. The public is provided opportunities to participate at SANDAG Board and committee meetings, SANDAG public notices of document availability and public hearings, and through the SANDAG public communications program. In 2011, SANDAG held five public workshops and numerous public outreach events for the development of the 2050 RTP. The projects included in the 2012 RTIP were discussed as part of the extensive RTP public outreach efforts. Pursuant to 23 U.S.C. 134(i). At its meeting on April 5, 2013, the Transportation Committee accepted for review and distribution the Draft 2012 Regional Transportation Improvement Program, Amendment No. 2, including its air quality conformity analysis and the

draft air quality conformity redetermination of the 2050 Revenue Constrained Regional Transportation Plan for a 30-day public comment period, which is scheduled to close on May 6, 2013.

Examples of public outreach efforts and ongoing participation include:

Independent Taxpayer Oversight Committee (ITOC): In conformance with the regional transportation sales tax *TransNet* Ordinance, a citizen advisory committee, the ITOC, was established, which oversees projects funded through the *TransNet* program. As the document through which SANDAG identifies *TransNet* projects, the RTIP is reviewed by the ITOC, and their comments on the *TransNet* Program of Projects are conveyed to the SANDAG Transportation Committee, and ultimately to the Board of Directors.

Social Equity: For the development of the RTIP, SANDAG relied on the social equity analysis conducted through the development of the 2050 RTP. Included in the process of developing the RTP, SANDAG used performance measures to aid in making decisions intended to ensure compliance with Title VI requirements and environmental justice principles. This process included the creation of a Stakeholder's Working Group (SWG), citizen representatives and community based organization groups. For the 2012 RTIP, SANDAG conducted additional outreach to Low Income/Minority (LIM) areas and tribal organizations to solicit their input through additional electronic notifications. The social equity analysis conducted can be found in Chapter 4 of the 2050 RTP.

Public Workshops/Outreach: SANDAG provided information for the RTIP seeking comments during special workshops provided for the development of the 2050 RTP. SANDAG held five workshops in spring 2010 and five workshops in spring 2011. All workshops were conducted in an open house format where participants were invited to attend at any time during the workshop; review maps, displays, and information; ask questions of staff; complete comment cards; or speak to a bilingual English/Spanish transcriber to have their comments recorded. Various public involvement and outreach activities were conducted throughout the San Diego region, which included, but is not limited to, presenting information at city council meetings, community based organizations, and collaboration with regional partners. More information on the outreach efforts for the 2050 RTP can be found on the SANDAG website www.sandag.org/2050RTP.

Expansion of Electronic Notifications: In addition to the current list of external industry professionals, SANDAG continually strives to expand the notifications to other citizen-involved working groups. SANDAG has established accounts on Facebook and Twitter to ensure maximum outreach.

Appendix A-8 in the 2012 RTIP describes the SANDAG public participation process and includes a copy of the latest Public Participation Policy, which contains the section specifically addressing the RTIP development and amendment process.

Public Participation Plan (PPP): The PPP reflects the SANDAG commitment to public participation and involvement to include all residents and stakeholders in the regional planning and decision-making process. The PPP was developed in accordance with guidelines established by the FHWA for metropolitan transportation planning (23 CFR 450.316). It fully complies with Title VI, related nondiscrimination requirements, and reflects the principles of social equity and environmental justice. Included in the PPP are procedures, strategies, and outcomes associated with the ten requirements listed in 23 CFR 450.316. The PPP also fulfills various state and federal public involvement requirements and is available on the SANDAG website at www.sandag.org/ppp.

Table 1-1
2012 RTIP Amendment No. 2 – Program Summary
Summary of Major Projects by Mode (in \$000s)

DESCRIPTION	FEDERAL	STATE	TRANSNET	LOCAL/ PRIVATE	TOTAL
Transit Projects					
Blue Line (including vehicle purchase)	\$71,562	\$186,185	\$143,153	\$182,001	\$582,901
Mid-Coast	\$856,975	\$14,537	\$858,578	\$0	\$1,730,090
I-15 BRT	\$24,573	\$17,200	\$104,048	\$88	\$145,909
Mid-City Rapid Bus	\$22,699	\$0	\$21,827	\$0	\$44,526
SuperLoop	\$617	\$0	\$36,560	\$0	\$37,177
South Bay BRT	\$3,339	\$0	\$96,389	\$180	\$99,908
Other BRT	\$0	\$0	\$27,954	\$0	\$27,954
Coastal Corridor (LOSSAN)	\$160,986	\$57,650	\$144,996	\$4,351	\$367,982
Bus/Rail Infrastructure	\$240,298	\$66,622	\$53,334	\$80,997	\$441,251
Bus/Rail Intermodal Stations	\$23,754	\$130,218	\$52,151	\$15,373	\$221,495
Bus/Rail Vehicle Purchase	\$117,897	\$7,760	\$3,420	\$79,460	\$208,538
Other Bus/Rail (Operations/Planning)	\$412,694	\$4,919	\$357,331	\$238,779	\$1,013,723
Subtotal Transit Projects	\$1,935,395	\$485,091	\$1,899,741	\$601,231	\$4,921,456
Highway Projects (Express/HOV lanes and DARs)					
I-5 (HOV/Managed Lanes)	\$101,682	\$213,188	\$429,099	\$22,194	\$766,163
I-15 (Managed Lanes)	\$237,717	\$891,412	\$219,097	\$19,657	\$1,367,883
SR 52	\$67,931	\$291,769	\$162,101	\$1,000	\$522,801
SR 76 (East and Middle)	\$183,153	\$29,387	\$116,570	\$30,346	\$359,456
I-805 (HOV/Managed Lanes/DARs)	\$138,816	\$98,759	\$202,928	\$180	\$440,683
SR 905 (I-805 to Otay Mesa POE)	\$236,825	\$187,673	\$1,582	\$0	\$426,080
SR 78	\$1,904	\$18,463	\$21,529	\$14,954	\$56,850
SR 11	\$65,700	\$88,001	\$0	\$569,200	\$722,901
SR 241 TCA Toll	\$0	\$0	\$0	\$489,975	\$489,975
Highway Bridge Program/Other State Administered Programs	\$168,296	\$14,250	\$0	\$9,400	\$191,946
State Highway Operations Protection Program (SHOPP)	\$0	\$395,413	\$0	\$0	\$395,413
Other Highway Projects	\$1,763	\$71,687	\$7,643	\$5,310	\$86,403
Subtotal Highway Projects	\$1,203,786	\$2,300,002	\$1,160,549	\$1,162,216	\$5,826,554
Local Streets & Roads Projects					
Highway Bridge Replacement/Rehabilitation	\$145,817	\$2,512	\$17,111	\$34,837	\$200,277
Regional Arterial System	\$23,697	\$0	\$147,076	\$208,421	\$379,194
Roadway Maintenance & Rehabilitation	\$2,452	\$0	\$137,455	\$43,374	\$183,281
Traffic Signal Projects	\$280	\$0	\$44,145	\$1,397	\$45,822
Other Local Street & Road	\$23,008	\$6,000	\$346,939	\$147,010	\$522,957
Subtotal Local Streets & Roads Projects	\$195,254	\$8,512	\$692,726	\$435,039	\$1,331,531
Other Projects					
Bicycle/Pedestrian Projects	\$11,150	\$9,885	\$48,363	\$25,753	\$95,151
Miscellaneous*	\$941	\$9,050	\$8,626	\$50	\$18,666
TransNet Environmental Mitigation Program	\$0	\$0	\$329,762	\$0	\$329,762
Transportation Demand Management (TDM)	\$35,482	\$0	\$0	\$0	\$35,482
Transportation Enhancements (TE)	\$0	\$5,301	\$4,300	\$0	\$9,601
Transportation Management System/Intelligent Transportation System	\$22,515	\$14,476	\$29,567	\$1,475	\$68,033
Subtotal Other Projects	\$70,087	\$38,712	\$420,618	\$27,278	\$556,696
GRAND TOTAL	\$3,404,523	\$2,832,317	\$4,173,635	\$2,225,763	\$12,636,237

*Includes SANDAG planning and various improvement projects

Table 1-2
2012 RTIP - SAN DIEGO REGION Amendment No. 2 (IN \$000s)
Transportation Control Measures (T-Tactics) Project

RIDESHARING	
Transportation Demand Management (TDM)	<u>\$35,482</u>
<i>Subtotal:</i>	<i>\$35,482</i>
TRANSIT IMPROVEMENTS	
Blue Line (including vehicle purchase)	\$582,901
Mid-Coast	\$1,730,090
I-15 BRT	\$145,909
Mid-City Rapid Bus	\$44,526
SuperLoop	\$37,177
South Bay BRT	\$99,908
Other BRT	\$27,954
Coastal Corridor (LOSSAN)	\$367,982
Bus/Rail Infrastructure	\$441,251
Bus/Rail Intermodal Stations	\$221,495
Bus/Rail Vehicle Purchase	\$208,538
Other Bus/Rail (Operations/Planning)	<u>\$1,013,723</u>
<i>Subtotal:</i>	<i>\$4,921,456</i>
BICYCLE FACILITIES PROJECTS	
Bicycle/Pedestrian Projects	<u>\$95,151</u>
<i>Subtotal:</i>	<i>\$95,151</i>
TRAFFIC FLOW IMPROVEMENTS	
Transportation Management System/Intelligent Transportation System	\$68,033
Traffic Management/Signal Projects	<u>\$47,376</u>
<i>Subtotal:</i>	<i>\$115,409</i>
Total Transportation Tactics in 2012 RTIP:	\$5,167,498
Total All Transportation Projects in 2012 RTIP:	\$12,636,237
Share of T-Tactics Projects in 2012 RTIP:	40.9%

Table 1-3
2012 Regional Transportation Improvement Program
Amendment No. 2
San Diego Region (in \$000s)

Caltrans

MPO ID: CAL29B		RTIP #:12-02									
Project Title:	SR 76 East							EA NO: 25711			
Project Description:	From Mission Rd. to I-15 - In and near Oceanside from Mission Rd to I-15, widen from 2 to 4 lanes. Toll Credits of \$4,986 will be used to match FY14 federal funds for the CON phase, Toll Credits of \$4,986 will be used to match FY15 federal funds for the CON phase, Toll Credits of \$782 will be used to match FY16 federal funds for the CON phase							RTP PG NO: A-6 SANDAG ID: 1207606			
Change Reason:	Revise open to traffic date.										
RT:76	Capacity Status:CI	Exempt Category:Non-Exempt									
Est Total Cost: \$201,549		Open to Traffic: Phase 1: Aug 2013			Phase 2: Dec 2015						
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON	
RSTP	\$7,436	\$7,436						\$7,436			
RSTP - Conversion	\$83,000			\$38,487	\$38,487	\$6,026				\$83,000	
TPFP	\$300			\$300						\$300	
Prop 1B - CMIA	\$29,387	\$29,387								\$29,387	
TransNet - MC	\$51,426	\$14,303	\$18,155	\$5,331	\$7,791	\$5,828	\$18	\$22,225	\$16,276	\$12,925	
TransNet - MC AC	\$0		\$113,000	\$(38,487)	\$(38,487)	\$(6,026)	\$(30,000)				
Local Funds	\$30,000						\$30,000			\$30,000	
TOTAL	\$201,549	\$51,126	\$131,155	\$5,631	\$7,791	\$5,828	\$18	\$29,661	\$16,276	\$155,612	
PROJECT LAST AMENDED 12-01											
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON	
RSTP	\$7,436	\$7,436						\$7,436			
RSTP - Conversion	\$83,000			\$38,487	\$38,487	\$6,026				\$83,000	
TPFP	\$300			\$300						\$300	
Prop 1B - CMIA	\$29,387	\$29,387								\$29,387	
TransNet - MC	\$51,426	\$14,303	\$18,155	\$5,331	\$7,791	\$5,828	\$18	\$22,225	\$16,276	\$12,925	
TransNet - MC AC	\$0		\$113,000	\$(38,487)	\$(38,487)	\$(6,026)	\$(30,000)				
Local Funds	\$30,000						\$30,000			\$30,000	
TOTAL	\$201,549	\$51,126	\$131,155	\$5,631	\$7,791	\$5,828	\$18	\$29,661	\$16,276	\$155,612	

Table 1-3
2012 Regional Transportation Improvement Program
Amendment No. 2
San Diego Region (in \$000s)

Caltrans

MPO ID: CAL75			RTIP #:12-02							
Project Title:	I-5 Genesee Interchange and Widening							EA NO: 02233, 0223U, 06500		
Project Description:	From Genesee Avenue to Sorrento Valley Overhead - reconstruct I-5 Genesee Bridge and interchange including ramps, retaining walls; add type 1 bicycle facility between Voigt and Sorrento Valley Road							PPNO: 0129P		
								RTP PG NO: A-33		
								SANDAG ID: 1200506		
								EARMARK NO: 3086		
Change Reason:	Revise open to traffic date.									
RT:5	Capacity Status:CI	Exempt Category:Non-Exempt								
Est Total Cost: \$93,129			Open to Traffic: Feb 2016							
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON
HPP	\$1,600		\$1,600							\$1,600
RSTP	\$32,487		\$32,487							\$32,487
SHOPP (AC)-Mobility	\$12,987		\$12,987					\$2,467	\$500	\$10,020
TransNet - MC	\$24,845	\$54	\$1,787	\$3,352	\$7,207	\$9,707	\$2,738	\$950	\$2,500	\$21,395
Local Funds	\$21,210	\$18,710	\$2,500					\$13,610	\$5,100	\$2,500
TOTAL	\$93,129	\$18,764	\$51,361	\$3,352	\$7,207	\$9,707	\$2,738	\$17,027	\$8,100	\$68,002
PROJECT LAST AMENDED 12-01										
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON
HPP	\$1,600		\$1,600							\$1,600
RSTP	\$32,487		\$32,487							\$32,487
SHOPP (AC)-Mobility	\$12,987		\$12,987					\$2,467	\$500	\$10,020
TransNet - MC	\$24,845	\$54	\$1,787	\$3,352	\$7,207	\$9,707	\$2,738	\$950	\$2,500	\$21,395
Local Funds	\$21,210	\$18,710	\$2,500					\$13,610	\$5,100	\$2,500
TOTAL	\$93,129	\$18,764	\$51,361	\$3,352	\$7,207	\$9,707	\$2,738	\$17,027	\$8,100	\$68,002

Table 1-3
2012 Regional Transportation Improvement Program
Amendment No. 2
San Diego Region (in \$000s)

Caltrans

MPO ID: CAL77								RTIP #:12-02			
Project Title:	I-5/I-8 Connector						EA NO: 00270				
Project Description:	On I-5 from 0.1 km south of junction with I-8 and on the right lanes through the Sea World Drive interchange, On I-8 from I-8/I-5 separation to 0.6 km east of Morena Blvd. undercrossing - construction of auxiliary lanes and widening of connectors. Toll Credits of \$40 will be used to match FY11 federal funds for the PE phase, Toll Credits of \$482 will be used to match FY12 federal funds for the PE phase, Toll Credits of \$792 will be used to match FY13 federal funds for the CON phase						SANDAG ID: 1200505 EARMARK NO: CA643/3120				
Change Reason:	Revise open to traffic date.										
RT:5	Capacity Status:CI	Exempt Category:Non-Exempt									
Est Total Cost: \$23,905		Open to Traffic: Jun 2015									
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON	
HPP	\$4,800	\$1,926	\$2,874					\$1,926		\$2,874	
IM	\$1,025	\$360	\$665					\$360		\$665	
SHOPP (AC)-Mobility	\$14,220			\$14,220				\$2,452	\$1,140	\$10,628	
TransNet - MC	\$3,860	\$14	\$615	\$2,226	\$996	\$9				\$3,860	
TOTAL	\$23,905	\$2,300	\$4,154	\$16,446	\$996	\$9		\$4,738	\$1,140	\$18,027	
PROJECT LAST AMENDED 12-00											
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON	
HPP	\$4,800	\$1,926	\$2,874					\$1,926		\$2,874	
IM	\$1,025	\$360	\$665					\$360		\$665	
SHOPP (AC)-Mobility	\$14,220			\$14,220				\$2,452	\$1,140	\$10,628	
TransNet - MC	\$3,860	\$14	\$615	\$2,226	\$996	\$9				\$3,860	
TOTAL	\$23,905	\$2,300	\$4,154	\$16,446	\$996	\$9		\$4,738	\$1,140	\$18,027	

Table 1-3
2012 Regional Transportation Improvement Program
Amendment No. 2
San Diego Region (in \$000s)

Chula Vista, City of

MPO ID: CHV69			RTIP #:12-02							
Project Title:	Heritage Road Bridge									
Project Description:	Heritage Road from Main Street/ Nirvana Ave. to Entertainment Circle - Widen and lengthen bridge over Otay River from four lane to six lane bridge that accommodates shoulders, sidewalk and median. Project is on Heritage Road from the intersection of Main Street and Nirvana Ave. to Entertainment Circle.									
Change Reason:	New project									
	Capacity Status:CI	Exempt Category:Non-Exempt								
Est Total Cost: \$17,500			Open to Traffic: Mar 2017							
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON
HBP	\$15,492			\$345			\$15,147		\$345	\$15,147
Local Funds	\$2,008			\$45			\$1,963		\$45	\$1,963
TOTAL	\$17,500			\$390			\$17,110		\$390	\$17,110

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Table 1-3
2012 Regional Transportation Improvement Program
Amendment No. 2
San Diego Region (in \$000s)

Escondido, City of

MPO ID: ESC08			RTIP #:12-02							
Project Title:	Felicitia Ave/Juniper Street							TransNet - LSI: CR		
Project Description:	From Escondido Boulevard to Juniper Street and from Juniper Street to Chestnut Street - Widen from 2 to 4 lanes with left turn pockets, raised medians on Felicitia; new traffic signals at Juniper and Chestnut, Juniper and 13th Ave., modifications to installed signal at Juniper and 15th, modify traffic signal at Juniper and Felicitia – Included in 2012 RTIP for Air Quality purposes only.									
Change Reason:	Carry over from 10-30									
Capacity Status:CI			Exempt Category:Non-Exempt							
Est Total Cost: \$3,830			Open to Traffic: May 2020							
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON
TransNet - L (Cash)	\$330	\$330							\$330	
Local Funds	\$3,500	\$3,500							\$3,500	
TOTAL	\$3,830	\$3,830							\$3,830	
PROJECT LAST AMENDED 10-30										
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON
TransNet - L (Cash)	\$330	\$330							\$330	
Local Funds	\$3,500	\$3,500							\$3,500	
TOTAL	\$3,830	\$3,830							\$3,830	

MPO ID: ESC09			RTIP #:12-02							
Project Title:	Ninth Avenue							TransNet - LSI: CR		
Project Description:	Ninth Avenue from La Terraza to Spruce - widen from 2 to 4 lanes with raised median and modify traffic signals at Ninth Ave and Tulip Street - design phase – Included in 2012 RTIP for Air Quality purposes only									
Change Reason:	Carry over from 10-30									
Capacity Status:CI			Exempt Category:Non-Exempt							
Est Total Cost: \$161			Open to Traffic: May 2020							
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON
TransNet - LSI Carry Over	\$161	\$161						\$161		
TOTAL	\$161	\$161						\$161		
PROJECT LAST AMENDED 10-30										
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON
TransNet - LSI Carry Over	\$161	\$161						\$161		
TOTAL	\$161	\$161						\$161		

Table 1-3
2012 Regional Transportation Improvement Program
Amendment No. 2
San Diego Region (in \$000s)

Oceanside, City of

COMPLETED

MPO ID: O26		RTIP #:12-02									
Project Title:	SR76 Widening at Rancho del Oro Boulevard							RAS (TA 4-69)			
Project Description:	From W. of Rancho del Oro to East of Rancho del Oro - future widening of SR76 for one additional lane width 1500 feet west and east of Rancho del Oro Boulevard							TransNet - LSI: CR			
Change Reason:	Complete project										
Capacity Status:NCI		Exempt Category:Other - Engineering studies									
Est Total Cost: \$77											
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON	
TransNet - LSI	\$8		\$8					\$8			
TransNet - LSI (Cash)	\$19		\$19					\$19			
TransNet - LSI Carry Over	\$50	\$50						\$50			
TOTAL	\$77	\$50	\$27					\$77			
PROJECT LAST AMENDED 12-00											
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON	
TransNet - LSI Carry Over	\$50	\$50						\$50			
Local Funds	\$200		\$150		\$50			\$200			
TOTAL	\$250	\$50	\$150		\$50			\$250			

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Table 1-3
2012 Regional Transportation Improvement Program
Amendment No. 2
San Diego Region (in \$000s)

Various Agencies

MPO ID: V11		RTIP #:12-02								
Project Title:	State Route 11							EA NO: 05631		
Project Description:	From Border of Mexico east of SR 905/Otay Mesa Border Crossing to future SR 125/905 junction - Construction of four-lane toll highway facility, CVEF and POE in three segments: Segment 1: SR-11/905 to Enrico Fermi; Segment 2: SR-11 from Enrico Fermi to Siempre Viva; Segment 3: POE from Siempre Viva to Mexico Border; Segment 1 is fully funded through Construction phase . Toll Credits of \$3,213 will be used to match FY12 federal funds for the PE phase, Toll Credits of \$4,366 will be used to match FY12 federal funds for the ROW phase, Toll Credits of \$194 will be used to match FY14 federal funds for the CON phase							PPNO: 0999 RTP PG NO: A-6; B-5 EARMARK NO: CA393/740		
Change Reason:	Revise open to traffic date									
RT:11	Capacity Status:CI	Exempt Category:Non-Exempt								
Est Total Cost: \$722,901		Open to Traffic: Phase 1: Dec 2015			Phase 2: Apr 2017		Phase 3: Apr 2017			
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON
CBI	\$64,900	\$63,400		\$1,500				\$29,700	\$33,700	\$1,500
HPP	\$800	\$800						\$800		
Prop 1B - TCIF	\$75,000			\$75,000						\$75,000
STIP-IIP NHS	\$6,882	\$6,882						\$6,882		
STIP-IIP Prior State Cash	\$5,200	\$5,200						\$5,200		
STIP-IIP State Cash	\$919	\$919						\$919		
Local Funds	\$569,200	\$108,300		\$460,900				\$14,400	\$93,900	\$460,900
TOTAL	\$722,901	\$185,501		\$537,400				\$57,901	\$127,600	\$537,400
PROJECT LAST AMENDED 12-00										
	TOTAL	PRIOR	12/13	13/14	14/15	15/16	16/17	PE	RW	CON
CBI	\$64,900	\$63,400		\$1,500				\$29,700	\$33,700	\$1,500
HPP	\$800	\$800						\$800		
Prop 1B - TCIF	\$75,000			\$75,000						\$75,000
STIP-IIP NHS	\$6,882	\$6,882						\$6,882		
STIP-IIP Prior State Cash	\$5,200	\$5,200						\$5,200		
STIP-IIP State Cash	\$919	\$919						\$919		
Local Funds	\$569,200	\$108,300		\$460,900				\$14,400	\$93,900	\$460,900
TOTAL	\$722,901	\$185,501		\$537,400				\$57,901	\$127,600	\$537,400

Table 1-3
2012 Regional Transportation Improvement Program
Amendment No. 2
San Diego Region (in \$000s)

RTIP Fund Types

<i>Federal Funding</i>	
BIP/CBI	Border Infrastructure Program/Corridors and Borders Infrastructure Program
DEMO-Sec 117/STP	Surface Transportation Program under FHWA Administrative Program (congressionally directed appropriations)
HBP	Highway Bridge Program under SAFETEA-LU
HBRR	Highway Bridge Repair and Rehabilitation under TEA-21
HPP	High Priority Program under SAFETEA-LU
IM	Interstate Maintenance Discretionary
NHS	National Highway System (administered by Caltrans)
RSTP	Regional Surface Transportation Program
TE	Transportation Enhancement Program
TPFP	Truck Parking Facilities Program (Federal Discretionary)
CMAQ/RSTP Conversion	Reimbursement of advanced federal funds which have been advanced with local funds in earlier years
<i>State Funding</i>	
CMIA	Corridor Mobility Improvement Account (State Prop. 1B)
SHOPP	State Highway Operation & Protection Program
STA	State Transit Assistance
STIP-IIP	State Transportation Improvement Program - Interregional Program
STIP-RIP	State Transportation Improvement Program - Regional Improvement Program
TCIF	Trade Corridor Improvement Fund (State Prop. 1B)
STIP/SHOPP Prior	Funds which were allocated by the CTC from a previous fund cycle
TSM	Transportation Systems Management
<i>Local Funding</i>	
Local Funds AC	Local Funds - Advanced Construction; mechanism to advance local funds to be reimbursed at a later fiscal year with federal/state funds
TransNet-L	Prop. A Local Transportation Sales Tax - Local Streets & Roads
TransNet-L (Cash)	TransNet - L funds which agencies have received payment, but have not spent
TransNet-LSI	Prop. A Extension Local Transportation Sales Tax - Local System Improvements
TransNet-LSI Carry Over	TransNet - LSI funds previously programmed but not requested/paid in year of allocation
TransNet-LSI (Cash)	TransNet - LSI funds which agencies have received payment, but have not spent
TransNet-MC	Prop. A Extension Local Transportation Sales Tax - Major Corridors
TransNet-MC AC	TransNet - Major Corridors - Advanced Construction; mechanism to advance TransNet funds to be reimbursed at a later fiscal year with federal/state funds

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Chapter 2
FINANCIAL CAPACITY ANALYSIS

Chapter 2

FINANCIAL CAPACITY ANALYSIS

This chapter provides an update to the analysis of the financial capacity of the region's programmed transportation projects. Financial capacity is measured by a comparison of the total cost of the proposed projects against the available revenues and a test of the reasonableness of the revenue assumptions.

An overview of the program and available revenues by funding sources is provided for all projects included in Chapter 4 of the 2012 RTIP. The assumptions used in the forecasts of available funding are based upon information in the 2012 State Transportation Improvement Program (STIP) adopted by the California Transportation Commission (CTC) in August 2011, forecasts provided by the California Department of Transportation, and other forecasts of ongoing transportation funding programs. For the local transportation sales tax program (*TransNet*), the forecast was updated which takes into account the recent economic trend.

PROGRAM AND REVENUES

Table 2-1a summarizes the revenues available by major funding source (i.e., federal, state, and local), Table 2-1b summarizes the funds programmed based on available revenues, and Table 2-1c provides the revenue versus programmed summary, which shows remaining revenues available. Tables 2-1a to 2-1c include all costs and revenues for all projects in the 2012 RTIP, including Amendment No. 2.

Table 2-1a: Revenues
2012 Regional Transportation Improvement Program
San Diego Region - Amendment No. 2 (\$000's)*

Funding Source		2012/13		2013/14		2014/15		2015/16		2016/17		TOTAL
		Prior	Current	Prior	Current	Prior	Current	Prior	Current	Prior	Current	
LOCAL	Sales Tax	\$742,101	\$747,088	\$637,872	\$645,480	\$460,917	\$462,374	\$374,612	\$381,068	\$847,219	\$846,117	\$3,082,127
	-- City											
	-- County	\$742,101	\$747,088	\$637,872	\$645,480	\$460,917	\$462,374	\$374,612	\$381,068	\$847,219	\$846,117	\$3,082,127
	Other Local Funds	\$91,913	\$106,019	\$637,340	\$637,365	\$164,496	\$164,266	\$189,454	\$189,510	\$52,110	\$54,399	\$1,151,559
	-- County General Funds											
	-- City General Funds	\$63,132	\$77,238	\$31,686	\$31,711	\$35,958	\$35,728	\$54,836	\$54,892	\$21,560	\$23,849	\$223,418
	-- Street Taxes and Developer Fees	\$28,781	\$28,781	\$605,654	\$605,654	\$128,538	\$128,538	\$134,618	\$134,618	\$30,550	\$30,550	\$928,141
Other	\$113,148	\$108,391	\$123,057	\$139,874	\$74,433	\$86,849	\$30,644	\$84,639		\$86,951	\$506,703	
Local Total	\$947,162	\$961,498	\$1,398,269	\$1,422,719	\$699,846	\$713,489	\$594,710	\$655,216	\$899,329	\$987,467	\$4,740,389	
STATE	State Highway Operations and Protection Program	\$206,934	\$199,293	\$99,674	\$99,674	\$130,654	\$119,357		\$21,266			\$439,590
	SHOPP (Including Augmentation)	\$206,934	\$199,293	\$99,674	\$99,674	\$130,654	\$119,357		\$21,266			\$439,590
	State Transportation Improvement Program	\$12,788	\$10,866	\$854	\$854	\$107,966	\$109,888	\$854	\$854	\$46,294	\$46,294	\$168,756
	STIP (Including Augmentation)	\$4,051	\$4,051	\$854	\$854	\$107,966	\$107,966	\$854	\$854	\$46,294	\$46,294	\$160,019
	<i>Transportation Enhancement</i>	\$8,737	\$6,815				\$1,922					\$8,737
	Proposition 1 A	\$62,855	\$65,188	\$2,333								\$65,188
	Proposition 1 B	\$115,800	\$109,941	\$97,853	\$77,779		\$21,317		\$21,317	\$2,120	\$4,900	\$235,255
	GARVEE Bonds (Includes Debt Service Payments)	\$21,835	\$21,835	\$21,835	\$21,835	\$21,835	\$21,835					\$65,505
	Traffic Congestion Relief Program (TCRP)			\$55,775	\$55,775							\$55,775
	State Transit Assistance (e.g., population/revenue based, Prop 42)		\$24,623		\$6,395							\$31,018
	Other	\$2,947	\$2,947	\$2,951	\$2,951	\$2,896	\$2,896	\$2,896	\$2,896	\$2,896	\$2,896	\$14,586
State Total	\$423,159	\$434,694	\$281,275	\$265,264	\$263,351	\$275,293	\$3,750	\$46,333	\$51,310	\$54,090	\$1,075,673	
FEDERAL TRANSIT	5307 - Urbanized Area Formula Program	\$60,829	\$59,335	\$63,262	\$59,929	\$65,793	\$60,528	\$68,426	\$61,133		\$61,745	\$302,670
	5308 - Clean Fuel Formula Program											
	5309a - Fixed Guideway Modernization	\$19,580		\$20,363		\$21,177		\$22,024				
	5309b - New and Small Starts (Capital Investment Grants)									\$842,208	\$842,208	\$842,208
	5309c - Bus and Bus Related Grants	\$15,000	\$2,000									\$2,000
	5310 - Elderly & Persons with Disabilities Formula Program											
	5311 - Nonurbanized Area Formula Program	\$369	\$987	\$380	\$506	\$392	\$506		\$506		\$506	\$3,011
	5312 - National Research and Technology Program	\$50	\$50									\$50
	5311f - Intercity Bus											
	5316 - Job Access and Reverse Commute Program	\$1,666	\$3,115									\$3,115
	5317 - New Freedom	\$94	\$1,227	\$252	\$252							\$1,479
	5337 - State of Good Repair		\$29,345		\$29,312		\$29,278		\$29,983		\$29,252	\$147,170
	5339 - Bus and Bus Facilities Program		\$4,871		\$4,919		\$4,969		\$5,018		\$5,068	\$19,777
Other												
Federal Transit Total	\$97,589	\$100,930	\$84,257	\$94,918	\$87,362	\$95,281	\$90,450	\$96,640	\$842,208	\$938,778	\$1,321,480	
FEDERAL HIGHWAY	Bridge Discretionary Program											
	Congestion Mitigation and Air Quality (CMAQ)	\$16,296	\$11,575	\$36,443	\$36,443	\$28,547	\$28,547	\$36,443	\$36,443	\$36,443	\$36,443	\$149,451
	Coordinated Border Infrastructure (SAFETEA-LU Sec.1303)			\$1,500	\$1,500							\$1,500
	High Priority Projects (HPP) and Demo	\$29,521	\$24,121	\$1,147	\$9,386	\$1,436	\$1,436					\$34,942
	Highway Bridge Program (HBP)	\$26,282	\$26,282	\$2,644	\$2,989	\$35,179	\$35,179	\$14,804	\$14,804	\$195,501	\$210,648	\$289,902
	Highway Safety Improvement Program (HSIP)	\$983	\$983	\$6,075	\$5,866	\$3,495	\$3,495	\$1,479	\$1,479			\$11,823
	Public Lands Highway	\$500	\$500									\$500
	Recreational Trails	\$744	\$744									\$744
	Safe Routes to School (SRTS) (SAFETEA-LU)			\$1,235	\$1,235			\$4,937	\$4,937			\$6,172
	Surface Transportation Program (Regional)	\$39,211	\$36,955	\$39,211	\$39,211	\$39,211	\$39,211	\$39,211	\$39,211	\$39,211	\$39,211	\$193,800
	Transportation and Community and System Preservation Program	\$1,087	\$1,087	\$179	\$179							\$1,266
Other	\$2,943	\$2,943	\$494	\$494							\$3,437	
Federal Highway Total	\$117,568	\$105,190	\$88,928	\$97,303	\$107,868	\$107,868	\$96,874	\$96,874	\$271,155	\$286,303	\$693,538	
Federal Total	\$215,157	\$206,121	\$173,185	\$192,221	\$195,230	\$203,149	\$187,324	\$193,514	\$1,113,363	\$1,225,081	\$2,015,018	
REVENUES TOTAL	\$1,585,478	\$1,602,312	\$1,852,729	\$1,880,203	\$1,158,427	\$1,191,931	\$785,784	\$895,063	\$2,064,002	\$2,266,637	\$7,831,079	

Note: Highlighted sections refer to changes from prior amendment
*Current Program includes changes through Amendment No. 5

**Table 2-1b: Program
2012 Regional Transportation Improvement Program
San Diego Region - Amendment No. 2 (\$000's)***

Funding Source		2012/13		2013/14		2014/15		2015/16		2016/17		TOTAL
		Prior	Current	Prior	Current	Prior	Current	Prior	Current	Prior	Current	
LOCAL	Local Total	\$911,129	\$927,603	\$1,375,990	\$1,401,549	\$669,597	\$686,208	\$575,789	\$634,420	\$879,061	\$967,484	\$4,617,264
	State Highway Operations and Protection Program	\$206,934	\$199,293	\$99,674	\$99,674	\$130,654	\$119,357		\$21,266			\$439,590
	SHOPP (Including Augmentation)	\$206,934	\$199,293	\$99,674	\$99,674	\$130,654	\$119,357		\$21,266			\$439,590
STATE	State Transportation Improvement Program	\$12,788	\$10,866	\$854	\$854	\$107,966	\$109,888	\$854	\$854	\$46,294	\$46,294	\$168,756
	STIP (Including Augmentation)	\$4,051	\$4,051	\$854	\$854	\$107,966	\$107,966	\$854	\$854	\$46,294	\$46,294	\$160,019
	Transportation Enhancement	\$8,737	\$6,815				\$1,922					\$8,737
	Proposition 1 A	\$62,855	\$65,188	\$2,333								\$65,188
	Proposition 1 B	\$115,800	\$109,941	\$97,853	\$77,779		\$21,317		\$21,317	\$2,120	\$4,900	\$235,255
	GARVEE Bonds (Includes Debt Service Payments)	\$21,835	\$21,835	\$21,835	\$21,835	\$21,835	\$21,835					\$65,505
	Traffic Congestion Relief Program (TCRP)			\$55,775	\$55,775							\$55,775
	State Transit Assistance (STA)(e.g., population/revenue based, Prop 42)		\$24,623		\$6,395							\$31,018
	Other	\$2,947	\$2,947	\$2,951	\$2,951	\$2,896	\$2,896	\$2,896	\$2,896	\$2,896	\$2,896	\$14,586
	State Total	\$423,159	\$434,694	\$281,275	\$265,264	\$263,351	\$275,293	\$3,750	\$46,333	\$51,310	\$54,090	\$1,075,673
FEDERAL TRANSIT	5307 - Urbanized Area Formula Program	\$60,821	\$58,930	\$63,262	\$58,373	\$65,793	\$59,525	\$62,887	\$60,236		\$56,913	\$293,977
	5308 - Clean Fuel Formula Program											
	5309a - Fixed Guideway Modernization	\$19,580		\$20,363		\$21,177		\$22,024				
	5309b - New and Small Starts (Capital Investment Grants)									\$842,208	\$842,208	\$842,208
	5309c - Bus and Bus Related Grants	\$15,000	\$2,000									\$2,000
	5310 - Elderly & Persons with Disabilities Formula Program											
	5311 - Nonurbanized Area Formula Program	\$369	\$987	\$380	\$506	\$392	\$506		\$506		\$506	\$3,011
	5312 - National Research and Technology Program	\$50	\$50									\$50
	5316 - Job Access and Reverse Commute Program	\$1,666	\$3,115									\$3,115
	5317 - New Freedom	\$94	\$1,227	\$252	\$252							\$1,479
	5337 - State of Good Repair		\$29,345		\$29,312		\$29,278		\$29,983		\$29,252	\$147,170
	5339 - Bus and Bus Facilities Program		\$4,871		\$4,919		\$4,969		\$5,018		\$5,068	\$24,845
	Other											
Federal Transit Total	\$97,580	\$100,525	\$84,257	\$93,362	\$87,362	\$94,278	\$84,911	\$95,743	\$842,208	\$933,946	\$1,317,854	
FEDERAL HIGHWAY	Congestion Mitigation and Air Quality (CMAQ)	\$16,296	\$11,575	\$15,304	\$20,024	\$7,182	\$7,182	\$7,500	\$7,500	\$8,000	\$8,000	\$54,281
	Coordinated Border Infrastructure (SAFETEA-LU Sec.1303)			\$1,500	\$1,500							\$1,500
	High Priority Projects (HPP) and Demo	\$29,521	\$24,121	\$1,147	\$9,386	\$1,436	\$1,436					\$34,942
	Highway Bridge Program (HBP)	\$26,282	\$26,282	\$2,644	\$2,989	\$35,179	\$35,179	\$14,804	\$14,804	\$195,501	\$210,648	\$289,902
	Highway Safety Improvement Program (HSIP)	\$983	\$983	\$6,075	\$5,866	\$3,495	\$3,495	\$1,479	\$1,479			\$11,823
	Public Lands Highway	\$500	\$500									\$500
	Recreational Trails	\$744	\$744									\$744
	Safe Routes to School (SRTS) (SAFETEA-LU)			\$1,235	\$1,235			\$4,937	\$4,937			\$6,172
	Surface Transportation Program (Regional)	\$39,211	\$36,955	\$39,211	\$39,211	\$39,211	\$39,211	\$10,750	\$30,463	\$724	\$724	\$146,565
	Transportation and Community and System Preservation Program	\$1,087	\$1,087	\$179	\$179							\$1,266
	Transportation Improvements (TI)											
Other	\$2,943	\$2,943	\$494	\$494							\$3,437	
Federal Highway Total	\$117,567	\$105,190	\$67,789	\$80,883	\$86,503	\$86,503	\$39,470	\$59,183	\$204,225	\$219,372	\$551,133	
PROGRAM TOTAL	\$1,549,435	\$1,568,013	\$1,809,311	\$1,841,058	\$1,106,813	\$1,142,283	\$703,920	\$835,679	\$1,976,804	\$2,174,892	\$7,561,924	

Note: Highlighted sections refer to changes from prior amendment
*Current Program includes changes through Amendment No. 5

**Table 2-1c: Revenues vs. Program
2012 Regional Transportation Improvement Program
San Diego Region - Amendment No. 2 (\$000's)***

Funding Source		2012/13		2013/14		2014/15		2015/16		2016/17		TOTAL
		Prior	Current	Prior	Current	Prior	Current	Prior	Current	Prior	Current	
LOCAL	Local Total	\$36,033	\$33,895	\$22,279	\$21,170	\$30,249	\$27,281	\$18,921	\$20,796	\$20,268	\$19,982	\$123,124
	State Highway Operations and Protection Program SHOPP (Including Augmentation)											
STATE	State Transportation Improvement Program STIP (Including Augmentation) <i>Transportation Enhancement</i>											
	STIP Prior <i>Transportation Enhancement</i>											
	Proposition 1 A											
	Proposition 1 B											
	GARVEE Bonds (Includes Debt Service Payments)											
	Highway Maintenance (HM)											
	Traffic Congestion Relief Program (TCRP)											
	State Transit Assistance (STA)(e.g., population/revenue based, Prop 42)											
	Other											
	State Total											
FEDERAL TRANSIT	5307 - Urbanized Area Formula Program	\$8	\$405		\$1,556		\$1,003	\$5,539	\$897		\$4,832	\$8,693
	5308 - Clean Fuel Formula Program											
	5309a - Fixed Guideway Modernization											
	5309b - New and Small Starts (Capital Investment Grants)											
	5309c - Bus and Bus Related Grants											
	5310 - Elderly & Persons with Disabilities Formula Program											
	5311 - Nonurbanized Area Formula Program											
	5312 - National Research and Technology Program											
	5316 - Job Access and Reverse Commute Program											
	5317 - New Freedom											
	5337 - State of Good Repair											
5339 - Bus and Bus Facilities Program												
Other												
Federal Transit Total	\$8	\$405		\$1,556		\$1,003	\$5,539	\$897			\$4,832	\$8,693
FEDERAL HIGHWAY	Bridge Discretionary Program											
	Congestion Mitigation and Air Quality (CMAQ)			\$21,139	\$16,419	\$21,365	\$21,365	\$28,943	\$28,943	\$28,443	\$28,443	\$95,170
	High Priority Projects (HPP) and Demo											
	High Risk Rural Road (HRRR)											
	Highway Bridge Program (HBP)											
	Highway Safety Improvement Program (HSIP)											
	Recreational Trails											
	Safe Routes to School (SRTS) (SAFETEA-LU)											
	Surface Transportation Program (Regional)							\$28,461	\$8,748	\$38,487	\$38,487	\$47,235
	Transportation and Community and System Preservation Program											
Other												
Federal Highway Total			\$21,139	\$16,419	\$21,365	\$21,365	\$57,404	\$37,691	\$66,930	\$66,930	\$142,405	
FRA	Passenger Rail Investment and Improvement Act of 2008 (PRIIA)											
	Other											
Federal Railroad Administration Total												
Federal Total		\$8	\$405	\$21,139	\$17,975	\$21,365	\$22,368	\$62,943	\$38,588	\$66,930	\$71,763	\$151,099
REVENUES - PROGRAM TOTAL		\$36,041	\$34,300	\$43,418	\$39,145	\$51,614	\$49,649	\$81,864	\$59,384	\$87,198	\$91,745	\$274,223

Note: Highlighted sections refer to changes from prior amendment
*Current Program includes changes made through Amendment No. 5

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Chapter 3

AIR QUALITY CONFORMITY ANALYSIS

Chapter 3

AIR QUALITY CONFORMITY ANALYSIS

On April 15, 2004, the U.S. Environmental Protection Agency (EPA) designated the San Diego air basin as non-attainment for the 1997 Eight-Hour Ozone Standard. This designation took effect on June 15, 2004. Several areas that are tribal lands in eastern San Diego County were excluded from the non-attainment designation.

In cooperation with SANDAG and the California Air Resources Board (CARB) the San Diego County Air Pollution Control District (APCD) developed an Eight-Hour Ozone Attainment Plan for the 1997 standard which was submitted to the U.S. EPA on June 15, 2007. The budgets in the *Eight-Hour Ozone Attainment Plan for San Diego County* were found adequate for transportation conformity purposes by the U.S. EPA, effective June 9, 2008.

The air basin was initially classified as a basic non-attainment area under Subpart 1 of the Clean Air Act and the maximum statutory attainment date for the Eight-Hour Ozone Standard was set as June 15, 2009. However, on April 27, 2012, in response to a court decision, U.S. EPA ruled that the San Diego basic non-attainment area be reclassified as a Subpart 2 moderate non-attainment area, with an attainment deadline of June 15, 2010. This reclassification became effective on June 13, 2012. Air quality data for 2009, 2010, and 2011 demonstrated that the San Diego air basin attained the 1997 ozone standard and APCD prepared a Maintenance Plan, with a request for re-designation to attainment/maintenance. On December 6, 2012, the CARB approved the *Re-designation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County* for submittal to U.S. EPA as a State Implementation Plan (SIP) revision. On December 20, 2012, the U.S. EPA initiated its adequacy review of the plan and posted the document for a 30-day public review period that closed January 22, 2013. The U.S. EPA found the emissions budgets adequate for use in conformity determinations effective April 4, 2013, while final approval of the plan has yet to occur.

On May 21, 2012, the U.S. EPA designated the San Diego air basin as a non-attainment area for the new 2008 Eight-Hour Ozone standard and classified it as a marginal area with an attainment date of December 31, 2015. This designation became effective on July 20, 2012. SANDAG is required to determine conformity to the new standard by July 20, 2013. The U.S. EPA final rule also provides for the revocation of the 1997 Eight-Hour Ozone NAAQS for transportation conformity purposes to become effective on July 20, 2013. For this non-attainment designation, tribal areas that were previously excluded are now included as part of the San Diego region non-attainment designation.¹

On October 28, 2011, the SANDAG Board made a finding of conformity of the *2050 San Diego Regional Transportation Plan: Our Region. Our Future.* (2050 RTP) and the 2010 Regional Transportation Improvement

¹ One small portion (approximately 119 acres) of the Pechanga Band of Luiseno Indians purchased within the north portion of San Diego County piece of tribal land was excluded from the San Diego region 2008 Eight-Hour ozone standard non-attainment designation. All other tribal lands within San Diego County were included in the designation.

Program (2010 RTIP) Amendment No. 13 and adopted the plan. The U.S. Department of Transportation (DOT), in consultation with U.S. EPA, made its conformity determination on December 2, 2011.

On September 28, 2012, the SANDAG Board of Directors adopted the final 2012 RTIP and its conformity determination and re-determination of conformity for the 2050 RTP. The U.S. DOT, in consultation with U.S. EPA, made its conformity determination on December 13, 2012.

The San Diego region also has been designated by the U.S. EPA as a federal maintenance area for the Carbon Monoxide (CO) standard. On November 8, 2004, CARB submitted the 2004 revision to the California SIP for CO to the U.S. EPA. Effective January 30, 2006, the U.S. EPA has approved this maintenance plan as a SIP revision.

Demonstration of Fiscal Constraint

The 2012 RTIP, including Amendment No. 2 is consistent with the 2050 RTP. As a financially constrained document, the 2012 RTIP contains only those major transportation projects listed in the revenue constrained 2050 RTP. Chapter 4 of the 2012 RTIP includes detailed discussion on fiscal constraint and overall financial capacity to carry out projects included in the RTIP.

Development of Transportation Control Measures

In 1982, SANDAG adopted four Transportation Tactics as elements of the 1982 Revised Regional Air Quality Strategy (RAQS). These Transportation Tactics are ridesharing, transit improvements, traffic flow improvements, and bicycle facilities and programs.

These four Transportation Tactics were subsequently approved by the San Diego Air Pollution Control Board (APCB) and are included in the 1982 SIP for Air Quality as Transportation Control Measures (TCMs). The U.S. EPA approved this SIP revision for the San Diego Air Basin in 1983. The four TCMs have been fully implemented. Ridesharing, transit, bicycling, and traffic-flow improvements continue to be funded, although the level of implementation established in the SIP has been surpassed.

The California Clean Air Act required the preparation of a 1991 RAQS, including TCMs. During 1991 and 1992, SANDAG, in cooperation with local agencies, transit agencies, and the APCD developed a TCM Plan. SANDAG approved the TCM Plan on March 27, 1992.

On June 30, 1992, the APCD amended the TCM Plan and adopted the 1991 RAQS, including the amended TCM Plan. TCMs included in the 1991 RAQS include the four Transportation Tactics described above, as well as a transportation demand management (TDM) program, vanpools, high-occupancy vehicle (HOV) lanes, and park-and-ride facilities. On November 12, 1992, the CARB gave approval to the 1991 RAQS, including the TCMs.

The 1995 Triennial RAQS Update subsequently deleted the Employee Commute Travel Reduction Program contained in the TDM program because the program was no longer required under federal law. Assembly Bill 3048 (Statutes of 1996, Chapter 777) eliminated all state requirements for mandatory trip reduction programs. As a result, the Student Travel Reduction Program, the Non-Commute Travel Reduction Program, and the Goods Movement/Truck Operation Program proposed in the 1991 RAQS were no longer statutorily mandated and were deleted from the RAQS in 1998. The 2001, 2004, and 2009 Triennial RAQS Revisions did not make changes to measures related to mobile sources or the TCM Plan.

Air Quality Conformity Requirements

SANDAG, as the Metropolitan Planning Organization (MPO), and the U.S. DOT must make a determination that the 2012 RTIP and the 2050 RTP conform to the applicable SIP. Conformity to the SIP means that transportation activities will not create new air quality violations, worsen existing violations, or delay the attainment of the National Ambient Air Quality Standards (NAAQS).

Based upon the U.S. EPA's Transportation Conformity Rule, as amended, conformity of transportation plans and programs, including the 2012 RTIP Amendment No. 2, is determined according to the 1990 Clean Air Act Amendments [Section 176(c)(3)(A)] if the following is demonstrated:

- The 2012 RTIP Amendment No. 2 provides for the timely implementation of the Transportation Tactics contained in the 1991 RAQS. These tactics are also included as TCMs in the 1982 SIP, but have been fully implemented.
- A quantitative analysis is conducted on the cumulative emissions of projects programmed within the 2012 RTIP as amended, including all regionally significant, capacity-increasing projects. Further, implementation of the projects and programs must meet the motor vehicle emissions budget developed by local and state air quality agencies and approved by the U.S. EPA. The 2012 RTIP Amendment No. 2 must meet the applicable emission budgets prescribed in the *Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County*, which were found adequate for transportation conformity purposes by the U.S. EPA, effective April 4, 2013. Also, the 2012 Amendment No. 2 must meet the CO emissions budget established in the CO Maintenance Plan (approved by the U.S. EPA in January 2006).
- In addition to the required emissions tests, consultation with transportation and air quality agencies is required. The consultation process followed, to prepare the air quality conformity analysis, complies with the San Diego Transportation Conformity Procedures adopted in July 1998.
- Interagency consultation involves SANDAG, APCD, Caltrans, CARB, the U.S. DOT, and the U.S. EPA, which form the San Diego Region Conformity Working Group (CWG).

Consultation is a three-tier process that:

1. formulates and reviews drafts through a conformity working group;
2. provides local agencies and the public with opportunities for input through existing regional advisory committees and workshops; and
3. seeks comments from affected federal and state agencies through participation in the development of draft documents and circulation of supporting materials prior to formal adoption.

SANDAG consulted with the CWG for the preparation of the new air quality analysis of the 2012 RTIP Amendment No. 2. Conformity of the San Diego 2050 RTP also is being redetermined for consistency purposes and to demonstrate conformity to the 2008 Eight-Hour Ozone standard. On March 6, 2013, the U.S. EPA has approved a new model to forecast regional emissions, Emissions FACTors 2011 (EMFAC2011) for conformity purposes; this model was used to conduct this conformity analysis.

The schedule for the development of the 2012 RTIP Amendment No. 2 was presented to the CWG on December 5, 2012, and criteria and procedures for determining conformity were presented to the CWG on

February 6, 2013. In addition, the draft list of capacity increasing and non-capacity increasing projects was discussed at the February 6, 2013, CWG meeting.

The quantitative emissions analyses for the 2012 RTIP Amendment No. 2 conformity determination and 2050 RTP redetermination were initiated on February 7, 2013, and the results distributed on February 26, 2013, to the CWG for an initial review and comment period. The CWG reviewed the draft air quality conformity analysis at its March 6, 2013, meeting. The 2012 RTIP Amendment No. 2, and its conformity analysis and the 2050 RTP conformity redetermination was released for public review and a 30-day comment period on April 5, 2013. The results of the regional emissions analysis indicate that the 2012 RTIP as amended and 2050 RTP meet the air quality conformity requirements.

The SANDAG Board of Directors will be asked to make a conformity finding for the 2012 RTIP Amendment No. 2 and redetermination of conformity for the 2050 RTP, and approve the final 2012 RTIP Amendment No. 2 at its May 24, 2013, meeting. The following sections provide a summary of the air quality conformity analysis of the 2012 RTIP Amendment No. 2 and 2050 RTP in relation to the above conformity requirements.

The first requirement of the air quality conformity finding is to provide for the expeditious implementation of adopted TCMs, which are also the Transportation Tactics included in the 1991 RAQS. These tactics are ridesharing, transit improvements, traffic flow improvements, and bicycle facilities and programs.

The 1982 SIP established the TCMs, which identified general objectives and implementing actions for each tactic. Due to substantial investments since 1982, SANDAG has fully implemented the TCMs. Ridesharing, transit, bicycling, and traffic flow improvements continue to be funded, although the level of implementation established in the SIP has been surpassed. No TCMs have been removed or substituted from the SIP.

The 2012 RTIP makes substantial progress in programming funds for implementation of the four adopted Transportation Tactics for the San Diego region contained in the 2009 RAQS. As shown in Table 3-1, the TCMs/T-tactic projects programmed for implementation total approximately \$5.2 billion, or approximately 40 percent of the total funds programmed. Included are \$35.4 million for Ridesharing, \$4.9 billion for Transit Improvements, \$95 million for Bicycle Facilities and Programs, and \$115 million for Traffic Flow Improvements. Based upon this analysis, the 2012 RTIP Amendment No. 2 continues to provide for the expeditious implementation of the four Transportation Tactics approved in the 1991 RAQS.

Quantitative Emissions Analysis

The second requirement of the conformity finding is to conduct a quantitative emissions analysis for the 2012 RTIP, as amended. The emissions analysis must show that implementation of the 2012 RTIP, as amended, and 2050 RTP meet the emissions budgets established in the 2004 CO Maintenance Plan and in the *Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County*

A quantitative emissions analysis was conducted according to the requirements established in the Transportation Conformity Rule under Section 93.122(b). Motor vehicle emissions forecasts were produced for the following analysis years: 2015, 2018 (interpolated), 2020 (interpolated), 2025, 2035, 2040, and 2050 (for informational purposes). SANDAG's regional growth forecasts and transportation models, as well as CARB's emissions model, were used to generate the emissions forecasts. Transportation forecasts were developed using the TransCAD 5.0 transportation planning computer package. The four-step transportation modeling process includes trip generation, trip distribution, mode split, and trip assignment.

The emissions analysis was conducted using the latest EMFAC2011 model. Using EMFAC2011, the emissions data for 2040 and 2050 were prepared using 2035 emissions factors, as emission factors for 2040 and 2050 are not available from CARB.

The 2012 RTIP Amendment No. 2 and 2050 RTP air quality conformity analysis was conducted for the years 2012-2040. Emissions data for 2050 is included for informational purposes only.

All of the proposed capacity-increasing improvements identified in the 2012 RTIP Amendment No. 2 that are on the Regional Arterial System (as defined in the RTP) or the FHWA functional classification system (other principal arterials and higher classifications) were modeled.

Emissions Budget Analysis

Table 3-2 provides a summary of the results of the quantitative emissions analysis conducted for the 2012 RTIP Amendment No. 2 and 2050 RTP using budgets from the *Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County*. Table 3-2 demonstrates that the 2012 RTIP, as amended, and the 2050 RTP meet the budgets for the 2008 Eight-Hour Ozone Standard. Projected reactive organic gas (ROG) and nitrogen oxide (NOx) emissions for 2015, 2020, 2025, 2035, and 2040 are below the established SIP budgets. The analysis for 2050 is presented for informational purposes.

Table 3-3 shows that projected CO emissions from the 2012 RTIP, as amended and the 2050 RTP are below the 2003 CO budget of 730 tons per day.

Table 3-1
2012 RTIP - Amendment No. 2 (in \$000s)
Transportation Control Measures (T-Tactics) Projects

RIDESHARING	
Transportation Demand Management (TDM)	<u>\$35,482</u>
<i>Subtotal:</i>	<i>\$35,482</i>
TRANSIT IMPROVEMENTS	
Blue Line (including vehicle purchase)	\$582,901
Mid-Coast	\$1,730,090
I-15 BRT	\$145,909
Mid-City Rapid Bus	\$44,526
SuperLoop	\$37,177
South Bay BRT	\$99,908
Other BRT	\$27,954
Coastal Corridor (LOSSAN)	\$367,982
Bus/Rail Infrastructure	\$441,251
Bus/Rail Intermodal Stations	\$221,495
Bus/Rail Vehicle Purchase	\$208,538
Other Bus/Rail (Operations/Planning)	<u>\$1,013,723</u>
<i>Subtotal:</i>	<i>\$4,921,456</i>
BICYCLE FACILITIES PROJECTS	
Bicycle/Pedestrian Projects	<u>\$95,151</u>
<i>Subtotal:</i>	<i>\$95,151</i>
TRAFFIC FLOW IMPROVEMENTS	
Transportation Management System/Intelligent Transportation System	\$68,033
Traffic Management/Signal Projects	<u>\$47,376</u>
<i>Subtotal:</i>	<i>\$115,409</i>
Total Transportation Tactics in 2012 RTIP:	\$5,167,498
Total All Transportation Projects in 2012 RTIP:	\$12,636,237
Share of T-Tactics Projects in 2012 RTIP:	40.9%

**Table 3-2
2012 RTIP Amendment No. 2 and 2050 Regional Transportation Plan
Air Quality Conformity Analysis for 2008 Eight-Hour Ozone Standard**

Year	Average Weekday Vehicle Starts (1,000s)	Average Weekday Vehicle Miles (1,000s)	ROG		NOx	
			SIP Emissions Budget Tons/Day	ROG Emissions Tons/Day	SIP Emissions Budget Tons/Day	NOx Emissions Tons/Day
2015	14,274	84,365	53	23	98	37
2020	15,056	89,372	23	19	38	29
2025	15,838	94,378	21	16	30	20
2035	17,155	102,501	21	14	30	18
2040 ⁽¹⁾	17,891	106,906	21	15	30	19
2050 ⁽²⁾	19,595	117,087	21	16	30	21

(1) The emissions data for 2040 and 2050 was prepared using 2035 emission factors, as emission factors for 2040 and 2050 are not available from CARB. Also, adjustment factors are not available for these later years. Modeled emission results for 2040 and 2050 likely are overestimated due to these two factors.

(2) The air quality conformity analysis was conducted for the years 2013 – 2040. Emissions data for 2050 is included for informational purposes only.

Note: Emissions budgets from *Eight-Hour Ozone Redesignation Request and Maintenance Plan for San Diego County*, were found adequate for transportation conformity purposes by the U.S. EPA, effective April 4, 2013.

**Table 3-3
2012 RTIP Amendment No. 2 and 2050 Regional Transportation Plan
Air Quality Conformity Analysis for Carbon Monoxide**

Year	Average Weekday Vehicle Starts (1,000s)	Average Weekday Vehicle Miles (1,000s)	CO	
			SIP Emissions Budget Tons/Day	CO Emissions Tons/Day
2015	14,274	84,365	730	256
2018	14,743	87,369	730	223
2025	15,838	94,378	730	147
2035	17,155	102,501	730	134
2040 ⁽¹⁾	17,891	106,906	730	140
2050 ⁽²⁾	19,595	117,087	730	153

- (1) The emissions data for 2040 and 2050 was prepared using 2035 emission factors, as emission factors for 2040 and 2050 are not available from CARB. Modeled emission results for 2040 and 2050 likely are over estimated due to this factor.
- (2) The air quality conformity analysis was conducted for the years 2013 – 2040. Emissions data for 2050 is included for informational purposes only.

Note: Emissions budgets for the San Diego region from 2004 Revision to California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas (Approved as SIP revision in January 2006).

Conclusion

Based upon an evaluation of projects and funds programmed and a quantitative emissions analysis, the 2012 RTIP, as amended, and 2050 RTP meet the U.S. EPA transportation conformity regulations contained within the federal guidelines published on August 15, 1997, and subsequent amendments, as well as the requirements of the federal Clean Air Act amendments of 1990.

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APPENDICES

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Appendix A

PROJECTS EXEMPT FROM AIR QUALITY CONFORMITY DETERMINATION

APPENDIX A

PROJECTS EXEMPT FROM AIR QUALITY CONFORMITY DETERMINATION*

SAFETY	
<ul style="list-style-type: none"> - Railroad/highway crossing. - Safer non-federal-aid systems roads. - Increasing sight distance. - Traffic control devices and operating assistance other than signalization projects. - Pavement resurfacing and/or rehabilitation. - Emergency relief (23 U.S.C. 125). - Skid treatments. - Adding medians. - Lighting improvements. - Emergency truck pullovers. 	<ul style="list-style-type: none"> - Projects that correct, improve, or eliminate a hazardous location or feature. - Shoulder improvements. - Highway Safety Improvement Program implementation. - Railroad/highway crossing warning devices. - Guardrails, median barriers, crash cushions. - Pavement marking. - Fencing. - Safety roadside rest areas. - Truck climbing lanes outside the urbanized area. - Widening narrow pavements or reconstructing bridges (no additional travel lanes).
MASS TRANSIT	
<ul style="list-style-type: none"> - Operating assistance to transit agencies. - Rehabilitation of transit vehicles. - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.). - Construction of small passenger shelters and information kiosks. - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way. - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of fleet. 	<ul style="list-style-type: none"> - Purchase of support vehicles. - Purchase of office, shop, and operating equipment for existing facilities. - Construction or renovation of power, signal, and communications systems. - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures). - Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771.
AIR QUALITY	
<ul style="list-style-type: none"> - Continuation of ride-sharing and van-pooling promotion activities at current levels. 	<ul style="list-style-type: none"> - Bicycle and pedestrian facilities.
OTHER	
<ul style="list-style-type: none"> - Specific activities which do not involve or directly lead to construction, such as: <ul style="list-style-type: none"> Planning and technical studies. Grants for training and research programs. Planning activities conducted pursuant to titles 23 and 49 U.S.C. Federal-aid systems revisions. - Sign removal. - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities). 	<ul style="list-style-type: none"> - Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action. - Noise attenuation. - Emergency or hardship advance land acquisitions (23 CFR 710.204(d)). - Acquisition of scenic easements. - Plantings, landscaping, etc. - Directional and informational signs. - Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational or capacity changes.
ALL PROJECTS	
<ul style="list-style-type: none"> - Intersection channelization projects. - Interchange reconfiguration projects. - Truck size and weight inspection stations. 	<ul style="list-style-type: none"> - Intersection signalization projects at individual intersections. - Changes in vertical and horizontal alignment. - Bus terminal and transfer points.

*Source: Part II Environmental Protection Agency 40 CFR Parts 51 & 93 Transportation Conformity Rule, as amended, January 24, 2008.

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Appendix B

**REGIONAL EMISSIONS ANALYSIS
AND MODELING PROCEDURES**

Appendix B

REGIONAL EMISSIONS ANALYSIS AND MODELING PROCEDURES

BACKGROUND

The federal Clean Air Act (CAA), which was last amended in 1990, requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. California has adopted state air quality standards that are more stringent than the NAAQS. Areas with levels that violate the standard for specified pollutants are designated as non-attainment areas.

The U.S. EPA requires that each state containing non-attainment areas develop plans to attain the NAAQS by a specified attainment deadline. These attainment plans are called State Implementation Plans (SIP). The San Diego County Air Pollution Control District (APCD) prepares the San Diego portion of the California SIP. Once the standards are attained, further plans – called Maintenance Plans – are required to demonstrate continued maintenance of the NAAQS.

SANDAG and the U.S. Department of Transportation (DOT) must make a determination that the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP) conform to the SIP for air quality. Conformity to the SIP means that transportation activities will not create new air quality violations, worsen existing violations, or delay the attainment of the national ambient air quality standards.

On October 28, 2011, the SANDAG Board made a finding of conformity of the *2050 San Diego Regional Transportation Plan: Our Region, Our Future* (2050 RTP) and the 2010 RTIP Amendment No. 13 and adopted the plan. The U.S. DOT, in consultation with U.S. EPA, made its conformity determination on December 2, 2011.

On September 28, 2012, the SANDAG Board of Directors adopted the final 2012 RTIP and its conformity determination and redetermination of conformity for the 2050 RTP. The U.S. DOT, in consultation with U.S. EPA, made its conformity determination on December 13, 2012.

The San Diego region attained the federal One-Hour Ozone Standard in 2001. The U.S. EPA redesignated the San Diego air basin as attainment/maintenance and approved the One-Hour Ozone Maintenance Plan as a SIP revision, effective on July 28, 2003. On June 15, 2005, the U.S. EPA revoked the federal One-Hour Ozone Standard after the 1997 Eight-Hour Ozone Standard became applicable for conformity.

On April 15, 2004, the EPA designated the San Diego air basin as non-attainment for the 1997 Eight-Hour Ozone Standard. This designation took effect on June 15, 2004; however, several areas that are tribal lands in eastern San Diego County were excluded from the non-attainment designation. As shown in Figure B.1, La Posta Areas #1 and #2, Cuyapaipe, Manzanita, and Campo Areas #1 and #2 are attainment areas for the 1997 Eight-Hour Ozone NAAQS.

The air basin initially was classified as a basic non-attainment area under Subpart 1 of the CAA, and the attainment date for the 1997 Eight-Hour Ozone Standard was set as June 15, 2009. In cooperation with SANDAG, the San Diego APCD developed an Eight-Hour Ozone Attainment Plan for the 1997 standard, which was submitted to the U.S. EPA on June 15, 2007. The budgets in the *Eight-Hour Ozone Attainment Plan for San Diego County* were found adequate for transportation conformity purposes by the U.S. EPA, effective June 9, 2008.

However, on April 27, 2012, in response to a court decision, U.S. EPA ruled that the San Diego basic non-attainment area be reclassified as a Subpart 2 moderate non-attainment area, with an attainment deadline of June 15, 2010. This reclassification became effective on June 13, 2012. Air quality data for 2009, 2010, and 2011 demonstrated that the San Diego air basin attained the 1997 ozone standard; APCD prepared a Maintenance Plan, with a request for re-designation to attainment/maintenance. On December 6, 2012, the California Air Resources Board (CARB) approved the *Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County* for submittal to U.S. EPA as a SIP revision. On December 20, 2012, the U.S. EPA initiated its adequacy review of the plan and posted the document for a 30-day public review period that closed January 22, 2013. U.S. EPA found the emission budgets in the plan adequate for use in transportation conformity effective April 4, 2013. U.S. EPA final approval of the plan has yet to occur.

On May 21, 2012, the U.S. EPA designated the San Diego air basin as a non-attainment area for the new 2008 Eight-Hour Ozone standard and classified it as a marginal area with an attainment date of December 31, 2015. This designation became effective on July 20, 2012. SANDAG is required to determine conformity to the new standard by July 20, 2013. In addition, the U.S. EPA has approved a new model to forecast regional emissions Emissions FACtors 2011 (EMFAC2011) for conformity purposes effective March 6, 2013. EMFAC2011 was used to conduct this conformity analysis. The U.S. EPA final rule also provides for the revocation of the 1997 Eight-Hour Ozone NAAQS for transportation conformity purposes to become effective on July 20, 2013. For this non-attainment designation, tribal areas that were previously excluded are now included as part of the San Diego region non-attainment designation.¹

The San Diego region also has been designated by the U.S. EPA as a federal maintenance area for the Carbon Monoxide (CO) standard. On November 8, 2004, CARB submitted the 2004 revision to the California SIP for CO to the U.S. EPA. Effective January 30, 2006, the U.S. EPA has approved this maintenance plan as a SIP revision.

¹ One small portion (approximately 119 acres) of the Pechanga Band of Luiseno Indians purchased within the north portion of San Diego County piece of tribal land was excluded from the San Diego region 2008 Eight-Hour Ozone standard non-attainment designation. All other tribal lands within San Diego County were included in the designation.

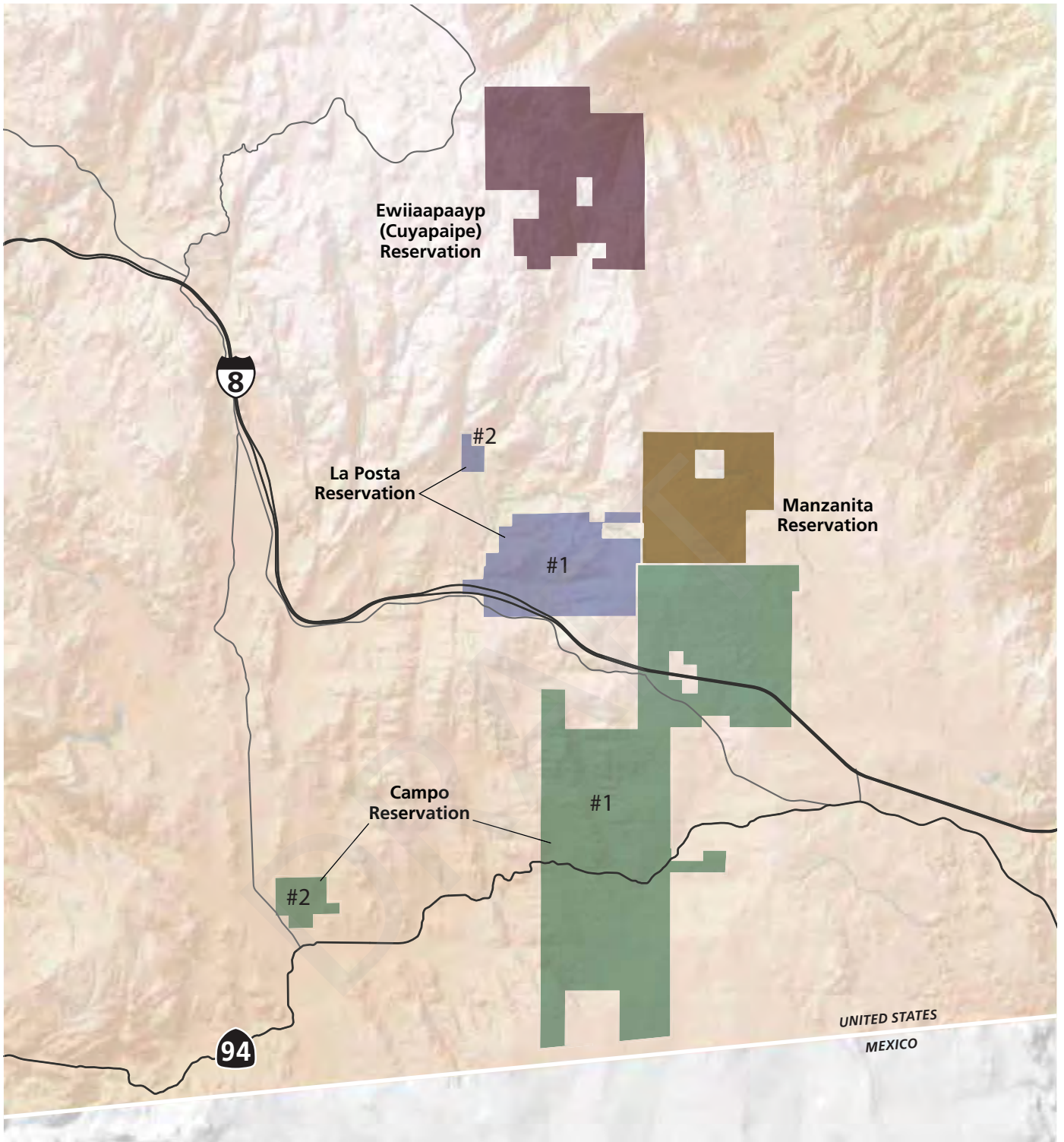
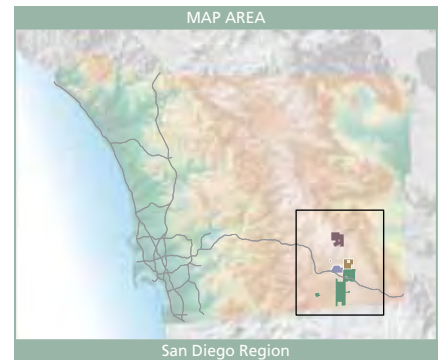
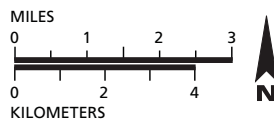


Figure B.1
**Eastern San Diego County
 Attainment Areas
 for the Eight-Hour Ozone
 NAAQS**

October 2011

Data Source: US EPA, Region 9 GIS Center
 1997 Eight-Hour Ozone Standard



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TRANSPORTATION CONFORMITY: MODELING PROCEDURES

Introduction

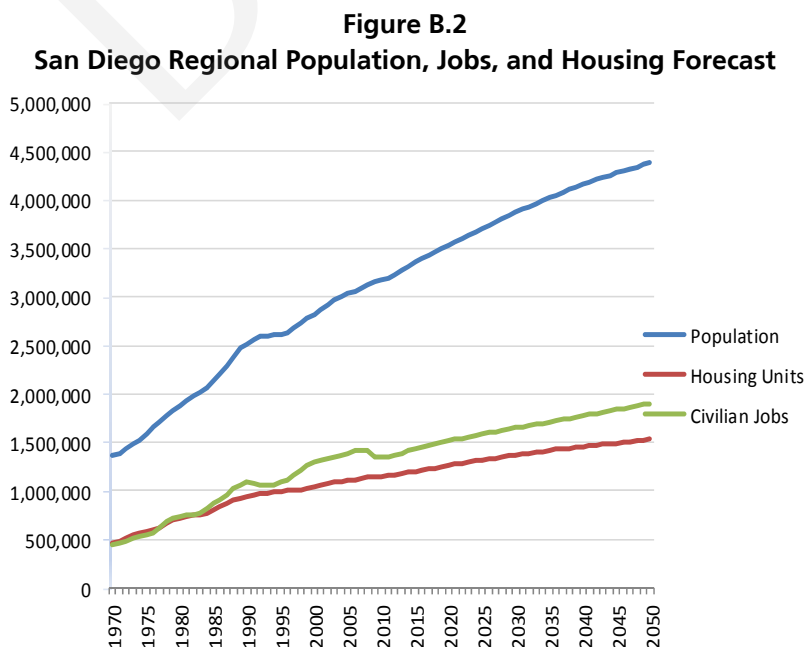
The 2012 RTIP Amendment No. 2 is consistent with the 2050 RTP. As a financially constrained plan, the 2012 RTIP, as amended, only contains major transportation projects listed in the Revenue Constrained 2050 RTP that are being implemented in the five-year 2012 RTIP period. Chapter 4 of the 2012 RTIP includes a detailed discussion on fiscal constraint. Conformity of the 2050 RTP expires on December 2, 2015; Tables B.2 and B.4 include the conformity analysis for both the 2012 RTIP, as amended, and the conformity redetermination for the 2050 RTP.

Growth Forecasts

Every three to five years, SANDAG produces a long-range forecast of population, housing, and employment growth for the San Diego region. The most recent is the 2050 Regional Growth Forecast, which was adopted by the SANDAG Board on October 28, 2011, and was utilized in the development of the 2050 RTP and the 2012 RTIP, as amended.

The forecast process relies upon three integrated forecasting models. The first one, the Demographic and Economic Forecasting Model (DEFM), provides a detailed econometric and demographic forecast for the entire region. The second one, the Interregional Commuting Model, provides a forecast of commuting between the San Diego region, Orange County, southwest Riverside County, Imperial County, and Tijuana/Northern Baja California/Mexico. The third one, the Urban Development Model, allocates the results of the first two models to subregional areas based upon the current plans and policies of the jurisdictions.

On February 6, 2013, SANDAG consulted with the San Diego Region Conformity Working Group (CWG) on the use of the 2050 Regional Growth Forecast for the air quality conformity analysis of the 2012 RTIP, as amended, and 2050 RTP conformity redetermination. Previously, both the U.S. DOT and the U.S. EPA concurred that approved plans should be used as input in the air quality conformity process. Figure B.2 and Table B.1 show the regional population, jobs, and housing growth forecast for the San Diego region through 2050.



Source: 2050 Regional Growth Forecast, SANDAG, October 2011

**Table B.1
San Diego Regional Population and Employment Forecast**

2050 Regional Growth Forecast		
Year	Population	Civilian Employment
2008	3,131,552	1,411,811
2020	3,535,000	1,515,346
2030	3,870,000	1,648,361
2040	4,163,688	1,773,399
2050	4,384,867	1,898,769

Source: 2050 Regional Growth Forecast, SANDAG, October 2011

The 2050 Regional Growth Forecast is based largely upon the adopted general plans and community plans and policies of the 18 cities and, in some cases, includes draft plans which are nearing completion. Because many of the local general plans have horizon years of 2030 – twenty years before the 2050 Growth Forecast horizon year- the later part of the forecast was developed in collaboration with each of the local jurisdictions through an iterative process that allowed each city to provide their projections for land uses in those later years. For the unincorporated area, the forecast is based upon the County’s Referral Alternative draft of the General Plan update, with additional constraints included for sensitive habitat areas.

Transportation Modeling

SANDAG follows a widely used, four-step transportation modeling process of trip generation, trip distribution, mode choice, and assignment to forecast travel activity in the San Diego region. After a first pass through the four steps, a feedback process is used to pass congested travel conditions back into trip distribution and through to assignment. After several feedback iterations, a final pass is made through the mode choice and assignment steps to reflect congested travel conditions in mode decision making. Travel model results then are combined with additional post-process input and output functions to form the complete modeling chain. A truck model is run parallel to the four-step model and truck origin-destination trip tables are merged with vehicle trip tables for highway assignment and air quality procedures.

The estimates of regional transportation-related emissions meet the requirements established in the Transportation Conformity Rule, Sections 93.122(b) and 93.122(c). These requirements relate to the procedures to determine regional transportation-related emissions, including the use of network-based travel models, methods to estimate traffic speeds and delays, and the estimation of vehicle miles of travel.

TransCAD 5.0 is the transportation planning computer package used by SANDAG to provide a framework for performing much of the computer processing involved with modeling and is used for the trip distribution and assignment steps. Another software package used extensively in the modeling process is ArcInfo. This geographic information system (GIS) maintains, manipulates, and displays transportation, land use, and demographic data. SANDAG has written numerous programs that provide a linkage between TransCAD and ArcInfo. Other custom programs perform some modeling functions such as trip generation and mode choice.

A number of data files and surveys are used to calibrate the transportation models. These include:

- 1991 San Diego Visitor Survey
- 1995 San Diego Region Travel Behavior Study
- 2000 Census Transportation Planning Package
- 2000 Market Research Survey
- 2001 Caltrans Statewide Travel Survey
- 2001-2003 San Diego Regional Transit Survey
- 2002 Freight Analysis Framework
- 2006 San Diego Household Travel Study
- 2010 Freight Gateway Study
- External Trip Surveys (2006 Interregional Travel Behavior Study)
- Traffic Generation Studies

In addition to model parameters derived from these surveys, there are three major inputs to the transportation models:

- Growth forecast inputs used to describe existing and planned land use patterns and demographic characteristics
- Highway networks used to describe existing roadway facilities and planned improvements to the roadway system
- Transit networks used to describe existing and planned public transit service

Highway Networks

The regional highway networks in the 2012 RTIP, as amended, and 2050 RTP include all roads classified by local jurisdictions in their general plan circulation elements. These roads include freeways, expressways, and the Regional Arterial System (RAS). The RAS consists of all conventional state highways, prime arterials, and selected major streets. In addition, some local streets are included in the networks for connectivity between zones.

The route improvements and additions in the 2012 RTIP, as amended, and 2050 RTP are developed to provide adequate travel service that is compatible with adopted regional policies for land use and population growth. All regionally significant projects are included in the quantitative emissions analysis. These include all state highways, all proposed national highway system routes, all regionally significant arterials, and all "other principal arterials" functionally classified by the Federal Highway Administration.

The networks also account for programs intended to improve the operation of the highway system, including high occupancy vehicle (HOV) lanes, Managed Lanes, and ramp metering. Existing and proposed toll facilities also are modeled to reflect time, cost, and capacity effects of these facilities. State Route (SR) 125 South, SR 11, and SR 241 and additional lanes on Interstate 15 (I-15) north of SR 78 and additional lanes on I-5 north of Vandegrift Boulevard are modeled toll facilities included in the Revenue Constrained Plan for the San Diego region.

In addition, several managed/HOV lanes are included in the Revenue Constrained Plan. Facilities with proposed or existing Managed Lanes include Interstate 5 (I-5), I-15, I-805, SR 52, SR 54, SR 78, SR 94, and SR 125. Managed Lanes are defined as reversible HOV routes and HOV routes with two or more lanes in the

peak direction. Additionally, one-lane HOV facilities that operate as two-person carpool lanes in the earlier years of the plan transition to Managed Lanes by 2035. It is assumed that the excess capacity not utilized by carpools and transit on these facilities would be managed so that single occupant vehicles could use these lanes under a pricing mechanism. Traffic flows would be managed so that the facility would operate at level of service D or better.

Based upon the networks and programs described above, the transportation forecasts of the 2012 RTIP, as amended, and 2050 RTP differentiate between eight highway modes:

- Drive alone non-toll
- Drive alone toll
- Shared-ride non HOV/non-toll
- Shared-ride HOV/non-toll
- Shared-ride HOV/Toll
- Light-heavy-duty
- Medium-heavy-duty
- Heavy-heavy-duty

SANDAG maintains a master highway network from which a specific year network, between the years 2008 (the 2050 Regional Growth Forecast base year) and 2050, can be built. Four networks were built and verified (2015, 2025, 2035, and 2040) for air quality conformity analyses of the 2012 RTIP, as amended, and 2050 RTP. Reactive organic gasses (ROG) and nitrogen oxides (NOx) data were interpolated for 2020 and CO data was interpolated for 2018. A network also was built and verified for the year 2050 for an air quality analysis for informational purposes.

A list of the major highway and near-term regional arterial projects included in the conformity analysis, along with information on phasing for their implementation, is included in Tables B.6 and B.8. Locally funded, regionally significant projects also have been included in the air quality conformity analysis. These projects are funded with *TransNet* funds, a 20-year, half-cent local sales tax for transportation that expired in 2008; *TransNet* Extension funds, a 40-year, half-cent local sales tax extension approved by voters in 2004 that expires in 2048; and other local revenue sources.

Transit Networks

SANDAG also maintains transit network datasets for existing and proposed transit systems. Most transit routes run over the same streets, freeways, HOV lanes, and ramps used in the highway networks. As a result, the only additional facilities that are added to the transportation coverage for transit modeling purposes are:

- Trolley and commuter rail lines
- Streets used by buses that are not part of local general plan circulation elements.

Seven transit modes group routes with similar operating characteristics. They are:

- Commuter Rail
- Trolley/Light Rail
- Bus Rapid Transit (BRT)
- Rapid Bus

- Limited-Express Bus
- Express Bus
- Local Bus

BRT service would have stations similar to commuter rail and light rail, and operating characteristics midway between rail and bus service. BRT service would be provided by advanced design buses operating on HOV lanes or Managed Lanes, some grade-separated transit ways, and surface streets with priority transit systems. Once TransCAD transit networks have been built, TransCAD finds minimum time paths between transit access points (TAPs). TAPs are selected transit stops that are used to represent walk and auto access to the transit system.

The following four sets of paths are created for modes:

- A.M. Peak-period local bus
- A.M. Peak-period premium service
- Mid-day local bus
- Mid-day premium service

Bus speeds assumed in the transit networks are derived from modeled highway speeds and reflect the effects of congestion. Regional and express transit routes on surface streets are assumed to operate out of congestion due to priority transit treatments. Higher bus speeds may result for transit vehicles operating on highways with HOV lanes and HOV bypass lanes at ramp meters, compared to those routes that operate on highways where these facilities do not exist.

In addition to transit travel times, transit fares are required as input to the mode choice model. TransCAD procedures replicate the San Diego region's complicated fare policies which differ among:

- Buses which collect a flat fare of between \$1 and \$4, depending on the type of service
- Trolleys, which charge \$2.50 for all trips
- SPRINTER, which charges \$2
- Commuter rail (COASTER), which has a zone-based fare of between \$5 and \$6.50
- Proposed regional BRT routes, which are assumed to charge \$4
- Proposed Rapid Bus routes, which are assumed to charge \$2.50

Fares are expressed in 1999 dollars (consistent with household incomes from the 2050 Regional Growth Forecast) and are assumed to remain constant in inflation-adjusted dollars over the forecast period.

Near-term transit route changes are drawn from the Coordinated Plan, which was produced in cooperation with the region's transit agencies. Longer-range improvements are proposed as a part of the RTP development and other transit corridor studies. In addition to federal and state funded projects, locally funded transit projects that are regionally significant have been included in the air quality conformity analysis of the 2012 RTIP, as amended, and 2050 RTP. These transit projects also are funded with *TransNet* funds or other local revenue sources. Once network coding is completed, the transportation models are run for the applicable scenarios (2015, 2025, 2035, 2040, and 2050 (for informational purposes)). A list of major regional transit projects included in the analysis and their implementation phasing are provided in Table B.7.

Trip Generation

A trip generation analysis is the first step in the transportation modeling process. Average weekday trip ends, by all forms of transportation and starting and ending in each zone, are estimated for ten trip types.

- Home-to-work
- Home-to-college
- Home-to-school
- Home-to-shop
- Home-to-other
- Work-to-other
- Other-other
- Serve passenger
- Visitor
- Airport

The model computes person trips, which account for all forms of transportation including automobiles, trucks, taxicabs, motorcycles, public transit, bicycling, and walking.

The trip generation model works by applying trip rates to zone-level growth forecasts. The model calculates each of the trip ends separately as trip productions and attractions. Trip production rates are expressed as trips per household, while trip production rates vary by trip type and structure type. Trip attractions are expressed as trips per acre of nonresidential land use or trips per household. Trip attraction rates vary by trip type and land use category. The 2050 Regional Growth Forecast was used to produce trip generation forecasts for the years 2015, 2025, 2035, 2040, and 2050. Trip generation rates were established by utilizing data from traffic generator studies, as well as expanding rates from the 1995 San Diego Region Travel Behavior Study, the 2006 San Diego Household Travel Study, and the 2001 Caltrans Statewide Travel Survey.

The model reduces future year person-trips by a small amount to reflect increased use of teleworking and e-commerce. Reduction factors of 1, 3, or 5 percent were applied to selected trip purposes and land uses. Telework reduction factors depend on the likelihood the land use type would have employee categories that could feasibly telecommute. Reduction factors start in year 2020.

The truck model follows a process similar to the one followed by the person model. The model computes truck vehicle trips for heavy-duty trucks, including light heavy-duty, medium heavy-duty, and heavy heavy-duty trucks. The truck classifications correspond to the CARB truck classifications used in the air quality model EMFAC2011. Trip production and attraction rates are expressed as trips per employee and the rates vary by employee industry category.

Trip Distribution

After trip generation analysis is completed, trip movements between zones are determined using a form of the trip distribution models known as the doubly-constrained, gamma-function gravity model. Inputs to the trip distribution model include zone-level trip generation forecasts by trip type, zone-to-zone impedances, and gamma function parameters by trip type and 4D category. 4D index categories attempt to define locations by their density, diversity, distance, and urban design characteristics. A high 4D index value represents areas that would be considered smart growth and would result in shortened trip lengths. In this way, the model is designed to reflect changing trip patterns in response to the types of new development in land use scenarios. The model also modifies trip patterns as new roadways are added.

A truck trip distribution analysis is performed in a similar manner, but is used to distribute vehicle trips rather than person trips by purpose, as in the person model. The truck model also uses different distribution parameters by vehicle type, which are not segmented by 4D category.

The model is calibrated to match observed trip length frequencies from the 2006 Household Travel Study and the 2001 Caltrans Statewide Travel Survey. Zone-to-zone impedances are a composite measure of peak and off-peak travel times and costs by highway, transit, and non-motorized modes.

Mode Choice

At this point in the modeling process, total person-trip movements between zones are split into different forms of transportation by highway, transit, and non-motorized modes (bicycling and walking). Highway modes include drive-alone non-toll, drive-alone toll, shared-ride non HOV/non-toll, shared-ride HOV/non-toll, and shared-ride HOV/toll. Nine transit modes differentiate transit trips by three ride modes (rail, BRT, and bus) and three access modes (walk, drive, and drop-off). The mode choice model is designed to link mode use to demographic assumptions, highway network conditions, transit system configuration, land use alternatives, parking costs, transit fares, and auto operating costs. Trips between zone pairs are allocated to modes based on the cost and time of traveling by a particular mode, compared with the cost and time of traveling by other modes. For example, vehicle trips on a congested route would be more likely to be diverted to light rail than vehicle trips on an uncongested freeway.

Income level also is considered, because lower-income households tend to own fewer automobiles, and therefore make more trips by transit and carpooling. People in higher-income households tend to choose modes based upon time and convenience rather than cost. The mode choice model is calibrated using the 1995 San Diego Region Travel Behavior Study and the 2006 Household Travel Study trip tables by mode and income and 2001-2003 Regional Transit Survey transit trip characteristics. Regional-level Census 2000 work-trip mode shares also were used to fine tune mode-share estimates.

Highway and transit travel times reflect highway congestion effects from the final iteration of the feedback loop. The model produces a.m. peak, p.m. peak, and off-peak period trip tables for vehicles and transit riders. The a.m. peak period is from 6 to 9 a.m. and the p.m. peak period is from 3 to 6 p.m. The off-peak period covers the remaining 18 hours of the day.

Highway and Transit Assignment

Highway assignment produces traffic-volume estimates for all roadway segments in the system. These traffic volumes are an important input to emissions modeling. Similarly, transit trips are assigned to transit routes and segments.

Highway

SANDAG loads traffic using the TransCAD Multimodal Multiclass Assignment function. Before loading the traffic onto the network, the three truck modes are combined with the five passenger vehicle modes. Multi-class assignment allows SANDAG to assign the eight vehicle modes (as defined in the highway network section) in one combined procedure.

The highway assignment model works by finding roads that provide the shortest travel impedance between each zone pair. Trips between zone pairs are then accumulated on road segments making up minimum paths. Highway impedances consider posted speed limits, signal delays, congestion delays, and costs. The model computes congestion delays for each segment based on the ratio of the traffic volume to roadway capacity. Motorists may choose different paths during peak hours, when congestion can be heavy and off-peak hours, when roadways are typically free flowing. For this reason, traffic is assigned separately for a.m. peak, p.m. peak, and off-peak periods. Vehicle trip tables for each scenario reflect increased trip-making due

to population growth and variations in travel patterns due to the alternative transportation facilities/networks proposed.

Model accuracy is assessed by comparing model estimated traffic volumes with actual traffic counts obtained through the SANDAG traffic monitoring program and Highway Performance Monitoring System estimates of Vehicle Miles of Travel (VMT).

After completing the highway assignments, additional processing is needed. Adjustments are made for calibration error volume, HOV/managed lane volume, bus volumes, hourly distribution factors, Level of Service, and travel time.

Transit

For transit assignment, TransCAD software assigns TAP-to-TAP transit trips to the network. Eight separate transit assignments are produced for peak and off-peak periods; walk and auto access; and local bus and premium service. These individual assignments are summed to obtain total transit ridership forecasts.

Before assigning transit trips, external transit trips coming into San Diego from outside the region need to be added to the internal transit trips estimated by the mode choice model. Currently, few transit trips enter from the north or east; however, over 20,000 transit trips cross the United States-Mexico border each day. To account for these trips, an external transit trip table for the base year is developed from on-board transit ridership surveys and factored to future years based upon border crossing trends.

For accuracy, transit ridership forecasts from the transit assignment model are compared with transit counts from the SANDAG transit passenger counting program to determine whether transit modeling parameters need to be adjusted.

Some of these comparisons of model-estimated boardings with actual boardings include:

- System-level boardings, which may reveal transfer rate problems and lead to changes to the transfer wait time factor in the mode choice model
- Boardings by mode, which may reveal modal biases and lead to changes in mode choice modal constants
- Boardings by frequency of service, which may show biases that lead to changes in the first wait factor in the mode choice model
- A Centre City screenline crossings, which may lead to changes in parking costs, and boardings by stop location, which may indicate problems with specific generators such as a university

Post-TransCAD Processing

Standard TransCAD output needs to be reformatted and adjusted to be useful for emissions modeling. Several routines and computer programs have been written to accomplish the following major functions:

- Correcting link-specific traffic volume forecasts for calibration errors
- Adding in estimated travel on roads not in the transportation modeling process
- Computing link speeds based upon corrected link volumes, highway capacity manual relationships between congestion, and speed (or signal delay)
- Splitting link volumes into heavy-duty truck and other traffic to obtain speed distributions by vehicle class

- Preparing a data set that contains total VMT and VMT by speed category by time of day for each vehicle class

Motor Vehicle Emissions Modeling

Emissions Model

In September 2011, CARB released EMFAC2011 and the U.S. EPA approved this emissions model for use in conformity determinations on March 6, 2013. EMFAC2011 is an integrated model that combines emission rate data with vehicle activity to calculate regional emissions. EMFAC2011 reflects recent CARB rulemakings for on-road diesel fleet rules, Pavley Clean Car Standards, and the Low Carbon Fuel Standard (LCFS). EMFAC2011 is made up of three modules: EMFAC2011-SG (scenario air quality assessment); EMFAC2011-LDV (passenger vehicle emissions); and EMFAC2011-HD (diesel trucks and buses). As noted in CARB's EMFAC2011 Technical Documentation, EMFAC2011-SG takes the output from EMFAC2011-LDV and EMFAC2011-HD and applies scaling factors to estimate emissions consistent with regional vehicle miles of travel (VMT) and speeds. Scaling factors are based on changes in total VMT, VMT distribution by vehicle class, and speed distribution. The SG module reports total emissions as tons per average weekday for each pollutant by vehicle class, and the total vehicle fleet for years between 1990 and 2035.

Using EMFAC2011-SG, projections of daily regional emissions were prepared for ROG, NOx, and CO.

The following process emissions are generated for each pollutant.

- All Pollutants – Running Exhaust, Idling Exhaust, Starting Exhaust, Total Exhaust.
- ROG and total organic gases (TOG) – Diurnal Losses, Hot-Soak Losses, Running Losses, Resting Losses, Total Losses
- PM10 and PM2.5 – Break wear, Tire wear, Total Wear

EMFAC2011 models two fuels; gasoline and diesel. Forty-two vehicle classes are modeled in EMFAC2011, including the following vehicle class categories:

- Passenger cars
- Motorcycles
- Motor homes
- Light-duty trucks
- Medium-duty trucks
- Light-heavy duty trucks
- Medium-heavy duty trucks
- Heavy-heavy duty trucks
- School buses
- Urban buses
- Motor coaches
- Other bus types

The air quality analysis of the 2012 RTIP Amendment No. 2 and 2050 RTP conformity redetermination was conducted using EMFAC2011-SG.

Regional Emissions Forecasts

Regional transportation forecasts were initiated in February 7, 2013. Output from the TransCAD model was then reformatted and adjusted to be useful for emissions modeling.

Eight-Hour Ozone Standard

Effective April 4, 2013, the U.S. EPA found the Eight-Hour Ozone budgets included in the *Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County* adequate for transportation conformity purposes. Beginning in February 2013, SANDAG prepared countywide forecasts of average weekday ROG and NOx emissions for 2015, 2020 (interpolated), 2025, 2035, 2040, and 2050 (for informational purposes), using the EMFAC2011 model. ROG and NOx emissions are based upon the summer season.

The analysis years were selected to comply with 40 CFR Sections 93.106(a)(1) and 93.118(a) of the Transportation Conformity Rule and the approved methodology for conducting the air quality conformity analyses for the 2012 RTIP, as amended, and 2050 RTP, which shortened the conformity horizon to 2040 and requires an informational analysis of the plan horizon year (2050). According to these sections of the Conformity Rule, the first horizon year (2015) must be within ten years from the base year used to validate the regional transportation model (2008), the last horizon year must be the last year of the transportation plan's forecast period, or in the case of the 2012 RTIP, as amended, and 2050 RTP, the last year of the conformity determination (2040), and the horizon years may be no more than ten years apart (2025 and 2035), ROG and NOx data for the year 2020 were interpolated and included to demonstrate conformity to the budgets included in the Maintenance Plan.

CO Standard

CO regional emissions were projected for 2015, 2018 (interpolated), 2025, 2035, 2040, and 2050 (for informational purposes) for the conformity determination of the 2012 RTIP Amendment No. 2 and 2050 RTP conformity redetermination. CO emissions are based upon the winter season.

Emissions Modeling Results

An emissions budget is the part of the SIP that identifies emissions levels necessary for meeting emissions reduction milestones, attainment, or maintenance demonstrations.

To determine conformity of the 2012 RTIP Amendment No. 2 and redetermine conformity of the 2050 RTP, the plan must comply with the emission analysis described in the Regional Emissions Forecast section. Table B.2 shows that the projected ROG and NOx emissions from the 2012 RTIP, as amended, and 2050 RTP are below the ROG and NOx budgets.

Table B.2
2012 RTIP Amendment No. 2 and 2050 Revenue Constrained RTP
Air Quality Conformity Analysis for 2008 Eight-Hour Ozone Standard

Year	Average Weekday Vehicle Starts (1,000s)	Average Weekday Vehicle Miles (1,000s)	ROG		NOx	
			SIP Emissions Budget Tons/Day	ROG Emissions Tons/Day	SIP Emissions Budget Tons/Day	NOx Emissions Tons/Day
2015	14,274	84,365	53	23	98	37
2020	15,056	89,372	23	19	38	29
2025	15,838	94,378	21	16	30	20
2035	17,155	102,501	21	14	30	18
2040 ⁽¹⁾	17,891	106,906	21	15	30	19
2050 ⁽²⁾	19,595	117,087	21	16	30	21

(1) The emissions data for 2040 and 2050 was prepared using 2035 emission factors, as emission factors for 2040 and 2050 are not available from CARB. Also, adjustment factors are not available for these later years. Modeled emission results for 2040 and 2050 likely are overestimated due to these two factors.

(2) The air quality conformity analysis was conducted for the years 2013 – 2040. Emissions data for 2050 is included for informational purposes only

Note: Emissions budgets are from the *Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County*, which were found adequate for transportation conformity purposes by the U.S. EPA, effective April 4, 2013.

Adjustment factors for ROG and NOx were provided by CARB to account for regulations and minor technical improvements not yet included in the California Emissions Forecasting System inventories at the time of EMFAC2011 development. Table B.3 includes the adjustment factors by category and analysis year. Adjustment factors were provided for the years 2015, 2020, and 2025. Factors for later years were not available from CARB and, therefore, the adjustment factors for 2025 were carried over into later years.

**Table B.3
EMFAC2011 Adjustment Factors**

Category	ROG Adjustment Factor (tons/day)					NOx Adjustment Factor (tons/day)				
	2015	2020	2025	2035	2040	2015	2020	2025	2035	2040
AB 1493	0.12	0.22	0.35	0.35	0.35	0.01	0.01	0.02	0.02	0.02
Moyer	-		-	-	-	-	-	-	-	-
Reformulated Gasoline	0.97	0.72	0.54	0.54	0.54	-	-	-	-	-
Prop 1B	-	-	-	-	-	0.71	-	-	-	-
Smog Check	1.05	0.87	0.50	0.50	0.50	0.54	0.38	0.20	0.20	0.20
Advanced Clean Cars	0.04	0.21	0.39	0.39	0.39	0.08	0.24	0.94	0.94	0.94
Total*	2.17	2.03	1.78	1.78	1.78	1.33	0.63	1.16	1.16	1.16

Note: Adjustment factors were provided by CARB. The tons listed are subtracted from the EMFAC2011 output of tons per day for ROG and NOx. Adjustment factors were not available for years 2035 and 2040 and therefore reflect 2025 adjustments for those years.

* Totals represent unrounded adjustment factors.

Table B.4 shows that projected CO emissions from the 2012 RTIP Amendment No. 2 and 2050 RTP are below the 2003 CO budget of 730 tons per day.

**Table B.4
2012 RTIP Amendment No. 2 and 2050 Revenue Constrained RTP
Air Quality Conformity Analysis for Carbon Monoxide Standard**

Year	Average Weekday Vehicle Starts (1,000s)	Average Weekday Vehicle Miles (1,000s)	CO	
			SIP Emissions Budget Tons/Day	CO Emissions Tons/Day
2015	14,274	84,365	730	256
2018	14,742	87,369	730	223
2025	15,838	94,378	730	147
2035	17,155	102,501	730	134
2040 ⁽¹⁾	17,891	106,906	730	140
2050 ⁽²⁾	19,595	117,087	730	153

(1) The emissions data for 2040 and 2050 was prepared using 2035 emission factors, as emission factors for 2040 and 2050 are not available from CARB. Modeled emission results for 2040 and 2050 likely are overestimated due to this factor.

(2) The air quality conformity analysis was conducted for the years 2013 – 2040. Emissions data for 2050 is included for informational purposes only.

Note: Emissions budgets for the San Diego region from *2004 Revision to California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas* (Approved as SIP revision in January 2006). Emissions results do not reflect CARB adjustment factors.

Exempt Projects

Section 93.126 of the Transportation Conformity Rule exempts certain highway and transit projects from the requirement to determine conformity. The categories of exempt projects include safety, mass transit, air quality (ridesharing and bicycle and pedestrian facilities), and other (such as planning studies).

Table B.5 illustrates the exempt projects considered in the 2012 RTIP, as amended, and 2050 Revenue Constrained RTP. This table shows short-term exempt projects. Additional unidentified projects could be funded with revenues expected to be available from the continuation of existing state and federal programs.

**Table B.5
Exempt Projects**

Project/Program Description	Project/Program Description
Bikeway, Rail Trail, and Pedestrian Projects	
Bayshore Bikeway	Maple Street Pedestrian Plaza
Bay-to-Ranch Bikeway	Mid-County Bikeway
Border Access Bicycle Corridor	Mira Mesa Bicycle Corridor
Camp Pendleton Trail	Mission Valley – Chula Vista Bicycle Corridor
Carlsbad – San Marcos Bicycle Corridor	North Park – Centre City Bicycle Corridor
Central Coast Bicycle Corridor	Otay Mesa Port of Entry Pedestrian/Bicycle Facilities
Chula Vista Greenbelt	Park Boulevard Bicycle Connector
City Heights – Old Town Bicycle Corridor	Poway Bicycle Loop
Clairemont – Centre City Bicycle Corridor	San Diego Regional Bicycle Plan
Coastal Rail Trail	San Diego River Multi-Use Bicycle and Pedestrian Path
East County Northern Bicycle Loop	San Luis Rey River Trail
East County Southern Bicycle Loop	Santee – El Cajon Bicycle Corridor
El Camino Real Bicycle Corridor	SR 52 Bikeway
Encinitas – San Marcos Bicycle Corridor	SR 56 Bikeway
Escondido Creek Bike Path Bridge and Bikeway	SR 56/Black Mountain Road Bikeway Interchange
Gilman Bicycle Connector	SR 125 Bicycle Corridor
Hillcrest – El Cajon Bicycle Corridor	SR 905 Bicycle Corridor
Imperial Beach Bicycle Connector	Sweetwater River Bikeway
Inland Rail Trail	Tecate International Border Crossing Pedestrian Facilities
Interstate 8 Bicycle Corridor	Ted Williams Parkway Pedestrian Bridge at Shoal Creek
Interstate 15 Bikeway	Third Avenue Bicycle and Pedestrian Access
Interstate 805 Bicycle Corridor	Vista Way Bicycle Connector
Kearny Mesa – Beaches Bicycle Corridor	West Bernardo Bike Path
Kensington – Balboa Park Bicycle Corridor	

Project/Program Description (Cont.)	Project/Program Description
Safety Improvement Program	Transportation Systems Management
Bridge Rehabilitation/Preservation/Retrofit	Automated Traveler Information System (ATIS)
Collision Reduction	Bus on Shoulder Service
Emergency Response	Compass Card
Hazard Elimination/Safe Routes to School	FasTrak®
Highway Maintenance	Freeway Service Patrol
Safety Improvement Program	Connected Vehicle Roadside Devices
Roadway/Roadside Preservation	Intermodal Transportation Management System (IMTMS)
Smart Growth Incentive Program	ITS Operations
Transit Terminals	Joint Transportation Operations Center (JTOC)
Airport Intermodal Transit Center/Terminal	Trolley Fiber Communication Network
San Ysidro Intermodal Transit Center/Terminal	Universal Transportation Account
University Town Center (UTC) Transit Center/Terminal	Various Traffic Signal/Prioritization

Implementation of Transportation Control Measures

There are four federally-approved Transportation Control Measures (TCMs) that must be implemented in San Diego, which the SIP refers to as transportation tactics. They include ridesharing, transit improvements, traffic flow improvements, and bicycle facilities and programs.

These TCMs were established in the 1982 SIP, which identified general objectives and implementing actions for each tactic. The TCMs have been fully implemented. Ridesharing, transit, bicycling, and traffic flow improvements continue to be funded, although the level of implementation established in the SIP has been surpassed.

Interagency Consultation Process and Public Input

The consultation process followed to prepare the air quality conformity analysis for the 2012 RTIP, as amended, and the 2050 RTP complies with the San Diego Transportation Conformity Procedures adopted in July 1998. In turn, these procedures comply with federal requirements under 40 CFR 93. Interagency consultation involves SANDAG (as the Metropolitan Planning Agency for San Diego County), the APCD, Caltrans, CARB, U.S. DOT, and U.S. EPA.

Consultation is a three-tier process that:

1. formulates and reviews drafts through a conformity working group
2. provides local agencies and the public with opportunities for input through existing regional advisory committees and workshops
3. seeks comments from affected federal and state agencies through participation in the development of draft documents and circulation of supporting materials prior to formal adoption

SANDAG consulted on the development of the air quality conformity analysis of the 2012 RTIP Amendment No. 2 and 2050 RTP at meetings of the San Diego Region Conformity Working Group (CWG), as follows:

- On December 5, 2012, SANDAG staff presented the schedule for the preparation of the 2012 RTIP Amendment No. 2 and its air quality conformity analysis. The CWG also discussed the conformity analysis budgets, timeframe, and boundary. Staff confirmed that a redetermination of conformity would be done for the 2050 RTP, in conjunction with the 2012 RTIP, as amended, for consistency purposes.
- On February 6, 2013, SANDAG staff presented information about the criteria and procedures to be followed for its conformity analysis. Staff presented information on the 2050 Regional Growth Forecast, Travel Demand Model, Transportation Control Measures, the Revenue Constrained financial assumptions, latest emissions model and emissions budgets, and public involvement and outreach. Staff also confirmed that the conformity timeline would be shortened to the year 2040, and an informational analysis would be conducted for projects in the 2041-2050 timeframe.
- On February 6, 2013, SANDAG staff distributed the draft list of capacity increasing and non-capacity increasing projects to be included in the 2012 RTIP amendment for interagency consultation. The project lists were discussed at the February 6, 2013, CWG meeting.

- On February 26, 2013, SANDAG released the draft air quality conformity analysis of the 2012 RTIP, as amended, and 2050 RTP to the CWG for a 30-day review-and-comment period. The draft air quality analysis was discussed at the March 6, 2013, meeting of the CWG. The draft 2012 RTIP, as amended, will be presented to the *TransNet* Independent Taxpayer Oversight Committee (ITOC) on April 10, 2013, for input.
- On April 5, 2013, the SANDAG Transportation Committee accepted for review and distribution the Draft 2012 Regional Transportation Improvement Program, Amendment No. 2, including its air quality conformity analysis and the draft air quality conformity redetermination of the 2050 Revenue Constrained Regional Transportation Plan for a 30-day public comment period.
- On May 17, 2013, the SANDAG Transportation Committee will be asked to recommend that the Board of Directors adopt the Final 2012 RTIP Amendment No. 2 and its conformity determination and the 2050 RTP conformity redetermination.
- On May 24, 2013, the SANDAG Board will be asked to adopt the Final 2012 RTIP Amendment No. 2 and its conformity determination and the 2050 RTP conformity redetermination.

Members of the public are welcomed to provide comments at meetings of the CWG, the Transportation Committee, and the SANDAG Board of Directors.

Table B.6
Phased Highway Projects – 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2

Conformity Analysis Year	Freeway	From	To	Existing	Improvements	(\$ Millions - 2010 Dollars)	
						Cost	Cumulative Cost
2015	I-805	Palomar St	SR 94	8F	8F+2HOV	\$200	\$2,911
2015	I-805	SR 52	Carroll Canyon Rd	8F/10F	8F/10F+2HOV	\$163	\$3,074
2015	I-805	Carroll Canyon Rd	I-5 (north)	8F/10F	8F/10F+2ML	\$87	\$3,161
2015	SR 905	I-805	Mexico	--	6F	\$595	\$3,756
2015	National City Marine Terminal		Bay Marina Drive, Civic Center Freeway Access Improvements			\$7	\$4,009
2015	SR 76	Melrose Drive	I-15	2C	4C	\$404	\$2,268
2015	I-15	SR 163	SR 56	8F+2ML(R)	10F+4ML/MB	\$419	\$1,654
2015	I-15	Centre City Parkway	SR 78	8F	8F+4ML	\$210	\$1,864
2025	I-5	Manchester Ave	SR 78	8F	8F+2HOV	\$480	\$480
2025	SR 11/ Otay Mesa East POE	SR 905	Mexico	--	4T	\$755	\$1,235
2025	SR 241	Orange County	I-5	--	4T	\$443	\$2,711
2025	Vesta Street Bridge		Mobility Connector over Harbor Drive at Naval Base San Diego			\$60	\$3,816
2025	32nd Street		Freeway Access Enhancement			\$119	\$3,935
2025	10th Avenue Marine Terminal Entrance		Rail Line Grade Separation/Barrio Logan Enhancement			\$67	\$4,002
2025	I-5	La Jolla Village Drive	I-5/I-805 Merge	8F/14F	8F/14F+2ML	\$250	\$4,259
2025	I-5/I-805	North to North & South to South (HOV Connectors)				\$110	\$4,369
2025	SR 15	I-805	I-8	8F	8F+2TL	\$45	\$4,414
2025	I-15	I-8	SR 163	8F	8F+2ML	\$130	\$4,544
2025	SR 15/ I-805	North to North & South to South (HOV Connectors)				\$90	\$4,634
2025	I-15/SR 78	East to South & North to West (HOV Connectors)				\$105	\$4,739
2025	SR 78	I-5	I-15	6F	6F+2ML/Operational	\$570	\$5,309
2025	SR 94	I-5	I-805	8F	8F+2ML	\$480	\$5,789
2025	SR 94/ SR 125	South to East (Freeway Connector)				\$139	\$5,928
2025	I-805	Palomar St	SR 15	8F/8F+2HOV ¹	8F+4ML	\$1,200	\$7,128

Table B.6
Phased Highway Projects - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2 (Cont.)

Conformity Analysis Year	Freeway	From	To	Existing	Improvements	(\$ Millions - 2010 Dollars)	
						Cost	Cumulative Cost
2025	I-805/ SR 94	North to West & East to South (HOV Connectors)				\$160	\$7,288
2025	I-805	SR 52	Carroll Canyon Rd	8F/10F+ 2HOV	8F/10F+4ML	\$391	\$7,679
2025	National City Rail Yard					\$7	\$7,686
2025	I-5/SR 56	West to North (Freeway Connector)				\$65	\$8,501
2025	I-5/SR 56	South to East (Freeway Connector)				\$120	\$8,621
2035	I-5	Palomar St	SR 15	8F	8F+2ML	\$200	\$7,886
2035	I-5	I-5/I-805 Merge	SR 56	8F/14F+2HOV	8F/14F+4ML	\$50	\$7,936
2035	I-5	SR 56	Manchester Ave	8F+2HOV	8F+4ML	\$500	\$8,436
2035	I-5	Manchester Ave	Palomar Airport Rd	8F+2HOV*	8F+4ML	\$950	\$9,571
2035	SR 67	Mapleview St	Dye Rd	2C/4C	4C	\$570	\$10,141
2035	SR 94/ SR 125	West to North (Freeway Connector)				\$180	\$10,321
2035	SR 125	SR 94	I-8	8F	10F	\$215	\$10,536
2035	SR 241	Orange County	I-5	4T	6T	\$58	\$10,594
2035	I-805	SR 905	Palomar St	8F	8F+4ML	\$350	\$10,944
2035	I-805	SR 15	Mission Valley Viaduct	8F	8F+4ML	\$230	\$11,174
2035	I-805	Mission Valley Viaduct	SR 52	8F/10F	8F/10F+4ML	\$637	\$11,811
2035	I-5	Palomar Airport Rd	SR 78	8F+2HOV*	8F+4ML	\$750	\$12,561
2035	I-5	SR 78	Vandegrift Blvd	8F	8F+4ML	\$420	\$12,981
2035	I-5/SR 78	South to East and West to North (HOV Connectors)				\$120	\$13,101
2035	I-5/SR 78	North to East and West to South (HOV Connectors)				\$120	\$13,221
2035	I-5/SR 78	South to East (Freeway Connector)				\$60	\$13,281
2035	I-5/SR 78	West to South (Freeway Connector)				\$46	\$13,327
2035	SR 15	SR 94	I-805	8F	8F+2ML	\$20	\$13,347
2035	SR 15/ SR 94	South to West & East to North (HOV Connectors)				\$80	\$13,427
2035	SR 52	I-805	I-15	6F	6F+2ML	\$223	\$13,650

Table B.6
Phased Highway Projects - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2 (Cont.)

Conformity Analysis Year	Freeway	From	To	Existing	Improvements	(\$ Millions - 2010 Dollars)		
						Cost	Cumulative Cost	
2040	I-8	I-15	SR 125	8F/10F	8F/10F+Operational	\$125	\$13,775	
2040	I-8	SR 125	2nd Street	6F/8F	6F/8F+Operational	\$125	\$13,900	
2040	SR 52	I-15	SR 125	4F	6F+2ML(R)	\$325	\$14,225	
2040	SR 56	I-5	I-15	4F	6F	\$135	\$14,360	
2040	SR 76	I-15	Couser Canyon	2C	4C/6C+Operational	\$130	\$14,490	
2040	SR 94	I-805	College Ave	8F	8F+2ML	\$220	\$14,710	
2040	SR 94	College Ave	SR 125	8F	8F+2ML	\$230	\$14,940	
2040	SR 125	SR 94	I-8	10F	10F+2ML	\$70	\$15,010	
2040	I-805	Mission Valley Viaduct		8F	8F+4ML	\$610	\$15,620	
2040	I-805/ SR 52	West to North & South to East (HOV Connectors)					\$90	\$15,710
2050	I-5	SR 905	Palomar St	8F	8F+2ML	\$95	\$15,805	
2050	I-5	SR 54	I-15	8F	10F+2ML	\$165	\$15,970	
2050	I-5	I-15	I-8	8F	8F+Operational	\$1,130	\$17,100	
2050	I-5	I-8	La Jolla Village Dr	8F/10F	8F/10F+2ML	\$530	\$17,630	
2050	I-5	Vandegrift Blvd	Orange County	8F	8F+4T	\$754	\$18,384	
2050	I-8	I-5	I-15	8F	8F+Operational	\$440	\$18,824	
2050	I-8	2nd Street	Los Coches	4F/6F	6F	\$54	\$18,878	
2050	SR 15	I-5	SR 94	6F	8F+2ML	\$90	\$18,968	
2050	I-15	Viaduct		8F	8F+2ML	\$720	\$19,688	
2050	I-15	SR 78	Riverside County	8F	8F+4T	\$1,005	\$20,693	
2050	I-15/SR 52	West to North and South to East (HOV Connectors)					\$140	\$20,833
2050	I-15/SR 56	North to West (Freeway Connector)					\$100	\$20,933
2050	SR 52	I-5	I-805	4F	6F	\$110	\$21,043	
2050	SR 54	I-5	SR 125	6F	6F+2ML	\$100	\$21,143	

Table B.6
Phased Highway Projects - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2 (Cont.)

Conformity Analysis Year	Freeway	From	To	Existing	Improvements	(\$ Millions - 2010 Dollars)	
						Cost	Cumulative Cost
2050	SR 94	SR 125	Avocado Blvd	4F	6F	\$90	\$21,233
2050	SR 94	Avocado Blvd	Jamacha Rd	4C	6C	\$30	\$21,263
2050	SR 94	Jamacha Rd	Steele Canyon Rd	2C/4C	4C	\$20	\$21,283
2050	SR 125	SR 905	San Miguel Rd	4T	8F	\$110	\$21,393
2050	SR 125	San Miguel Rd	SR 54	4F	8F	\$60	\$21,453
2050	SR 125	SR 54	SR 94	6F	6F+2ML	\$100	\$21,553

KEY

C = Conventional Highway Lanes

MB = Movable barrier

T = Toll Lanes

F = Freeway Lanes

ML = Managed lanes (HOV & Value Pricing) TL = Transit Lanes

HOV = High Occupancy Vehicle Lanes

ML(R) = Managed lanes (Reversible)

* Project completed in two phases. See improvement from 8F to 8F+2HOV by 2025.

Note: All HOV lanes would convert to Managed Lanes by 2035 with an HOV occupancy of 3+ people.

Table B.7
Phased Transit Services - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2

Conformity Analysis Year	Service	Route	Description	Peak Headway (Minutes)	Off-Peak Headway (Minutes)
2015	COASTER	398	Double tracking/Increased Frequency between Oceanside and downtown San Diego with extension to Convention Center/Petco Park	20	Current
2015	Trolley	530	Green Line Extend to downtown – Bayside	15	15
2015	BRT	607	Rancho Bernardo – downtown Express	10	-
2015	BRT	608	Escondido – downtown Express	10	-
2015	BRT	610	Temecula (Peak Only)/Escondido – downtown	10	10
2015	BRT	628	South Bay BRT (Otay Mesa – downtown) via Otay Ranch/Millenia	15	-
2015	Rapid	15	Mid-City Rapid (SDSU – downtown) via Mid-City, El Cajon and Park Blvds	10	10
2015	Rapid	201/202	UTC Area Super Loop	10	15
2025	Trolley	510	Mid-Coast LRT Extension (peak frequencies 7.5 to downtown/15 to UTC)	7.5/15	15
2025	BRT	470	Escondido – UTC/UCSD via Mira Mesa Blvd	10	-
2025	BRT	680	Otay Mesa to Sorrento Mesa via I-805 Corridor, Otay Ranch/Millenia, National City, Southeastern San Diego, Kearny Mesa	15	15
2025	BRT	688	San Ysidro to Sorrento Mesa Express	15	-
2025	BRT	689	Millenia/Otay Ranch to UTC/Torrey Pines Express	15	-
2025	Rapid	350	Escondido to Del Lago via Escondido Blvd & Bear Valley	10	10
2025	Streetcar	554	Hillcrest/Balboa Park/downtown San Diego Loop	10	10
2025	BRT	90	Santee/El Cajon Transit Centers to downtown via SR 94	15	-
2025	BRT	640	I-5 - San Ysidro to downtown & Kearny Mesa via I-5 shoulder lanes/HOV lanes, downtown, Hillcrest, Mission Valley	15	15
2025	BRT	870	El Cajon to UTC via Santee, SR 52, I-805 (Peak only)	10	-
2025	Rapid	10	La Mesa to Ocean Beach via Mid-City, Hillcrest, Old Town	10	10
2025	Shuttle	448/449	San Marcos Shuttle	15	15
2025	Airport Express		I-5 from McClellan-Palomar Airport to San Diego International Airport	30	30
2025	Airport Express		I-15 from Escondido Transit Center to San Diego International Airport	30	30
2025	Airport Express		I-15 from Escondido Transit Center to Cross Border Facility	30	30
2025			Local Bus Routes - 15 minutes in key corridors	15	15

Table B.7
Phased Transit Services - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement program Amendment No. 2 (Cont.)

Conformity Analysis Year	Service	Route	Description	Peak Headway (Minutes)	Off-Peak Headway (Minutes)
2025	SPRINTER	399	Double tracking (Oceanside-Escondido) Increased Frequencies	10	10
2025	SPRINTER	588	SPRINTER Express	10	15
2025	Rapid	2	North Park to downtown San Diego via North Park, Golden Hill	10	10
2025	Rapid	709	H Street Trolley to Otay Ranch/Millenia via H Street Corridor, Southwestern College	10	10
2025	Rapid	910	Coronado to downtown via Coronado Bridge	10	10
2035	COASTER	398	Additional Double tracking/Increased Frequency	20	60
2035	Trolley	561	UTC to Mira Mesa via Sorrento Mesa/Carroll Canyon (extension of route 510)	7.5	7.5
2035	Trolley	520	Orange Line - Increased Frequency (existing 15/15)	7.5	15
2035	Streetcar	553	Downtown San Diego: Little Italy to East Village	10	10
2035	BRT	890	El Cajon to Sorrento Mesa via SR 52, Kearny Mesa	10	-
2035	Rapid	28	Point Loma to Kearny Mesa via Old Town, Linda Vista	10	10
2035	Rapid	30	Old Town to Sorrento Mesa via Pacific Beach, La Jolla, UTC	10	10
2035	Rapid	120	Kearny Mesa to downtown via Mission Valley	10	10
2035	Rapid	473	Oceanside to UTC via Hwy 101 Coastal Communities, Carmel Valley	10	10
2035	Trolley	520	Orange Line - Extend to Airport Intermodal Transit Center	7.5	15
2035	Streetcar	555	30 th St to downtown San Diego via North Park/Golden Hill	10	10
2035	Trolley	560	Mid-City to downtown (Phase 1) via El Cajon and Park Blvds	7.5	7.5
2035	Trolley	563	Pacific Beach to El Cajon via Clairemont, Kearny Mesa, Mission Valley, SDSU	7.5	10
2035	BRT	653	Mid-City to Palomar Airport Road via Kearny Mesa/I-805/I-5	15	-
2035	Rapid	11	Spring Valley to SDSU via Southeastern San Diego, Downtown, Hillcrest, Mid-City	10	10
2035	Rapid	201/202	UTC Area Super Loop - Increase Frequencies	10	10
2035	Rapid	471	Downtown Escondido to East Escondido	10	10
2035	Rapid	474	Oceanside to Vista via Mission Ave/Santa Fe Road Corridor	10	10
2035	Rapid	635	Eastlake/EUC to Palomar Trolley via Main Street Corridor	10	10
2035	Rapid	636	SDSU to Spring Valley via East San Diego, Lemon Grove, Skyline	10	10
2035	Rapid	637	North Park to 32nd Street Trolley via Golden Hill	10	10

Table B.7
Phased Transit Services - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Program Amendment No. 2 (Cont.)

Conformity Analysis Year	Service	Route	Description	Peak Headway (Minutes)	Off-Peak Headway (Minutes)
2035	Rapid	638	San Ysidro to Otay Mesa via Otay, SR 905 Corridor	10	10
2035	Shuttle	448/449	San Marcos - Increase Frequencies	10	10
2035			Local Bus Routes - 10 minutes in key corridors	10	10
2040	Trolley	520	Orange Line - Increased Frequencies	7.5	7.5
2040	Trolley	522	Orange Line Express - El Cajon to downtown San Diego	10	10
2040	Trolley	530	Green Line Extend to downtown - Bayside	7.5	7.5
2040	Trolley	540	Blue Line Express - UTC to San Ysidro via downtown	10	10
2050	Trolley	560	SDSU to downtown (Phase 2) via Mid-City, El Cajon and Park Blvds	7.5	7.5
2050	Trolley	562	UTC to San Ysidro via Kearny Mesa, Mission Valley, Mid-City, Southeastern San Diego, National City/Chula Vista via Highland Ave/4th Ave	7.5	10

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Table B.8
Phased Arterial Projects* - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2015	CB04A	Carlsbad	El Camino Real Widening - Tamarack Avenue to Chestnut Avenue	In Carlsbad, widen El Camino Real to prime arterial standards with three travel lanes, bike lanes and sidewalks in each direction including intersection improvements at Tamarack Avenue and Chestnut Avenue
2015	CB04B	Carlsbad	El Camino Real and Cannon Road	In Carlsbad, along the eastside of El Camino Real just south of Cannon Road widen to prime arterial standards with three through lanes, a right turn lane and a sidewalk approaching the intersection
2015	CB04C	Carlsbad	El Camino Real - Lisa Street to Crestview Drive	In Carlsbad, along the west side of El Camino Real, roadway widening to provide three southbound through lanes, curb, gutter and sidewalk per Prime Arterial standards
2015	CB12	Carlsbad	College Boulevard Reach A - Badger Lane to Cannon Road	In Carlsbad, from Badger Lane to Cannon Road, construct a new segment of College Blvd. to provide 4-lane roadway with raised median, bike lanes and sidewalks/trails in accordance with Major Arterial standards
2015	CB24	Carlsbad	College Boulevard and Palomar Airport Road - Intersection Improvements	In Carlsbad, at the intersection of College Blvd. and Palomar Airport Road, roadway widening along southbound College Blvd. to provide dual left turns, one thru lane, one shared thru/right turn lane and one right turn lane and to lengthen right turn lanes on the other approaches to the intersection
2015	CB26	Carlsbad	Melrose and Palomar Airport Road	In Carlsbad, at the intersection of Palomar Airport Road and Melrose Drive, roadway widening along southbound Melrose to provide an additional right turn lane to westbound Palomar Airport Road
2015	CB30	Carlsbad	El Camino Real – El Camino Real to Tamarack Avenue	In Carlsbad, at the intersection of El Camino Real and Tamarack Avenue construct a second left turn lane from El Camino Real to westbound Tamarack
2015	CHV08	Chula Vista	Willow Street Bridge Project - Bonita Road to Sweetwater Road	Replace and widen bridge including shoulders
2015	CHV20	Chula Vista	North Fourth Avenue and Brisbane Street	Add additional lane on east side of Fourth Avenue
2015	CNTY14	San Diego County	South Santa Fe Avenue North - Montgomery Drive to South of Woodland Drive	Vista City limits to 700 feet south of Woodland - reconstruct and widen from 2 to 4 lanes including bicycle lane
2015	CNTY21	San Diego County	Bradley Avenue Overpass at SR 67 - Magnolia Avenue to Mollison Avenue	Widen Bradley Avenue including the SR 67 overpass from 2 to 4 lanes plus sidewalks

* The arterials listed in this table reflect locally initiated projects that were submitted by local jurisdictions in the 2012 Regional Transportation Improvement Program.

**Table B.8
Phased Arterial Projects - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2(Cont.)**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2015	CNTY35	San Diego County	Ramona Street Extension - Boundary Avenue to Warnock Drive	In the community of Ramona, construct new road extension, 2 lanes with intermittent turn lanes, bike lanes and walkway/pathway
2015	CNTY36	San Diego County	San Vicente Road Improvements - Warnock Drive to Wildcat Canyon Road	In Ramona, design and reconstruct road improvements, including 2-lane community collector road with intermittent turn lanes, bike lanes, asphalt concrete dike, and pathway/walkway
2015	CNTY39	San Diego County	Bear Valley Parkway North - San Pasqual Valley Road to Boyle Avenue	Widen from 2 to 4 lanes, with a center median, a bike lane and shoulder in each direction of travel
2015	CNTY76	San Diego County	Jamacha Blvd (Phase 1 and 2) - Omega Street to Sweetwater Spring Boulevard	In unincorporated Spring Valley, the current funds programmed are for Phase 1 - between Omega Street and Spring Valley Glen, widen from 2-lane to 4-lane roadway with bicycle and pedestrian improvements
2015	ESC02	Escondido	Bear Valley/East Valley/Valley Center - Citrus Avenue to Beven Drive	Realignment and widening from 2 to 4 lanes
2015	ESC04	Escondido	Citracado Parkway II - West Valley to Harmony Grove	Widen from 2 to 4 lanes with raised medians, construct bridge over Escondido Creek
2015	ESC06	Escondido	El Norte Parkway Bridge at Escondido Creek - Kaile Lane to Key Lime Way	Construct missing 2-lane bridge at Escondido Creek
2015	ESC24	Escondido	Centre City Parkway - Mission Road to SR 78	Widen 4 lanes to 6 lanes with intersection improvements
2015	ESC25	Escondido	Citracado/Nordahl - Country Club Lane to SR 78	Widen from 4 lanes to 6 lanes with double left turn lanes and exclusive right turn lanes
2015	LG13	Lemon Grove	Street Improvements (Congestion Relief)	Lemon Grove Avenue Realignment Project: A key project in the redevelopment of the city's downtown Village Specific Plan, this project improves access to and from SR 94, reducing motorist delays and emissions, while greatly enhancing the visual appeal of the block adjacent to the trolley station.
2015	SD34	San Diego	El Camino Real	In San Diego on El Camino Real from San Dieguito Road to Via de la Valle - reconstruct and widen from 2 to 4 lanes and extend transition lane and additional grading to avoid biological impacts (CIP 52-479.0)

**Table B.8
Phased Arterial Projects - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2(Cont.)**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2015	SD70	San Diego	West Mission Bay Drive Bridge	In San Diego, replace bridge and increase from 4- to 6-lane bridge including Class II bike lane (52-643)
2015	SD90	San Diego	SR 163/Clairemont Mesa Boulevard Interchange	In San Diego, widen from 4- to 6-lane prime arterial; Phase II of the project - west ramps (CIP 52-745.0)
2015	SD103	San Diego	I-5/Genesee Avenue Interchange	In San Diego, replace Genesee Avenue over crossing from 4-lane bridge with 6-lane bridge; construct auxiliary lanes and replace Voigt Drive bridge; add additional lane at on/off ramp to Sorrento Valley Rd.; add one carpool lane and one general purpose lane to on ramp from Sorrento Valley Road to southbound I-5; install ramp meters at on ramp and construct a southbound auxiliary lane between Sorrento Valley Road and Genesee Avenue
2015	SD133	San Diego	Mira Sorrento Place	Mira Sorrento Place from Scranton Road to Vista Sorrento Parkway in San Diego widen the existing 2-lane 560-foot portion of Mira Sorrento Place (40-foot road width, 55-foot right of way) to a 4-lane collector (72-foot road width, 92-foot right of way), and extend the road to intersect with Vista Sorrento Parkway at the existing on/off ramps to I-805
2015	SM25	San Marcos	Borden Road Street Improvements and Bridge Construction - Twin Oaks to Woodward Street	Construction of approximately 700 lineal feet of a new 4-lane secondary arterial including a bridge
2015	SM31	San Marcos	Discovery Street Improvements - McMahr Rd to Bent Avenue/Craven Road	Widen roadway to 4-lane secondary arterial
2015	SM32	San Marcos	Via Vera Cruz Bridge and Street Improvements - San Marcos Boulevard to Discovery Street	Widen to 4-lane secondary arterial and construct a bridge at San Marcos Creek
2015	SM44	San Marcos	Eastbound SR 78 Auxiliary lane - Woodland Parkway to Nordahl Road	Construct auxiliary lanes along eastbound SR 78 between Woodland Parkway Interchange and Nordahl Road Interchange; includes widening of Mission Road undercrossing
2015	SM48	San Marcos	Creekside Drive	Construct approximately 3,000 feet of a 2-lane collector road from Via Vera Cruz to Grand Avenue in the City of San Marcos. The road will include two 12-foot lanes, diagonal parking on the north side, and parallel parking on the south side. In addition, the project also will include a 10-foot bike trail meandering along the south side.

**Table B.8
Phased Arterial Projects - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2(Cont.)**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2015	VISTA08A	Vista	W. Vista Way - Emerald Drive to Grapevine Road	The scope of this project is to provide right of way acquisition and construction for the widening of W. Vista Way a distance of 1,500 feet from the intersection with Emerald Drive to the intersection with Grapevine Road
2025	CB13	Carlsbad	Poinsettia Lane Reach E - Cassia Drive to Skimmer Court	In Carlsbad, from Cassia Drive to Skimmer Court, construct a new 4-lane roadway with median, bike lanes, and sidewalks/trails to major arterial standards
2025	CB22	Carlsbad	Avenida Encinas - Widen from Palomar Airport Road to EWPCF	In Carlsbad, Avenida Encinas from Palomar Airport Road southerly to existing improvements adjacent to the EWPCF, roadway widening to Secondary Arterial standards
2025	CB32	Carlsbad	El Camino Real Widening - Cassia to Camino Vida Roble	In Carlsbad, widen El Camino Real from 900 feet north of Cassia Road to Camino Vida Roble, along the northbound side of the roadway to provide three travel lanes and a bike lane in accordance with Prime Arterial standards
2025	CB31	Carlsbad	El Camino Real – La Costa Avenue to Arenal Road	In Carlsbad along El Camino Real from 700 feet north of La Costa Avenue to Arenal Road, widening along the southbound side of the roadway to provide three travel lanes and a bike lane in accordance with Prime Arterial Standards
2025	CB33	Carlsbad	Palomar Airport Road and El Camino Real Right Turn Lane	In Carlsbad, widening along eastbound Palomar Airport Road to provide a dedicated right turn lane to southbound El Camino Real
2025	CB34	Carlsbad	Palomar Airport Road - Palomar Airport Road to Paseo Del Norte	In Carlsbad widening along eastbound Palomar Airport Road to provide a dedicated right turn lane to southbound Paseo Del Norte
2025	CB35	Carlsbad	Palomar Airport Road - Palomar Airport Road to Paseo Del Norte	In Carlsbad lengthen the left turn pocket along eastbound Palomar Airport Road to northbound Paseo Del Norte
2025	CNTY24	San Diego County	Cole Grade Road - North of Horse Creek Trail to South of Pauma Heights Road	Widen to accommodate 14-ft traffic lane in both direction, 12-ft center 2-way left turn, 6-ft bike lane & 10-ft pathway
2025	CNTY34	San Diego County	Dye Road Extension - Dye Road to San Vicente Road	In Ramona, study, design and construct a 2-lane community collector road with intermittent turn lanes, bike lanes, curb, gutter, and pathway/walkway

**Table B.8
Phased Arterial Projects - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2(Cont.)**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2025	ENC31	Encinitas	I-5/Encinitas Boulevard Interchange Modification	Modify interchange to improve safety and alleviate congestion (design only)
2025	ESC02A	Escondido	East Valley/Valley Center	Widen roadway from 4 to 6 lanes with raised medians and left turn pockets; modify signal at Lake Wohlford and Valley Center Road; widen bridge over Escondido Creek
2025	ESC08	Escondido	Felicita Avenue/ Juniper Street - from Escondido Boulevard to Juniper Street and from Juniper Street to Chestnut Street	Widen from 2 to 4 lanes with left turn pockets, raised medians on Felicita; new traffic signals at Juniper and Chestnut, Juniper and 13th Avenue, Juniper and 15th Avenue; modify traffic signal at Juniper and Felicita
2025	ESC09	Escondido	Ninth Avenue – La Terraza Boulevard to Spruce Street	Widen from 2 to 4 lanes with raised median and modify traffic signals at Ninth Avenue and Tulip Street - design phase
2025	NC01	National City	Plaza Boulevard Widening	Widen from 2 to 3 lanes including a new traffic lane in each direction, new sidewalks, sidewalk widening, traffic signal upgrades and interconnection
2025	O06	Oceanside	Melrose Drive	Extension in Oceanside, future construction of 4-lane arterial highway with medians, sidewalks and bike lanes
2025	O26	Oceanside	SR 76 & Rancho Del Oro Boulevard	Widen SR 76 for one additional lane width 1,500 feet west and east of Rancho del Oro Boulevard
2025	SD83	San Diego	SR 163/Friars Road Interchange Modification	Friars Road from Avenida de las Tiendas to Mission Center Road widen and improve Friars Road and overcrossing; reconstruct interchange including improvements to ramp intersections (Phase 1). Construct new connector roadways and structures (Phase 2). Construct auxiliary lanes along northbound and southbound SR 163 (Phase 3)
2025	SD102A	San Diego	Otay Truck Route Widening	On Otay Truck Route in San Diego from Drucker Lane to La Media, add one lane (total 3 lanes) for trucks; from Britannia to La Media, add one lane for trucks and one lane for emergency vehicles (Border Patrol/fire department access); along Britannia from Britannia Court to the Otay Truck Route - add one lane for trucks
2025	SM19	San Marcos	Grand Avenue Bridge	In San Marcos, construct 4-lane arterial; between Bent Avenue to Discovery Street construct 6-lane arterial
2025	SM22	San Marcos	South Santa Fe - Bosstick to Smilax	Widen and realign existing road to 4-lane secondary arterial standards

**Table B.8
Phased Arterial Projects - 2050 Regional Transportation Plan Revenue Constrained Plan and
Regional Transportation Improvement Program Amendment No. 2 (Cont.)**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2025	SM24	San Marcos	Woodland Parkway Interchange Improvements – La Moree Road to Rancheros Drive	Modify existing ramps at Woodland Parkway and Barham Drive; widen and realign Barham Drive to accommodate a new eastbound SR 78 on-ramp; widen and realign SR 78 undercrossing and associated work
2025	SM30	San Marcos	San Marcos Boulevard Street Improvements - Rancho Santa Fe to Bent Avenue	Widen road to a 6-lane prime arterial
2025	SM42	San Marcos	Street Improvements: Discovery Street - Craven Road to West of Twin Oaks Valley Road	In the City of San Marcos, on Discovery Street from Craven Road to west of Twin Oaks Valley Road, construct approximately 5,100 lineal feet of a new 6-lane roadway
2025	SM43	San Marcos	Barham Drive - Twin Oaks Valley Road to La Moree Road	In the City of San Marcos, on Barham Drive between Twin Oaks Valley Road and La Moree Road, widen and reconstruct the north side of Barham Drive to a 6-lane prime arterial and associated work
2025	CNTY14A	San Diego County	South Santa Fe Avenue South - South of Woodland Drive to Smilax Road	Widening of South Santa Fe Avenue to a 5-lane major road with a center left turn lane, curb, gutter, sidewalk, bike lanes, and drainage improvements from 700 ft. south of Woodland Dr to Smilax Road
2025	O22	Oceanside	College Boulevard - Vista Way to Old Grove Road	In Oceanside, widen from the existing 4 lanes to 6 lanes with bike lanes and raised median
2025	O23	Oceanside	College Boulevard Bridge - San Luis Rey River	In Oceanside, widen from 4 to 6 lanes plus bike lanes and a striped-only median; widening includes the approach roadway and the bridge deck over the San Luis Rey River - Design Phase
2025	SD189	San Diego	Sea World Drive Widening and I- 5 Interchange Improvements	In San Diego, replace existing 4-lane bridge with an 8-lane bridge with new on/off ramps; widen approachways to add right turn lanes to improve access to I-5 (CIP 52-706.0)

**Table B.8
Phased Arterial Projects - 2050 Regional Transportation Plan Revenue Constrained Plan and
2012 Regional Transportation Improvement Program Amendment No. 2 (Cont.)**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2025	SD190	San Diego	Palm Avenue/ I-805 Interchange	<p>In San Diego, future widening of Palm Avenue Bridge including providing for repairs to the bridge approaches and abutments, installing sidewalks, signals, and striping</p> <ul style="list-style-type: none"> ▪ Phase I was work pertaining to re-striping to reconfigure travel lanes; no actual modifications to the physical geometry of the bridge took place ▪ Phase II of the project will widen the bridge on the north side; in addition to this the scope of work will also contain restriping of the lanes and modifications to the on/off ramps ▪ Phase III of the project will widen the bridge on the south side; in addition to this the scope of work will also contain restriping of the lanes and modifications to the on/off ramps ▪ Both Phase II and III will have environmental documentation prepared and all technical studies performed before entering into full design signage modifications: also modify freeway on and off ramps (CIP 52-640.0)
2025	SD81	San Diego	Genesee Avenue - Nobel Drive to SR 52	In San Diego, future widening to 6-lane major street north of Decoro Street and to a 6-lane primary arterial south of Decoro Street and included Class II bicycle lanes (CIP 52-458.0)
2035	SM10	San Marcos	SR 78/Smilax	Construct new interchange at Smilax Road interchange and SR 78 improvements

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Appendix C
GLOSSARY OF TERMS AND ACRONYMS

Appendix C

GLOSSARY OF TERMS AND ACRONYMS

A

AC	Advanced Construction
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
APCB	San Diego Air Pollution Control Board
APCD	San Diego Air Pollution Control District
ARB	California Air Resources Board
ARRA	American Recovery and Reinvestment Act
ATCDF	Average Train Crossing Delay Factor

B

BIA	Bureau of Indian Affairs
BIP	Border Infrastructure Program
BPWG	Bicycle-Pedestrian Working Group
BRT	Bus Rapid Transit
BTA	Bicycle Transportation Account

C

CAA	Clean Air Act
CAAA	1990 Clean Air Act Amendments
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBI	Corridors and Borders Infrastructure
CHP	California Highway Patrol
CI	Capacity Increasing
CIP	Capital Improvement Program
CMAQ	Congestion Mitigation and Air Quality Program
CMIA	Corridor Mobility Improvement Account
CO	Carbon Monoxide
CON	Construction Phase
CPI	Consumer Price Index
CTAC	Cities/County Transportation Advisory Committee
CTC	California Transportation Commission
CTC	Centralized Train Control
CWG	Conformity Working Group

D

DAR	Direct Access Ramp
DEFM	Demographic and Economic Forecasting Model
DEMO	Demonstration
DOT	U.S. Department of Transportation

E

EAP	Early Action Program
EMFAC	EMissions FACTors Model
EPA	U.S. Environmental Protection Agency
EPSP	Expedited Project Selection Process

F

FE	Fund Estimate
FHWA	Federal Highway Administration
FR	Federal Register
FRA	Federal Railroad Administration
FSP	Freeway Service Patrol or FSP Act
FSTIP	Federal State Transportation Improvement Program
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
FWG	Freight Working Group
FY	Fiscal Year

G

GARVEE	Grant Anticipation Revenue Vehicle
GIS	Geographic Information System

H

HBP	Highway Bridge Program
HCD	Housing and Community Development
HES	Hazard Elimination Safety
HIRE	Hiring Incentives to Restore Employment
HOV	High Occupancy Vehicle
HPMS	Highway Performance Monitoring System
HPP	High Priority Program
HRCSA	Highway-Railroad Crossing Safety
HRRR	High Risk Rural Roads
HSIP	Highway Safety Improvement Program
HUD	Housing and Urban Development

I

IIP	Interregional Improvement Program
IM	Interstate Maintenance
IRR	Indian Reservation Road
ITOC	Independent Taxpayer Oversight Committee
ITS	Intelligent Transportation System

J		
JARC	Jobs Access Reverse Commute	
JTOC	Joint Transportation Operations Center	
L		
LOS	Level of Service	
LOSSAN	Los Angeles to San Diego (Rail Corridor Agency)	
M		
MPO	Metropolitan Planning Organization	
MTS	Metropolitan Transit System	
N		
NAAQS	National Ambient Air Quality Standards	
NCI	Non Capacity Increasing	
NCTD	North County Transit District	
NEPA	National Environmental Protection Act	
NHS	National Highway System	
NOx	Nitrogen Oxide	
P		
P/PE	Preliminary Engineering Phase	
PADT	Person Average Daily Traffic	
PM	Particulate Matter	
POF	Plan of Finance	
POP	Program of Projects	
PPEI	Peak-Period Exposure Index	
PPNO	Project Number (Caltrans)	
PPP	Public Participation Plan	
PTA	Public Transportation Account	
PTMISEA	Public Transportation Modernization, Improvement, and Service Enhancement Account	
R		
RAQS	Regional Air Quality Strategy	
RAS	Regional Arterial System	
RCP	Regional Comprehensive Plan	
RHNA	Regional Housing Needs Assessment	
RHWG	Regional Housing Working Group	
RIP	Regional Improvement Program	
ROG	Reactive Organic Gas	
ROW	Right-of-Way	
RSTP	Regional Surface Transportation Program	
RTC	Regional Transportation Commission	
RTIP	Regional Transportation Improvement Program	
RTP	Regional Transportation Plan or Recreational Trails Program	
RTPA	Regional Transportation Planning Agency	

S

SAFETEA-LU	Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users
SANDAG	San Diego Association of Governments
SANTEC	San Diego Regional Traffic Engineers' Council
SB	Senate Bill
SCAT	Subcommittee for Accessible Transportation
SD&AE	San Diego and Arizona Eastern Railway
SHA	State Highway Account
SHOPP	State Highway Operation and Protection Program
SIP	State Implementation Plan (for air quality)
SLPP	State-Local Partnership Program
SOV	Single Occupant Vehicle
SR	State Route (as in SR 52 - State Route 52)
SRTS	Safe Routes to School Program
SS	Senior Services
STA	State Transit Assistance
STIP	State Transportation Improvement Program
STIP-IIP	State Transportation Improvement Program – Interregional Improvement Program
STIP-RIP	State Transportation Improvement Program – Regional Improvement Program (SANDAG)
STP	Surface Transportation Program
SWG	Stakeholders Working Group (Regional Planning)

T

T-1	Transportation T-tactic: Ridesharing
T-2	Transportation T-tactic: Transit
T-3	Transportation T-tactic: Bicycle
T-5	Transportation T-tactic: Traffic Improvement
TAP	Transit Access Point
TCI	Transit Capital Improvement
TCIF	Trade Corridor Improvement Fund
TCM	Transportation Control Measure
TCRP	Traffic Congestion Relief Program
TCSP	Transportation, Community, and Systems Preservation
TDA	Transportation Development Act
TDM	Transportation Demand Management
TE	Transportation Enhancement
TEA-21	Transportation Equity Act for the 21 st Century
TIF	Transportation Investment Fund
TIGER	Transportation Investment Generating Economic Recovery
TIGGER	Transit Investment for Greenhouse Gas Emission Reduction
TIP	Transportation Improvement Program
TPEC	Transportation Project Evaluation Criteria
TransCAD	Transportation Planning Computer Package
<i>TransNet</i>	San Diego Region ½ cent Local Transportation Sales Tax Program
TSM	Traffic Systems Management
TWG	Technical Working Group

U

UCSD	University of California – San Diego
UTC	University Town Center

V

VMT	Vehicle Miles of Travel
VOC	Volatile Organic Compounds

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TRANSPORTATION COMMITTEE

May 17, 2013

AGENDA ITEM NO.: **6**

Action Requested: RECOMMEND

FY 2014 TRANSPORTATION DEVELOPMENT ACT
PRODUCTIVITY IMPROVEMENT PROGRAM

File Number 3320100

Introduction

The Transportation Development Act (TDA) provides one-quarter percent of the state sales tax for operating and capital support of public transportation systems and non-motorized transportation projects. SANDAG, as the designated Regional Transportation Planning Agency, is responsible for the allocation of TDA funds to the region's cities, the County, and transit operators.

Recommendation

The Transportation Committee is asked to recommend that the Board of Directors find that Metropolitan Transit System (MTS) and North County Transit District (NCTD) made a reasonable effort to implement productivity improvements during FY 2013.

Pursuant to California Public Utilities Code Section 99244, an operator can be allocated no more in FY 2014 than it was allocated in FY 2013 unless SANDAG determines that the operator made a reasonable effort to implement the productivity improvement recommendations adopted by the Board of Directors for the current fiscal year. This reasonable effort is determined through the evaluation of three-year trend data.

Discussion

Productivity Improvement Recommendations

The Productivity Improvement Program includes all of the performance measures explicitly stated in the state TDA Guidebook Section 99246(d). Additionally, SANDAG tracks multiyear trend analysis since it is recognized that steps taken by the transit agencies to improve system performance often take several years to be fully realized. The Productivity Improvement Program for FY 2013 included the evaluation of the following TDA performance measures within a three-year (13 quarter; Quarter 2 FY 2010 to Quarter 2 FY 2013) period:

- Operating Cost Per Passenger (adjusted for annual inflation) – measures cost-effectiveness
- Operating Cost Per Revenue Hour (adjusted for annual inflation) – measures cost-efficiency
- Passengers Per Revenue Hour – measures service productivity
- Passengers Per Revenue Mile – measures service productivity
- Revenue Hours Per Employee – measures labor productivity
- Farebox Recovery Ratio – measures service cost-efficiency¹

¹ Based on the state TDA Guidebook Sections 6633.2 and 6633.5, this measure includes the evaluation of the last four quarters of available data (Quarter 2 of FY 2012 through Quarter 2 of FY 2013).

These performance indicators are measured separately for fixed-route services (MTS Trolley, MTS Bus, NCTD SPRINTER, NCTD COASTER, and NCTD BREEZE Bus) and Americans with Disabilities Act of 1990 (ADA) Paratransit services (MTS ADA and NCTD ADA).

The indicators help determine if the agency is obtaining the desired results from the system and if overall performance is improving based on updated regional strategies or service operation plans. These indicators are reviewed quarterly by the Regional Short Range Transit Planning Task Force. These indicators also help the transit agencies determine where improvements can be made. These improvements can be incorporated into each operator's Service Implementation Plan, which are included in the Coordinated Public Transit – Human Services Transportation Plan prepared by SANDAG.

Performance trends were evaluated in FY 2013 to determine whether the transit agencies improved their performance in light of external circumstances (e.g., fuel prices and reduced state funding levels for transit). To facilitate a greater understanding of each individual service (MTS Bus, MTS Paratransit, MTS Trolley, NCTD Breeze, NCTD COASTER, NCTD SPRINTER, and NCTD Paratransit), a composite index of the six TDA performance measures is included in the Productivity Improvement Program to help determine overall trends.

Attachment 1 includes a chart of each of the six performance indicators, as well as the composite evaluation of each service from Quarter 2 of FY 2010 to Quarter 2 of FY 2013. The overall composite charts are followed by charts that specifically illustrate the percent change through the reporting period as discussed below.

MTS FY 2013 Performance

The results of the Quarter 2 FY 2010 to Quarter 2 FY 2013 MTS performance trend analysis indicate that:

- *MTS Trolley* performance declined by 6 percent based on the Quarter 2 FY 2010 to Quarter 2 FY 2013 analysis period. One reason for the decline was a rise in operating costs attributed to schedule impacts from the Trolley Renewal project, as well as enhancements to security on the system. Additionally, due to the slight decline in ridership (3 percent), the cost to operate Trolley service per passenger was higher since the operating cost was spread out over fewer passengers. Total fare revenues increased by 15 percent however, a sign that the margin of error from the current ridership estimates may cause anomalous relationships between indicators. SANDAG and MTS are working collaboratively on a new ridership estimation program to improve accuracy. Additionally, labor productivity, measured by Revenue Hour per Employee, has improved dramatically over the three-year analysis period with a 27 percent increase. The Trolley farebox recovery rate remained stable, resulting in a recent four-quarter average of 54 percent.
- *MTS Bus* overall performance declined slightly by 1 percent through the analysis period. Factors contributing to the decline in performance included overall drops in productivity measured by a 2 percent decrease in Passengers per Revenue Hour and a 7 percent decrease in Passengers per Revenue Mile. In the same period, MTS made the decision to add service to mitigate overloaded buses and pass-ups which increased the hours and miles operated but contributed to the decline in passengers per revenue hour operated. With improved operating costs (down 4 percent) and a generally steady ridership base, overall MTS Bus is providing increased service (increased revenue miles and hours) on a tighter operating budget.

- *MTS ADA* overall performance declined slightly by 1 percent over the past analysis period. Ridership, revenue miles, and revenue hours increased throughout this reporting period (Quarter 2 of FY 2010 to Quarter 2 FY 2013), raising operating costs. Also, MTS changed the method for allocating administrative costs to more accurately reflect the higher overhead required for ADA services. Prior to FY2011, administrative costs were allocated by the number of passengers. However, because of the small passenger volume on paratransit services, this calculation did not accurately reflect the effort required to operate these services. The methodology for allocation was changed to use revenue miles, rather than passengers, creating a more equitable cost distribution between paratransit and fixed-route services. While the farebox recovery ratio for ADA service decreased by 2 percent to 14 percent for the three-year analysis, it remains above the annual average of 12 percent.

MTS Farebox Recovery Rates exceeded the minimum TDA requirements for fixed-route and ADA paratransit services. TDA requirements include a minimum annual farebox recovery of: 31.9 percent for fixed-route rail and bus (41.8 percent was achieved); 20.0 percent for Premium Express (46.9 percent achieved); and 10 percent for MTS ADA services (12.1 percent was achieved).

NCTD FY 2013 Performance

The results of the Quarter 2 FY 2010 to Quarter 2 FY 2013 NCTD performance trend analysis indicate that:

- *NCTD COASTER* overall performance increased by 5 percent during the analysis period. Contributing factors to the COASTER's positive performance are measured by increases in ridership, revenue miles, and revenue hours. Additionally, though operating costs increased by nine percent, total fare revenue increased by 17 percent despite the passenger fare reductions which took place in Quarter 3 FY 2011. The COASTER experienced steady gains in four of the six performance indicators, while Revenue Hour per Employee decreased by 28 percent and the farebox recovery ratio declined by 3 percent.
- *NCTD SPRINTER* performance improved by 2 percent over the last 13 quarters. The SPRINTER performance improvement was primarily due to increased passengers (37 percent), revenue hours and revenue miles, and fares. This yielded improvements in cost-effectiveness and productivity. Farebox recovery also was up 2 percent in the three-year analysis period landing at 21 percent, just slightly above the one-year average of 19 percent.
- *NCTD BREEZE* overall improved by 2 percent during the analysis period. Substantial gains in cost-effectiveness (Operating Cost per Passenger and Revenue Hour) were slightly offset by minor reductions in productivity (Passengers per Revenue Hour and Revenue Mile). BREEZE farebox recovery has improved by 2 percent over the last three years. Labor productivity held constant from the Quarter 2 FY 2010 to the Quarter 2 FY 2013.
- *NCTD ADA* service improved by 5 percent over the analysis period. This was the result of significant improvements in cost-effectiveness and productivity based on increased passengers (21 percent), declining operating costs (down 4 percent), and increased fare revenues (9 percent).

- *NCTD Farebox Recovery* minimum TDA requirements were exceeded for fixed-route and ADA paratransit services. TDA requirements include a minimum annual farebox recovery of: 18.8 percent for fixed-route (24.9 percent was achieved); and 10 percent for ADA (15.5 percent was achieved) services.

FY 2013 Productivity Improvement Program

Based on the results discussed above, the conclusion of the performance analysis is that both MTS and NCTD have made reasonable efforts toward achieving their FY 2013 productivity recommendations. Though MTS showed a slight decline in overall performance due in part by rising operating costs for system upgrades, service restoration/expansion, and security enhancements, the operator has made reasonable efforts to implement productivity improvements. Additionally, as system improvements continue to be made (which include increased frequencies, restored routes, station/stop enhancements, etc.), an increase in general service performance is anticipated to be seen in future reporting. As is typical with significant transit service enhancements, a period of 6-12 months after implementation is expected before improvements reach their productivity goals; however, review of all data and procedures suggests that MTS is on target to achieve its FY 2013 productivity recommendations. Additionally, as part of its Policy 42 process for system and route evaluation, MTS reviews all of its services quarterly and annually, with an emphasis on identifying potential changes that would increase ridership and productivity. NCTD is currently implementing an operations analysis (Mobility Plan) that will be reflected in next year's Productivity Improvement Program results.

TDA Triennial Audit Recommendations

In addition to the three-year performance monitoring associated with the annual TDA claim, the triennial performance audit included the development of improvement recommendations for the transit agencies. The most recent performance audit completed in April 2010 included some recommendations on possible strategies to improve efficiency and effectiveness for both transit operators. These recommendations and the associated MTS and NCTD action plans to implement them (from Form B of the 2013 TDA Claim) were updated by MTS and NCTD and are included in Attachments 2 and 3, respectively. SANDAG staff will bring the recommendations generated from the FY 2010 to FY 2012 triennial performance audit (report to be completed in late May 2013) to the Transportation Committee for approval in June 2013. The new recommendations will be included in the Form B of the 2014 TDA Claim and will be included as an attachment in the FY 2015 TDA Productivity Improvement Program.

CHARLES "MUGGS" STOLL

Director of Land Use and Transportation Planning

- Attachments:
1. FY 2013 Productivity Improvement Results
 2. MTS Annual TDA Claim Form (Form B)
 3. NCTD Annual TDA Claim Form (Form B)

Key Staff Contact: Brian Lane, (619) 699-7331, brian.lane@sandag.org

FY 2013 Productivity Improvement Results Composite Evaluation

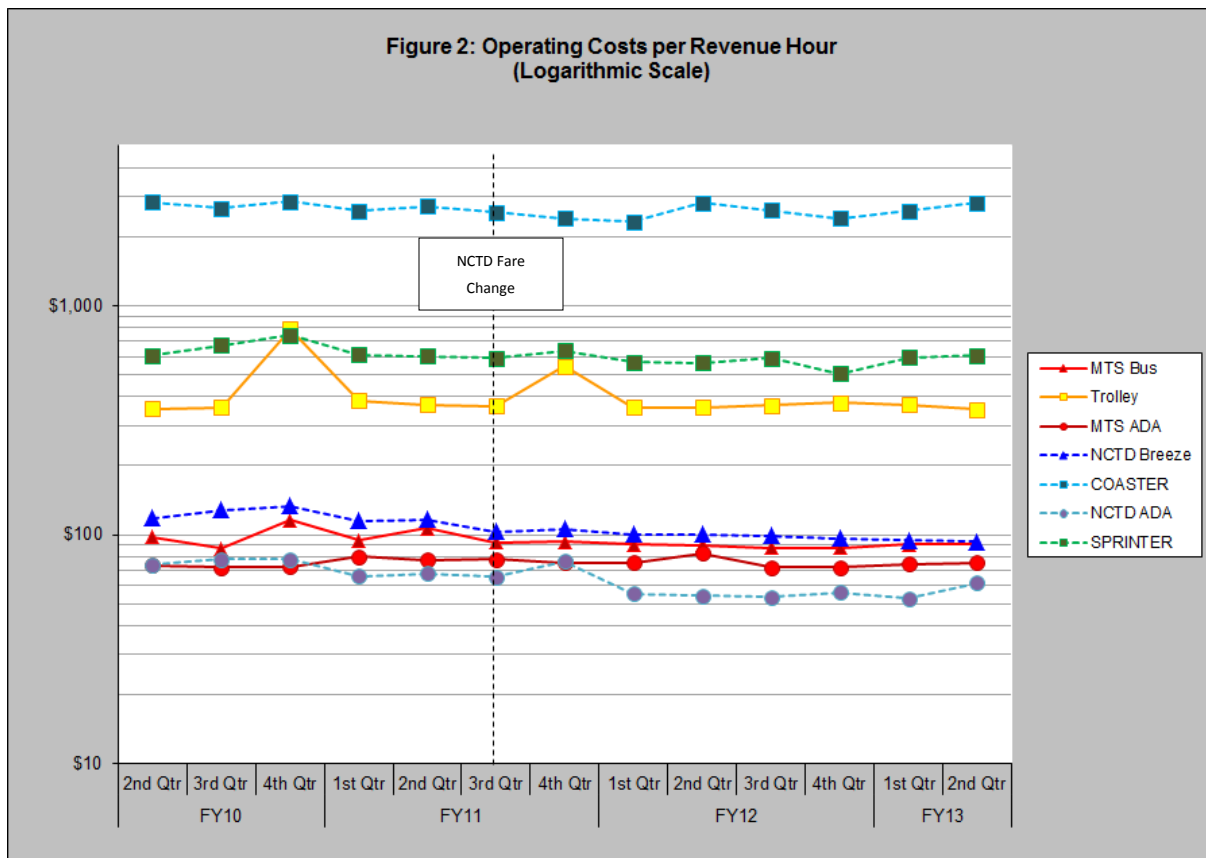
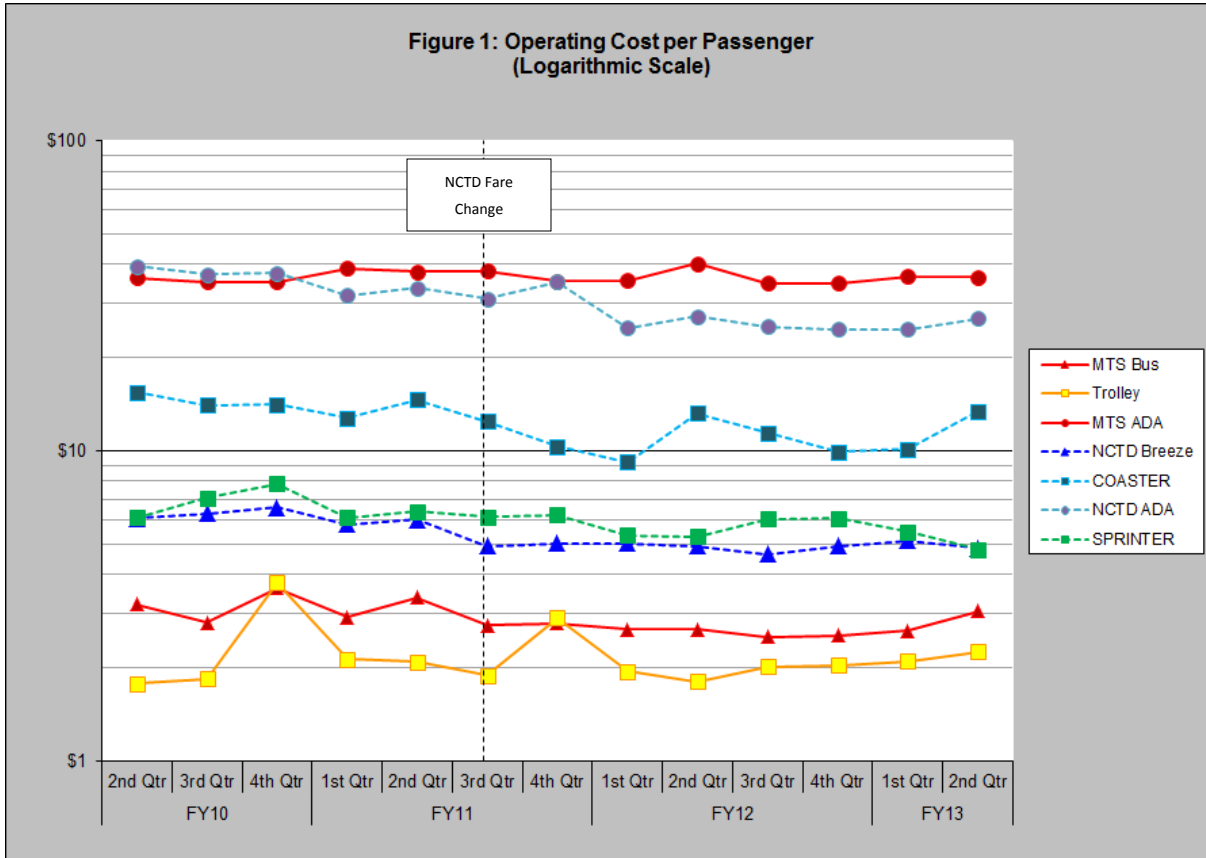


Figure 3: Passengers per Revenue Hour

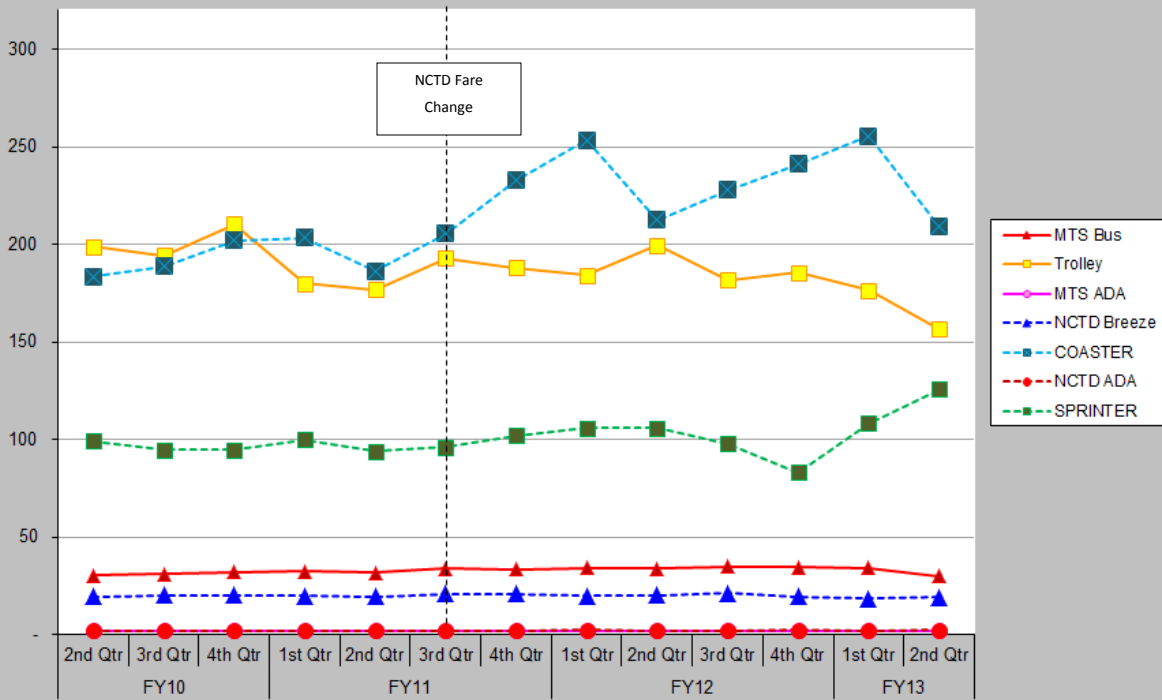


Figure 4: Passengers per Revenue Mile

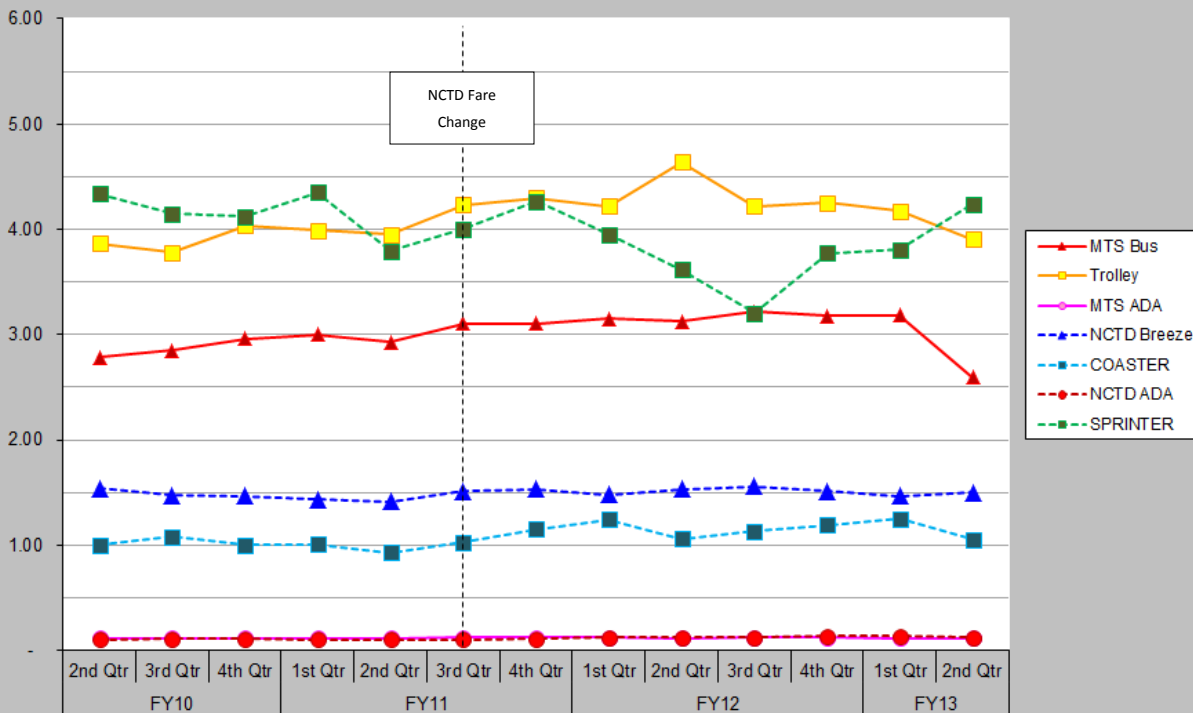


Figure 5: Revenue Hours per Employee (Logarithmic Scale)

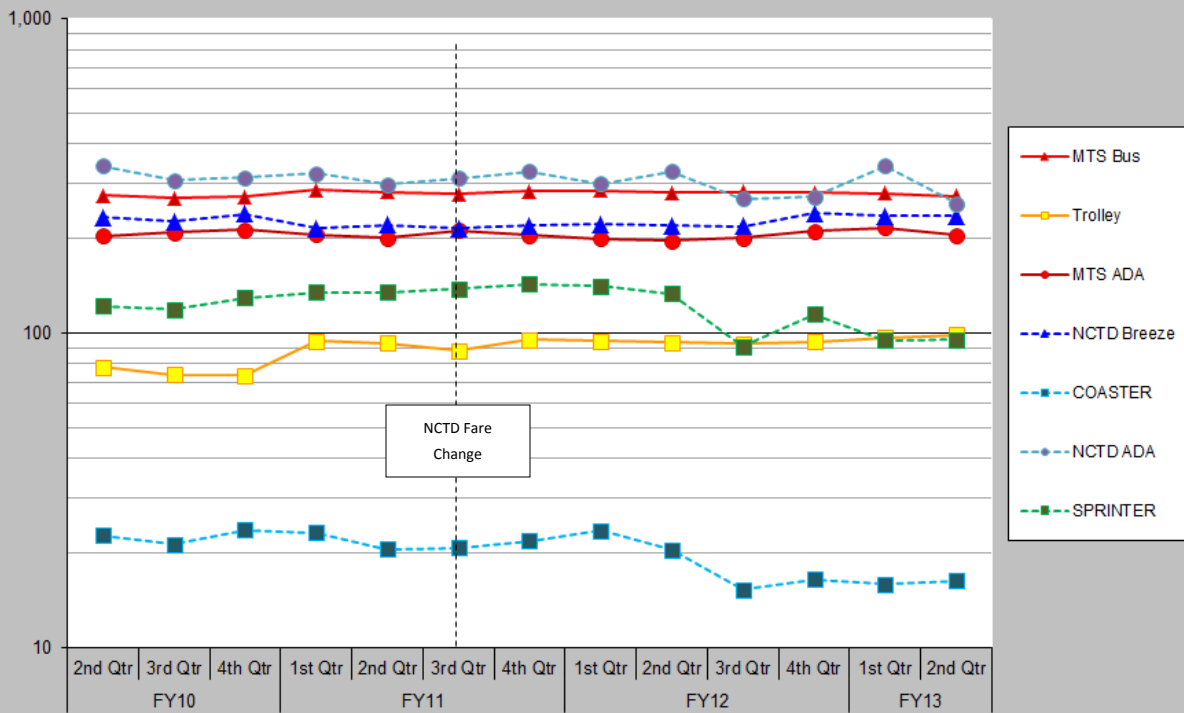


Figure 6: Farebox Recovery Rate

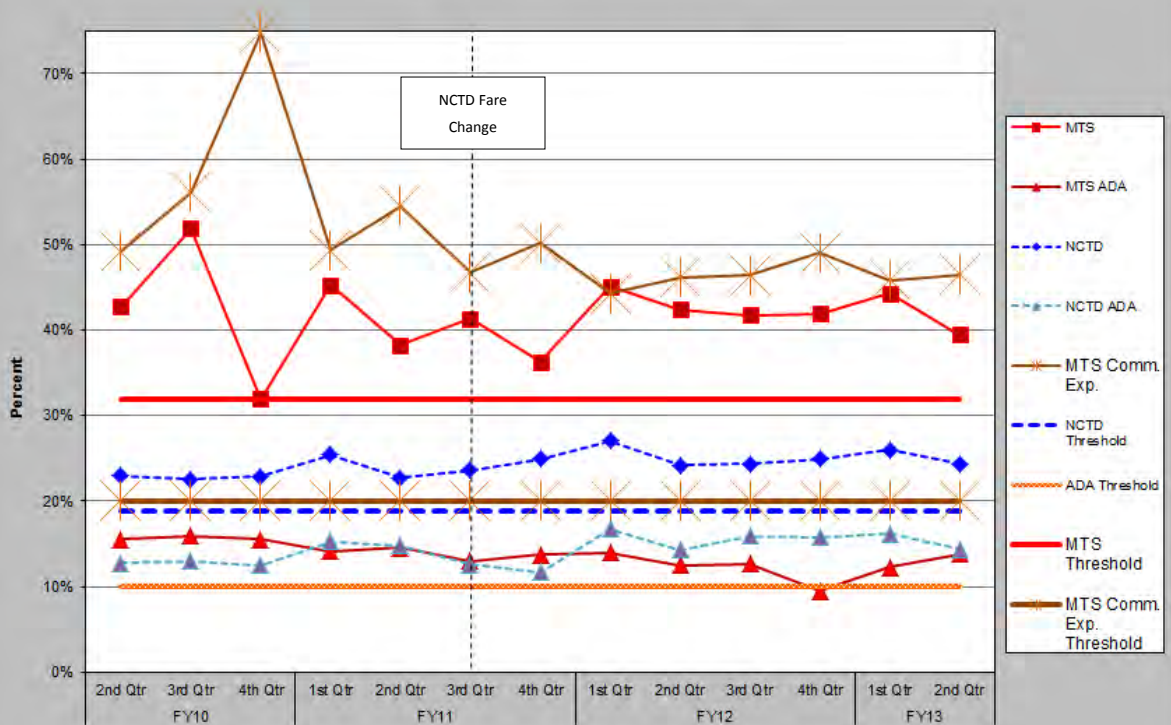


Figure 7: Fixed Route TDA Performance Composite Index

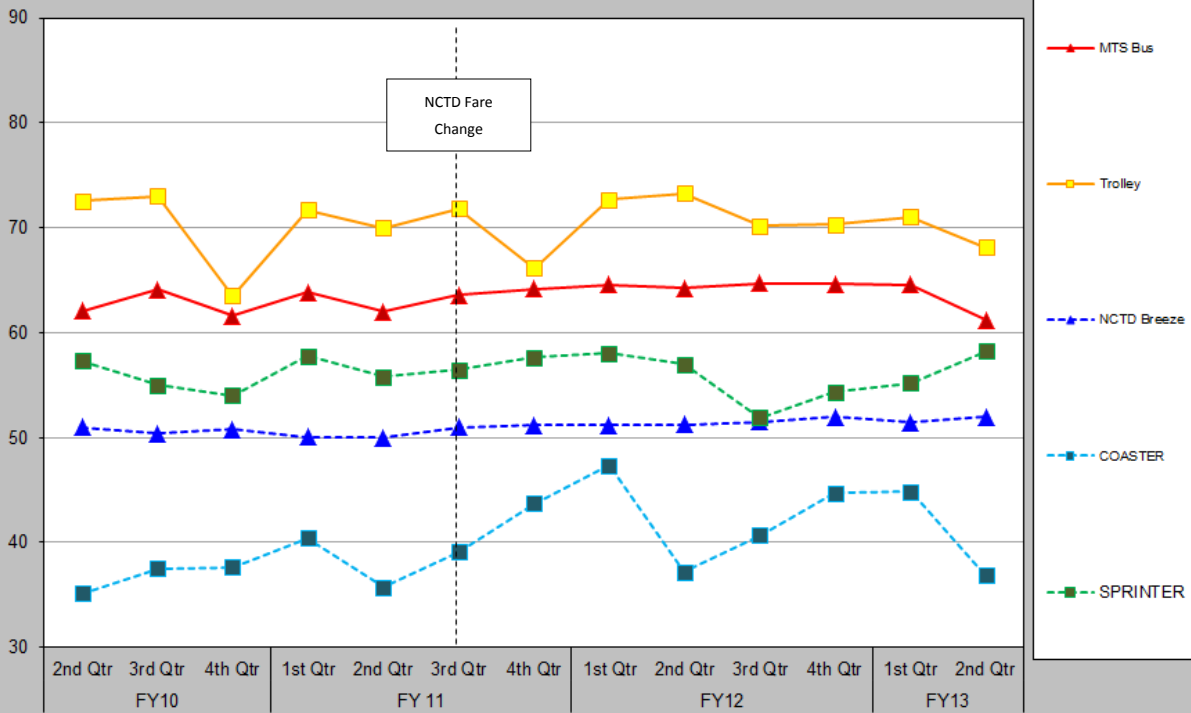


Figure 8: Fixed Route TDA Performance Composite Index - Percent Change

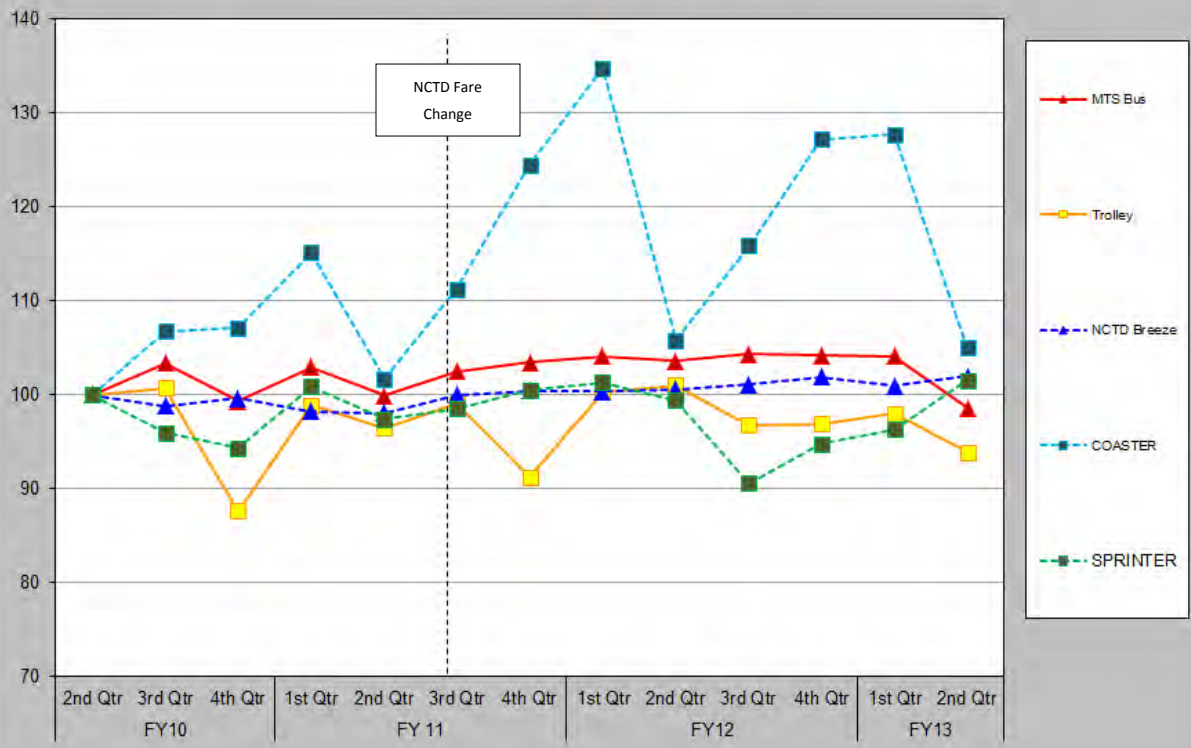


Figure 9: ADA TDA Performance Composite Index

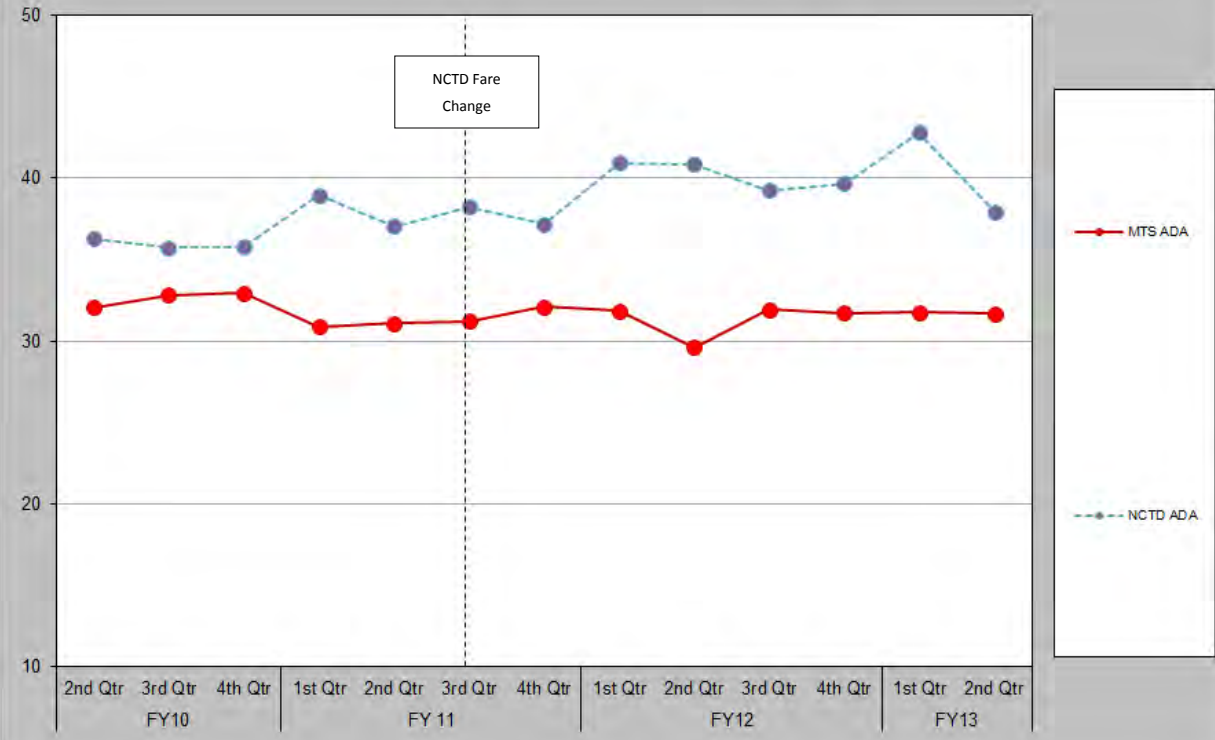
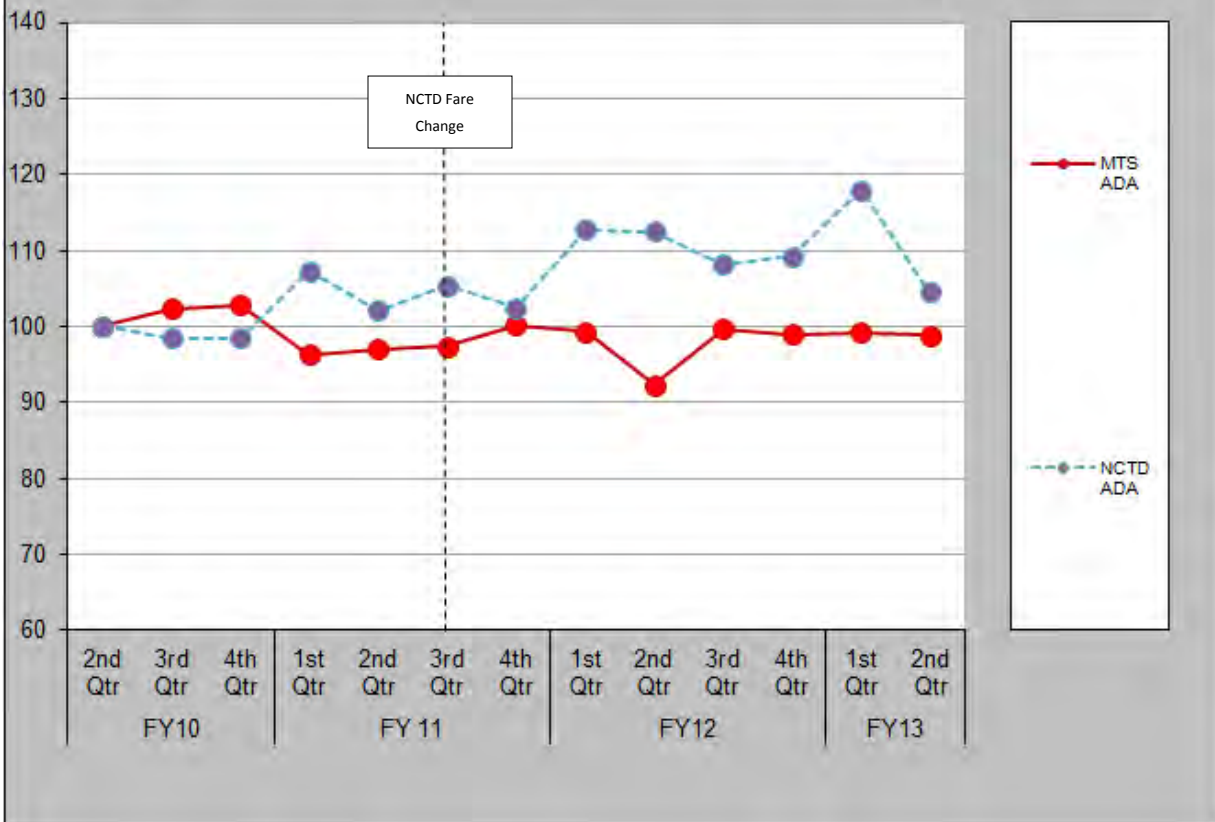


Figure 10: ADA TDA Performance Composite Index - Percent Change



ANNUAL TDA CLAIM FORM

Form B

STATEMENT OF EFFORTS MADE TO IMPLEMENT PERFORMANCE AUDIT RECOMMENDATIONS

SANDAG Staff Member: Brian Lane Date Completed: April 22, 2013Operator: Metropolitan Transit System (MTS)Date of Last Performance Audit: April 15, 2010

Page	Performance Audit Recommendation(s)	Actions Taken to Implement Recommendations
36	1. MTS and Chula Vista Transit (CVT) should consider identifying a practice that would ensure that the data submitted in the State Controller's Reports for CVT equate to total revenues, costs and operating statistics for the CVT service.	<p>The State Controller's report is prepared by finance staff at the City of Chula Vista, not MTS. This information is prepared using the best information that they have available at the due date of the report (October 31). Normally, the City of Chula Vista's financial information is not complete until late December, so the information used to prepare the State Controller's report is typically incomplete at the time of submission.</p> <p>MTS staff has requested that the City of Chula staff do the following:</p> <ul style="list-style-type: none"> • Standardize report formatting similar to MTS for both the actual and budgeted figures. • Submit a copy of the State Controller's reports for CVT to MTS's Finance Department prior to submission to the State. • Provide a reconciliation of the City of Chula Vista State Controller's report to their audited financial statements to MTS within sixty days of the publication of the City of Chula Vista's Combined Annual Financial Report (CAFR).
37	2. MTS should work with SANDAG to verify the accuracy of performance data reported to SANDAG.	<p><u>MTS management response:</u></p> <p>Based on the previous TDA Triennial Audit recommendation, MTS and SANDAG revised their procedures for reporting data. The revised procedure includes reporting the data later in order to allow the data to be collected in its entirety and validated by MTS. This has resulted in fewer changes after the data has been transmitted to SANDAG. Changes made after transmittal are highlighted for transparency purposes.</p>

Page	Performance Audit Recommendation(s)	Actions Taken to Implement Recommendations
37	3. MTS should identify ways to maintain the cost-efficiency of MTS Trolley service.	<p>The draft audit report noted a formula error in the Full Time Equivalent section of the form. The fiscal year totals were off due to a minor calculation error. While the error caused an error in the rolled-up annual data, the quarterly data in the same report was correct. The spreadsheet has been corrected and the error will not be made in future reports.</p> <p>MTS Trolley has experienced an increase in operating cost per service hour and service mile over the previous audit period. The increased operating cost is due to a number of factors:</p> <ul style="list-style-type: none"> • Five minutes of travel time was added to the Blue Line at the end of FY 2006 in response to wheelchair lift delays and a limited wheelchair capacity on the U2 Light Rail Vehicle (LRV). The change in travel time required one additional train set, increasing the number of base period train sets from eight to nine. This change directly increased the cost per service hour and cost per service mile. • Prior to 2005, all Trolley operator reliefs were made at the Trolley yard, so there was no deadhead time for reliefs. The implementation of the Mission Valley East segment (as the Green Line) in FY 2006 required deadhead time to/from Old Town for operator reliefs. (travel between Old Town and the yard is 23 minutes). • In the first half of the audit period, MTS Trolley was understaffed in train operators and had a high percentage of overtime pay. MTS Trolley has corrected this and has a program in place to stay fully staffed in the future, including use of additional part time employees. Due to favorable conditions in the labor agreement, the agency reduces operating costs by increasing part time staff in order to decrease overtime. Part time operators are also frequently a more cost-effective choice when staffing for the many special events that occur in San Diego. Part time staff is also used for other needs such as extra revenue collection, outreach, or construction related wayside safety. • Due to the age of the Blue Line and parts of the Orange Line, MTS Trolley added some additional maintenance-of-way personnel during the audit period to increase track inspection and conduct more frequent tamping, rail grinding, and tie replacement. The Blue Line is over 30 years old and still has a number of miles of 90 lb. rail, worn rail in many of the curves, and very old ties.

Page	Performance Audit Recommendation(s)	Actions Taken to Implement Recommendations
		<p data-bbox="805 239 1500 302">MTS Trolley continues to strive to drive down costs. Some solutions under way:</p> <ul data-bbox="805 327 1500 940" style="list-style-type: none"> <li data-bbox="805 327 1500 428">• The Trolley Renewal program is replacing old rails, catenary wire, and vehicles, upgrading stations, and raising platforms to accommodate new low-floor LRVs. <li data-bbox="805 453 1500 655">• Though it occurred just outside the current audit period, in September 2012 MTS implemented a new operating plan for the Blue, Green, and Orange Lines. This plan will eliminate the extra train set on the Blue Line, the long turn time at San Ysidro, and the deadhead travel time for operator reliefs on the Green Line. <li data-bbox="805 680 1500 856">• MTS has been putting new S70US LRVs in service and retiring some of its oldest LRVs (U2s). The new LRVs have better performance, are more reliable, and can carry up to four times the wheelchairs without any time or intervention by the operator. <li data-bbox="805 882 1500 940">• MTS Trolley will continue to look at rules, policies, and procedures for ways to reduce cost.

Page	Performance Audit Recommendation(s)	Actions Taken to Implement Recommendations
37	4. MTS should develop a strategic plan for its provision of contracted services.	<p>California Assembly Bill 117 (Kehoe, 2003) restricted MTS' ability to contract services with an outside provider. The law essentially prohibits MTS from contracting service currently operated by San Diego Transit Corporation (SDTC). New services are not bound by the same restriction, so staff analyzes any new service to determine if the service should be operated in-house by SDTC or contracted out. The analyses include cost, location of the service and proximity to operations and maintenance facility bases, capability of the entity to expand service, type of vehicles used, fleet compatibility issues, etc. For example, the new SuperLoop service introduced in 2009 was assigned to MTS' in-house operation because its divisions were the closest to the service area, minimizing excessive deadhead. Also, the buses used were brand new technology for MTS (gasoline-hybrid electric power plants), and SDTC was better capable of introducing, monitoring, maintaining, and operating this new technology.</p> <p>Working within this restriction, MTS has driven down costs by consolidating much of its contracted fixed route and Rural operations under a single miles-based contract. In addition, reduction of contracted services that were unproductive such as the Scripps Ranch and Rancho Bernardo DART services, Rural service, and the Sorrento Valley Coaster Connection (also reported under DART in Form C) resulted in a reduced operating cost for the agency. These changes had little or no impact on ADA services.</p> <p>MTS will continue to seek ways to improve efficiency by reviewing its service operations to determine the best method for service delivery. Operations will be evaluated to determine when opportunities are available for contracting within the confines of AB 117.</p>

ANNUAL TDA CLAIM FORM

Form B

**STATEMENT OF EFFORTS MADE TO IMPLEMENT
PERFORMANCE AUDIT RECOMMENDATIONS**

SANDAG Staff Member: Laurie Gartrell Date Completed: April 17, 2013

Operator: North County Transit District (NCTD)

Date of Last Performance Audit: April 15, 2010

Page	Performance Audit Recommendation(s)	Actions Taken to Implement Recommendations
32	1. Develop Strategies to improve farebox recovery on SPRINTER.	<p>NCTD has taken three steps to improve SPRINTER farebox recovery:</p> <ul style="list-style-type: none"> (a) Improved fare enforcement resulting in higher farebox revenue. NCTD took the fare enforcement function in-house in June 2010, and increased the number of Code Enforcement Officers (CEOs) from 6 to 15. NCTD has since increased the number of CEOs from 15 to 17. This staff adjustment has allowed NCTD to expand fare enforcement coverage. Currently there is one CEO out on the line for the full service day, with periodic surges where multiple CEOs are deployed. Comparing January-March 2011 (in-house fare enforcement) with January-March 2010 (contracted fare enforcement), there were 294 SPRINTER fare citations in 2011 versus 226 in 2010, which represents a 30 percent increase. In 2012, there were 1033 Citations written on the SPRINTER for Fare Evasion. Also notable is that NCTD's estimated fare evasion rate on COASTER and SPRINTER has dropped following implementation of the in-house Code Enforcement program. (b) SPRINTER ridership has been increasing, which has led to increased fare revenue. In the first two quarters of FY2013 SPRINTER ridership was 1,284,031 compared to 1,253,512 for the first two quarters of FY 2012. This represents a 2.4 percent increase. This increase in ridership has translated to an increase in SPRINTER fare revenues of more than 2.9 percent over the same period. (c) Reduced operating costs. NCTD re-negotiated its contract with SPRINTER contractor Veolia in 2010 to lower the cost of contracted service by \$2,002,840 over the three-year contract. NCTD has managed SPRINTER costs through use of contracts, and controlled cost increases to reasonable annual contract escalations.

Page	Performance Audit Recommendation(s)	Actions Taken to Implement Recommendations
33	2. Consider updating the COASTER passenger counting methodology.	<p>(d) In January, 2011, NCTD increased SPRINTER service on weekends which has contributed to additional ridership and fare revenue, while only increasing operating costs incrementally. The extended SPRINTER schedule allows riders to utilize the SPRINTER until 12:30am on weekends.</p> <p>NCTD's Operations Department has a FY 2013 Capital Improvement Project for installation of automatic passenger counters (APCs) on COASTER passenger cars. By installing APCs on the COASTER, NCTD will be able to collect more station level boarding and alighting data than is currently possible through manual surveys by SANDAG or by TASI (COASTER service contractor). By installing APCs on the COASTER, NCTD will be able to collect more station level boarding and alighting data than is currently possible through manual surveys by SANDAG or by TASI (COASTER service contractor).</p> <p>The initial effort to procure an APC system took place in FY 2012. <u>However, in order to ensure that (1) the ultimate responsibility for implementing the APC system was allocated to the contractor, and (2) there are provisions for ongoing maintenance of the system, NCTD staff worked to improve the original scope of work and release a new RFP. Due to a protest from one of the vendors over the level of precision requirements the procurement process was delayed several months.</u> NCTD issued an RFP to procure APCs in March 2013. There may be up to four APC system vendors who submit proposals on this project. Staff currently expects to take a recommendation for contract award to the NCTD Board of Directors in June 2013.</p>
33	3. Continue efforts to implement prior audit recommendations, in particular undertaking business planning activities to guide service delivery strategies in the post-SPRINTER service environment.	<p>To date, the first four phases of the Mobility Plan have been implemented for improved bus connections to the SPRINTER line:</p> <ul style="list-style-type: none"> On August 28, 2011, NCTD implemented the first major phase of the Mobility Plan, which included implementation of three new fixed routes, alignment and other service adjustments to another ten routes, cancellation of four fixed routes, and introduction of new FLEX general-public, demand-response services in Southwest Carlsbad and the Escondido to Ramona (SR 78) corridor.

Page	Performance Audit Recommendation(s)	Actions Taken to Implement Recommendations
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- On March 11, 2012, NCTD implemented the second phase of Mobility Plan service changes, which included implementation of three new fixed routes, frequency improvements to three routes, alignment and other service adjustments to another four routes, and cancellation of two fixed routes.
- In June 2012, NCTD implemented changes focused primarily on systemwide schedule adjustments and restructuring of service in Escondido (at total of five routes). FLEX 374 Encinitas-Solana Beach also was implemented while FLEX 370 was discontinued.
- In August 2012, NCTD continued with schedule adjustments, filling in gaps in service span, and increasing frequencies as needed and within budget. A total of ten routes had such modifications.
- The last phase of the Mobility Plan will include adding Saturday service on Routes 304 and 347 and adding weekend service on Route 355/357; Timeframe for implementation of these remaining elements will be determined according to budget availability.

TRANSPORTATION COMMITTEE

May 17, 2013

AGENDA ITEM NO.: **7**

Action Requested: INFORMATION

INVENTORY OF LOCAL PARKING POLICIES IN THE SAN DIEGO REGION

File Number 3310701

Introduction

In January 2013, SANDAG staff conducted a parking policy inventory of local jurisdictions in the San Diego region, building upon a previous inventory that was first conducted in 2009. Staff members from all eighteen cities in the region and the County of San Diego participated in interviews related to local parking policies and management strategies. Staff will provide an overview of the inventory. The inventory was presented to the Regional Planning Technical Working Group (TWG), the Cities/County Transportation Advisory Committee (CTAC), and the Regional Planning Committee at their March, April, and May meetings.

Background

The management of public parking and the regulation of private parking supply are under the jurisdiction of local governments. Since the adoption of the Regional Comprehensive Plan in 2004, SANDAG has provided member agencies with several resources related to parking strategies that encourage smart growth and the use of transportation alternatives, including:

- Parking Strategies for Smart Growth;
- Trip Generation for Smart Growth;
- Integrating Transportation Demand Management (TDM) into the Planning and Development Process – A Reference for Cities; and
- The Climate Action Strategy.

Additionally, the Urban Area Transit Strategy of the 2050 Regional Transportation Plan (2050 RTP) included a "Menu of Policy Options to Support the Transit Network." This report identified localized parking policies and management strategies that can influence transit ridership and mode share. In fall 2010, the TWG, CTAC, and Regional Planning Stakeholder Working Group, as well as members of the planning, building and urban design communities prioritized the list of parking policies to provide a starting point for discussion by policymakers for consideration in the 2050 RTP. The highest ranked parking policy options were a toolbox of parking strategies for local jurisdictions, and resources to support local parking management efforts. Although these policies were not included in the 2050 RTP, the Board of Directors provided direction to staff to more closely examine parking as part of the Regional Comprehensive Plan update. As a first step in preparing for a discussion on parking management, staff has prepared an update to the parking policy inventory that was conducted in 2009.

Discussion

Parking Policy Inventory Highlights

The survey of member agencies asked about local use of a wide range of on- and off-street parking policies, management strategies, enforcement practices, and technologies for managing the use of parking. A copy of the questionnaire is included as Attachment 1a. Attachments 1b-1d provide a detailed overview of the data collected in January 2013. A summary of key observations follows:

1. Six cities price public, on-street parking, (Attachment 1b) and one city is vetting parking pricing through its city council. The cost of parking and actual parking occupancy or demand do not appear to be coordinated. The cost of parking is rarely adjusted, with only the City of San Diego modifying the price of on-street parking based on demand.
2. Although several jurisdictions have updated aspects of their parking requirements to allow for shared parking, there does not appear to be widespread adoption of other parking management strategies such as parking cash-out, unbundled parking, or parking maximums. ¹
3. Most jurisdictions do not have dedicated staff responsible for parking management, making the coordination and implementation of parking policies difficult.
4. Most jurisdictions are not yet making use of the available technologies that facilitate the management and use of parking through real-time parking information, way-finding, facilitating parking payment, and monitoring occupancy.
5. A majority of jurisdictions exhibit parking rates that are higher than the recommendations for parking rates suggested in SANDAG's *Parking Strategies for Smart Growth* for both urban and suburban areas as well as parking rates recommended by national organizations that have studied the subject of parking in smart growth areas. The table below summarizes the parking rates suggested for smart growth developments in the San Diego region. These rates were established based on guidance from *Parking Generation – 3rd Edition* (Institute of Transportation Engineers) and *Shared Parking* (Urban Land Institute) with consideration for existing typical parking requirements in the San Diego region:

Land Use	National Smart Growth Parking Standards ¹		Suggested Smart Growth Parking Rates for San Diego Region ²
	Urban	Suburban	
Residential Multi-Family (parking spaces per dwelling unit) ³	1.00	1.20	1.25
Office (parking spaces per 1,000 square feet)	2.40	2.84	2.90
Retail (parking spaces per 1,000 square feet)	3.60 – 4.50	3.60 – 4.50	3.60

¹ Residential and office rates from Institute of Transportation Engineers' "Parking Generation-3rd Edition." Retail rate from Urban Land Institute's "Shared Parking"

² From "Parking Strategies for Smart Growth - Planning Tools for the San Diego Region"

³ Regardless of unit size

¹ Shared parking allows for parking to be shared among two or more uses that have different peak periods. Parking cash-out allows employees to choose between subsidized parking or a cash allowance in lieu of the parking space. Unbundled parking separates the cost of parking from the cost of the lease for residential and commercial uses. Parking maximums limit the amount of parking that can be provided for certain uses. All parking strategies are defined in Attachment 1a.

The inventory (Attachment 1c) shows that, in the San Diego region:

- a. Parking requirements for single-family housing are regionally consistent at two spaces per dwelling unit.
- b. Fifteen of the 19 jurisdictions require more than 1 parking space per studio apartment.
- c. Seventeen of the 19 jurisdictions require 1.5 or more parking spaces per one bedroom unit.
- d. For office uses, 15 jurisdictions require more than 2.9 spaces per 1,000 square feet.
- e. For retail uses, 13 jurisdictions require more than 3.6 spaces per 1,000 square feet.
- f. Ratios for eating and drinking establishments vary greatly, with most jurisdictions falling between five and 20 spaces per 1,000 square feet.
- g. Many cities offer exceptions to their parking standards for affordable housing, mixed-use developments, transit-oriented development (TOD), or along specific corridors.

Parking Challenges

Local jurisdictions were also asked to identify the specific challenges associated with parking in their communities (Attachment 1d). The parking challenges identified as most problematic can be organized under the following categories:

1. *Economic development*: The cost of providing required parking is viewed as limiting new development, particularly redevelopment/infill development and TOD. It also may limit change of use and commercial growth in business districts. This same concern was raised by the building and real-estate industry in recent TOD listening sessions conducted by SANDAG in December 2012. Parking requirements were identified as the number one barrier to the implementation of TOD projects. Cities also stated that financing public parking structures is often a challenge.
2. *Parking turn-over*: Free parking, the lack of designated long-term parking for employees in business districts, and the lack of time limits for on-street parking may lead to overuse by long-term or all-day parkers who occupy valuable spaces at the expense of short-term parkers trying to access retail businesses, restaurants, and services.
3. *Parking spill-over*: Parking from patrons and employees of the business districts spills over into surrounding residential neighborhoods that do not require residential parking permits.
4. *Cruising for parking*: Local traffic may be impacted by vehicles circling city streets in search of free parking spaces.

Additional Comments Received From Member Agencies

In March, April, and May 2013, SANDAG presented the parking inventory to the TWG, CTAC, and the Regional Planning Committee. The following points were raised:

- There was consensus among all committees that a Parking Management Toolbox of localized parking management strategies and case studies would be a useful resource.
- There was concern about the unintended consequences of individual parking policies. For example, pricing parking or reducing parking requirements may result in parking spill-over into adjacent residential communities if a parking permit program is not in place. It was acknowledged that a comprehensive and balanced approach to parking management can eliminate these potential adverse effects. Redwood City, CA is an example of a city that has demonstrated the effectiveness of comprehensive parking management.
- Charging for public parking, increasing the cost of on-street parking, and reducing parking requirements for developments have been controversial issues for most communities. A public outreach and marketing strategy should be a key component of any parking management initiative.
- While there is interest in reducing parking requirements to encourage TOD and smart growth, reductions in parking should be tied to the availability of reliable transportation alternatives and should be flexible and sensitive to community context.
- There was concern that charging for parking at transit stations would deter transit use. However, there was consensus that parking at transit stations needs to be better managed to discourage inappropriate use. The Regional Planning Committee suggested that SANDAG identify mode-specific parking standards for transit stations that could be tied to the Smart Growth Concept Map.
- Addressing parking for eating and drinking establishments in business districts is a challenge that was raised by several cities. Parking requirements for these uses may need to be treated differently than standard commercial uses.
- Building consensus on a regional framework for aligning parking policies could minimize economic disadvantages between communities with disparate parking requirements.
- Parking challenges vary greatly across the region. A one-size-fits-all approach to parking management would not be flexible enough to meet the unique needs of each community. A toolbox that provides best practices that could be tailored to individual communities would be more beneficial.
- It was suggested that a toolbox approach should consider parking technologies, such as stacked parking systems.
- It was suggested that carshare programs should be expanded throughout the region to augment transit service and provide an alternative to the single occupant vehicle for trips that are not feasible by transit.

Next Steps

The inventory of local parking policies is provided to the Transportation Committee for information purposes and to establish a baseline that can guide future discussions on how parking could be considered in San Diego Forward: The Regional Plan.

RAY TRAYNOR

Transportation Demand Management Program Manager

Attachments: 1a. Parking Management Telephone Questionnaire
1b. Inventory of Local Parking Management Strategies
1c. Summary of Off-Street Parking Standards by Jurisdiction
1d. Summary of Parking Challenges Defined by Local Jurisdictions

Key Staff Contact: Antoinette Meier, (619) 699-7381, antoinette.meier@sandag.org

PARKING MANAGEMENT TELEPHONE QUESTIONNAIRE

1. **Parking Management Plans** - Has your city developed any parking management plans (i.e., policies/programs designed to maximize efficient use of parking resources; to reduce traffic congestion; preserve residential parking for residents; or to achieve other objectives)?

2. **Parking Supply Management Strategies and Policies** – Has your city implemented, or are you planning to implement any parking supply management strategies/policies such as:
 - a. Shared parking (using the same parking for two or more uses that have different peak periods. For example, using a church parking lot for restaurant and retail uses during the evenings and weekdays)
 - b. Unbundled parking (the cost of a parking space is separated from the cost of the lease for residential or commercial uses)
 - c. Parking Cash-Out programs (allows employees to choose between subsidized parking or a cash allowance in lieu of the parking space)
 - d. Parking reservation system (allows for parking spaces to be reserved on-line or via a website or mobile application)
 - e. Real-time Parking Information (the number and location of vacant parking spaces is made available in real-time via signage, website or mobile application)
 - f. Way-finding (guidance to parking spaces in garages, lots or metered spaces)
 - g. Parking districts (residential parking permit zones or parking assessment districts)
 - h. Parking maximums (limits the amount of parking that can be provided in a given development or for certain uses)
 - i. Remote parking (parking structures are located off-site with shuttle service into the business district or employment center to reduce parking demand and traffic)
 - j. Other

3. **Parking Pricing Strategies:**
 - a. Is public parking priced in your city (i.e., motorists pay directly to use parking facilities)?
 - b. If “yes,” is parking priced only in certain areas of the city (such as smart growth opportunity areas, or TOD zones)?
 - c. Is the rate fixed or do prices vary? If prices vary, how is the rate determined? For example do rates vary by location or zone (such as Smart Growth Opportunity Areas or Transit Oriented Development zones), or are they based on demand, time of day and/or day of week? Other?
 - d. Are on-street and off-street parking pricing coordinated to discourage cruising for inexpensive on-street parking spaces?

- e. How are parking revenues collected (traditional single space meters, multi space smart meters, pay by phone, other)?
 - f. How are parking revenues used?
 - g. Have you used parking revenues, or would your city consider using parking revenues, towards improvements in the areas where parking fees have been collected? Do you think the community would be more willing to embrace parking fees under these conditions?
4. **Parking Enforcement:** Are parking regulations enforced in your city and if so how are they enforced?
5. **Parking Inventory:** Has your city recently completed a parking inventory
6. **Challenges:** What are the greatest challenges that parking presents for your city?
(For example, parking turn-over in the business district, "cruising for parking" creating congestion on city streets, cost of providing parking in new developments is limiting development, parking requirements discourage new businesses, etc.)
7. **Climate:** What is the political climate around parking management in your city?

Attachment 1b: Inventory of Local Parking Management Strategies

Jurisdiction	Enforcement	Shared Parking	Inventory	Way-Finding	Parking Districts	Remote Parking	Parking Management Plan	Priced Parking	Coordinated On and Off-Street Parking	Demand-Based Pricing	Parking Maximums	Unbundled Parking	Parking Cash-Out	Real-Time Parking Information	Reservation System	
Carlsbad	√	√	√	√		S										
Chula Vista	√		√	√	√		√	√	√							
Coronado	√	√			√	√		√								
County of San Diego	√	√*			√*											
Del Mar	√	√	√				D	√	√							
El Cajon	√	√	√	√		√										
Encinitas	√	√	√		√*											
Escondido	√	√		√	√	√										
Imperial Beach	√		√				D									
La Mesa	√	√	√	√	√		√	√								
Lemon Grove	√	√	√	√												
National City	√		√		√	√*										
Oceanside	√	√		√	√			√								
Poway	√	√		√												
San Diego	√	√	√	√	√	√	√	√	√	√	√	√*	√*			
San Marcos		√														
Santee	√	√														
Solana Beach	√	√		√		S										
Vista	√	√	√	D		√	D									

√ Existing strategy
 D Under development

* Municipal code/planning documents allow for it but not implemented
 S Special events only

Summary of Off-Street Parking Standards by Jurisdiction

Jurisdiction	Single-Family	Studio	Multi-Family Residences 1 BR	2 BR	3 BR	4 BR +	Office	Retail	Eating/Drinking Establishments	Parking Reductions
San Diego County	2 per du + 1 per 10 du	1.5 per du + 1 per 5 du	1.5 per du + 1 per 5 du	1.5 per du + 1 per 5 du	2 per du + 1 per 5 du	2 per du + 1 per 5 du	1 per 250 sf 1 per 200 sf (medical office)	4.5 per ksf	6 per ksf or 0.2 spaces per person ≤ 3 ksf 10 per ksf or 0.2 per person > 3ksf	Reduction for multiuse and/or mixed-use developments on one or more lots/parcels that have distinctly different parking demand patterns that allow for the shared use of parking spaces without conflict. Parking Assessment District reductions it is associated with a Major Use Permit (findings required)
City of San Diego	2 per du (excludes 5+ bdrm units in Campus Impact Area)	1.25 per du ≤ 400 sf 1.5 per du > 400 sf	1.5 per du	2 per du	2.25 per du	2.25 per du	1 per 300 sf 1 per 250 sf (medical)	Range of 1 - 5 per ksf	Range of 1 - 15 per ksf	Residential, office, and retail reductions in transit area (applies to development that is at least partially within a Transit Area Overlay Zone or is subject to Urban Village Overlay Zone). Reduced office ratios in small lot industrial (IS) zone.
North County Coastal										
Carlsbad	2 per du	1.5 per du + .3 per du ≤ 10 du or .25 per du > 10 du	1.5 per du + .3 per du ≤ 10 du or .25 per du > 10 du	2 per du + .3 per du ≤ 10 du or .25 per du > 10 du	2 per du + .3 per du ≤ 10 du or .25 per du > 10 du	2 per du + .3 per du ≤ 10 du or .25 per du > 10 du	1 per 250 sf 1 per 200 sf (medical)	1 per 300 sf 1 per 200 sf (shopping center)	1 per 100 sf < 4 ksf 1 per 200 sf ≥ 4 ksf	Reductions available for affordable housing. Carlsbad Village Master Plan includes provisions for reduced office ratios and parking in-lieu fees. Ratios may also be reduced based on the results of a parking study.
Del Mar	2 per du (1 - 3 BR) 2 per du + 1 space (4+ BR)	2 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	1 per 300 sf 1 per 200 sf (medical)	1 per 300 sf ≤ 5 ksf 17 spaces + 1 per 150 sf 5,001-20 ksf 117 spaces + 1 per 100 sf > 20 ksf	1 per 90 sf ≤ 4 ksf + 1 for each add'l 45 sf	Minor reduction for affordable housing projects but Del Mar doesn't have any built affordable housing. An in-lieu fee program is available but the City Council has not set the fee. There is a requirement for a built structure and shuttle operation at 50 in-lieu contracts. No variance to off-street parking requirements.
Encinitas	2 per du ≤ 2.5 ksf 3 per du > 2.5 ksf	1.5 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	2.5 per du + 1 per 4 du	2.5 per du + 1 per 4 du	1 per 250 sf 1 per 200 sf (medical)	1 per 250 sf < 100 ksf 1 per 200 sf > 100 ksf	1 per 200 sf	Reductions within the Downtown Encinitas Specific Plan for selected commercial/office uses. Also, on-street parking may count towards the parking requirement for uses on an immediately adjacent site. The required number of spaces may be adjusted based on the results of a site-specific parking study with the issuance of a minor use permit.
Oceanside	2 per du 3 per new du > 2.5 ksf	1.5 per du + 1 per 4 - 10 units or 1 + 20% of units > 10	1.5 per du + 1 per 4 - 10 units or 1 + 20% of units > 10	2 per du + 1 per 4 - 10 units or 1 + 20% of units > 10	2 per du + 1 per 4 - 10 units or 1 + 20% of units > 10	2 per du + 1 per 4 - 10 units or 1 + 20% of units > 10	1 per 300 sf 1 per 200 sf (medical)	1 per 200 sf < 5 ksf 1 per 250 sf > 5 ksf	1 space per 50 sf of seating area	Cash in-lieu payments to the City may be made to meet parking requirements for non-residential uses within the D District and designated parking districts per City Council and zoning map. A use permit for collective parking or other uses may reduce parking requirements if certain findings related to parking demand are made.
Solana Beach	2 per du	1 per du + 1 per 4 du	1.5 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	1 per 200 sf < 2ksf 1 per 225 sf 2 - 7.5 ksf 1 per 250 sf 7.5 - 40 ksf 1 per 300 sf > 40 ksf	1 per 200 sf < 25 ksf 1 per 225 sf 25 - 250 ksf 1 per 250 sf > 250 ksf	1 space per 100 sf	Reductions for office and retail as part of Highway 101 Specific Plan.
North County Inland										
Escondido	2 per du	1 per du + 1 per 4 du	1.5 per du + 1 per 4 du	1.75 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	4 or 1 per 300 sf (whichever greater) 1 per 200 sf (medical) 1 per 250 sf (industrial overlay)	1 per 250 sf 1 per 200 sf (shopping center ≥ 3 ac)	1 per 100 sf < 4 ksf 40 plus 1 for each 50 sf over 4 ksf ≥ 4000 sf	Reductions available for affordable housing and projects processed as a Planned Development, especially for mixed-use projects. Applicants typically provide a parking study to demonstrate adequacy of the proposed parking, and may include a requirement for a parking management plan. Parking requirements have been eliminated for a designated area within the Downtown Specific Plan area. There is no in-lieu fee program.
Poway	2 per du	1.75 per du (RC zone) 1.5 per du (RA zone)	1.75 per du (RC zone) 1.5 per du (RA zone)	2.25 per du (RC and RA zones)	3 per du (RC zone) 2.75 per du (RA zone)	3 per du (RC zone) 2.75 per du (RA zone)	1 per 250 sf 1 per 200 sf (medical)	1 per 300 sf	1 per 5 seats or 1 per 75 sf of seating area if no fixed seats +1 per employee	Reductions for affordable housing only.
San Marcos	2 per du	1 per du + 1 per 3 du	1 per du + 1 per 3 du	2 per du + 1 per 3 du	2 per du + 1 per 3 du	2 per du + 1 per 3 du	1 per 250 sf 1 per 200 sf (medical)	1 per 250 ksf	1 per 250 sf + 2 employee spaces ≤ 1 ksf 1 per 3 seats or 100 sf (whichever greater) + 3 employee spaces, 1 - 4 ksf 1 per 3 seats or 1 per 100 sf (whichever greater) + 1 per employee > 4 ksf	Reductions available for mixed use projects and for non-residential, multi-family, and mixed use developments proposed within ¼ mile of local or regional mass transit lines or routes. Reduced affordable housing requirements. In-lieu fee program allowed by the municipal code.
Vista	2 per du + 2 per du	2 per du + 1 per 3 du	2 per du + 1 per 3 du	2 per du + 1 per 2 du	2 per du + .5 per add'l bdrm > 2	2 per du + .5 per add'l bdrm > 2	1 per 250 sf 1 per 175 sf (medical)	1 per 200 sf ≤ 5 ksf 1 per 200 sf > 5 ksf + 1 per add'l 150 sf	1 per 80 sf ≤ 4 ksf + 1 per add'l 100 sf over 4 ksf	Reductions for residential parking ratios in the Mixed Use Zone
East County										
El Cajon	2 per du 2 per du + 1 (RM-6000)	2 per du	2 per du	2.25 per du	2.25 per du	2.25 per du	1 per 250 ksf ≤ 10 ksf 1 per 300 sf 10 - 25 ksf 1 per 400 sf > 25 ksf	1 per 250 ksf ≤ 10 ksf 1 per 300 sf 10 - 25 ksf 1 per 400 sf > 25 ksf	1 space per 100 sf (except in shopping centers over 2 acres, the parking requirement is that of general retail)	Reduced parking requirements for affordable housing. Up to 10% parking reduction may be approved provided that an equivalent amount of parking is available along a project's frontage of a public street. A Conditional Use Permit may be obtained to allow a reduced number of on-site parking. No parking in-lieu fee program.
La Mesa	2 per du One or two-family dwellings on individual panhandle/easement access lots - 5 per du; Planned residential development (one family or duplex) - 2 per du + 1 guest	2 per du	2 per du	2 per du	2 per du	2 per du	1 per 300 sf 1 per 200 sf (medical)	1 per 250 sf	1 per 250 sf exclusive of dining area + 1 per each 3 persons seating capacity in the dining room	Reductions for affordable housing developments and TODs. Modified development standards are considered on a case by case basis as part of the project review. In-lieu parking fees are under study by the Community Development Department; no ordinance has been adopted at this time.
Lemon Grove	2 per du	1 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	1 per 500 sf	1 per 500 sf	1 per 500 sf	Reductions for affordable housing developments, TODs, or in specific zones - a 20% reduction can generally apply. In-lieu fee allowed to reduce the spaces required in a development.
Santee	2 per du	1.5 per du + 1 per 4 du	1.5 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	2 per du + 1 per 4 du	1 per 250 sf	1 per 250 sf	1 per 100 sf	Residential and commercial reductions in R-30 overlay zone: 1 per 400 sf and 1 per 10 du (visitors). A development project may apply for a Minor Exception, which allows two types of parking deviations: 1. Up to 25% of allowable parking may be allowed offsite within 300 feet, and 2. Up to a 25% reduction in onsite parking requirements may be allowed. Reductions for affordable housing. No in-lieu fee program.
South County										
Chula Vista	2 per du	1.5 per du	1.5 per du	2 per du	2 per du	2 per du	1 per 300 sf, min 4 spaces 1 per 200 sf, min 5 spaces (medical)	1 per 200 sf (excludes furniture stores)	1 per 2.5 permanent seats (excludes dance space or assembly area)	Reduced requirements for affordable housing, density bonus recipients, and TODs. Reduced ratios within Urban Core Specific Plan (UCSP). An in-lieu fee program exists and was structured primarily for the Town Centre redevelopment project area where metered parking exists.
Coronado	2 per du	no less than 2 per du (R-5 zone: 1.5 per du)	no less than 2 per du (R-5 zone: 1.5 per du)	no less than 2 per du (R-5 zone: 1.5 per du)	no less than 2 per du (R-5 zone: 1.5 per du)	no less than 2 per du (R-5 zone: 1.5 per du)	None for first floor parcels < 7ksf 1 per 500 sf 1st floor parcels > 7 ksf 1 per 500 sf all new 2nd floor parcels 1 per 600 sf underground parking	None for first floor parcels < 7ksf 1 per 500 sf first floor parcels > 7 ksf 1 per 500 sf all new 2nd floor parcels 1 per 600 sf underground parking	1 per 100 sf (Establishments with outdoor dining may be established or expanded in the commercial area and have a total of 18 seats without 1 per 75 sf + 1 per 2 employees at largest shift Minimum 4 spaces)	Commercial office/retail rates are reflective of reduced ratios per the Orange Avenue Corridor Specific Plan as it accounts for most office/retail development. Reduced ratios available for affordable housing and senior housing. Density bonus with affordable housing - maximum 1 space/du that has up to 1 BR, maximum 2/du that has up to 3 BR, and maximum 2.5/du that has more than 3 BR. No in-lieu fee program or reduced parking for TOD.
Imperial Beach	2 per du	2 per du	2 per du	2 per du	2 per du	2 per du	1 per 300 sf + 1 per 2 employees	1 per 250 sf + 1 per 2 employees at largest shift (excludes furniture/hardware stores)	1 per 75 sf + 1 per 2 employees at largest shift Minimum 4 spaces	Reductions for residential, office, and retail in C-1, C-2, C-3, MU-1, MU-2, and MU-3 zones. Commercial office and retail with less than 1000 sf in the C/MU-2 zone may receive waiver from parking requirements. Reductions for affordable housing. No TOD or in-lieu fee provisions.
National City	2 per du ≤ 2,500 sf 3 per du > 2,500 sf	1.3 per du + .5 per du ≤ 20 units + .25 per du above 20	1.3 per du + .5 per du ≤ 20 units + .25 per du above 20	1.5 per du + .5 per du ≤ 20 units + .25 per du above 20	1.5 per du + .5 per du ≤ 20 units + .25 per du above 20	1.5 per du + .5 per du ≤ 20 units + .25 per du above 20	1 per 300 sf (medical) 1 per 200 sf ≤ 500 sf 1 per 250 sf 500 - 10ksf 1 per 300 sf 10 - 30 ksf 1 per 350 sf 30 - 100ksf 1 per 400 sf > 100 ksf	1 per 250 sf	1 per 100 sf	Reduction for residential units < 1,200 sf in RS-4 zone. Reduction for residential and retail in MCR zones of Westside Specific Plan. Reduction for mixed use in MXD and MXC zones.

A plus symbol (+) indicates guest or employee parking

Land Use	National Smart Growth Parking Standards ¹		Suggested Smart Growth Parking Rates for San Diego Region ²
	Urban	Suburban	
Residential Multi-family ³	1	1.2	1.25
Office ⁴	2.4	2.84	2.9
Retail ⁴	3.60 - 4.50	3.60 - 4.50	3.6

¹ Residential and office rates from Institute of Transportation Engineers' "Parking Generation-3rd Edition". Retail rate from Urban Land Institutes' "Shared Parking"

² From "Parking Strategies for Smart Growth - Planning Tools for the San Diego Region"

³ Rate is per dwelling unit regardless of unit size

⁴ Rate is per 1,000 square feet

SUMMARY OF PARKING CHALLENGES DEFINED BY LOCAL JURISDICTIONS

1. Cost of providing parking and parking requirements are limiting new development, redevelopment, business opportunities, and change of use
 - a. Private Sector Issues
 - i. Parking requirements may discourage new restaurants from locating on a commercial corridor or business district
 - ii. Parking requirements are driving site design
 - b. Public Sector Issues
 - i. Cost of providing parking in new developments limits the amount of affordable housing, park-and-ride capacity at transit stations, and ability to build mixed-use projects in activity centers.
 - ii. Lack of resources to finance a shared public parking structure
 - iii. Lack of parking enforcement funds and staffing
 - iv. Unsuccessful parking in-lieu fee program – developers did not want to pay the fee
 - v. Poor economy limits the creation of a parking district
 - vi. Likelihood of supplying additional parking is low due to being built out
 - vii. Facilitating new commercial growth while meeting parking demand
 - viii. Developers continue to request more parking despite a municipal push for smaller off-street parking ratios
2. Parking turnover and spillover
 - a. Long-term employee parking, delivery parking, and vehicle storage infringing upon resident, customer, and/or visitor parking
 - b. Parking spillover from specific commercial or institutional uses onto residential and/or industrial streets
3. One size fits all approach
 - a. Suburban parking standards not conducive to smaller parcels, redevelopment, village areas, and specific uses
 - b. Limited supply of parking in specific areas (e.g. business districts, multi-family neighborhoods, strip malls)
4. Education on parking supply/demand, management, and regulations
 - a. Perceived parking supply shortage on the part of residents and merchants
 - b. Confusion over how to operate multi-space meters
 - c. Confusion over use of reverse angled parking installed following streetscape projects
5. Coastal access issues
 - a. Cruising for parking – a seasonal issue more common in coastal communities
 - b. Setting standards sufficiently flexible for coastal parking needs
 - c. Improving coastal access while abiding by Coastal Commission parking requirements
6. Abuse of free parking in transit stations or Park & Ride lots
7. Parking policies adopted but not implemented

TRANSPORTATION COMMITTEE

May 17, 2013

AGENDA ITEM NO.: **8**

Action Requested: INFORMATION

RELEASE OF SUBSEQUENT MITIGATED NEGATIVE DECLARATION
FOR PUBLIC REVIEW AND COMMENT FOR THE INLAND RAIL TRAIL:
SAN MARCOS TO VISTA SEGMENT

File Number 1223024

Introduction

Staff is preparing a Subsequent Mitigated Negative Declaration (MND) for the San Marcos to Vista segment of the Inland Rail Trail to satisfy the requirements of the California Environmental Quality Act (CEQA). In preparation of the release of the Subsequent MND for public review, staff also is providing a project status update.

Background

The Inland Rail Trail is a proposed and partially constructed 21-mile, Class I facility located within the cities of Oceanside, Vista, San Marcos, Escondido, and unincorporated County of San Diego. In 1999, the City of San Marcos completed a MND for the 21-mile project. The easternmost portion of the bikeway was initially developed by the Cities of Escondido and San Marcos and constructed by North County Transit District (NCTD) as part of the SPRINTER project. This segment extends from the Escondido Transit Center to the intersection of West Mission Road and North Pacific Street in the City of San Marcos. No other portions of the Inland Rail Trail have been built to date. Due to the passage of time and per CEQA guidelines, a Subsequent MND is being completed in preparation for additional construction of the Inland Rail Trail.

On April 22, 2011, the Board of Directors approved funding for preliminary engineering and environmental planning for the 7-mile, San Marcos to Vista segment (Attachment 1). Along the corridor, this segment will provide access to five SPRINTER stations, downtown Vista, residential communities, Palomar College, other schools and attractions. The bikeway is generally located in the NCTD right-of-way. The Subsequent MND covers the San Marcos to Vista segment and identifies changes to the project description, physical environment, regulatory setting, environmental impact analysis, and mitigation measures from what was described in the MND adopted by the City of San Marcos in 1999.

One of the conclusions of the Subsequent MND is that implementation of mitigation measures would ensure that potentially significant adverse effects to biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, and noise would remain less than significant. All other environmental issues were found to be less than significant or no impact. The project is anticipated to have positive environmental effects with respect to air quality, greenhouse gas emissions, and transportation/traffic.

The westernmost portion of the Inland Rail Trail, from Melrose Drive to Wisconsin Avenue in the City of Oceanside, will be part of a future project and future action by SANDAG.

Next Steps

The Subsequent MND will be released for a 30-day public review and comment period in late May or early June. Staff proposes to hold two public meetings during the 30-day public review period to provide additional opportunities for members of the public to learn about the project and submit comments. Staff will return to the Transportation Committee for further action this summer.

The Draft FY 2014 Capital Budget includes funding for the design of the San Marcos to Vista segment. The design is estimated to be completed during the summer of 2015.

JIM LINTHICUM

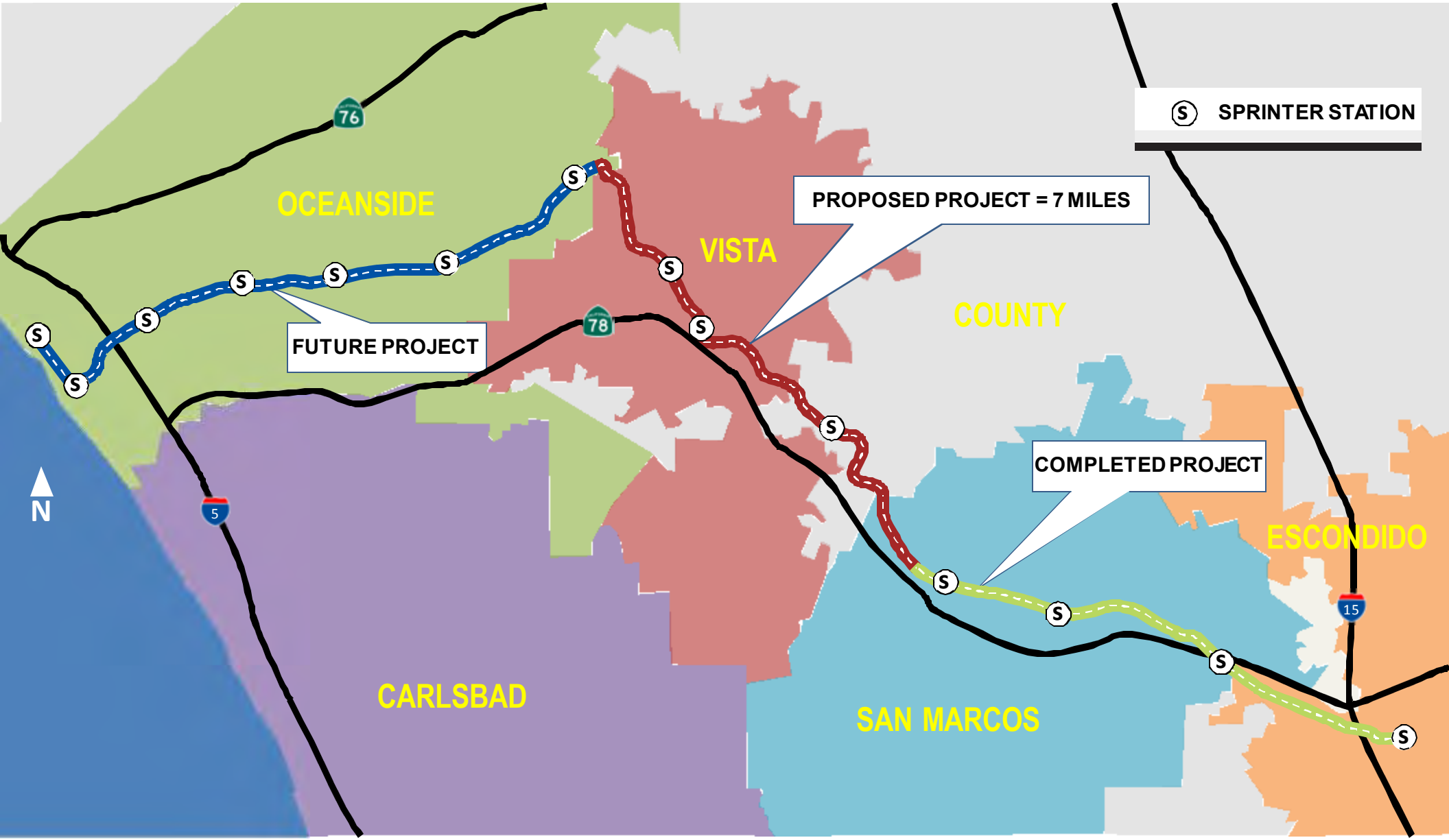
Director of Mobility Management and Project Implementation

Attachment: 1. Proposed Project Map

Key Staff Contacts: Emilio Rodriguez, (619) 699-6984, erod@sandag.org

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INLAND RAIL TRAIL



Ⓢ SPRINTER STATION

PROPOSED PROJECT = 7 MILES

FUTURE PROJECT

COMPLETED PROJECT



401 B Street, Suite 800
 San Diego, CA 92101-4231
 (619) 699-1900
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 www.sandag.org

May 10, 2013

File Number 8000100

TO: Transportation Committee
 FROM: Renée Wasmund, Chief Deputy Executive Director
 SUBJECT: Transportation Committee Meeting Cancellation Notice and Other Meeting Schedule Changes

MEMBER AGENCIES

Cities of
 Carlsbad
 Chula Vista
 Coronado
 Del Mar
 El Cajon
 Encinitas
 Escondido
 Imperial Beach
 La Mesa
 Lemon Grove
 National City
 Oceanside
 Poway
 San Diego
 San Marcos
 Santee
 Solana Beach
 Vista
 and
 County of San Diego

ADVISORY MEMBERS

Imperial County
 California Department
 of Transportation
 Metropolitan
 Transit System
 North County
 Transit District
 United States
 Department of Defense
 San Diego
 Unified Port District
 San Diego County
 Water Authority
 Southern California
 Tribal Chairmen's Association
 Mexico

Please note the following meeting schedule changes for the Transportation Committee:

- June 21 meeting begins at 8 a.m. to allow for regular Committee business prior to a 9 a.m. public hearing on the draft environmental document for the Mid-Coast Corridor Transit Project
- July 5 meeting has been cancelled
- July 19 joint meeting with the Regional Planning Committee at 10:30 a.m. (immediately following the regularly scheduled Transportation Committee meeting at 9 a.m.)

In addition, please note that a public workshop for San Diego Forward: The Regional Plan will be held at the Caltrans District 11 office on July 19, from 11:30 a.m. to 1:30 p.m. The workshop will focus on economic prosperity, public facilities, and borders as part of a larger series of workshops on the regional plan. The workshop schedule is attached. Committee members are encouraged to attend the workshop after the Joint Transportation and Regional Planning Committees meeting.

If you have questions or a specific issue or topic that you would like to discuss at a future Transportation Committee meeting, don't hesitate to contact Committee Coordinator José Nuncio (619) 699-1908 or via e-mail at jose.nuncio@sandag.org.

RWA/dda

Attachment: Flyer

Help Shape Our Region's Future



Workshops Tackle Important Issues Facing the Region

Bring your ideas to the table on the biggest issues facing the San Diego region between now and 2050 — issues like the economy, the environment, transportation, public health, and social equity.

Get involved in the on-going conversation about how best to tackle our challenges today, and preserve our quality of life for the future.

The San Diego Association of Governments (SANDAG) and its partners have embarked on creating San Diego Forward: The Regional Plan. It will build upon local planning efforts, and incorporate emerging issues and innovative concepts, to form an overall vision for the region's future, including specific actions aimed at turning that vision into reality.

Now is the time to make your voice heard! Take part in a series of workshops that will be held throughout the region in May, June, and July 2013 — in the daytime and in the evening.

Evening Community Workshops

Every Thursday in June — all include complimentary sandwiches, cookies, and beverages

All four community workshops will seek input on the same topics — land use, transportation, housing, healthy environment, public health, economic prosperity, public facilities, energy, climate change, and borders.

South County

June 6, 6 to 8 p.m.

*Casa Familiar Civic Center
212 W. Park Avenue, San Ysidro*

North County Inland

June 13, 6 to 8 p.m.

*Escondido City Hall, Mitchell Room
201 North Broadway, Escondido*

North County Coastal

June 20, 6 to 8 p.m.

*Oceanside City Hall Community Rooms
300 North Coast Highway, Oceanside*

East County

June 27, 6 to 8 p.m.

*La Mesa Community Center,
Arbor View Room
4975 Memorial Drive, La Mesa*

Weekday Central Workshops

The third Fridays in May, June, and July — all include complimentary sandwiches, cookies, and beverages

May 17 – Focused discussions on healthy environment, energy, climate change, and public health

June 21 – Focused discussions on land use and transportation

July 19 – Focused discussions on economic prosperity, public facilities, and borders

Caltrans District 11

**All weekday workshops from
11:30 a.m. to 1:30 p.m.**

*Garcia Room & Gallegos Room
4050 Taylor Street, San Diego*

Spanish-speaking staff members will be available at all seven workshops and Spanish translators will be available at the four evening workshops. All locations are transit accessible. Call 511 or visit 511sd.com/transit for route information. Limited parking also available.

RSVP to Sarah Strand at sarah.strand@sandag.org, (619) 595-5609, or via the SANDAGRegion Facebook page by attending “Regional Plan Workshop” events.

For more information, visit sandag.org/sandiegoforward



Ayude a determinar el futuro de nuestra región



Los talleres abordarán cuestiones importantes que enfrenta la región

Aporte sus ideas sobre los asuntos más importantes que la región de San Diego enfrentará de ahora al año 2050; cuestiones como la economía, el medio ambiente, el transporte, la salud pública y la justicia social.

Participe en un diálogo abierto sobre cómo abordar, de la mejor manera, nuestros retos actuales y preservar nuestra calidad de vida para el futuro.

La Asociación de Gobiernos de San Diego (SANDAG, por sus siglas en inglés) y sus socios han iniciado el desarrollo de San Diego Forward: The Regional Plan (San Diego Adelante: El Plan Regional). Se basará en los esfuerzos de planificación local e incorporará cuestiones emergentes y conceptos innovadores para formar una visión general del futuro de la región, incluyendo acciones específicas para convertir esa visión en una realidad.

¡Ahora es el momento de hacer que su voz se escuche! Participe en una serie de talleres que se llevarán a cabo por toda la región en mayo, junio y julio de 2013, durante el día y por la noche.

Talleres comunitarios por la noche

Cada jueves del mes de junio. En todos los talleres se ofrecerán sándwiches, galletas y bebidas de cortesía

En los cuatro talleres comunitarios se solicitará retroalimentación sobre los mismos temas: usos de suelo, transporte, vivienda, medio ambiente saludable, salud pública, prosperidad económica, instalaciones públicas, energía, cambio climático y fronteras.

Sur del Condado de San Diego 6 de junio, de las 6 a las 8 p.m.

Centro Cívico Casa Familiar
212 W. Park Avenue, San Ysidro

Norte del Condado de San Diego - Interior 13 de junio, de las 6 a las 8 p.m.

Salón Mitchell del Ayuntamiento de Escondido
201 North Broadway, Escondido

Norte del Condado de San Diego - Costa 20 de junio, de las 6 a las 8 p.m.

Salones comunitarios del Ayuntamiento de Oceanside
300 North Coast Highway, Oceanside

Este del Condado de San Diego 27 de junio, de las 6 a las 8 p.m.

Salón Arbor View del Centro Comunitario de La Mesa
4975 Memorial Drive, La Mesa

Talleres en el centro de San Diego en días de entre semana

El tercer viernes de mayo, junio y julio. En todos los talleres se ofrecerán sándwiches, galletas y bebidas de cortesía

17 de mayo – Diálogos enfocados en el medio ambiente saludable, energía, cambio climático y salud pública

21 de junio – Diálogos enfocados en el uso de suelo y el transporte

19 de julio – Diálogos enfocados en la prosperidad económica, instalaciones públicas y fronteras

Caltrans Distrito 11

Todos los talleres de entre semana se llevarán a cabo de las 11:30 a.m.

a la 1:30 p.m. en:

Salón García y Salón Gallegos
4050 Taylor Street, San Diego

Personal que habla español estará disponible en los siete talleres y traductores al español estarán disponible en los cuatro talleres nocturnos. El transporte público es accesible en todas las localidades. También se cuenta con estacionamiento limitado. Llame al 511 o visite 511sd.com/transit para información sobre las rutas.

Favor de confirmar asistencia

con Sarah Strand en sarah.strand@sandag.org, o al (619) 595-5609, o a través de la página de Facebook, SANDAGRegion, al participar en uno de los eventos "Talleres del Plan Regional".

Para mayor información, visite sandag.org/sandiegoforward





Inventory of Local Parking Policies in the San Diego Region

May 17, 2013




Background

- SANDAG parking resources
 - *Parking Strategies for Smart Growth and Trip Generation for Smart Growth*
 - *Climate Action Strategy*
 - *2050 Regional Transportation Plan: Urban Area Transit Strategy – Menu of Policy Options*
 - *Integrating Transportation Demand Management Into the Planning and Development Process – A Reference for Cities*








2

Why Consider Parking?

- Parking influences mode choice
- Parking requirements drive site design and community character
- Parking is expensive and can hinder smart growth, affordable housing, commercial growth, and transit oriented development
- Regional approach to address unintended consequences

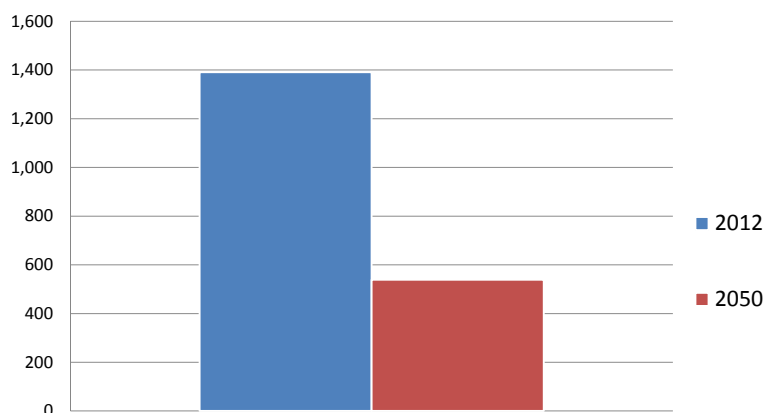


Santee Trolley Square
Plentiful parking surrounding a light rail station



The Challenge

Acres of Land Dedicated to Surface Lots and Structure Parking in the San Diego Region (Urbanized Areas)*



*Series 12 Growth Forecast; does not include parking for developments



Parking Inventory Topic Areas

- Supply management
- Price management
- Emerging technologies
- Parking inventory
- Parking management plans
- Off-street requirements and exceptions



Off-Street Parking Standards

Land Use	National Smart Growth Parking Standards		Suggested Smart Growth Parking Rates for San Diego Region
	Urban	Suburban	
Residential Multi-Family	1.00	1.20	1.25
Office	2.40	2.84	2.90
Retail	3.60 - 4.50	3.60 - 4.50	3.60



Off-Street Parking Standards

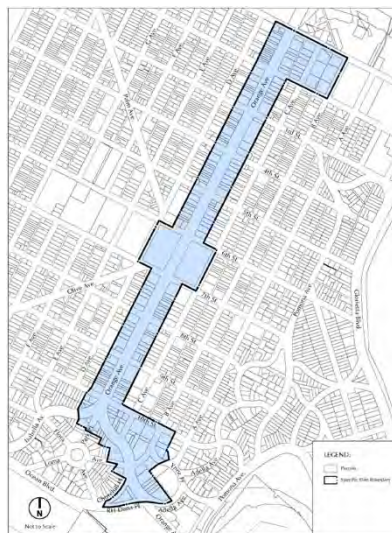
- Single family housing: 2 spaces per unit is regionally consistent
- Studio apartment: 15 of 19 require more than 1 space per unit
- One bedroom: 17 out of 19 require 1.5 or more spaces per unit
- Office: 15 require more than 2.9 spaces per 1,000 square feet
- Retail: 13 require more than 3.6 spaces per 1,000 square feet
- Ratios for eating/drinking establishments vary : 5 - 20 spaces per 1,000 square feet

Land Use	National Smart Growth Parking Standards		Suggested Smart Growth Parking Rates for San Diego Region
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Off-Street Parking Reductions and Exceptions

- Affordable and senior housing
- Specific plan areas, districts, or corridors
- Parking in-lieu fees
- Proximity to transit
- Specified zones



Credit: Orange Avenue Corridor Specific Plan (Coronado)



On-Street Parking Management Strategies

Jurisdiction	Enforcement	Shared Parking	Inventory	Way-Finding	Parking Districts	Remote Parking	Parking Management Plan	Priced Parking	Coordinated On and Off-Street Parking	Demand-Based Pricing	Parking Maximums	Unbound Parking	Parking Cash-Out	Real-Time Information	Reservation System
Carlsbad	v	v	v	v		S									
Chula Vista	v		v	v	v		v	v	v						
Coronado	v	v			v	v		v							
County of San Diego	v	v*			v*										
Del Mar	v	v	v				D	v	v						
El Cajon	v	v	v	v		v									
Encinitas	v	v	v		v*										
Escondido	v	v		v	v	v									
Imperial Beach	v		v				D								
La Mesa	v	v	v	v	v		v	v							
Lemon Grove	v	v	v	v											
National City	v		v		v	v*									
Oceanside	v	v		v	v			v							
Poway	v	v		v											
San Diego	v	v	v	v	v	v	v	v	v	v	v	v*	v*		
San Marcos	v														
Santee	v	v													
Solana Beach	v	v		v		S									
Vista	v	v	v	D		v	D								

v Existing strategy
 D Under development
 * Municipal code/planning documents allow for it but not implemented
 S Special events only

- ## Common Parking Issues Identified by Local Jurisdictions
- Economic development
 - Parking turnover
 - Parking spill-over
 - Cruising for parking

Additional Input from Regional Planning Committee and Planning and Public Works Directors

- Parking Management Toolbox that includes parking technologies
- Unintended consequences of stand-alone parking strategies
- Marketing and public outreach
- Reductions in parking tied to the availability of transportation alternatives

Additional Input from Regional Planning Committee and Planning and Public Works Directors

- Regional approach minimizes economic disadvantages, but there is no one-size-fits-all solution
- Better parking management at transit stations
- Regional carshare expansion
- Eating/drinking establishments

Example of a Coordinated Parking Strategy: Redwood City

- Demand-based
- Pay-By-Space meter technology
 - Pay/add time from a smart phone
- Way-finding
- Long-term satellite parking
- Shared parking
- In-lieu fees
- Parking maximums in special districts
- Revenues fund community improvements



Photo credit: redwoodcity.org/parking



Questions?



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