

TransNet Independent Taxpayer Oversight Committee

Fiscal Year 2012 Triennial Performance Audit

May 31, 2012

Submitted To:

Jim Ryan, Chair
Independent Taxpayer Oversight Committee
401 B Street, Suite 800
San Diego, California 92101

Submitted By:



455 Capitol Mall • Suite 700 • Sacramento, California • 95814 • Tel 916.443.1300 • Fax 916.443.1350

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Executive Summary

In 2004, San Diego residents voted to extend an existing half-cent sales tax for an additional forty years funding \$14 billion of transportation, transit, and environmental programs through the *TransNet* Extension Ordinance. As part of the *TransNet* measure, safeguards were put into place requiring a triennial performance audit of the program through its sunset in 2048. This report provides the results of the second performance audit of *TransNet* focused on changes implemented during the three-year period between Fiscal Years 2008-2009 and 2010-2011 as well as operational processes and performance for the new programs implemented during that same time period.

Key Results by Audit Objective

Five primary objectives were identified for this performance audit as follows:

1. Evaluate the status of implementation of the recommendations from the first triennial performance audit and effectiveness of these prior recommendations.
2. Determine whether the organizational structure and operational processes allow for effective and efficient project delivery, cost control, and schedule adherence.
3. Identify process changes in contracting, construction, permitting, and other procedures that could improve the efficiency and effectiveness of the *TransNet* program.
4. Evaluate the efficiency and effectiveness of Independent Taxpayer Oversight Committee (ITOC), including adherence to its bylaws.
5. Identify and evaluate any potential barriers and opportunities for proposed changes.

To address these objectives, we reviewed the structures, processes, and performance for each *TransNet* sub-program keeping focused on the efficiency of processes, project delivery, and cost and schedule adherence as well as the effectiveness of activities. Table 1 on page 4 summarizes the key audit results and recommendations based on our focus on the following:

- Status of Prior Audit Recommendations
- Major Capital Construction on Highways and Transit Projects
- Local Street and Road Program
- Environmental Mitigation Program
- Land Management, Smart Growth Incentive, Senior-Mini, and Bicycle, Pedestrian, and Neighborhood Safety Grant Programs
- Transit Operator Services
- Independent Taxpayer Oversight Committee Performance

Our review reveals there continues to be strong practices in place at the San Diego Association of Governments (SANDAG) and its partner agencies to guide and implement the wide-variety of complex programs envisioned under the *TransNet* Extension Ordinance and to continually improve operations and proactively address recommendations for improvement. Of particular importance, our audit revealed that SANDAG and its regional partners are operating a well-run

TransNet program encompassing many best and leading practices related to program development and delivery, environmental mitigation, cost and schedule control, contracting and construction, and general management and oversight. Performance in several areas seems to be on-target, and outpacing its peers in other areas. All parties involved with *TransNet* activities seem highly focused on collaborative relationships, goals and accomplishments, and continual improvement.

Our review found that good progress is being made on freeway and transit capital construction projects on the major corridors where strong project delivery practices continue to be employed. For example, the *TransNet* Dashboard is still used as a project and program management tool to track schedule, budget, and expenditure information and a strong network is in place to track, monitor, minimize, and communicate any overruns. As a result, SANDAG and Caltrans have been able to keep most of the major corridor projects on schedule and justify budget revisions. Further, *TransNet* projects completed to date have realized positive outcomes of relieving congestion and improving mobility. Similarly, while many strong practices are in place for the delivery and management of local street and road projects, we found that SANDAG could more actively administer and monitor the Local Street and Road Program to better measure project impacts toward congestion relief and maintenance of roadways. Towards this end, local agencies have performance data available related to pavement condition and level of service for roadway operations that could be submitted to SANDAG.

Further, we found that the Environmental Mitigation Program, a program in its infancy, already has achieved several noteworthy accomplishments. These include the implementation of acquisition policies and procedures, ability to bring multiple stakeholders with diverse interests together to work collaboratively and address environmental concerns in the region, and successfully achieving early cost savings with land purchases. However, the program has also experienced some challenges, such as difficulty with securing coastal wetland mitigation acres, a lack of strategic plans and measurable program objectives related to the habitat conservation program, and no defined methodologies related to the calculation and allocation of “economic benefits” derived from mitigation efforts. For each of these areas of concern, SANDAG is proactively working to address the issues.

Similar to other audit focus areas, we found that best practices are employed and followed in the four *TransNet* grant programs reviewed as well as in ITOC’s performance of its responsibilities. While we suggest certain program enhancements such as streamlined grant approval processes, additional performance monitoring protocols, we do not believe there are any significant barriers to capitalize on these and the other improvement opportunities noted by implementing the suggested recommendations. Moreover, we found that transit operator performance far outpaces its peers in many industry categories such as farebox recovery ratios and operating cost per boarding.

Demonstrating commitment to continual improvement, both SANDAG and ITOC took quick initiative as soon as the prior audit was released to address recommendations from the first triennial audit and began implementing corrective measures. During this second triennial audit, we found that all corrective actions have been completed and those actions have shown benefit to the *TransNet* program through the efficiencies and effectiveness realized.

Table 1: At-a-Glance Key Audit Results

Primary Audit Objectives	Key Audit Results	Key Audit Improvements Recommended	Report Chapter
1. Status of prior audit recommendations.	✓ All prior audit recommendations have been addressed, as warranted.	<ul style="list-style-type: none"> ▪ Additional performance monitoring for the arterial urban network and transit services would enhance the <i>TransNet</i> Program. 	1
2. Organizational structure and operational processes over project delivery, cost control, and schedule adherence. 3. Process changes in contracting, construction, permitting, and other procedures that could improve efficiency and effectiveness.	✓ Structures and most processes run efficiently and are effective in managing project costs, schedules, and delivery. ✓ However, changes in certain procedures would create more efficiency and allow SANDAG to better assess how well the <i>TransNet</i> program is functioning or whether it is achieving its intended goals.	<ul style="list-style-type: none"> ▪ <u>Capital Construction</u>—Continue existing efforts to promote and improve project oversight practices, as well as enhance Dashboard features for greater accountability. ▪ <u>Local Street & Road Program</u>—Assign SANDAG staff to more actively monitor program. Revisit policies related to fund balance limitations and fund transfer requirements. Consider statistics to regularly report on pavement conditions and improvements. ▪ <u>Environmental Mitigation Program</u>—Strengthen the EMP by continuing efforts and setting timelines to identify wetland mitigation opportunities, develop strategic plans and objectives, clarify the economic benefit concept, and implement an information management system. Also, begin tracking local mitigation separately from regional mitigation expenditures. ▪ <u>Grant Programs</u>^(A)—Enhance monitoring of performance against program goals and publicize results. Also, consider streamlining grant processes to minimize project implementation delays. ▪ <u>Transit</u>—Identify a reporting platform where existing transit performance data could be consolidated for easier public viewing and set specific targets for certain transit performance metrics. 	2 3 4 5 6
4. Evaluate the efficiency and effectiveness of ITOC.	✓ ITOC is fulfilling its responsibilities and using leading practices.	<ul style="list-style-type: none"> ▪ None noted. 	7

Primary Audit Objectives	Key Audit Results	Key Audit Improvements Recommended	Report Chapter
5. Potential barriers to and opportunities for proposed changes.	✓ No significant barriers exist; but there are several opportunities for change.	▪ See key audit recommendations above.	1 – 7

Note: (A) Grant Programs referenced include Land Management, Smart Growth Incentive Program, Senior Mini-Grants, and Bicycle, Pedestrian, and Neighborhood Safety grants.

Yet, as with other similar large scale regional transportation and transit programs, our audit found a few instances where existing practices could be enhanced to strengthen outcomes and the overall effectiveness of the *TransNet* program.

Introduction and Background

To relieve traffic congestion and improve highways, transit, streets, and environmental services in the San Diego region, voters passed Proposition A in November 2004 calling for a continuation of an existing *TransNet* half-cent sales tax for an additional 40-year period, from 2008 through 2048. This proposition, implemented through the San Diego Association of Governments (SANDAG) Board of Directors' adoption of the *TransNet* Extension Ordinance, paved the way for dedicated local funds to be leveraged through state and federal matching dollars for improving regional systems. SANDAG is ultimately responsible for administering the *TransNet* Program and projects funded through the *TransNet* Extension Ordinance.

TransNet Extension Ordinance of 2004

Recognizing the continued need for transportation and transit improvement projects in the region and the importance of minimizing their environmental impacts, the SANDAG Board of Directors prepared and authorized the *TransNet* Extension Ordinance and Expenditure Plan to expand upon the foundation and projects completed under the original *TransNet* program approved by voters in 1987. The Ordinance and Expenditure Plan, a legal document that formally enacts the sales tax measure, provided for the implementation of the region's transportation improvement program and identified an estimated \$14 billion for transportation and transit improvement projects to be funded by tax revenues over the 40-year period between 2008 and 2048. *TransNet* revenues are distributed among a mix of transportation, transit, and environmental projects in accordance with established percentages. Some programs planned under *TransNet* are grant based, and others are project-based—still others are more globally-focused.

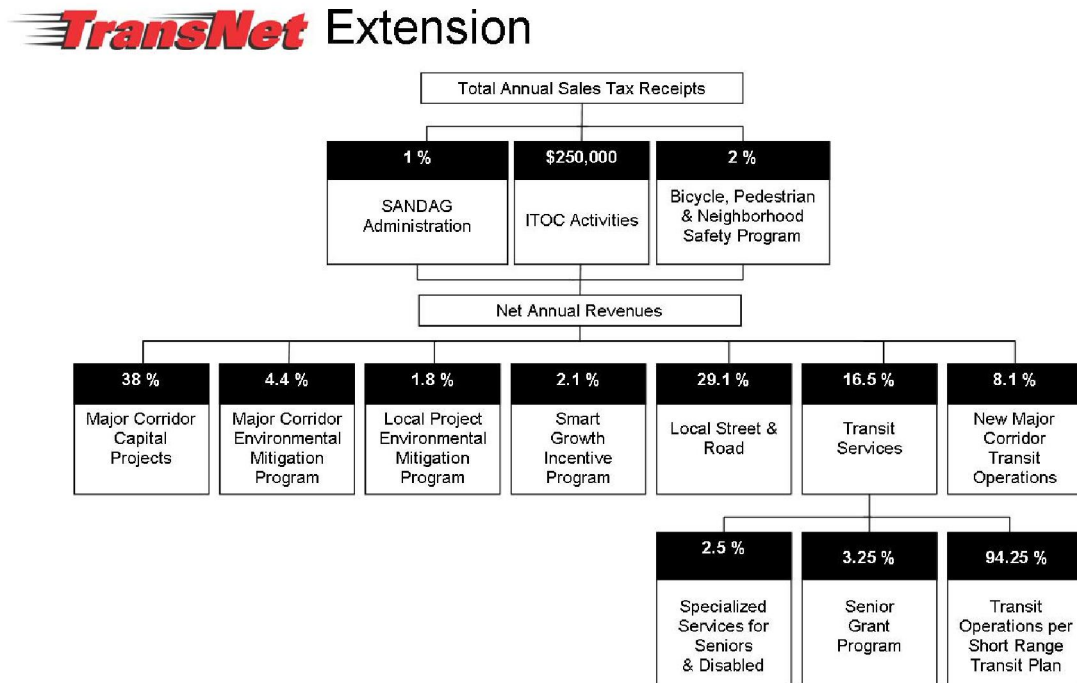
Funding Allocations Under *TransNet*

Under provisions of the *TransNet* Extension Ordinance, funds generated must be allocated to each program using a specified percentage or amount as shown in Figure 1.

More than 75 percent of funds are dedicated to major corridor capital projects for highways and transit in addition to local streets and roadways. The remaining 25 percent is mostly spent on transit services and environmental mitigation, with a small portion available for grant programs. Additionally, up to one percent of annual *TransNet* revenues is available for SANDAG administration as well as another \$250,000 a year (with inflationary adjustments) set-aside for ITOC oversight activities.

Moreover, *TransNet* monies are leveraged with a variety of other state, federal, and local funds—such as state Transportation Development funding, local street and highway funding, and Federal Highway Administration and Federal Transit Administration funding—to accomplish the program vision for the San Diego region.

Figure 1: TransNet Sales Tax Funding Allocation



Early Action Program

Prior to the start of the *TransNet* Extension in 2008, SANDAG and its partners took the initiative to launch an “Early Action Program” to accelerate the start and completion of certain projects. Mostly, the Early Action Program focused on major capital corridor construction of freeways and transit facilities with a minimal amount spent on the new Environmental Mitigation Program. Using innovative financing including commercial paper and bonding, the Early Action Program started in 2005—three full years before the first *TransNet* Extension sales tax revenues were generated.

After the *TransNet* Extension became effective in 2008, many additional programs were initiated and funded such as local streets and roads, environmental project mitigation, transit services, and several grant programs including Smart Growth, Senior Mini-Grants, and Bicycle, Pedestrian, and Neighborhood Safety. Although the “early” period prior to the effective date of the *TransNet* Extension Ordinance has passed, all current projects, grants, and activities are still considered to be part of the Early Action Program.

***TransNet* Association with Other Regional Plans**

A variety of governmental entities review and oversee aspects of the *TransNet* program including the Federal Highway Administration, Federal Transit Administration, U.S. Fish and Wildlife, and California Department of Fish and Game. Because *TransNet* funds are leveraged with other revenue sources, projects must adhere to many different state and federal laws and

regulations requiring the development and submission of regional plans in order to receive such funding. Certain relevant plans are described below:

- ***Regional Transportation Plan***
Required by federal regulations, each metropolitan planning organization (that is, SANDAG for the San Diego region) must complete a long-range Regional Transportation Plan to maintain, manage, and improve the transportation network in their region. In San Diego, the most recent Regional Transportation Plan aligns with the 40-year span of the *TransNet* program with a planning blueprint for transportation improvement projects until the year 2050. All significant *TransNet* projects are captured in the Regional Transportation Plan including regional freeway projects, local streets and roads, transit services, grant related projects, and the environmental mitigation program. The Regional Transportation Plan feeds into the overall Regional Comprehensive Plan.
- ***Regional Transportation Improvement Program***
To implement the projects in the Regional Transportation Plan, a Regional Transportation Improvement Program is developed on a biennial basis providing a five-year snapshot of those projects from the Regional Transportation Program. That five-year project cost programming document is incorporated, along with other Regional Transportation Improvement Programs and the State Transportation Improvement Program.
- ***Habitat Conservation Plans***
One significant aspect of *TransNet* funded regional transportation improvement projects is the requirement that impacted areas are mitigated to ensure the overall success of the San Diego regional conservation habitat efforts. *TransNet*'s \$850 million Environmental Mitigation Program funds the activities associated with mitigating the impacts resulting from transportation improvements as well as activities related to assisting local agencies in implementing the Multiple Species Conservation Program and the Multiple Habitat Conservation Program. The Multiple Species Conservation Program and Multiple Habitat Conservation Program are regional, long-term conservation planning programs required by federal and state law designed to preserve the native habitats for multiple plant and animal species on a large scale rather than focusing efforts on one species at a time.
- ***Regional Comprehensive Plan***
Focused on coordinating and connecting regional and local transportation and land use plans, the Regional Comprehensive Plan is a strategic planning framework encompassing smart growth planning and sustainability related to the environment, economy, and social equity. As such, the Regional Comprehensive Plan considers housing, water treatment, solid waste, energy, public facilities, transportation, and border issues of the region. *TransNet* programs are also covered in this plan. Through the Regional Comprehensive Plan, the vision is that all the various plans will be considered and connected for a cohesive regional focus for the various elements affecting the San Diego region.

- ***Other Miscellaneous Plans***

Additionally, there are a variety of plans completed and submitted to other external oversight agencies for the other *TransNet* programs. For instance, local transit operators must include significant transit services and capital construction projects in its Short Range Transit Plan ultimately submitted to the Federal Transit Administration. Similarly, SANDAG incorporates *TransNet* senior services grants into a Coordinated Plan that ensure these transit services are aligned with other programs serving the senior population. Even local cities or the county developing projects and competing for *TransNet* land management grants or smart growth grants must ensure that these projects are aligned with local land use plans.

Entities Involved with *TransNet*

While SANDAG is the primary entity responsible for the *TransNet* program, several others partner together in the San Diego region to cooperatively share responsibilities for planning, implementing, and monitoring projects and programs funded through the *TransNet* Extension Ordinance as described below:

- ❖ **San Diego Association of Governments**

SANDAG is a public agency serving as a forum for regional decision-making on a broad range of topics pertinent to the region’s quality of life for the 18 cities and county government representation that is SANDAG. Originally formed in 1966 as the “Comprehensive Planning Organization” and renamed in 1980, SANDAG is a regional decision-making body governed by a Board of Directors comprised of mayors, council members, and supervisors representing each of the local agencies and a number of advisory representatives including Caltrans, Metropolitan Transit System, and North County Transit District.

In addition to other committees, the Board is advised by its nine-person Transportation Committee on major policy-level matters related to transportation and oversight for many highway, transit, and other *TransNet* projects as well as a 15-person Regional Planning Committee advising the Board on regional and local environmental, economic, housing, and transportation matters. Further, SANDAG is charged with responsibility to plan, implement, fund, and administer any regional transportation improvement program including those funded by countywide sales tax initiatives such as the 2004 *TransNet* Extension Ordinance.

- ❖ **California Department of Transportation**

For *TransNet*’s major freeway corridor capital projects, the San Diego District Office of the California Department of Transportation (Caltrans) works closely and collaboratively with SANDAG on projects to improve mobility in the region. The *TransNet* Extension Ordinance includes language specifically establishing shared responsibilities between SANDAG and Caltrans for project development and management over local state highway projects. Further, all major decisions regarding project scope, budgets, and timelines are to be agreed upon by both SANDAG and Caltrans.

Although SANDAG may choose to outsource portions of the project delivery work, Caltrans is responsible by State statute for providing oversight of the projects relating to state highways to ensure that work is performed according to the standards established by the State of California. Moreover, Caltrans is also heavily involved with environmental mitigation activities such as planning, land acquisition, restoration, and coordination.

❖ **Metropolitan Transit System**

Although in existence since 1975 with the creation of the Metropolitan Transit Development Board, the name Metropolitan Transit System (MTS) was instituted in 2005 to reflect a reorganization of several operations into one agency. Today, MTS provides bus and rail services directly or by contract with public and private operators to approximately 3 million San Diego residents. MTS is a California public agency that owns assets of the San Diego Trolley, Inc. and San Diego Transit Corporation providing transit services for the central, south, northeast and southeast regions of San Diego County. It also owns San Diego and Arizona Eastern Railway. Overseeing operations is a 15-member Board of Directors with representation from the cities of San Diego, Chula Vista, Coronado, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, and Santee as well as the County of San Diego. Currently, MTS is responsible for the service planning, scheduling, and performance monitoring of all MTS transit services funded by *TransNet* and many other sources, while SANDAG maintains responsibility for transit financial programming, project development, and capital construction functions.

❖ **North County Transit District**

North County Transit District is a regional transit operator that provides public transportation to Northern San Diego County through the BREEZE bus system, COASTER commuter rail service, SPRINTER light rail, and LIFT para-transit services. The NCTD Board of Directors includes representatives from Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista as well as a county supervisor representing unincorporated areas of North County. Further, NCTD receives a portion of *TransNet* funding for transit operations such as service, pass subsidies, and para-transit services, and provides transit planning input and advice to SANDAG on *TransNet* projects as needed.

❖ **Local Cities**

In addition to membership within the SANDAG structure, there are 18 local city agencies each with their own governmental structures overseen by individual city councils. Primarily, the cities are involved with the Local Street and Road Program component of the *TransNet* program, typically operated through a public works or engineering department responsible for the design, construction, and delivery of congestion relief and pavement management system projects. Each city must submit its list of eligible transportation improvements projects to SANDAG before receiving distributions of the *TransNet* sales tax. Additionally, local agencies have a critical role in mitigating the environmental impacts resulting from local transportation improvements as well as adopting local habitat conservation plans that roll up into the regional Multiple Species

Conservation Program and Multiple Habitat Conservation Program plans. Cities may also compete to provide services or develop projects eligible under any of the *TransNet* grants for land management, smart growth, senior services, or bicycle, pedestrian, and neighborhood safety activities. Following are the cities involved with *TransNet*:

- | | |
|-------------------|-------------------|
| 1. Carlsbad | 10. Lemon Grove |
| 2. Chula Vista | 11. National City |
| 3. Coronado | 12. Oceanside |
| 4. Del Mar | 13. Poway |
| 5. El Cajon | 14. San Diego |
| 6. Encinitas | 15. San Marcos |
| 7. Escondido | 16. Santee |
| 8. Imperial Beach | 17. Solano Beach |
| 9. La Mesa | 18. Vista |

❖ **County of San Diego**

Governed by a Board of Supervisors, the County of San Diego provides related transportation services to those residents outside city incorporated areas of the County. The County of San Diego's Department of Public Works maintains nearly 2,000 miles of roads in the county's unincorporated areas and is responsible for local traffic engineering, land development civil engineering review, design engineering, and construction management. Similar to the local cities, the County must submit its list of eligible transportation improvements projects to SANDAG before receiving distributions of the *TransNet* sales tax. Additionally, the County develops local environmental conservation plans, like the cities, that fit within the region's broader plans. Further, the County can also compete with other eligible entities for *TransNet* grant programs such as land management, smart growth, and bicycle, pedestrian, and neighborhood safety.

❖ **Independent Taxpayer Oversight Committee**

Representing taxpayer interests, the Independent Taxpayer Oversight Committee (ITOC) monitors *TransNet* funds and serves as an independent resource to San Diego Association of Governments (SANDAG). This Committee also helps ensure that all voter mandates are carried out appropriately and develops recommendations for improvements to the financial integrity and performance of the *TransNet* program. Established as a provision of the 2004 *TransNet* Extension Ordinance, ITOC also provides increased accountability by overseeing independent annual fiscal and compliance audits as well as triennial performance audits of SANDAG and its partners.

Scope and Methodology

In accordance with the *TransNet* Extension Ordinance, the Independent Taxpayer Oversight Committee has the responsibility for conducting triennial performance audits of the agencies involved in the implementation of *TransNet*-funded projects and programs.

Audit Scope

In August 2011, the ITOC hired our firm, Sjoberg Evashenk Consulting, to conduct the second triennial performance audit for the three year period between Fiscal Years 2008-2009 and 2010-2011. Specifically, we were asked to examine the performance of SANDAG, Caltrans, MTS, NCTD, the City of San Diego, the County of San Diego, and a representative sample of the other cities of the region that have been involved in *TransNet*-funded projects. Of particular note, the review was required to focus on changes that have occurred since the first triennial audit in addition to other new *TransNet* projects including Environmental Mitigation Program, Smart Growth Incentive, Senior Mini Grant, and Bicycle, Pedestrian, and Neighborhood Safety Grant programs.

Audit Objectives

Five primary objectives were identified for this performance audit as follows:

1. Evaluate the status of implementation of recommendations from the first triennial performance audit and effectiveness of these prior recommendations.
2. Determine whether the organizational structure and operational processes allow for effective and efficient project delivery, cost control, and schedule adherence.
3. Identify process changes in contracting, construction, permitting, and other procedures that could improve the efficiency and effectiveness of the *TransNet* program.
4. Evaluate the efficiency and effectiveness of ITOC, including adherence to its bylaws.
5. Identify and evaluate any potential barriers to and opportunities for proposed changes.

As part of fulfilling these audit objectives, we reviewed operational processes and organizational structures that had changed since the first audit as well as those employed over the new *TransNet* programs that were not in place at the time of the first audit. We assessed program functions and activities and analyzed the performance of each of the programs.

Audit Methodology

To fulfill our objectives, we conducted a series of in-depth audit tasks involving data mining and analysis, documentary examinations, peer comparisons, source data verification, and one-way interviews. Appendix A provides the detailed methodology employed on this audit. We conducted this audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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Chapter 1: Prior Audit Recommendations Have Been Addressed

Although the *TransNet* Extension was not effective until April 1, 2008, SANDAG and its partners embarked on an ambitious “Early Action Program” accelerating the start of certain *TransNet* major corridor highway construction and transit projects in Fiscal Year 2005-2006. These projects were financed through commercial paper and bonding activity since the *TransNet* Extension funds were not generated until Fiscal Year 2008-2009. As part of the first triennial audit, the focus was primarily on these early action projects; specifically, the audit examined major corridor capital construction projects—both freeway and transit related—that were active during the three year period between Fiscal Years 2005-2006 and 2007-2008. Because none of the other *TransNet* programs such as the Local Street and Road Program or various grants had yet received funding under the *TransNet* Extension Ordinance at the time, they were not included in the scope of that first audit.

Results of the first triennial audit of the *TransNet* program revealed that a strong foundation had been built over the early action freeway and transit capital development projects with appropriate oversight, fiscal control, program management, and project delivery practices. The audit also made recommendations in several areas to improve efficiencies related to certain contracting and project management practices in addition to suggestions to strengthen the effectiveness of the program through performance reporting. Immediately following the release of that audit, SANDAG and ITOC took quick initiative to address the audit recommendations and implement reasonable corrective actions. During this second triennial audit, we found that past issues have been addressed and corrected and that those actions have shown benefit to the *TransNet* program through the efficiencies and effectiveness realized.

Prior Audit Made Recommendations to Improve Efficiencies and Effectiveness

As detailed in Appendix B and summarized below, the prior audit made 25 recommendations to augment better decision making, strengthen accountability, increase efficiency and improve effectiveness.

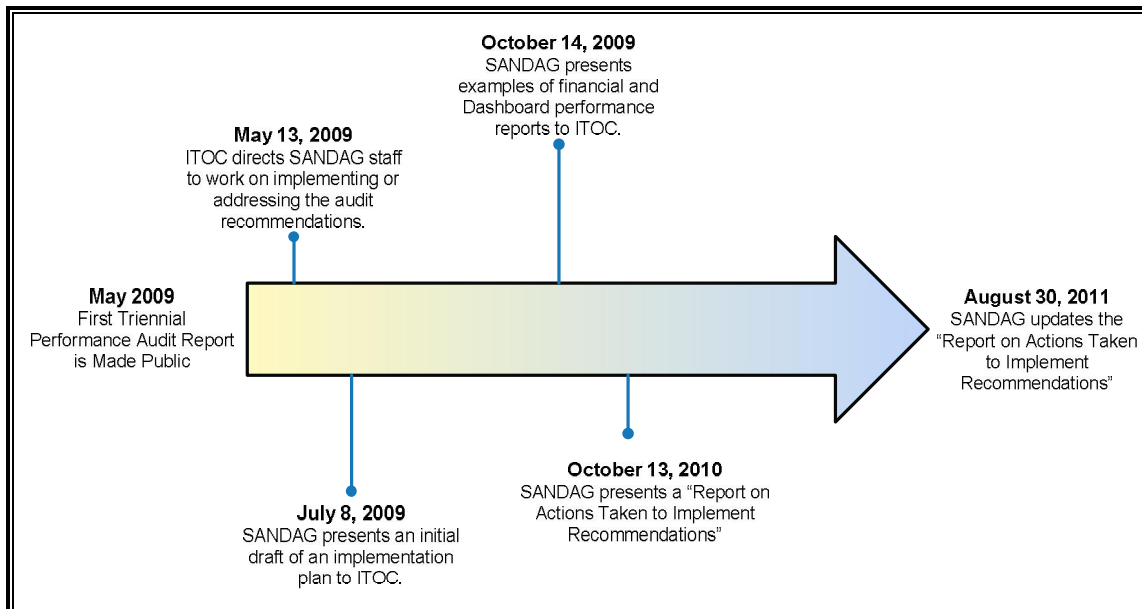
Better Decision-Making	Strengthen Accountability
<ol style="list-style-type: none"> 1. Develop and deliver a “Report Card” describing project performance. 2. Provide status updates on internal and external audits. 3. SANDAG should work collaboratively with the ITOC to identify other type of oversight data needed. 4. Develop matrices or tracking documents to summarize critical issues and decisions from monthly meetings. 5. Consider using the newly formed ITOC Audit Subcommittee as the portal for audit status updates. 6. ITOC should work collaboratively with SANDAG to identify other type of oversight data needed. 	<ol style="list-style-type: none"> 7. Develop a mechanism to report project budget and schedule history and changes over the life of <i>TransNet</i>. 8. Establish a mechanism to link and track planned projects and amounts per the Ordinance with current plans and budgets for all <i>TransNet</i> projects. 9. Ensure all Dashboard views and tables are complete and accurate. 10. Summarize and distribute data reflecting key project milestones and performance indicators. 11. Add a note to clarify cumulative data presented in the Dashboard or isolate pre-2005 expenditures. 12. Enhance practices by tracking change orders and contract amendments for performance indicators.

Increase Efficiency	Improve Effectiveness
<ul style="list-style-type: none"> 13. ITOC should use standard meeting agenda categories to ensure critical program areas are reviewed. 14. Revisit the intent and vision for the Dashboard to determine whether it should include all <i>TransNet</i> programs and historical data, as well as be used to summarize performance indicators. 15. Develop and define concrete performance goals and targets to measure project outcomes as well as performance efficiencies. 16. Revisit task order approvals to streamline process and consider higher delegated authority level. 17. Ensure task order amendments for time extension have sufficient written justification. 18. Improve and formalize SANDAG transit policies and project documentation. 19. Create a uniform filing system to ensure consistency and availability of transit project management. 	<ul style="list-style-type: none"> 20. ITOC should analyze suggested Report Card data and performance indicators to monitor effectiveness of strategies. 21. Performance monitoring should be routinely conducted to assess the impact of performance not meeting target goals. 22. Consider using baseline data available to compare against actual results once projects are completed. 23. Continue to regularly monitor and review the debt-to-revenue ratio as well as total financing costs to ensure it meets short- and long-term obligations. 24. Conduct a workshop where SPRINTER project management share lessons learned. 25. Ensure post-evaluation forms are consistently completed after each project phase for highway and transit projects.

Prior Audit Recommendations have been Addressed

Following the issuance of the first triennial performance audit report in May 2009, SANDAG staff immediately began addressing the audit recommendations as described in their initial response to the audit findings. Figure 2 illustrates the timeline of SANDAG’s efforts to implement the recommendations.

Figure 2: ITOC and SANDAG Discussing Implementation of First Triennial Performance Audit Recommendations



Source: ITOC Meeting Agenda Packages and Minutes for the meeting dates as noted in Chart

SANDAG staff actively sought input and feedback from ITOC to help guide how SANDAG could best address recommendations, especially those that involved providing more financial or project information to ITOC. For instance, in listening to the ITOC audio from various meetings following the issuance of the first triennial audit report, we found SANDAG emphasized the importance of providing data in a format that is useful to ITOC and encouraged ITOC to identify what data they needed so that SANDAG could implement the recommendations in a way that is most meaningful to ITOC.

Of the 25 audit recommendations made, all of the recommendations have been addressed and incorporated into the *TransNet* program in some way as shown in Appendix B. Through SANDAG and ITOC's actions, there have been several benefits realized such as:

- Streamlining parts of the contracting process have made timelines more efficient;
- Incorporating performance measures, such as vehicle miles traveled and hours of delay on the Dashboard (a data warehouse concept that provides automated project budget, schedule, and progress reporting) has allowed *TransNet* partners and stakeholders to have insights into the impact of the program on congestion and mobility; and
- Having more complete and robust budget information on the Dashboard has also increased transparency and related accountability.

Many of the changes implemented in response to the audit recommendations have strengthened oversight and accountability to ensure the foundation surrounding the *TransNet* program continues to be solid. For instance, SANDAG has improved the data available to the ITOC and other committees on a quarterly basis to include extensive program revenue and expenditure data to assist in overseeing the program and ensuring it is on course. Additionally, there is a record of past ITOC decisions now maintained to enhance ITOC's effectiveness in overseeing the program—especially as members transition on and off the committee—and transparency to the public as well. Additionally, the Dashboard has been modified and now includes a variety of performance reports indicating vehicle-hours of delay and vehicle-miles of travel. Such data allows the public to make a determination of the success of the *TransNet* improvements in terms of increased mobility and decreased travel time. Certain other corrective actions were analyzed in more depth as described in the sections that follow.

Contracting and Amendment Process Show Improvement

In 2008, the previous audit reviewed the procurement practices and activities over the early action freeway and transit capital construction projects and found that several strong practices were employed to afford sufficient competition to attract good prices and quality services, objectively select contractors, track and approve allowable contract expenses, and monitor contractor skills and performance. Among the solid activities, the review revealed that task order amendments and contract change orders were properly managed and approved in a reasonable manner. Yet, the audit reported that amendments could take up to two months to process adding potential delays to a project. By modifying delegated authority thresholds and improving documentation supporting reasons for granting time extensions on projects, the auditors found that efficiencies could be realized.

Since that time, SANDAG has made several changes to its task order amendment process and no longer requires finance or legal approval for “time only extensions.” As a result, it seems that processing timelines have decreased under the new practices. We reviewed the following nine task order amendments associated with six contracts, and found that the time only extension amendments were processed within 1.5 weeks, on average, as shown in Table 2.

Table 2: Processing Times for Task Orders Reviewed Have Generally Decreased

Consultant Name	Initial Task Order #	Amendment Type	Date of Manager Approval	Date of Final Approval	Total Processing Time
Construction					
AECOM/LAN	6	Time only	04/19/11	05/04/11	2 weeks
		Cost only	06/06/11	06/20/11	2 weeks
PGH Wong Engineering	15	Time only	06/13/11	06/20/11	1 week
		Time only	11/28/11	12/03/11	1 week
Environmental					
EDAW	34	Time & Cost	06/09/10	06/29/10	3 weeks
General Engineering					
RailPros	7	Time only	01/29/10	01/29/10	1 day
CH2MHill	36	Time only	12/06/10	12/12/10	1 week
Bureau Veritas	80	Time & Cost	04/08/10	04/29/10	3 weeks
		Time only	09/09/10	09/30/10	3 weeks

Source: Task order amendments files

SANDAG also targeted efforts on streamlining its procurement practices overall. In addition to hiring an external consultant to provide recommendations for process improvements, SANDAG had its Internal Auditor conduct an operational review of the task order process providing additional recommendations for change. From those efforts, SANDAG noted that it has improved its quality control process to better define scope of service and negotiate costs for amendments, assessed additional training needs for staff, and incorporated other best practices.

Reports Provided to Decision Makers Enhance Data Available for Oversight

In 2009, the first triennial audit revealed that SANDAG and its other transportation and transit partners routinely prepared and provided vast amounts of detailed data, reports, and graphs on project status of expenditures, schedule, scope, and issues. While this wide array of competent and reliable project data is valuable, the audit found the volume and breadth of materials makes assimilating and using such information challenging especially for advisory board members. As such, recommendations were made to gather certain raw data that could be converted into targeted management reports to aid in decision making and assist with responsibilities such as:

- ✓ Considering other information when deliberating project activities;
- ✓ Weighing options before making decisions;
- ✓ Understanding critical status metrics related to cost, schedule and performance;
- ✓ Monitoring adherence to the Ordinance; and
- ✓ Assessing program impacts and demonstrating results to the public.

Toward this end, SANDAG committed resources to creating and modifying data provided over the last three years. Much of the information was already in existence through SANDAG's Dashboard, budget documents, or project files. Currently, SANDAG now provides additional information to its oversight bodies on a quarterly basis as follows:

- ✓ Receipts and Expenditures by Program Area as outlined in the Extension Ordinance
- ✓ Sales Tax allocations by program and recipient
- ✓ Debt service including bonds and commercial paper payments by program and recipient
- ✓ Recipient compliance with Board Policy on Local Agency Balance Limitations
- ✓ Comparison of Estimated Annual Sales Tax Revenue to Actual Receipts
- ✓ Debt-to-revenue ratio (also known as debt service coverage)

In addition to the financial aspects of the *TransNet* program, SANDAG staff also provide quarterly reports on major congestion relief projects and corridors. These reports include overviews of the *TransNet* Early Action Program projects in terms of cost control, schedule adherence, milestones reached, industry trends, and performance measures as well as allow ITOC the opportunity to review overall project and program performance on a quarterly basis.

SANDAG staff also provide its Board, policy committees, and various working groups with other types of critical program information that allow decision makers to understand the impact of approving recommendations and consider alternatives. Based on our review of meeting minutes, agendas, and staff reports related to Board and various committee meetings during 2011, we found significant amounts of relevant and comprehensive information shared with decision makers such as:

- ***Quarterly Progress Reports on Transportation Projects*** including information on cost and schedule of each major project and current phase, activities such as issuing proposals and awarding contracts, and other key accomplishments.
- ***Quarterly Financial Reports of TransNet Program*** sales tax revenue with quarterly allocation and disbursement figures as well as comparisons between current receipts and past quarter activity. These reports also provide information related to bond activity.
- ***Environmental Mitigation Plan Annual Status Reports*** with critical information including details on items such as land acquisitions and remaining mitigation needs, as well as program challenges.
- ***Information on Delegated Actions*** taken by the Executive Director.
- ***Plans of Finance*** with details on program revenue, costs, project budget, and cash flow assumptions as well as additional borrowing requirements and cost assumptions.
- ***Actions from Policy Advisory Committees***, such as the Transportation Committee and Regional Planning Committee.

While Improvements to Performance Measures Have Been Made, Additional Elements Can Make the Program More Robust

Another prior audit result communicated in 2009 focused on SANDAG and Caltrans strong management, solid tools for monitoring program and project development and results, and robust accountability structure in place over the *TransNet* program. At the same time, the audit found that greater performance monitoring and reporting would further promote accountability by incorporating concrete performance goals and targets to measure project outcomes as well as performance efficiencies into a defined performance monitoring system.

Over the past three years, we find that SANDAG has made several improvements to the type of data tracked, in general, and within the Dashboard. In the prior audit report, suggestions were made on possible measures that could be used for *TransNet*. For instance, it was described that to determine success towards “managing congestion,” SANDAG could measure and contrast the hours of delay both before and after a roadway improvement. SANDAG now tracks that exact indicator—vehicle-hours of delay—and an additional measure, vehicle-miles traveled, based on data captured through the Performance Measurement System. This system is a database jointly developed through a collaborative effort between the State of California and the University of California, Berkeley to capture and transmit real-time data related to traffic speed and volume. Dashboard measures are correlated to improvements made on a particular stretch of roadway and allow for a general determination of the outcome of an improvement in terms of increased mobility and decreased time travel as a result of less congestion.

Other new performance indicators are tracked, monitored, and reported as well. For instance, the Dashboard has a “Project Health Report” comparing baseline and actual schedules and budgets by various project phases such as environmental and construction as shown in Figure 3.

Figure 3: Example of the Schedule Section of the Dashboard Project Health Report

Schedule			
Milestone	Baseline	Current Date	Variance (mos.)
Draft Environmental Document	05/31/2008	07/31/2012	-50
Final Environmental Document	05/31/2009	08/30/2013	-51
Ready to Advertise	12/31/2011	04/30/2015	-40
Award Construction Contract	06/12/2012	07/31/2015	-37
Open to Public	12/31/2014	11/30/2018	-47
Close out	12/31/2017	12/31/2021	-48

Source: *TransNet Dashboard Internal Reports*

In addition, the Project Health Report also provides a budget snapshot where planned to actual figures are tracked in addition to expenditures being correlated with the percent of work complete on a project. As shown in Figure 4, this information allows project management staff to quickly assess the condition of a project in terms of adherence to budgets. For example, the report could alert project staff of a potential red flag—such as 70 percent of the budget is spent, while only 10 percent of the work is complete—so that corrective action can be taken to address the issue.

Figure 4: Example of the Budget Spent vs. Work Complete Section of the Dashboard for a Project

Phase	Budget	Actual	ETC	EAC	% Spent	% Work Complete	% Variance
Administration	\$63,833,000	\$9,602,959	\$54,230,041	\$63,833,000	15.04	0.00%	
Environmental	\$34,888,000	\$24,028,271	\$24,989,130	\$49,017,401	68.87	10.00%	58.87%
Design	\$71,050,000	\$48,343	\$71,001,657	\$71,050,000	0.07	0.00%	0.07%
ROW Support	\$5,495,000	\$0	\$5,495,000	\$5,495,000	0.00	0.00%	0.00%
ROW Capital	\$69,455,000	\$19,996,850	\$49,458,150	\$69,455,000	28.79	N/A	N/A
Const. Support	\$91,662,000	\$4,461	\$91,657,539	\$91,662,000	0.00	0.00%	0.00%
Const. Capital	\$825,962,000	\$0	\$825,962,000	\$825,962,000	0.00	N/A	N/A
Vehicles	\$83,947,000	\$0	\$83,947,000	\$83,947,000	0.00	N/A	N/A
Total	\$1,246,292,000	\$53,680,884	\$1,206,740,517	\$1,260,421,401	4.31		

Source: TransNet Dashboard Internal Reports

A variety of other reports are available including resource reports tracking planned and actual administrative support costs of SANDAG and Caltrans staff for each major corridor capital construction project by phase, financial reports tracking consultant task orders including their expiration dates, and schedule reports with master milestone reports for each corridor. Also, SANDAG’s annual State of the Commute report includes performance indicators for capital construction such as travel time and certain measures for transit services such as ridership.

However, according to SANDAG, limited data is available for transit and arterial performance due to the lack of real-time data and inconsistencies in operations between local agencies for streets and roads or transit operators for transit services. For example, MTS buses are equipped with automatic passenger counters that provide instant ridership data, but not all NCTD-operated vehicles have the automated feature. Thus, collecting transit data can require physical counts to capture boarding figures and timeliness measures. Similarly, to capture local roadway performance, SANDAG has to rely on local agencies to install and maintain traffic detectors.

While average weekday traffic volume can be compiled using this information, the data is often stale, incomplete, and unreliable. SANDAG is working toward improving the availability and reliability of transit and arterial performance data and plans to capture and use a system similar to the current one operated for freeway performance. On a regional level, SANDAG has identified 23 performance measures to track six overarching goals of its Regional Transportation Plan that includes all of the *TransNet* projects as shown in Table 3.

Table 3: Goals and Performance Measures in the 2050 Regional Transportation Plan

2050 Regional Transportation Plan Goal	Performance Measure Associated with the Regional Transportation Plan Goals
I. System Preservation and Safety	1. Percentage of transportation investments toward maintenance and rehabilitation 2. Percentage of transportation investments toward operational improvements
II. Mobility	3. Average work trip travel time 4. Average work travel speed 5. Percentage of work and higher education trips accessible within 30 minutes during peak periods 6. Percentage of non-work related trips accessible within 15 minutes 7. Out-of-pocket user costs per trip
III. Prosperous Economy	8. Benefits/Cost Ratio 9. Economic Impacts
IV. Reliability	10. Congested Vehicle Miles of Travel 11. Daily vehicle day per capita 12. Daily truck hours of delay
V. Healthy Environment	13. Smog-forming pollutants per capita 14. Systemwide Vehicle Miles of Travel per capita 15. Transit passenger miles per capita 16. Percentage of peak-period trips within ½ mile of a transit stop 17. Percentage of daily trips within ½ mile of a transit stop 18. Work trip mode share 19. Total bike and walk trips 20. CO2 Emission per capita
VI. Social Equity	21. Percentage of work trips accessible within 30 minutes during peak periods by mode 22. Percentage of homes within ½ mile of a transit stop 23. Distribution of RTP expenditures per capita

Source: SANDAG 2050 Regional Transportation Plan, Chapter 2

While SANDAG is using and tracking standard measures used in the industry, some of its peers also use other indicators that could be useful to SANDAG to help meet its goals. For instance, given that system preservation and safety is one of the six overarching goals, a common and relevant measure to track progress toward this goal could be tracking crash, injury, or fatality rates.

Plan of Finance and related Debt Structure Continue to be Monitored

In December 2005, the first Plan of Finance specifying the funding strategy for the *TransNet* program was approved by the SANDAG Board—since that time, the plan has been updated in January 2008, March 2009, and July 2010, with the last update in November 2011 to reflect the most current cash flow, budget, and revenue assumptions for the program. Each Plan of Finance update is discussed by ITOC, Transportation Committee, and ultimately approved by the SANDAG Board. Similar to the findings of the last audit, this current review found no significant operational changes had been made over the last three years to the structure, model,

or players involved with the development and usage of the Plan of Finance. The Plan of Finance remains an evolving, living plan that is continuously monitored and reviewed to balance costs and revenues and leverage sales tax revenues over the 40-year span of the program. Forming the foundation of the Plan of Finance are expenditures and revenues projections that are developed using sound practices as discussed below:

- ***Cost Estimates***

On the prior audit, we found that SANDAG had established sound processes to develop project budgets and continuously monitored those budgets to update projected costs on a regular basis. Our current review revealed there have been no changes to how program and project cost estimates are developed. Specifically, SANDAG project management staff provide cost estimates for transit projects, while Caltrans estimates cost on freeway projects. Once project cost estimates and associated cash flow needs for entire projects are known, finance and project staff work together to identify funding sources to supplement sales tax revenues and formula funds. Typically, environmental and design costs are programmed first with subsequent costs programmed once those stages are nearing completion. Additionally, we reviewed cost escalation multipliers used to convert initial *TransNet* budgets to current year dollars and found them to be reasonable.

- ***Revenue Projections***

Funding projections are determined on an annual basis during the budget process—although the specific revenue composition for individual projects varies greatly from year to year. Programmed amounts in the capital improvement program budget are revised as needed to address funding issues such as statewide budget cuts. Sales tax revenue projections are still developed using the same process as was employed in 2008 and is overseen by SANDAG’s Chief Economist. Those projections use a comprehensive approach incorporating a variety of demographic and economic forecasting components, commute models, and urban development models. Model results are reviewed by SANDAG’s Finance Department, the Chief Economist, and an advisory committee consisting of local experts in the area of municipal finance, housing and real estate, utilities companies, and academics.

While the prior audit did not find problems associated with the Plan of Finance and reported that the debt model in place seemed appropriate, it recommended continuous monitoring of debt service costs to ensure short-term and long-term obligations can be met given that the Plan of Finance was highly leveraged with borrowed funds. Early in the initial development of the Plan of Finance, the SANDAG Board of Directors made decisions to finance the Early Action Program projects through debt financing activities. As in the past, SANDAG’s debt structure continues to be reviewed by a nationally recognized financial advisory firm—Public Financial Management—who provides recommendations and advice related to decreasing risk through other financing vehicles or activities as necessary. SANDAG staff regularly monitor debt service costs and the debt model used, in addition to the SANDAG Board’s quarterly review of SANDAG’s investment strategy.

As of September 30, 2011, the annual debt service coverage ratio for Fiscal Year 2011-2012 was a strong 4.59—thus, SANDAG can pay its debt service costs consisting of interest and principal payments 4.59 times with its financial strength. The debt service includes the 2008 variable rate bond series and the 2010 fixed rate bond series.

Recommendations

To build upon the improved performance measure foundation and enhance current tracking and measurement of the impact and outcome of *TransNet* modes and programs, the ITOC should ask SANDAG to:

1. Continue ongoing efforts and develop a plan to incorporate arterial roadway and transit performance metrics into SANDAG's performance processes and develop additional performance measures including multi-modal measures or those related to other goals of the Regional Transportation Plan such as safety and environment. Plans and efforts should be documented to include:
 - Timelines and milestones for development and completion;
 - Methods for compiling, tracking, and using performance data;
 - Targets or goals for performance; and
 - Vehicles to be used for communicating actual performance results.

Chapter 2: Freeway and Transit Capital Construction Projects are still Closely Monitored and Mostly On-Schedule, and Within Budget

Similar to results noted in the prior triennial audit, good progress continues to be made on freeway and transit capital construction projects on the major corridors, and the same strong project oversight practices are in place related to project delivery, cost control, and schedule adherence monitoring. SANDAG and Caltrans have continued their use of the *TransNet* Dashboard as a project and program management tool to track up-to-date schedule, budget, and expenditure information against original baselines and budgets. When delays and overruns occur, there is a strong network in place to track, monitor, minimize, and communicate with all levels of the organization and leadership. Through these efforts, SANDAG and Caltrans have been able to keep most of the major corridor projects on schedule and justify budget revisions. Moreover, the *TransNet* projects completed to date have realized positive outcomes as it relates to relieving congestion and improving mobility.

Major Corridor Capital Projects Are Generally on Target

As of November 2011, *TransNet* had eleven major capital corridors with approximately 65 projects as follows:

1. State Route 76 Widening
2. State Route 52 Widening and Extension
3. Mid-Coast Transit
4. Interstate 15 High-Occupancy/Express Lanes and Transit
5. Interstate 805 High-Occupancy/Express Lanes and Transit
6. North Coast Rail Double-Tracking and High-Occupancy/Express Lanes
7. Blue and Orange Line Trolley Vehicles and Station Upgrades
8. Mid-City Transit
9. Goods Movement South Line Rail Upgrades and State Route 905
10. State Routes 94 and 125 South to East Connector
11. Border Access Corridor

Overall, projects along these corridors are mostly on schedule and are generally meeting interim milestones. Additionally, budgets over the past six years have remained stable although some corridor budgets have increased or experienced budget savings. However, certain segments or projects within corridors are delayed or vary significantly from original budgets as described in the following sections. Data was not in the Dashboard for the Goods Movement corridor; thus, that corridor is not included in our analysis.

Most Corridor Projects Seem to be on Schedule, and are Closely Monitored

When considering schedule adherence, we used Dashboard data to review progress at both the corridor-level and at the individual project or segment level within each corridor for a total of 65 projects or segments. The prior triennial audit validated the reliability of cost and schedule information captured in the Dashboard by tracing data back to fiscal records and project management software tools such as Primavera. For illustrative purposes, we present schedule data at the corridor-level in Table 4.

As shown in Table 4, two corridors (State Route 52 and State Route 76) are expected to be completed a year ahead of schedule in 2013 and 2017, respectively, and another 7 corridors are scheduled to be completed on-time or only slightly later than anticipated. However, the final corridor, the Mid-Coast Corridor, is projected to be delayed by more than four years beyond the original baseline completion date of December 2017; currently, that corridor is not slated to be completed until December 2021.

Table 4: Comparison of Corridor-Level Baseline Schedules with Current Completion Dates

Corridor	Baseline		Current	
	Start Date	End Date	Start Date	End Date
State Route 76	01/01/2002	12/01/2018	06/01/2000	01/22/2017
State Route 52	04/07/1987	06/30/2014	04/07/1987	01/14/2013
Mid-Coast	01/28/2005	12/31/2017	01/01/2006	12/31/2021*
Interstate 15	01/01/1998	12/31/2016	01/01/1998	04/30/2017
Interstate 805	01/28/2005	12/31/2016	07/01/2005	12/31/2016
North Coast	01/01/2001	12/01/2019	01/01/2001	07/01/2019
Blue Line – Orange Line	07/07/2007	06/30/2015	07/09/2007	12/31/2015
Mid-City	06/23/2008	06/30/2014	06/23/2008	06/30/2014
State Route 94/State Route 125	07/23/2010	12/31/2013	07/23/2010	05/21/2013
Border Access	01/01/1994	06/30/2016	01/01/1994	07/01/2016

Source: Schedules as of December 9, 2011 from TransNet Dashboard

Note: * According to SANDAG, the 2011 POF has updated the completion date for Mid-Coast as slated for 2018 and the start date for the Blue Line-Orange line was 07/09/2007.

To understand and assess the reasonableness of the schedule variances, we reviewed select projects in those corridors that projected some of the greater delays. For instance, we found that the overall four-year delay in completing the Mid-Coast corridor is mainly the result of the Trolley Light Rail Extension segment taking longer than initially planned. While SANDAG anticipated completion of the draft environmental document to take from January 2005 to May 2008, the current Dashboard schedule showed an actual start date one year later in January 2006 and a planned completion date of July 2012. With the late start and longer duration of the environmental document and numerous public meetings, the subsequent phases were delayed as well. Additional delay resulted when SANDAG was trying to coordinate the construction of the LOSSAN corridor heavy rail with this corridor, since the tracks run parallel to the Trolley with the light rail actually crossing at the junction of Interstate 5 and State Route 52 to minimize

construction impact on the community. As of September 2011, the project seems back on track with clearing a major milestone in receiving Federal Transit Administration approval of the preliminary engineering for the project paving the way for final design and construction.

It is important to note that a project end date is recorded after all close-out activities have been completed such as landscaping, claims settlement, and final accounting—a phase that can encompass several years. A more meaningful schedule date is “open to public” when the public can drive on the transportation improvement or ride on a new or renovated transportation feature. Yet, for those individual segments within a corridor that are experiencing schedule delays in certain project phases, SANDAG and Caltrans are currently watching and monitoring individual segment schedules to address those in caution or critical stages as indicated by a “traffic signal” on the Dashboard system showing a “red light.” Delays are discussed in project team meetings and vetted through the oversight committees. Specifically, baseline schedule changes must be approved by the SANDAG Transportation Committee.

Most Corridor Budget Increases Result from New Projects

Throughout the lifecycle of a corridor, segment, or project, costs can vary significantly with scope changes, cost overages and cost savings, and the addition or deletion of project details—all activity that is documented in detailed project files. While we did not review detailed project file documentation for each project within each corridor, we reviewed Dashboard cost data to analyze budget variances between expenditures originally anticipated in Fiscal Year 2006-2007 and current budgets as of Fiscal Year 2011-2012. Using that data, we found that 8 of the 10 corridors experienced a significant budget increase between Fiscal Year 2006-2007 and Fiscal Year 2011-2012 as shown in Table 5—although much of the increases seem to be attributable to new projects added to the corridors since Fiscal Year 2006-2007 that were not originally anticipated to start during these early years of the *TransNet* Extension Ordinance.

Table 5: Comparison of Historical and Current Budget Information by Corridor

Corridor	FY 06-07	FY 11-12	Variance	Amount Due to New Projects *	Remaining Amount Over/(Under)
	(in millions)		Over/(Under)		
State Route 76	\$400	\$373	(\$27)		(\$27)
State Route 52	\$719	\$580	(\$139)		(\$139)
Mid-Coast	\$1,285	\$1,306	\$21	\$21	\$0
Interstate 15	\$1,253	\$1,439	\$186	\$186	\$0
Interstate 805	\$153	\$652	\$499	\$489.5	\$9.5
North Coast	\$126	\$987	\$861	\$849.5	\$11.5
Blue Line – Orange Line	\$0	\$455	\$455	\$455	\$0
Mid-City	\$0	\$45	\$45	\$45	\$0
State Route 94/State Route 125	\$0	\$8	\$8	\$8	\$0
Border Access	\$0	\$245	\$245	\$245	\$0
Total:	\$3,936	\$6,090	\$2,154	\$2,299	(\$145)

Source: SANDAG Dashboard Budgets by Corridors as of October 24, 2011.

* Although actual total budgets for new projects added to the Mid-Coast and Interstate 15 corridors were \$24 million and \$247 million, respectively, these budget increases were combined with other project budget decreases for presentation at the summary corridor level.

For instance, according to SANDAG and Caltrans, staff took advantage of favorable conditions such as lower construction bid estimates and new funding streams to accelerate several corridor projects. Such is the case for the State Route 94/ State Route 125, Mid-City, and Border Access corridor representing \$298 million of the \$2.2 billion increase. Other budget increases were noted as well such as the North Coast Corridor that increased from \$126 million to nearly \$1 billion partly through the addition of \$849.5 budgeted for new projects along the corridor, and the Interstate 805 and Orange & Blue Lines that increased by \$455 million and \$499 million, respectively. In these instances, most of the budget increase was the result of new projects being added since Fiscal Year 2006-2007. Yet, over the same five-year period, three other corridors experienced declines in overall budgeted cost. Specifically, costs for the State Route 52 and State Route 76 declined from \$719 million to \$580 million, or 19 percent, and from \$400 million to \$373 million, or 6.7 percent, respectively.

Of particular note, even though some *TransNet* projects experienced budget increases, this is not atypical for large scale, major capital construction projects throughout the industry. Given the uncertainty of conditions that could be encountered during a longer term construction project, such as environmental requirements or construction price fluctuations, costs are often more than originally anticipated. What is important is that all significant changes to funding must be communicated, discussed, and approved by SANDAG and Caltrans management as well as the SANDAG Board of Directors. Prior to that approval, staff provide detailed reports discussing rationale for overruns, options or alternatives considered, and impact of changes to the overall program budget or schedule, among other items.

Solid Project Management Practices are Still in Place to Closely Monitor Projects

Successfully delivering transportation and transit development projects depends on employing the proper mix of project management practices to ensure that proper delivery, fiscal and schedule control, performance monitoring, communication, and oversight are in place throughout a project or program's life cycle. The prior audit concluded that SANDAG, in cooperation with Caltrans, had launched a solid project management framework over the development of its Early Action Program capital construction projects. Our current review reveals that no significant changes have been made to protocols employed over *TransNet* projects, and that these two entities continue to employ solid project management practices to sustain a viable capital development system.

For instance, little change has occurred in the way project managers oversee development projects or how the various transportation partner agencies interact and collaborate. Caltrans, with assistance from SANDAG-hired architecture and engineering consultants, is still responsible for delivering freeway projects; while SANDAG is responsible for transit capital construction. Effective project management tools are used for resource planning, cost estimation and monitoring, scheduling and tracking milestones in Primavera or Microsoft Project software systems, conducting regular project development team meetings, and reporting status and issues to decision makers. In terms of monitoring project budgets and schedules, project managers still rely on Microsoft Project software for smaller projects such as station improvements and Primavera project management software for larger, more complex projects—such as the Mid-Coast light rail transit where a more detailed tracking of activities with long lead items,

submittals, and detailed task level work breakdown structure is required to ensure milestones on the critical path are met. All data is converted into the Dashboard and can be observed at the program, corridor, or project segment level. Within various views in the automated database, a project manager can manage cash flow, schedule, trends, and budget. Stoplights and gauges provide quick budget and schedule status at a glance, and move from green to red as risks to the schedule and budget increase. Expenditures of all private, local, state, federal and *TransNet* funding for the freeway and transit major corridor capital development projects are tracked and managed in the Dashboard from project inception to project completion.

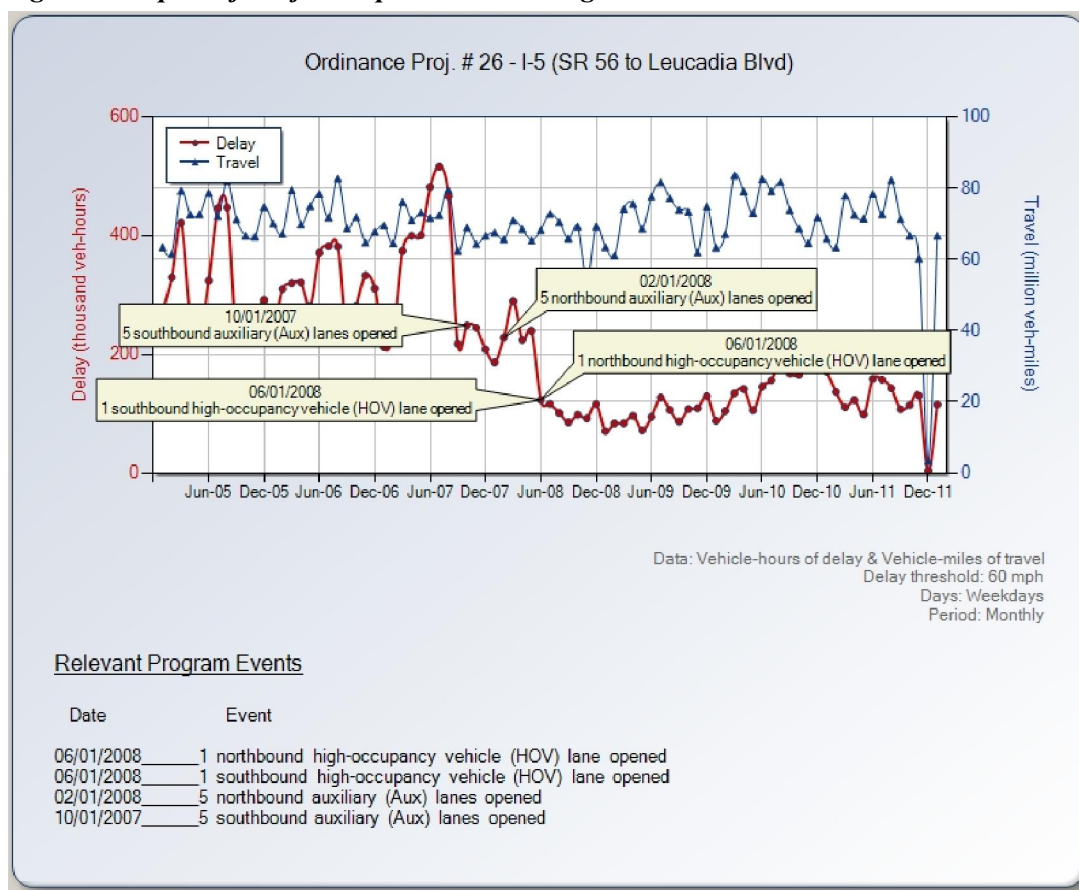
Moreover, SANDAG and Caltrans appear to have continued employing strong project development procedures over design, construction, contracting, and management, including implementing prior audit recommendations geared toward improving project delivery and management procedures. Specifically, SANDAG and Caltrans have implemented several process improvements such as establishing more formal and cohesive policies and procedures as part of a delivery manual for transit projects, streamlining the task order approval process, and standardizing project files and records. In response to other 2009 performance audit recommendations specific to transit project management, SANDAG and Caltrans are in process of implementing the following improvements:

- ***Project Management Plan*** which addresses contracting, change order control, budget and schedule, and document control processes including a uniform filing system for transit project management purposes.
- ***Configuration Management Plan*** to serve as the standard procedure and policy for controlling changes to transit systems and facilities. A draft plan was shared with MTS and NCTD in mid-2011 and final changes are currently being incorporated. Once complete, it will provide guidance on various areas including document control, design configuration, construction management, system safety, deviations from baseline documents, and change management.
- ***Risk Registries*** for all Early Action Program projects to assess risk and validate costs and schedules that will be included in the Dashboard. To date, the risk registries for the Interstate 15 Corridor and North Coast Corridor are available in the Dashboard.

Areas with Major Corridor Freeway Capital Construction Projects Completed to Date Have Shown Improved Congestion and Better Mobility

The Dashboard has both a public portal and an internal staff site—on the internal views, we reviewed reports correlating *TransNet* Ordinance projects with performance data for freeway segments related to freeway congestion in terms of vehicle-hours of delay and vehicle-miles of travel. We selected a sample of projects along a variety of corridors and found mostly positive impacts since the completion of the improvement projects. For the most part, traffic delays decreased after project completion when compared against similar data prior to the project start. For instance, when southbound auxiliary lanes opened on the Interstate 5 corridor between State Route 56 and Leucadia Boulevard in October 2007 followed by the opening of high-occupancy vehicle lanes in the summer of 2008, travelers encountered a significant decrease in delay. Specifically, vehicle-hours of delay decreased from 200 hours to less than 100 hours during the months following the completion of the additional lanes as shown in Figure 5.

Figure 5: Impact of Project Improvements Along the Interstate 5 Corridor

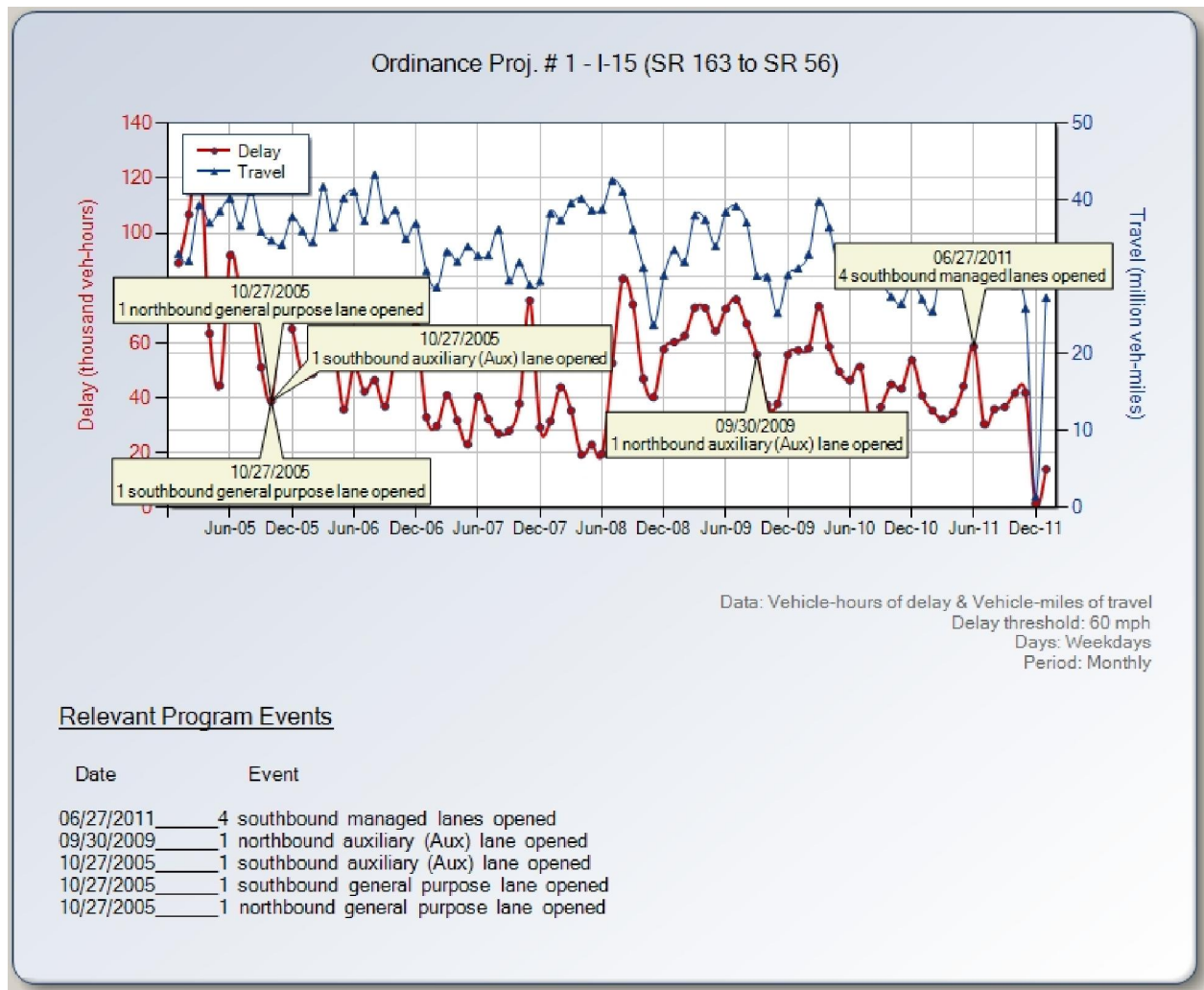


Source: TransNet Dashboard PeMS Report

Similarly, on the Interstate 15 corridor between State Route 163 and State Route 56, we found that while the number of miles vehicles traveled per day has remained relatively constant over the past six years, they traversed that freeway segment faster after additional lanes were opened as shown in Figure 6.

Moreover, SANDAG’s State of the Commute report for 2010 cites that overall travel times during peak commute periods have declined by 15 to 30 percent during morning commute periods and by nearly the same percentages in the afternoon. While the effects of the slowing economy certainly impact congestion and mobility, roadway construction efforts during the last several years have also helped to decrease severe congestion in the region. For instance, the State of the Commute report indicates that travel time delays on the Interstate 15/State Route 163 Corridor have been reduced by 25 to 50 percent from the completion of several key freeway improvements since 2005 with travel times increasing from 42 miles per hour in 2004 to 55 miles per hour in 2009 for general purpose lanes.

Figure 6: Impact of Project Improvements Along the Interstate 15 Corridor



Source: TransNet Dashboard PeMS Report

Recommendations

To better enhance transparency and communicate *TransNet* performance, the ITOC should have SANDAG:

2. Make the performance indicators such as vehicle-hours of delay and vehicle-miles of travel for individual corridors and projects shown on the internal Dashboard site available to the public either through Dashboard portals, or through some other mechanisms such as an annual report.

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Chapter 3: SANDAG Could More Actively Administer and Monitor the Local Street and Road Program to Measure Impacts

Although SANDAG functions in a mostly administrative role through policy development and fund distribution, the day-to-day implementation of local street and road projects is the responsibility of SANDAG's local partners. Once projects are approved by SANDAG, the local cities and the County handle the actual project design, construction, and project monitoring to ensure budgets are met, schedules maintained, and quality projects completed. Yet, with a significant amount of *TransNet* funding allocated to the Local Street and Road Program, SANDAG could do more to establish a sound program framework and actively monitor the impacts of the program.

For instance, we found that current efforts surrounding a 30-percent fund balance limitation rule miss the mark as an effective performance measurement tool and it is unknown whether the intended benefits of the local programs are being realized. We reviewed practices in place at the City of Chula Vista, City of San Diego, County of San Diego, City of Santee, and City of Vista and found that data to measure performance exists at the local level—although the cities and the County are not regularly tracking or using the data. However, to improve the Local Street and Road Program, SANDAG could require locals to provide annual reports or roadway statistics related to condition of roads and level of service related to mobility on roadways allowing impacts to be measured.

While local performance data is not regularly captured or monitored, we found many best practices in place at the local levels we reviewed through established processes and procedures allowing them to manage and deliver projects—although some of the tools employed vary between agencies due to project volume and size. Yet, certain SANDAG policies in place are cumbersome and inefficient at the local level related to the reallocation process required to transfer unused funds and interest between projects.

As the entity responsible for the *TransNet* program and related Regional Transportation Plan, SANDAG needs a better system to assess and monitor the impact of Local Street and Road Program projects on the quality of roadways and congestion relief that align with the goals of the overarching *TransNet* program. Thus, SANDAG should work with its local agencies to reconfigure the program's existing rules and develop new methods or practices that more closely monitor program outcomes and performance towards congestion relief and maintenance of roadways.

While SANDAG Oversees the *TransNet* Local Street and Road Program, Individual Cities and the County Implement Local Projects

With 29.1 percent of *TransNet* revenues allocated to the Local Street and Road Program, it is the second largest program behind major capital construction projects. To be included in the Local Street and Road Program, cities and the County submit congestion relief and maintenance projects approved by their local oversight bodies to SANDAG as part of the Regional Transportation Improvement Program process. As defined by the *TransNet* Extension Ordinance and Expenditure Plan Guidelines, maintenance projects include improvements such as lane

removal for bicycles, pothole repairs, erosion control, and roadway light bulb replacements. Conversely, congestion relief projects include:

1. Construct new or expand existing facilities
2. Conduct major rehabilitation and reconstruction of roadways
3. Improve traffic operations
4. Improve community infrastructure in support of smart growth development
5. Provide capital improvements for transit facilities

Ultimately, SANDAG has the authority to approve or deny projects as well as the responsibility for allocating *TransNet* funding for these projects. Once projects are approved to be in the program, SANDAG distributes *TransNet* revenues for the local streets and roads based on a defined formula outlined in the Ordinance as follows:

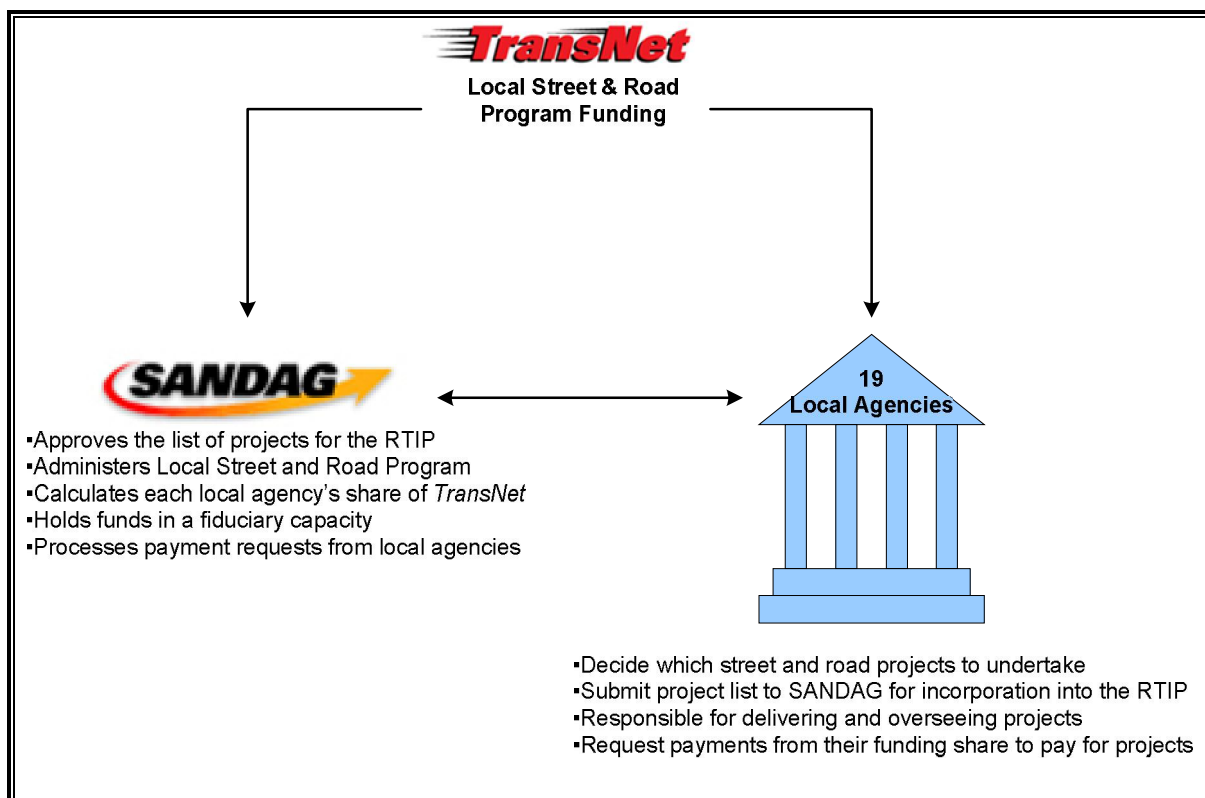
1. Annual base sum of \$50,000 for each local agency
2. Remainder of base sum allocation:
 - Two-thirds based on total population; and
 - One-third based on miles of maintained streets and roads.

However, the local agencies are responsible for the actual project selection and prioritization, as well as delivery of the projects, as depicted in Figure 7. Most agencies conduct project preliminary engineering in-house and seek assistance from engineering consultants on an as-needed basis, particularly for more specialized services such as bridge design or environmental surveys and studies. Construction project management is typically staffed by local entity staff, while private contractors are responsible for the actual construction.

Local street and road projects are typically related to congestion relief such as widening intersections or maintenance projects such as fixing potholes or overlaying road surfaces. Typically, all projects planned by the local cities and County must be approved by both the local governing bodies through the local capital improvement program and by SANDAG before the projects are incorporated into the Regional Transportation Improvement Program.

While the 2004 *TransNet* Extension Ordinance estimated the local street and road share at \$3.95 billion, or 29.1 percent of net sales tax revenues over 40 years, SANDAG uses the same formula-driven distribution rule based on population and miles of streets and roads. Further, the Ordinance requires at least 70 percent of *TransNet* local street and road funds to be spent on congestion relief and no more than 30 percent on maintenance efforts. Since 2008 when *TransNet* extension funds were received, SANDAG has allocated more than \$262 million of *TransNet* funding for this program— although, only half, or slightly more than \$130 million, was spent by the local agencies as of June 30, 2011.

Figure 7: General TransNet Local Street & Road Program Funding Responsibilities



SANDAG Should do More to Monitor *TransNet* Local Street and Road Program

Unlike most of the other *TransNet* programs, SANDAG does not actively administer and manage the Local Street and Road program to the same extent. Although the local agencies are responsible for the actual project implementation and making project decisions, SANDAG still has an inherent and critical role to establish the program parameters and monitor program accomplishments. Our review found that a delicate framework of Board policies and financial audit requirements form the foundation of the program with no one staff or group of programmatic staff responsible for establishing program goals, determining controls or procedures that should be in place, identifying the most effective tools for monitoring, and capturing whether program activities are functioning as intended. Throughout other *TransNet* program areas, SANDAG employs staff to closely manage those areas with continued focus on process improvements. Given the significant portion of funding allocated to this *TransNet* program, SANDAG should work with its local agencies to create a similar structure and stronger program incorporating the missing elements as described below.

✓ ***No Program Staff are Responsible for Program***

Currently, finance staff are the primary persons involved with the program through the compilation of local eligible projects into the Regional Transportation Improvement Program, allocation of *TransNet* revenues to local agencies according to specified formulas, tracking of local agency “draw down” of allocated funds, and coordinating the annual financial and compliance audit on behalf of ITOC. While these financial staff serve a critical and valuable role, there should also be a programmatic person(s) involved

with responsibilities associated with periodically set and monitor program goals, review rules and processes in place to streamline or set more effective controls, and measure program performance towards meeting overall *TransNet* goals.

✓ ***Concrete Program Goals are Missing***

While the Ordinance defines a program goal to “supplement other revenues available for local street and road improvements” that contribute towards congestion relief, a stronger goal should be established that is tied to program outcomes. With the current goal, a “successful” outcome could be realized by merely providing the revenues and resources for projects. Yet, the intent should be more than to just provide money; rather, the focus should be on whether the money spent achieved intended benefits such as relieving congestion in the area through less delayed traffic or enhancing the conditions of roadways so that traffic can flow smoothly. Currently, there are no program goals specific to the local road and street program; thus, it is challenging to know whether the *TransNet* funds spent are hitting the mark.

✓ ***Policies Need to be More Regularly Revisited***

As discussed in more detail in the sections that follow in this chapter, there are certain policies that seem to lead to inefficiencies and may not be functioning as intended. If dedicated program staff were made responsible for the program, they could revisit the existing procedures on a regular basis to identify better methods to achieve the intended results. Further, program staff could be more involved with the local agencies to better gauge where different controls are needed. Policies and procedures could be combined into a central handbook or set of guidelines that is provided to the local agencies.

✓ ***Tools for Measuring Progress and Performance Need to be Revisited***

When establishing goals for the program, SANDAG should also reassess how best to track local agency performance. Currently, it appears that there are mostly informal methods used to track and monitor program performance primarily related to annual financial and compliance audits commissioned by ITOC. As we describe later in this chapter, we believe existing rules and certain tests for audit compliance are not the most effective tools for tracking and understanding local performance.

✓ ***Limited Information Exists to Track Whether Program is Achieving Anticipated Goals***

Associated with the lack of effective tools for measuring performance, our review found limited data is captured to know whether *TransNet* funds spent on the Local Street and Road Program are achieving the intended program benefits. For instance, SANDAG does not know whether delays and congestion have decreased on local roadways, nor does it capture data on whether the condition of roadways has improved. This area is discussed in detail later in this chapter as well.

Current Practice of Auditing Compliance with 30 Percent Fund Balance Rule is not Effective in Measuring Progress

To assist with the implementation of the Ordinance in 2005, the SANDAG Board adopted a set of guidelines formalized as the “*TransNet* Ordinance and Expenditure Plan Rules” through Board Policy 31. One of the many rules documented in this policy focuses on local agency balance limitations as it relates to the Local Street and Road Program. Specifically, Rule 17 of the policy states the following:

“Based on the [annual financial and compliance] audit, an agency that maintains a balance of more than 30 percent of their annual apportionment (after debt service payments) must use the remaining balance to fund projects. SANDAG will defer payment until the unused balances fall below the 30 percent threshold.”

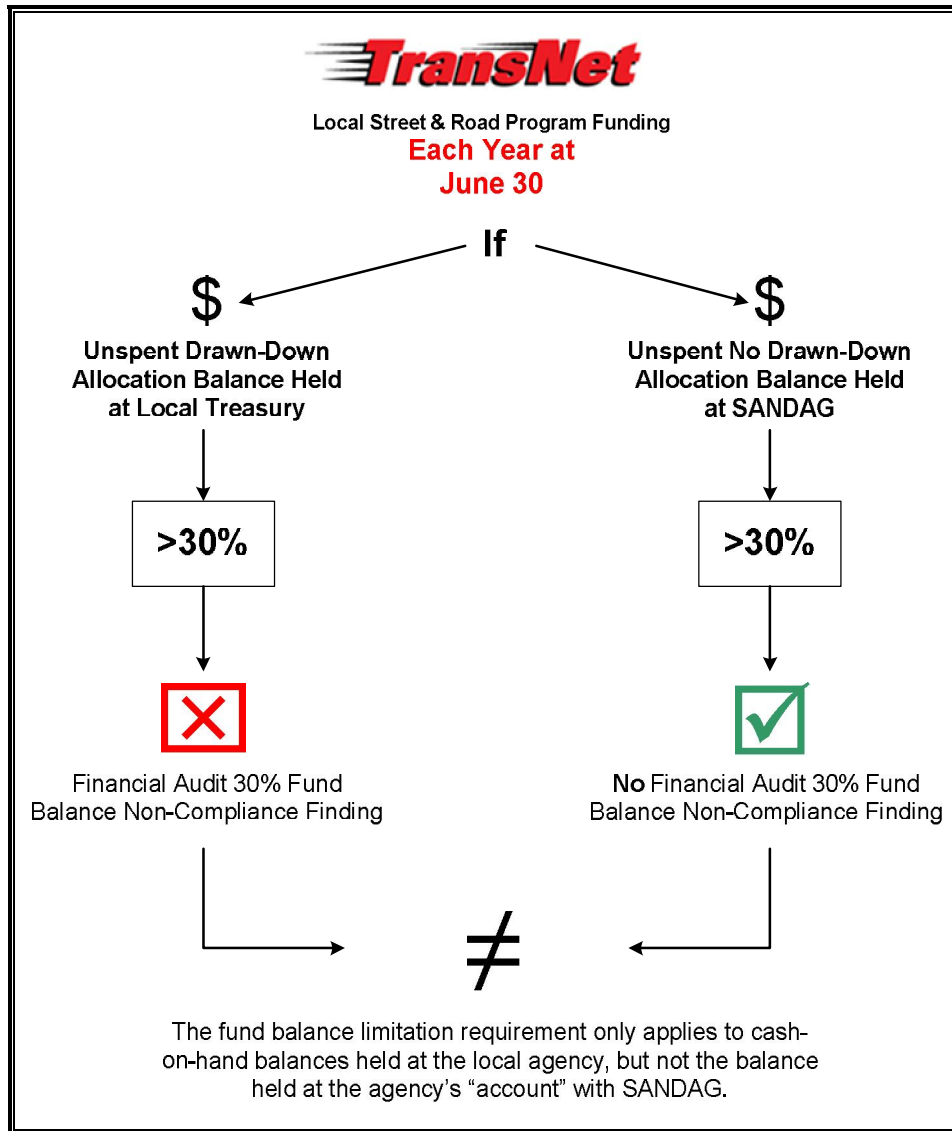
While not specifically stated, in practice, it appears that this rule is a key indicator used by SANDAG and ITOC to gauge whether the Local Street and Road Program is on-track and effective. Yet, we found the rule does not sufficiently measure progress and the policy may not have been fully vetted by ITOC—nor have been clearly communicated to the local agencies.

30 Percent Rule is Ineffective and Inconsistent in Application

In the absence of any other performance data, compliance with the 30 percent rule has become the primary method for measuring progress of the Local Street and Road program. If a local agency is found to have a *TransNet* fund balance in their local Treasury exceeding 30 percent, they receive an audit finding of non-compliance and may be perceived as not completing projects in a timely or effective manner. However, the 30 percent policy is not measuring whether the money was spent on projects as planned or better outcomes were realized from spending *TransNet* monies—rather, in effect, it merely measures whether the local agencies are drawing down funds in excess of spending patterns. In fact, a local agency’s application of drawdown options can unintentionally skew the audit findings as shown in Figure 8.

Specifically, local agencies have an option for drawing down the allocated share of Local Street and Road Program funds—it can request the entire amount of its allocation prior to incurring project expenditures, or it can request after-the-fact reimbursements for projects expenditures from its allocation. The option exercised may depend on the local agency cash flow position, but the 30 percent fund balance rule is only applied on monies drawn down and on deposit at the local treasury level.

Figure 8: Local Agency Fund Balance Requirement under SANDAG Board Policy 31 - Rule 17



For example, if an agency receives an allocation of \$1 million in program funding during one fiscal year, it could request the full \$1 million to be deposited with its local treasury to be used on approved projects. To be compliant with the fund balance requirement, it must spend at least \$700,000 and have a year-end cash-on-hand balance of no more than \$300,000. In contrast, if the agency does not draw down any funds at all—leaving its entire \$1 million “banked” at SANDAG—then it would not be viewed to have a non-compliant fund balance issue. Thus, a finding of compliance with this rule does not directly correlate with getting projects completed and realizing program benefits—as may have been an expectation when the rule was implemented.

In Fiscal Year 2008-2009, the first year audited under the *TransNet* Extension Ordinance, auditors found nearly 75 percent, or 14 of the 19, entities were non-compliant with the requirement as shown in Table 6.

The following year, the number of non-compliant agencies was reduced down to only 5 with three of those entities certifying that their cash-on-hand balance has fallen below the required 30 percent threshold. As the local agencies became aware of the new requirement through the financial audit process, they changed practices to draw down funds closer to the time when project expenditures were incurred or expected to be spent. Fiscal Year-end 2010-2011 compliance is still being determined by the financial audit currently underway—according to SANDAG, that audit is anticipated to conclude in March 2012, but compliance with the rule drastically improved for the Fiscal Year 2009-2010 period.

Table 6: Local Agency Fund Balance Compliance FY 2008/2009 to FY 2009/2010

Entity	Fiscal Year-Ending	
	6/30/2010	6/30/2009
Carlsbad		
Chula Vista	✓	
Coronado	✓	
Del Mar	✓	✓
El Cajon	✓	✓
Encinitas	✓	
Escondido		
Imperial Beach	✓	
La Mesa	✓	✓
Lemon Grove	✓	
National City		
Oceanside	✓	
Poway	✓	✓
San Diego City	✓	
San Marcos	✓	
Santee	✓	✓
Solana Beach		
Vista		
San Diego County	✓	✓
Compliant	14	6
Non-Compliant	5	13

Source: ITOC Quarterly Report Ending June 30, 2011

In some instances, local agencies cannot get reimbursement on individual projects with valid incurred expenditures if their overall fund balance for all projects exceeds the 30 percent threshold. This situation results because funds cannot be transferred between projects without undergoing complicated and time-consuming activities requiring formal approval by the local jurisdictional governing body and SANDAG approval through the Regional Transportation Improvement Program process; thus, some local jurisdictions are selective in the timing to seek transfer approvals. For example, the County of San Diego had spent more on certain projects at the end of Fiscal Year 2009-2010 than funds received for reimbursement—resulting in negative

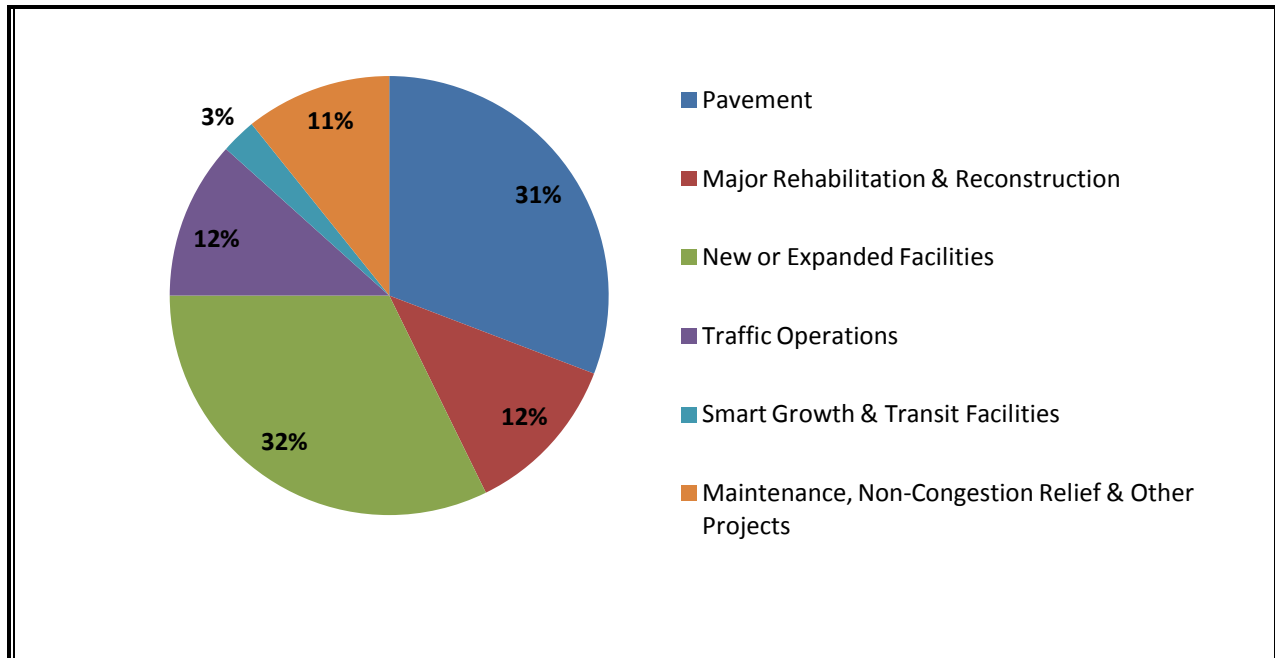
project balances. On one project, the County experienced a project deficit of \$101,282 when project expenditures of \$846,730 exceeded *TransNet* funding of \$745,403. According to the financial audit, the County could not request additional funding to cover the deficit because it had to stay compliant with the 30 percent fund balance rule. While the County planned to resolve the deficit in the next fiscal year when the 30 percent fund balance limit is reset, the 30 percent fund balance rule not only held up payment on an eligible project, but could have also delayed that project’s delivery schedule if other funding was not available to cover the deficit.

Conversely, because Local Street and Road Program projects are allocated funding in five-year time blocks as part of the Regional Transportation Improvement Program process, some agencies may have projects scheduled to start in later years and, thus, should not be “penalized” for not spending the money in earlier years—regardless of where the money resides. For some smaller agencies or larger projects, local agencies have to accumulate funds for several years to start its projects. In addition, if projects funded under the local program are more planning related, they might not have the same level of visibility in terms of outcomes as a construction project. Thus, improvements are still in progress and immediate results may not be measurable or visible.

When we reviewed the 2008 and 2010 Regional Transportation Improvement Programs covering Fiscal Years 2008-2009 through 2014-2015 for a sample of five local agencies, we found that only a third of the entire \$344 million of *TransNet* funding programmed was allocated for projects during the period of our audit review. Based on activities reviewed in Chula Vista, Santee, City of San Diego, County of San Diego, and Vista, we found that the majority of the \$344 million was allocated towards new or expanded facilities including new roadways and bridges, wider roadways and bridges, and pavement related work. As shown in Table 7, pavement repair and roadway improvements consume 66 percent of the \$344 million budget—but only represent 22 percent of all projects. Thus, there are fewer improvements related to tangible projects underway such as new pavement or new roadways or bridges. Other improvements, including transportation studies and traffic calming projects, are more prevalent in number, cost less, and likely are completed sooner—although they may not have the same visibility or magnitude of daily impact on the traveling public.

Table 7: Types of Projects Funded by *TransNet* Extension for 5 Local Agencies

Category	# of Projects	\$ Allocation
Pavement (e.g. grinding, overlays regardless of thickness)	13	\$106 million
Major Rehabilitation & Reconstruction (e.g. roadway realignment, bridge retrofit, new sidewalks)	30	\$41 million
New or Expanded Facilities (e.g. new roadways/bridges, roadway/bridges widening)	20	\$111 million
Traffic Operations (e.g. new median/traffic signals, traffic signal synchronization)	21	\$40 million
Smart Growth Related Infrastructure & Transit Facilities (e.g. traffic calming, pedestrian ramps, bus stops)	15	\$9 million
Maintenance, Other Non-Congestion Relief & Other Projects (e.g. traffic studies, design plans, signs)	48	\$37 million
Total:	147	\$344 million



Source: 2010 RTIP, Amendment No. 12 (as of October 24, 2011)

Recent ITOC meeting minutes from 2010 and 2011 indicate questioning the need for and practicality of the 30 percent fund balance rule, although there are those that viewed the rule as an important mechanism to “ensure local agencies are spending down their allocations in a timely manner.” Yet, it seems that local agencies may be spending significant energy on the administration necessary to comply with the rule—rather than devoting that extra time to tracking project milestones and the projects themselves. Further, little information is gained about whether outcomes based on the completed local projects are achieving the program goals regardless of whether there is an associated compliant or non-compliant audit finding. Instead, SANDAG should work with the local agencies to identify a better mechanism for monitoring performance and outcomes upon project completion.

Policies Related to Reallocating Unused Funds and Interest Earnings are Inefficient

As part of its administration over the *TransNet* Local Street and Road Program, SANDAG has established certain policies, guidelines, and protocols for the local agencies to implement language of the Ordinance itself. While this guidance is intended to help guide and manage the program, certain aspects create impediments to the efficiency of the program. Specifically, one program requirement that appears to be causing inefficiencies in the Local Street and Road Program relates to the amount of work needed to assign unused balances and interest earnings.

For example, if a local agency completes a project at a cost below the programmed or budgeted amount, it must follow Board-approved policies to transfer the balance to another *TransNet*-eligible project. Specifically, Board Policy 31 – Rule 17, Section 3.B requires local agencies to provide documentation, such as a signed staff report or resolution, indicating its governing body consents to the transfer proposed. Local agencies must go through an elaborate administrative process to seek local City Council or County Board of Supervisors approval to move the unused funds to another local street and road project—whether the amount is \$1 million dollars or \$100.

Given the effort required to obtain a resolution, there may be little incentive for project management staff to deliver a project under budget. While the intent of this rule could have been to minimize the risk of funds being transferred to non *TransNet*-eligible projects, the unintended consequence is that the rule maybe a disincentive towards aggressively monitoring project costs. At a minimum, there should be some dollar or percentage threshold applied when determining the process needed to transfer unused funds between projects so that only significant reallocations require City Council or County Board of Supervisors approval.

Moreover, Rule 6 under that same policy requires interest accrued to be allocated to active projects with outstanding balances—methods used for interest allocation are audited during the annual *TransNet* financial and compliance audits. Thus, once local agencies have drawn down their share of *TransNet* funding and deposited the monies in their local treasuries, the interest earned on the drawn amount should be allocated to active *TransNet* local street and road projects on a basis and frequency to be determined by each local agency. For example, if a local agency earned \$5,000 in interest during a fiscal year and has ten active *TransNet* local street and road projects, it must allocate the \$5,000 among those ten projects. The entire \$5,000 cannot be allocated to only one of the ten projects.

This process may not be the most efficient or effective method for using the “extra” *TransNet* income. If a local agency has ten on-going projects, there may only be one project in need of an additional influx of cash to pay for unanticipated costs or overruns. However, under the current rule where all projects must receive an allocated share of interest earning, a project that is on budget and on schedule would still receive additional monies further compounding the process inefficiencies. If that project is completed under budget, the remaining funds—both the original project allocation and the additional interest earning allocation—will have to be transferred to another project via the time-consuming amendment process wherein City Council or County Board of Supervisors approval must be sought regardless of dollar amount.

Given the significant effort involved with making changes to local project budgets and the relatively insignificant amounts of interest earned, policies and rules should be revisited and possibly modified to streamline the process. For instance, we found that local agencies have earned slightly over \$2.2 million in interest over the first two years of the *TransNet* Extension Ordinance Local Street and Road Program as shown in Table 9. Although the County of San Diego earned the bulk of those funds with \$2 million in interest, the remaining 18 local agencies earned minimal amounts ranging from zero dollars to \$120,036 for the City of San Diego. Combined, the remaining 18 agencies earned less than \$175,000. With so little interest earned, we believe it is unnecessary to require an overly complicated process to spread interest among projects.

Since *TransNet* revenues and associated interest earned are already tracked in separate funds or accounts at the local level and verified by the annual *TransNet* financial audit, SANDAG could consider revising the interest allocation rule to allow locals to utilize interest income as a “savings account” that can be spent on eligible projects as needed. Similar to a construction project contingency fund established for change orders, the interest could be pooled and drawn upon by the local agency and used for projects when needed.

**Table 8: Local Street & Road Program TransNet Extension
Interest Income as of June 30, 2010**

Entity	Interest Income
Carlsbad	\$158
Chula Vista	\$6,184
Coronado	\$7,205
Del Mar	\$1,241
El Cajon	\$0
Encinitas	\$381
Escondido	\$0
Imperial Beach	\$9,417
La Mesa	\$0
Lemon Grove	\$15,471
National City	\$2,161
Oceanside	\$0
Poway	\$5,076
San Diego City	\$120,036
San Marcos	\$340
Santee	\$180
Solana Beach	\$315
Vista	\$3,890
San Diego County	\$2,067,629
Total Interest Income	\$2,239,684

Source: ITOC Financial Audit Fiscal Year 2009-2010

Note: (A) Interest amounts shown represent only cumulative interest income for Local Street Improvement projects under the TransNet Extension as shown in the Financial Audit reports' Schedule B for each local agency. It does not include interest income from projects under other TransNet Extension programs.

Clear tracking and documentation of these activities should be maintained, and the annual financial and compliance audit could review the transactions to ensure money was appropriately spent on *TransNet*-eligible projects. For instance, if an agency hypothetically earned \$5,000 in interest, it would continue to track the interest amount earned and disbursed on an ongoing basis with transaction records showing \$1,000 spent on Project A, \$2,500 for Project B, and remaining interest pool available with a year-end balance of \$1,500.

Consequently, SANDAG and its local partners could consider employing policies allowing a more “needs” based approach to determine the type of local street and road projects to be funded, rather than limiting efficient and effective practices based on administrative rules.

While Measuring Performance Is Challenging without Goals and Metrics, Local Agencies Reviewed have Data that Could be Used to Assess Program Outcomes

Measuring program performance and reaching broad sweeping conclusions can be challenging because of the wide range of activities performed under the Local Street and Road Program. Based on our review, neither SANDAG nor the local agencies we reviewed seem to have formal stated goals for the program, and do not fully track program performance. A significant amount of the *TransNet* Local Street and Road Program funding is spent on pavement rehabilitation work and new or expanded facilities; however, it is critical for SANDAG and the local agencies to identify what has been accomplished with *TransNet* dollars such as repairing deteriorating roadways and sidewalks or alleviating congestion on major arterial roads. As discussed in the previous section, the current tools used to measure performance focus solely on expenditures, rather than standard industry outcome performance measures such as throughput, speed, travel time, level of service, or accident rates. Since not all *TransNet* local street and road projects lend themselves to be measured by those factors and some measures require the existence of reliable local data from surveys or roadway sensors, SANDAG and its local partners should work towards determining which measures would be valuable for evaluating the impact of the Local Street and Road Program and the frequency and method for providing data to SANDAG.

Local Agencies Reviewed are not Measuring Performance, Although Some Data is Available

To identify the level of performance measurement conducted and type of data available at the local level, we selected a sample of five agencies to conduct more in-depth assessments. Specifically, we reviewed practices at the City of Chula Vista, City of San Diego, County of San Diego, City of Santee, and City of Vista.

For the majority of local agencies we reviewed, most have not established specific goals or targets in terms of transportation measures such as minimizing accident rates or decreasing travel time delays. When asked if cities established general transportation goals or targets (such as paving a prescribed number of miles per year or achieving a specific accident rate for designated areas) to guide congestion relief or maintenance project creation, most cities advised that no formal goals or targets had been developed. However, two cities—the City of Santee and the City of Chula Vista—did have goals related to their streets and roads projects. Specifically, the City of Santee has a Pavement Condition Index goal of 70 (out of 100), and the City of Chula Vista has a target road operation goal of no more than 2 hours at Level Of Service “D” (on a scale with “A” being no congestion and traffic flowing at speed limits) each day. Yet, neither the City of Santee nor the City of Chula Vista measures the effect that individual maintenance or congestion relief projects have on achieving either of these goals.

In fact, none of the local agencies we reviewed evaluated the impact that individual maintenance or congestion relief projects have on their regions on a project-by-project basis. We asked if the locals conduct before and after studies to determine the effect *TransNet* projects or other transportation projects have had on various measures such as accident rates, Pavement Condition Index (a method of quantifying pavement conditions), Level of Service (a measure used to identify traffic flow) or other measures. All local agencies responded that no such measures are recorded and tracked on a project-by-project basis. While the County of San Diego and other cities we reviewed may calculate various measures and statistics to determine which roads require maintenance or congestion relief project development, none of the officials interviewed

conduct follow-up evaluations to determine what effect project completion had on any measure. Staff cited long term budget constraints and limited useful benefits for reasons why they have not conducted before and after studies for transportation projects. However, multiple local agencies interviewed advised that they are in process of developing formal transportation goals such as a target Pavement Condition Indices or Level of Service for roadways.

Moreover, while limited data is available at SANDAG in terms of local road performance measures, local agencies we reviewed track several types of data that could provide some minimum level of basic statistics on the program’s output such as miles or square feet of roads paved during a fiscal year as well as outcomes such as number of accidents related to safety or Level of Service related to congestion. By beginning to track certain measures and linking the measures with specific goals or targets, SANDAG and its local partners could move towards a more comprehensive arterial performance measurement framework.

Data to Assess Roadway Conditions is Available for those Local Agencies Reviewed

All local agencies we reviewed use the Pavement Condition Index or the Overall Condition Index— standard industry methods of quantifying pavement conditions—as their primary tool for evaluating paving needs and progress. The Pavement Condition Index is a numerical index between 0 and 100, with 0 being the worst possible condition and 100 being the best. Most conduct visual surveys on an annual or other rotational basis of each roadway within its jurisdiction and assign an index number based on the survey results. While the City of Santee has a prescribed, formal Pavement Condition Index target for all of its roadways, other agencies have more informal guidelines of staying in the “Good” or “Very Good” Pavement Condition Index ranges. However, most local agencies we reviewed do not compile statistics or data comparing the road miles they intended to pave versus the miles actually paved.

Because each *TransNet*-funded pavement project contract likely describes the number of square feet or miles to be paved, data does exist that could allow for a “planned to actual” comparison. For instance, at our request, the County of San Diego was able to compile statistics comparing its planned number of paved miles with the number of paved miles actually completed for its pavement program as shown in Table 10. These metrics show that over the last three years, the County has paved 55.99 miles, or nearly 90 percent as planned.

Table 9: Available County of San Diego Pavement Statistics, Fiscal Years 2009 through 2011

Jurisdiction	FY 2009		FY 2010		FY 2011		Total	
	Planned Miles	Actual Miles	Planned Miles	Actual Miles	Planned Miles	Actual Miles	Planned Miles	Actual Miles
San Diego County	18.94	32.42	20	0	23.57	23.57	62.51	55.99

Similarly, a 2010 audit conducted by the San Diego City Auditor used information from pavement contracts to identify the amount of linear miles of streets resurfaced by fiscal year. Specifically, between Fiscal Years 2003-2004 and 2009-2010, the audit reports that the City of San Diego had resurfaced 756 miles at a cost of approximately \$132.7 million—with 431 miles totaling approximately \$84 million between Fiscal Years 2008-2009 and 2009-2010. With roughly 3,000 miles within the city limits, the audit further estimated that it would cost the City

another \$112.5 million per year to bring city streets to a medium level of repair—yet, the City only had \$26.4 million available in its Fiscal Year 2010-2011 budget for resurfacing. In November 2011, the City of San Diego presented plans to the ITOC for spending \$3 million in Fiscal Year 2011-2012 and \$10.4 million in Fiscal Year 2012-2013 from its *TransNet* fund balance on paving construction contracts. However, similar to other local agencies, the City of San Diego could theoretically spend its entire annual *TransNet* allocation on pavement projects and still have a backlog of roads needing significant repair work.

We believe that by summarizing data from pavement contracts, other local agencies could also calculate performance statistics and provide the information to SANDAG on an annual or other specified basis that would provide more useful information regarding progress and outcome of the program. For example, as shown in Table 11, this data would allow the public to quickly assess how many miles of roads were paved, how the miles paved relate to the total miles of maintained roads, and what those improvements cost. Once several years of data is gathered, local agencies could also use the information to set pavement targets and goals for their own individual jurisdiction. Trends and comparisons between agencies could be analyzed as well.

Table 10: Example of Potential Roads Resurfacing Statistics that Could be Captured

	Total Miles Resurfaced by Agency	Total Miles Maintained by Agency	Ratio of Miles Resurfaced to Maintained	Cost of Resurfacing Work
Local Agency 1	10	100	10%	\$100,000
Local Agency 2	26	50	52%	\$250,000
Totals	36	150	24%	\$350,000

In conjunction with pavement management system reports and assessments of pavement conditions, local agencies could further expand the data and report on pavement condition index changes after improvements have been made to assess progress toward improving pavement conditions. For instance, if data was tracked as shown in Table 12, SANDAG could determine that “Local Agency 1” is improving conditions from a Pavement Condition Index of 50 to 60 and is getting closer to its goal of 65.

Table 11: Example of Potential Road Condition Statistics that Could be Analyzed

	PCI Goal	PCI Fiscal Year 1	PCI Fiscal Year 2
Local Agency 1	65	50	60
Local Agency 2	75	70	56
Average PCI for Region	70	60	58

Congestion Relief Performance Data is Also Available

While most local agencies we reviewed indicated that some type of transportation measures or statistics are calculated on an annual or rotating basis such a accident rates at major intersections or Level of Service for significant arterial roadways, the evaluations are not conducted to measure the impact of *TransNet* projects. As such, the local agencies do not record and track these performance statistics before and after project implementation to determine the impact of individual projects on local street and road conditions.

Specifically, local agencies reviewed capture industry-standard data related to Level of Service indices that rate the operating conditions of a roadway based on factors including travel speed, travel time, traffic volume, and delay. Level of Service is measured on a scale of “A” to “F,” with “A” representing the best operating conditions and “F” categorizing the worst condition—as briefly described in Table 13.

Table 12: Description of Level of Service Measures

Level of Service	Description
A	Free-Flow Operations: traffic at or above posted speed limit, motorist have complete mobility between lanes
B	Reasonably Free-Flow
C	Stable Flow
D	Decreasing Free-Flow Levels
E	Unstable Flow; Operations at Capacity
F	Forced or Breakdown Flow: every vehicle moves in lockstep with vehicle in front, frequent slowing required

For example, the City of Chula Vista conducts transportation surveys on a rotating basis to determine the Level of Service of its streets and roadways to prioritize maintenance and capital improvement project development and implementation. While there may be a number of congestion relief projects developed to address conditions and achieve a higher Level of Service, most local agencies surveyed do not conduct follow up surveys to determine the benefit or impact specific congestion relief projects had once projects are completed.

Overwhelmingly, local agencies interviewed take a broader approach to evaluating the impact of various transportation congestion relief and maintenance projects. For example, the City of Santee prepares an annual Pavement Management Report that includes providing the overall condition of the City’s roadways as well as a breakdown of conditions by arterial, major and residential roadways. In another instance, the City of Chula Vista evaluates the Level of Service at all of its signalized intersections and tracks non-compliant segments until improvements have been made to bring the segment into compliance. At a minimum, this type of useful and valuable outcome and performance data could be provided to SANDAG and ITOC as part of monitoring *TransNet* progress.

Local Project Delivery Frameworks we Reviewed Are Aligned with Best Practices to Help Control Project Schedule and Cost

To help ensure projects get completed as planned and anticipated, we found that local agencies responsible for delivering *TransNet* funded local street and road projects have established policies and practices setting an adequate framework to provide oversight and control over project delivery. Several best practices are in use at the local agencies including, but not limited to, the following:

- ✓ Use of public contracting code and competitive practices for purchasing;
- ✓ Retention of proposal and bid evaluation records justifying the selection of a contractor or consultant in contract files;
- ✓ Approval for capital improvement projects and high dollar contract change orders by City Council or County Board of Supervisors; and
- ✓ Scrutiny of progress payment requests and negotiation of change orders by project managers.

In addition, most agencies also referenced the industry-preferred “Greenbook” for public works construction standards and had published standard drawings and street design manuals on their websites. To get a better understanding of practices and processes at the local level, we selected 12 of the 19 local agencies in the San Diego region for review. Specifically, we interviewed the following 12 agencies and conducted more in-depth assessments at five agencies—City of Chula Vista, City of San Diego, County of San Diego, City of Santee, and City of Vista.

South Border	South Coastal	South Inland	North Coastal	North Inland	Downtown
-Chula Vista	-National City -Imperial Beach	-La Mesa -Lemon Grove -Santee	-Carlsbad -Oceanside	-Vista -Escondido	-City of San Diego -San Diego County

Public Contracting Guidelines

All local agencies we reviewed had some form of purchasing manual in place containing standard sections necessary to guide staff in the solicitation of professional services and construction contracts. While certain guidelines were embedded in local municipal code, some

<u>Procurement Practices</u>
✓ Purchasing/Procurement Manual Exists
✓ Competitive Procurement Methods Used
✓ Selection Records Available

agencies developed more comprehensive formal manuals to implement the purchasing rules. For example, the City of Carlsbad’s “Purchasing Policies and Procedures Manual” requires staff to go through a formal bid process for purchases over \$30,000 with all awards over \$100,000 requiring City Council approval. At smaller agencies such

as the City of Santee, the City Council approval threshold for professional services is set at \$10,000 as codified in the local municipal code.

In addition, we found that our five local agencies reviewed maintain proposal scoring sheets on file documenting the selection of professional services consultants. For services procured through a request for bid process, we found that the agencies awarded the contract to the “lowest responsible and responsive” bidder which is typical for public contracting. For example, the City of Santee received 10 bids for an intersection improvement contract in January 2010, and after reviewing the bids, recommended the City Council to award the contract to the lowest responsible and responsive construction company.

Project Selection – Capital Improvement Program Process

On an annual basis, local agencies we reviewed typically undergo a Capital Improvement Program process to identify projects needed to address the agencies’ infrastructure needs. While several departments can submit projects to be included in the Capital Improvement Program, an agency’s engineering division is generally responsible for delivering the projects. Approval of the Capital Improvement Program occurs at the City Council/County Supervisors-level after projects and budgets are vetted in public meetings. Specific to the *TransNet* Local Street and Road Program, all *TransNet* funded projects are also in the Capital Improvement Program budget. After being adopted by the local government, the Local Street and Road Program of projects is then submitted to SANDAG for inclusion in the Regional Transportation Improvement Program that combines local agency projects and regional projects into one regional document. While each Capital Improvement Program has a five-year outlook, updates occur annually to keep current with changing local needs and availability of funding.

As such, most local agencies’ project prioritization process depends highly on whether funds will be available to cover the expenses. While numerous staff reports and studies are provided to assist council members or county supervisors in making the decision, the City of San Diego has developed an additional tool specific for transportation projects—namely, a “Prioritization Policy” with the purpose of “establishing an objective process for ranking Capital Improvement Program projects to allow decision-makers to have a basis for choosing the most compelling projects for funding.” The City of San Diego’s Engineering and Capital Projects Department scores submitted project requests based on factors established by the policy such as health and safety effects, project cost and grant funding opportunity, or project readiness. With only projects being scored that have completed the planning stage, greater focus is given to projects that are closer to being “shovel-ready,” allowing selected projects to have a more defined scope and cost estimate which in turn can help minimize schedule and cost variations later on.

Project Planning

- ✓ Project Selection & Prioritization is Publicly Vetted Through the Capital Improvement Process
- ✓ Project Scope Changes & Cost Increases are Disclosed to and Approved by Appropriate City/County Officials

Project Management Practices

Organizationally, most local agencies we reviewed employ a “cradle-to-grave” project oversight method where one engineer is assigned to a project during the conceptual design phase and stays on as the project manager through the project’s close-out—a leading practice. During the construction phase, a construction manager or resident engineer manages day-to-day construction site activities while working closely with the project manager on issues, schedule, and budget adherence. If needed on a project, right-of-way and environmental staff are pulled into the project delivery team to assist during property negotiation and acquisition and environmental processes.

For the most part, established written project and construction management procedures exist to guide staff in delivering projects. For example, the City of San Diego has begun drafting a set of “Standard Operation Procedures” covering all phases of a construction project. Topics covered include alternative project delivery methods, using consultants, uniform filing systems, and

estimating construction costs. While smaller agencies do not have the same comprehensive set of procedures, we found essential information was still available for project staff. For instance, the City of Carlsbad’s Project Engineers Manual provided guidance on processing change orders, handling contractor claims, and conducting final project close-outs. We also found that for most larger projects, local agencies follow Caltrans’ construction manual and, in some instances, also use Caltrans’ document filing system protocol.

Project Budget and Schedule Management

In terms of ensuring projects stay within budget, construction management staff at the local agencies we reviewed appear to follow industry best practices in overseeing contractor work.

Project Delivery

- ✓ Cost Control—Change Orders are Negotiated
- ✓ Schedule Adherence—Milestones and Deliverables are Tracked

Budget-to-actual tracking is closely managed by all agencies as limited funding requires keeping a close watch on cost variances, especially during construction where unforeseen conditions could significantly increase a project’s original budget. At the project-level, local agencies monitor project budgets and schedules at various levels and during several stages.

Project managers receive overall and monthly project schedules produced by consultants and contractors to track project progress and deadlines. During construction, most local agencies require contractors to produce “3-week lookout schedules” detailing tasks and their dependencies on the critical path. For most of the smaller, less complex street projects, less formal methods are used such as Gantt charts in lieu of more sophisticated scheduling tools such as Primavera or Microsoft Project software. In addition, project managers consolidate project schedule and budget information on at least a monthly basis for discussion at the upper management level with the City/County Engineer and City Manager as warranted.

For our sample agencies, we consistently found daily inspection reports detailing progress made, progress payments that were based on bid schedules, and evidence of negotiated change orders. Some agencies also tracked the type of change orders (such as design errors or unforeseen conditions) and kept detailed records of change order pricing quotes and times and materials receipts. For overlay work, we also found delivery tickets in the project file documenting the quantity of concrete delivered to the project site—all efforts that help appropriately control costs and ensure projects get done as planned.

Recommendations

To more closely manage and monitor the Local Street and Road program performance as well as eliminate process inefficiencies, the ITOC should have SANDAG work collaboratively with the local agencies, where warranted, and:

3. Consider assigning certain Local Street and Road Program responsibilities and activities— such as setting and monitoring program goals, reviewing and modifying rules and processes in place, and measuring program performance towards meeting overall *TransNet* goals—to SANDAG program staff.

4. Develop a method, process, or practice over the Local Street and Road program to more closely monitor program outcomes and performance towards congestion relief and maintenance of roadways including the following:
 - Establishing defined program goals;
 - Revisiting and redesigning program policies as warranted;
 - Determining performance data to be captured and monitored; and
 - Identifying, defining, and implementing better mechanisms for monitoring performance related to getting projects done more timely and achieving better outcomes upon project completion.
5. Require local agencies to submit specific Local Street and Road performance statistics currently available—such as ratio of miles resurfaced to miles maintained, pavement condition indices over time, or others related to level of service ratings of roadway operating conditions—on a predetermined set schedule and make the data available to the public.
6. Analyze Local Street and Road performance data provided for trends or comparisons between local agencies; further, use analysis to make program changes as warranted.
7. Revisit existing rules and practices in the Local Street and Road program, and consider the following:
 - Replacing the 30 percent fund balance limitation with a more effective measure to monitor performance (such as those described in Recommendation 5) where SANDAG and ITOC could observe progress and performance through administrative processes rather than through an audit compliance mechanism; and
 - Exploring the feasibility of revising the interest allocation rule to allow local agencies to treat interest earnings as a “savings account” that can be used on eligible projects—similar to a construction project contingency fund—where interest could be pooled and drawn down for projects as needed.

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Chapter 4: Good Practices are in Place over the Environmental Mitigation Program, Yet More Needs to be Done over the Next Few Years

Although only a few years have transpired of the 40-year *TransNet* lifecycle, SANDAG and its partners have already realized many accomplishments in the Environmental Mitigation Program (EMP). Overall, the EMP is a well-run program employing several best practices including the implementation of acquisition policies and procedures, ability to bring multiple stakeholders with diverse interests together to work collaboratively and address environmental concerns in the region, and success in achieving early cost savings with land purchases to date. However, the EMP has also experienced several challenges and areas of concern. For example, SANDAG, Caltrans, and wildlife agencies have found difficulty securing the required number of coastal wetland acres to mitigate the impacts associated with regional transportation project improvements. Also, for regional habitat conservation efforts, there is a lack of strategic plans and measurable program objectives in place to help local agencies implement conservation plans. Additionally, SANDAG must develop calculation and allocation methodologies for implementing the requisite “economic benefit” concept related to cost savings associated with undertaking proactive mitigation activities, such as land acquisition, in advance of individual project requirements. While still early in the *TransNet* program, it is imperative that SANDAG address its challenges before opportunities are missed. Not only is SANDAG working to address these issues, but staff continually look for opportunities to improve.

TransNet Extension Ordinance Provided \$850 million for Environmental Mitigation

While many of the other *TransNet* programs funded with the sales tax revenues are tied to specific projects or grants, the EMP is a comprehensive program with a more global focus for the San Diego region. Specifically, the goal of the program is to protect, preserve, and restore native habitats as offsets to disturbances caused by the construction of regional and local transportation projects by focusing on three primary areas—mitigation, conservation, and land management. After mitigation opportunities are identified, land is typically acquired; the EMP process then involves restoring habitats on the acquired land (if needed) and managing and monitoring the land.

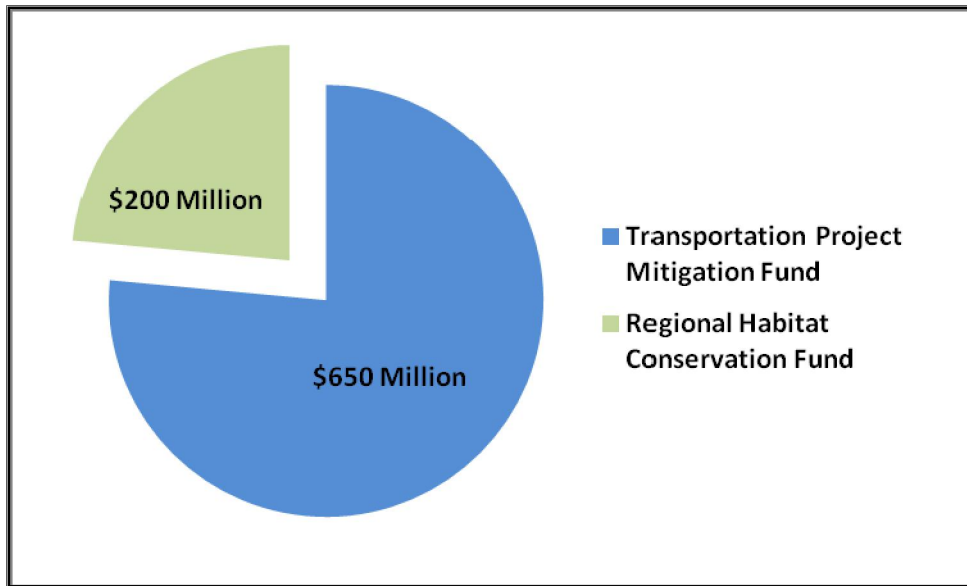
When approved in November 2004, the *TransNet* Extension Ordinance estimated \$850 million would be available over the life of the program to fund direct mitigation costs associated with planned transportation improvement projects as well as fund regional conservation and preservation efforts through two major funds as shown in Table 14 and Figure 9.

Table 13: *TransNet* Distribution of EMP Funds (in 2004 dollars)

Transportation Project Mitigation Fund (\$650 Million)	Major Transportation Project Mitigation	\$450 million
	Local Transportation Project Mitigation	\$200 million
Regional Habitat Conservation Fund (\$200 Million)	Regional Habitat Conservation	\$200 million
Total <i>TransNet</i> Environmental Mitigation Program:		\$850 million

Source: *TransNet* Extension Ordinance and Expenditure Plan

Figure 9: TransNet Distribution of EMP Funds (in 2004 dollars)

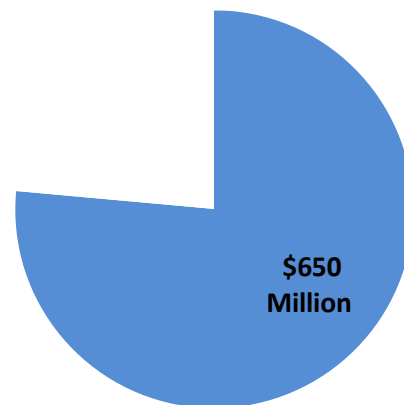


Of the \$850 million dedicated for the EMP over the 40-year life of the program, the SANDAG Board of Directors allocated more than half of the amount for activities to be performed in the first decade of the program. Specifically, the Board of Directors allocated \$480 million of the planned \$850 million over ten-year period between 2008-2018 as follows:

- \$440 million for Mitigation Activities in the Transportation Project Mitigation Fund (out of the available \$650 million allocated for mitigation)
- \$40 million for Conservation Activities in the Regional Habitat Conservation Fund (out of the available \$200 million for conservation)

Mitigation Funds

The *TransNet* Extension Ordinance earmarked \$650 million in funding to be used on regional and local mitigation activities paid by the Transportation Project Mitigation Fund for efforts to mitigate impacts caused by transportation improvement projects and include activities such as land acquisition, restoration, and management of uplands, freshwater wetlands, and coastal wetlands.



To develop projected costs for mitigation, SANDAG and Caltrans used historical averages of habitat costs for transportation projects with high, medium, and low levels of habitat impacts. The majority of the Transportation Project Mitigation Fund, \$450 million, is budgeted to provide mitigation activities associated with major highway and transit improvement projects as shown in Table 15 and detailed in Appendix C.

Table 14: Cost per Acre Estimates for Land Acquisitions, Restoration, and Parcel-Specific Land Management (in 2004 dollars)

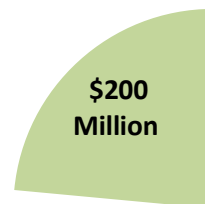
TransNet Ordinance Estimated Per Acre Costs	Habitat Types			Total
	Coastal Wetlands	Non-Coastal Freshwater Wetlands	Uplands	
Estimated Required Acres for RTP Mitigation	225	495	1,598	2,318
Estimated Land Acquisition Cost Per Acre	\$300,000	\$50,000	\$60,000	
Total Land Acquisition Estimated Cost	\$67,500,000	\$24,750,000	\$95,880,000	\$188,130,000
Estimated Restoration Cost Per Acre	\$300,000	\$125,000	\$60,000	
Total Restoration Estimated Cost	\$67,500,000	\$61,875,000	\$95,880,000	\$225,255,000
Estimated Parcel Specific Management Per Acre	\$10,000	\$10,000	\$5,000	
Total Parcel-Specific Management Estimated Cost	\$2,250,000	\$4,950,000	\$7,990,000	\$15,190,000
Estimated Amounts for Administrative Support				\$21,425,000
Total Overall Mitigation Cost				\$450,000,000

Source: Habitat Cost Estimate Analysis and Budget Prepared for TransNet Extension Ordinance, as provided by the EMP Senior Regional Planner

The remaining Transportation Project Mitigation Fund money, \$200 million, is for mitigation activities related to local transportation improvement projects—which per the Ordinance is not budgeted at a specific local project-level. Rather, the Ordinance simply directs that the funding be utilized for direct mitigation costs of local transportation projects consistent with the Regional Transportation Plan as part of the Environmental Mitigation Program.

Conservation Funds

The TransNet Extension Ordinance also provides for \$200 million to be used for regional habitat conservation activities, such as coordination, management, and monitoring efforts necessary to implement the Multiple Species Conservation and Multiple Habitat Conservation Programs. Funding is released for these purposes as the Transportation Project Mitigation Fund realizes cost savings and is intended to encourage proactive mitigation activities through buying land early at lower costs and banking it for future mitigation needs.

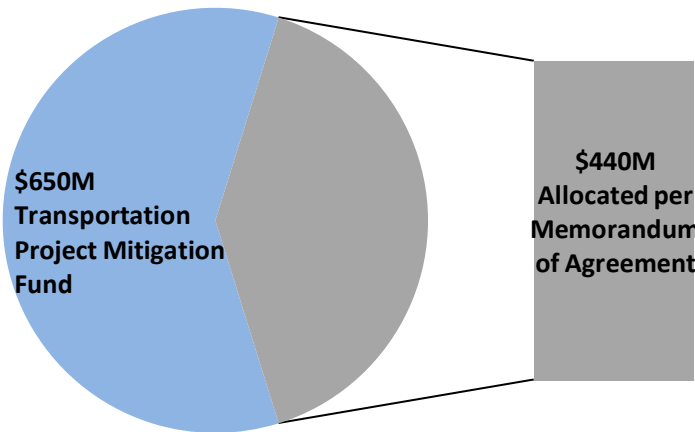


Environmental Mitigation Program Working Group

To assist with issues involved in implementing both the mitigation and preservation components of the EMP, the SANDAG Board of Directors established the Environmental Mitigation Program Working Group with representatives from the City of San Diego, County of San Diego, four SANDAG sub-regions, state and federal wildlife

agencies, and several organizations representing various disciplines and interests. Considerable cooperation and coordination is required among SANDAG, Caltrans, U.S. Fish and Wildlife Services, and the California Department of Fish and Game to successfully align the region’s mitigation needs with available conservation opportunities. It is important to note that the EMP mitigates all projects in the Regional Transportation Plan—even those that are non-*TransNet* projects.

While Initial Authorization for Large-Scale Mitigation Activities Was Somewhat Arbitrary, Process Improvements Have Been Implemented

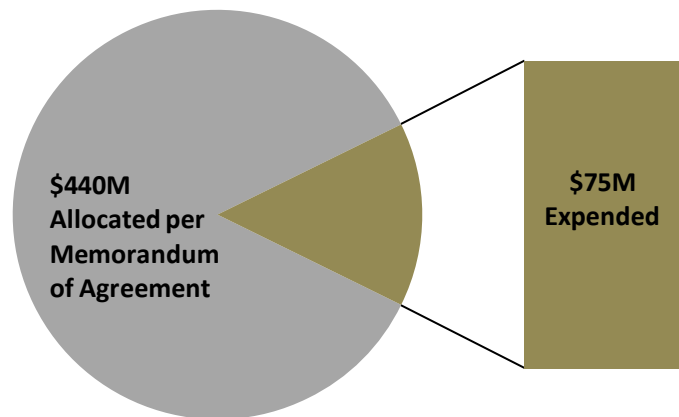


To launch the mitigation portion of the EMP, SANDAG entered into a Memorandum of Agreement in 2008 with Caltrans, U.S. Fish and Wildlife Service, and California Department of Fish and Game outlining a 10-year plan to purchase and mitigate habitat in accordance with the Ordinance. Through that agreement, the SANDAG

Board of Directors voted to finance up to \$440 million (of the \$650 million) over a ten year period for direct mitigation of regional and local transportation projects.

As of June 30, 2011, more than \$75 million of the \$440 million allocated per the Memorandum of Agreement has been spent on early mitigation activities including land acquisition, habitat restoration, and parcel-specific land management activities as follows:

- **Environmental**
\$1.71 million, or 2.3 percent
- **Land acquisitions**
\$68.6 million, or 91.2 percent
- **Restoration**
\$2.88 million, or 3.8 percent
- **Parcel-specific land management**
\$0.98 million, or 1.3 percent
- **Administration**
\$1.04 million, or 1.4 percent



Several entities work together to perform these activities including SANDAG, Caltrans employees, and private consultants. In particular, Caltrans is responsible for the majority of the direct mitigation activities used on the certain freeways designated in the Ordinance—including State Routes 67, 76, and 94 as well as Interstate 5—that relate to the creation, preservation, or restoration of habitat and realizing improved animal migration paths in wetland and upland areas.

Yet, because the *TransNet* Extension Ordinance did not detail specific roles and responsibilities of various stakeholders related to mitigation efforts, the multi-partner agreement directed the agencies to collaborate in identifying and prioritizing mitigation parcel purchases, negotiating acquisition costs, estimating mitigation needs, and obtaining necessary construction permits. This agreement also established SANDAG as the responsible agency accountable for all *TransNet* expenditure of funds. On September 28, 2008, SANDAG introduced the approved “Guidelines for the Implementation of the *TransNet* Environmental Mitigation Program—Conservation and Mitigation Strategy” with the intent of requiring certain assurances about the suitability of a property for mitigation from each of the regulatory agencies in place before spending funds on land acquisition. For instance, the guidelines require a letter of concurrence and commitment from U.S. Fish and Wildlife Service and California Department of Fish and Game stating that a property is suitable for mitigation prior to seeking a property appraisal.

However, before the guidelines were enacted, Caltrans had already begun land acquisition and restoration activities and requested a \$10 million advance from SANDAG in early September for a tentative purchase to acquire a certain property. While Caltrans, SANDAG, and the wildlife agencies informally agreed it was a good parcel to pursue, there was no formal authorization or authority to move forward with acquiring the property. At the time, Caltrans had spent slightly more than \$300,000 on appraisals and restoration design plans during the year-long property acquisition process. Eventually, the requested \$10 million was transferred from bond proceeds in September 2008 and remained in a Caltrans account not earning interest for the *TransNet* program before it was returned to SANDAG in June 2009 when negotiations fell through and Caltrans was unable to secure the property.

Since that time, SANDAG and its partners have made many process improvements to strengthen activities and oversight as part of their “Conservation and Mitigation Strategy” by requiring SANDAG and Caltrans to have written explanations describing how a planned acquisition and restoration of a proposed property conforms to the following seven criteria:

1. ***RTP Mitigation***

Property will satisfy impacts from one or more RTP projects.

2. ***Jurisdictional Land Use Plans***

Use of the property as habitat mitigation or open space is consistent with the long-range use and transportation policies of the local agencies.

3. ***Willing Seller***

Owner of the property is a willing seller with clear title to the property and any hazardous material has been evaluated and assessed in an environmental site assessment.

4. ***Appraisal***

Property is appraised by a qualified licensed appraiser and the first written offer reflects the fair market value of the property.

5. ***Promotes Natural Community Conservation Planning***

Proposed mitigation contributes to the success of the San Diego regional Natural Community Conservation Planning.

6. ***Owner-Manager***

Perpetual ownership of the land and land management has been identified and SANDAG, Caltrans, and land manager have agreed upon the annual cost to manage the land and the method for funding land management costs.

7. ***Cost***

Cost of the mitigation is consistent with the estimates established under the *TransNet* Extension Ordinance as adjusted for inflation in the *TransNet* Plan of Finance.

Moreover, the written justification must be approved by several SANDAG directors and the Executive Director before proceeding with serious purchase negotiations—unless specifically exempted by the Board of Directors, if the activities are currently in the regulatory permitting process to prevent unnecessary project delays. However, these exempted projects must still receive formal approval from the wildlife agencies and follow a budget aligned with the *TransNet* Extension Ordinance prior to proceeding with acquisition negotiations. With the new guidelines becoming effective in early 2009, SANDAG now retains the funding during the land negotiation process and transfers monies for acquisition purchases into an established escrow account.

EMP Land Acquisition Activities Realize Savings, but Struggle Securing Coastal Wetlands

With nearly 1,400 acres of land acquired, the EMP has already realized land acquisition savings. As shown in Table 16, as of June 30, 2011, 57 percent of the more than 2,300 acres of land acquisitions anticipated has been secured utilizing only 36 percent of the *TransNet* Ordinance Habitat Cost Estimate of \$188.1 million. Through these efforts, much of the region's needs for uplands habitats have been realized and significant progress has been made at a much lower cost than anticipated.

Table 15: Percentage of the Estimated Mitigation Needs That Has Been Secured as of June 30, 2011, by Habitat Type (in 2004 dollars)

Habitat Acres Estimated Versus Actual Purchases	Habitat Types (Post Mitigation)			Total
	Coastal Wetlands	Non-Coastal Freshwater Wetlands	Uplands	
Estimated Required Acres per the 2004 <i>TransNet</i> Ordinance	225.00	495.00	1,598.00	2,318.00
Total Habitat Acres Acquired as of June 30, 2011	55.92	335.30	1,002.16	1,393.38
Less Acres Acquired to Complete SR 76 Corridor “Net Benefit”	0	0	80.34	80.34 ^(A)
Total Acres Acquired for RTP Mitigation	55.92	335.30	921.82	1,313.04
Percent of Land Acquired for RTP Mitigation	25 percent	68 percent	58 percent	57 percent

Source: Habitat Cost Estimate Analysis and Budget Prepared for TransNet Extension Ordinance, as provided by the EMP Senior Regional Planner, as well as fiscal records and acquisition reports

Note: (A) 80.34 acres of uplands does not count towards RTP mitigation; rather, these acres are related to the Jeffries Ranch purchase to meet the “net-benefit” obligation for State Route 76.

As shown in Table 17, the EMP has already purchased nearly 1,400 acres, which under the per-acre cost estimates reflected in the Ordinance Habitat Cost Estimate analysis were projected to cost an estimated \$93.7 million.

Table 16: Comparison of Estimated Land Acquisition Costs per Acre with Actual Acquisition Costs as of June 30, 2011, by Habitat Type (in 2004 dollars)

Land Acquisition Cost Per 2004 Ordinance Estimates	Habitat Types (Post Mitigation)			Total
	Coastal Wetlands	Non-Coastal Freshwater Wetlands	Uplands	
Acres Acquired as of June 30, 2011	55.92	335.30	1,002.16	1,393.38
2004 <i>TransNet</i> Ordinance Estimated Per Acre Land Acquisition Cost	\$300,000	\$50,000	\$60,000	
Total	\$16,776,000	\$16,765,000	\$60,129,600	\$93,670,600

Source: Habitat Cost Estimate Analysis and Budget Prepared for TransNet Extension Ordinance, as provided by the EMP Senior Regional Planner

Yet, as shown on Table 18, because of favorable land prices due to the recession, those 1,400 acres only cost the EMP \$68.6 million including administrative costs—realizing more than \$25 million in savings.

Table 17: Habitat Costs Related to the Acquired 18 Parcels Purchased through June 30, 2011

Acquisition Number	Parcel Name	Mitigation Acres	Habitat Type	Total Estimate Based on 2004 Per Acre Costs	Actual Costs
1	Groves	268	Uplands	\$16,080,000	\$10,786,190.25
2	Morrison	136.7	Freshwater	\$6,835,000	\$4,784,000.00
3	Anderprizes	39.45 4	Upland Freshwater	\$2,567,000	\$6,589,712.00
4	Dean Family Trust	23.1	Upland	\$1,386,000	\$901,727.92
5	Zwesteria	7	Upland	\$1,039,000	\$413,000.00
		12.38	Freshwater		
6	Sage Hill	170.77	Upland	\$10,246,200	\$8,043,249.69
7	Hallmark	13.38	Upland	\$2,578,800	\$2,806,507.13
		5.92	Coastal Wetland		
8	Leung/Lowe	21.78	Upland	\$1,306,800	\$963,000.00
9	Ayoub	21.65	Upland	\$1,299,000	\$1,338,182.28
10	San Dieguito Lagoon	27	Upland	\$18,120,000	\$540,000.00
		30	Freshwater		
		50	Coastal Wetland		
11	Lonestar Ranch	160.29	Upland	\$10,367,400	\$11,706,754.88
		15	Freshwater		
12	Tabata	23.65	Freshwater	\$1,182,500	\$1,067,000.00
13	Zamudio	32.4	Upland	\$1,949,000	\$2,643,961.00
		.1	Freshwater		
14	Mendocino	19.72	Upland	\$1,183,200	\$1,152,070.00
15	Vessels	98.6	Upland	\$9,086,000	\$6,445,966.27
		63.4	Freshwater		
16	Jeffries Ranch	80.34	Upland	\$4,820,400	\$4,130,363.00
17	Rincon	37.34	Freshwater	\$1,867,000	\$1,495,466.48
18	Deer Canyon	18.68	Upland	\$1,757,300	\$1,338,404.75
		12.73	Freshwater		
		1002.16	Upland		
		335.30	Freshwater		
		55.92	Coastal Wetland		
Sub Total		1,393.38		\$93,670,600	\$67,145,555.65
Administration and Other Costs					\$1,457,892.00
Grand Total					\$68,603,447.65

Source: Habitat Cost Estimate Analysis and Budget Prepared for TransNet Extension Ordinance, as provided by the EMP Senior Regional Planner

Moreover, SANDAG estimates another \$52.3 million will be spent during Fiscal Year 2011-2012 to acquire an additional nine parcels, or more than 880 acres, of freshwater wetlands and upland habitats which will likely result in additional early acquisition cost savings.

While the EMP has already acquired much of the region's needs for uplands and has realized land acquisition savings, it continues to struggle acquiring enough coastal wetland habitat. Pursuant to the 2004 *TransNet* Ordinance Habitat Cost Estimate Analysis, a ratio of 5:1 is

necessary for mitigating the impact of transportation improvement on coastal wetlands. A mitigation ratio is a standard practice in environmental regulatory permitting that defines the required mitigation compensation—in this case, 5 acres of mitigation compensation must be realized for every 1 acre impact. With initial estimates showing 45 acres of coastal wetland would be impacted by the planned regional transportation improvements, 225 acres (5 acres for each of the 45 acres) of coastal wetlands would be required to mitigate the impact. As shown in Table 19, the Ordinance estimated that 10 percent of habitat acquisition should relate to coastal wetlands—when in reality, only 4 percent of the EMP’s acquisitions thus far have related to coastal wetlands.

Table 18: Comparison of Percentage Breakdown of Estimated Mitigation Needs with Percentage Breakdown of Acquired Land Acquisitions, by Habitat Type (in 2004 dollars)

Habitat Acres Estimated Versus Actual Purchases	Habitat Types (Post Mitigation)			Total
	Coastal Wetlands	Non-Coastal Freshwater Wetlands	Uplands	
Estimated Required Acres per the 2004 <i>TransNet</i> Ordinance	225.00 (10 percent)	495.00 (21 percent)	1,598.00 (69 percent)	2,318.00
Habitat Acres Acquired for RTP Mitigation as of June 30, 2011	55.92 (4 percent)	335.30 (26 percent)	921.82 (70 percent)	1,313.04
Difference	169.08	159.70	676.18	1,004.96

Source: Habitat Cost Estimate Analysis and Budget Prepared for TransNet Extension Ordinance, as provided by the EMP Senior Regional Planner

According to SANDAG, the lack of large-scale opportunities for wetlands, particularly in the coastal zone, due to the arid nature of the San Diego region has fueled the difficulty for wetland mitigation development resulting in notices to the state and federal regulatory agencies that the 2004 Ordinance Habitat Cost Estimate requiring a 5:1 mitigation impact ratio for coastal wetlands is not feasible. To address the challenges associated with acquiring coastal wetlands, SANDAG and Caltrans staff have been working with local lagoon conservancies to identify coastal wetland restoration and enhancement opportunities as well as collaborating with federal and state wildlife permitting agencies to develop a wetland mitigation bank.

Further, in June 2012, SANDAG will seek adjustments to the mitigation ratio, while still complying with the requirements of state and federal regulatory permitting agencies. As a potential solution, SANDAG and Caltrans have proposed a mitigation package that meets the regulatory requirement of “no net-loss” of coastal wetlands at a 1:1 ratio wherein the coastal wetland acreage already acquired will satisfy the mitigation of coastal wetland impacts. The mitigation package wetland mitigation bank concept includes:

- Large scale lagoon restoration to increase functionality and sustainability of current lagoon systems;
- Preservation of existing coastal uplands at risk of development; and
- Funding to perpetually maintain the lagoon inlets to the ocean.

Little Habitat Restoration or Parcel Specific Land Management Activity Has Occurred Thus Far, as Early EMP Focus is on Land Acquisition Efforts

With only three years of the 40-year *TransNet* program elapsed, little habitat restoration or parcel specific land management activity has occurred. Appropriately, SANDAG and its partners have first focused on acquiring mitigation land before they determine what, if any, restoration and management is needed. Specifically, once land is acquired, restoration efforts, if necessary, will be commenced after significant preliminary work is complete such as developing design plans and obtaining construction permits. After restoration activities are complete, long-term management will be established with the state and federal regulatory agencies indicating which local agencies will own and manage the site. As such, it is too early in the *TransNet* program to gauge the effectiveness of either the EMP’s habitat restoration or land management activities.

Habitat Restoration

Of the \$450 million earmarked for overall mitigation efforts, the *TransNet* Extension Ordinance Habitat Cost Estimate calculations showing approximately \$225.3 million (in 2002 dollars) would be required for land restoration. This amount was based on projections that 2,318 total acres would be required to mitigate the following habitat types, as shown on Table 20.

Table 19: *TransNet* Extension Ordinance Estimates for Restoration Costs (in 2004 dollars)

<i>TransNet</i> Ordinance Estimated Restoration Costs	Habitat Types			Total
	Coastal Wetlands	Non-Coastal Freshwater Wetlands	Uplands	
Estimated Required Acres	225	495	1,598	2,318
Estimated Per Acre Cost	\$300,000	\$125,000	\$60,000	
Total	\$67,500,000	\$61,875,000	\$95,880,000	\$225,255,000

Source: Habitat Cost Estimate Analysis and Budget Prepared for TransNet Extension Ordinance, as provided by the EMP Senior Regional Planner

While \$225.3 million is earmarked for restoration of all EMP acquired land over the 40-year life of the *TransNet* program, the EMP has only spent a fraction of these estimates on restoration activities. Specifically, shown on Table 21, approximately \$2.8 million, or about 1 percent of the 2004 estimate, has been spent on restoration activities as of June 30, 2011. Aside from these activities, additional steps have been conducted on parcels already owned by Caltrans and North County Transit District. According to SANDAG, costs will rise dramatically as the restoration process begins on the acquired mitigation land with estimates of another \$9 million of restoration activities to be spent on three parcels—Deer Canyon (\$2 million), Vessels (\$3 million), and Lonestar (\$4 million)—during Fiscal Year 2011-2012.

Table 20: Breakdown of Restoration Expenditures by Parcel as of June 30, 2011

Parcel Name	EMP Restoration Costs as of June 30, 2011
Groves	\$426,148
Morrison	\$1,304,000
Rincon	\$362
Zwierstra	\$18,000
Hallmark	\$109,366
Lonestar Ranch	\$372,168
Tabata	\$10,000
Deer Canyon	\$180,000
Santa Margarita	\$79,077
Dennergy West	\$98,804
Singh	\$277,017
Moosa Creek	\$544
Total	\$2,875,488

Source: SANDAG fiscal records from IFAS system

Habitat Management and Monitoring

Similar to restoration activities, the EMP has only spent a fraction of its costs on habitat management and monitoring. *TransNet* monies for parcel-specific land management are used to maintain the environmental integrity of the acquired land through land management and monitoring activities such as installing fencing and signage as well as removing debris and invasive vegetation.

Of the \$450 million earmarked for acquisition, restoration, and endowment activities to mitigate the regional and local Regional Transportation Plan improvement projects, the *TransNet* Extension Ordinance Habitat Cost Estimate projected approximately \$15.2 million (in 2004 dollars) would be required for parcel-specific habitat management and monitoring of acquired mitigation land. As shown in Table 22, this figure was estimated using the 2,318 total acres to be acquired within each habitat type.

Table 21: TransNet Extension Ordinance Estimates for Parcel-Specific Land Management Costs

TransNet Ordinance Estimated Parcel Specific Land Management Costs	Habitat Types			Total
	Coastal Wetlands	Non-Coastal Freshwater Wetlands	Uplands	
Estimated Required Acres	225	495	1,598	2,318
Estimated Per Acre Cost	\$10,000	\$10,000	\$5,000	
Total	\$2,250,000	\$4,950,000	\$7,990,000	\$15,190,000

Source: Habitat Cost Estimate Analysis and Budget Prepared for TransNet Extension Ordinance, as provided by the EMP Senior Regional Planner

As of June 30, 2011, slightly more than \$977,000, or about 6 percent of the 2004 Ordinance Habitat Cost Estimate, has been spent on these activities where restoration was not required allowing program staff to initiate habitat management and monitoring efforts. According to SANDAG, more land management costs will be incurred as restoration of the acquired mitigation land is completed and management responsibilities are turned over to local agencies.

As of June 30, 2010, Caltrans owns and manages most of the acquired parcels except for two parcels that did not require restoration—these two parcels (Sage Hill and Mendocino) are owned and managed by the County of San Diego. If an agency other than Caltrans owns a mitigation property because restoration was not required or was complete, a land management agreement must be established. As part of the environmental permitting process, decisions about the long-term management is the authority of the state and federal regulatory agencies who will agree on site ownership and site management as part of a land management agreement between SANDAG and the agreed-upon entity. On many of the properties still owned and managed by Caltrans, it is too early in the process for long-term land management agreements to be in place as sites must still be permitted and restoration activities concluded—which can range from five to seven years.

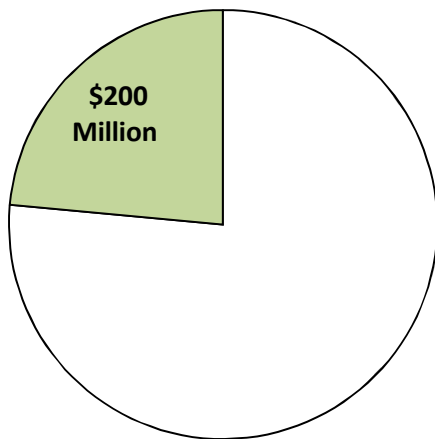
Local Mitigation Expenditures Are Not Tracked Separately

In addition to the \$450 million for acquisition, restoration, and management activities related to impacts from regional transportation improvements, the *TransNet* Extension Ordinance also earmarked another \$200 million from the Transportation Project Mitigation Fund for mitigation activities associated with the impact from local transportation projects. Although \$200 million is set aside for local transportation project mitigation, SANDAG does not yet track these costs separately from the regional major highway project mitigation efforts.

According to SANDAG, the only activity related to this type of local mitigation relates to the dedication of a small portion of acres from the 18 regional land acquisitions to a local Regional Transportation Plan project mitigation bank. As the acquisitions were purchased, a certain number of acres was required for the restoration and mitigation of regional projects and a small remainder was set aside in this mitigation bank for local needs. As of June 30, 2011, SANDAG has designated 121 acres of mostly uplands habitats to the local streets and roads mitigation bank.

As of the time of our audit, none of the local agencies have requested a draw from the mitigation bank. While SANDAG has not “allocated” the land acquisition expenditures to the \$200 million portion of local project mitigation component of the *TransNet* Extension Ordinance, it will need to track these costs more carefully once additional lands are acquired and local agencies are interested in using the local mitigation bank.

TransNet Funding Should Help with Implementing More Consistent Habitat and Species Conservation Programs



In addition to mitigation activities, another component of the *TransNet* EMP is the Regional Habitat Conservation Fund with its activities for habitat acquisition, management, and monitoring activities necessary to implement the Multiple Species Conservation Program (MSCP) and Multiple Habitat Conservation Programs (MHCP).

The MSCP and MHCP are regional, long-term conservation planning programs required by federal and state law designed to preserve the native habitats for multiple plant and animal species on a large scale rather than focusing efforts on one

species at a time. Thus, the \$200 million of funding is intended to fill gaps in regional conservation efforts—not replace funding.

The MSCP covers more than 80 species across 582,000 acres in the southwestern portion of San Diego County. The MHCP (not fully approved and implemented at the time of the audit) covers 61 species across nearly 112,000 acres in the northwestern portion of the County. Additionally, plans covering hundreds of species across more than one million acres in the unincorporated northern and eastern part of the County are in the planning stages, but have been put on hold because of the downturn in the economy. The regional MSCP and MHCP are implemented through individual subarea conservation plans of the local agencies. Each participating jurisdiction must develop their own detailed plan that is approved and permitted by the U.S. Fish and Wildlife Service as well as fits within the region's broader conservation plans.

While the intent of the MSCP and MHCP is to seamlessly incorporate subarea local plans into the larger regional conservation plans to ensure all local agencies are moving in concert to reach similar goals, SANDAG has found it challenging to fully engage all the entities in the process. Each jurisdiction has significant land use regulatory authority and has its own specific priorities, goals, objectives, requirements, and responsibilities related to habitat conservation. In the past, many of the cities have had difficulty obtaining the necessary funding to begin implementation of their specific sub-plans and have risked having their permits revoked for not commencing work within the agreed upon timeframe.

With each jurisdiction using a silo approach, the result was disjointed conservation actions and disparate funding resources. Thus, SANDAG hopes the *TransNet* funds will insert some consistency in the implementation of broader biological conservation goals of the region and incentivize the local agencies to participate in coordinated conservation efforts.

In 2008, the SANDAG Board allocated \$40 million of the \$200 million for the next ten years to embark on conservation efforts including land management, regional program coordination, and biological monitoring activities. According to SANDAG, the goal of these efforts is to maintain the region's biological integrity, avoid future listing of endangered species, and prevent delays to

future regional improvement projects through assisting local agencies implementing habitat conservation programs. Of the \$40 million allocated in 2008, approximately \$8.96 million has been expended through June 30, 2011.

While SANDAG Serves as the Regional Entity Funding Habitat Conservation, Improvements Should be Incorporated as the Program Evolves

As part of the *TransNet* Extension Ordinance, SANDAG was required to work with its state, federal, and local partners to establish a regional entity responsible for allocating funding for regional habitat conservation in accordance with goals and policies of regional habitat conservation plans. In 2005, SANDAG was designated as that entity with the SANDAG Regional Planning Committee outlining additional responsibilities including:

- Identify and fund mitigation obligations (including both acquisition and restoration) early in the project development process to ensure this process does not impede the overall schedule for completing transportation projects;
- Meet mitigation objectives of transportation projects within the context of the MSCP and the MHCP through the development of “mitigation banks” or other similar mechanisms;
- Contribute funding for coordination and implementation of a regional biological monitoring program, with assurances that data collected meets standard protocols, are stored centrally, and are accessible to everyone; and
- Ensure that adequate funding is available for land management, and that adaptive management occurs based on biological monitoring information.

SANDAG is assisted by advice and proposals from the EMP Working Group related to identification of priority habitat acquisition areas as well as recommendations regarding the allocation of funds for regional land acquisitions, management, and monitoring activities.

Although early in the *TransNet* life cycle, SANDAG has made progress in fulfilling its responsibilities related to funding and disseminating critical environmental information throughout the region. From our review of documents and interviews with stakeholders, SANDAG’s noteworthy accomplishment is its ability to bring together multiple and diverse stakeholders with a common goal of addressing environmental concerns in the region. In 2008, SANDAG hired a national expert to suggest options for structuring and coordinating the habitat conservation activities throughout the region. Results from that effort concluded that they should use the best available science to develop, evaluate, and coordinate management and monitoring activities through the region by employing the following:

- Determining the most effective and cost efficient management protocols and techniques;
- Maintaining a regional database and compiling information for analysis;
- Providing objective, clear, and comprehensive reporting on the status and trends of species and habitats in the region; and
- Developing options and alternative approaches to management and monitoring activities.

As part of the \$4 million annual allocation to the Regional Habitat Conservation Fund over the ten-year period starting in 2008, funding is scheduled that will address the consultant's recommendations by supporting coordination, management, and monitoring activities that are needed in the region through a five-year funding prioritization strategy. These activities are designed to assist local agencies in implementing the MHCP and MSCP and specifically include:

- ***Coordination***

Activities including development of regional mitigation strategies, coordination and oversight of management and monitoring activities, facilitation of discussion among environmental stakeholders, and development of a centralized information system. Independent consultants (through the San Diego Management and Monitoring Program) act as program monitors and coordinators over these regional management and monitoring activities.

- ***Management***

Efforts to support conservation land management and monitoring, provide gap funding to maintain existing preserve, define management goals and objectives as well as priorities, integrate science into management plans and develop models, and assist in applying management strategies to local preserves.

- ***Monitoring***

Actions related to monitoring the success at effectively conserving covered species, providing results for analysis and information dissemination, and linking monitoring results to management efforts.

Additionally, SANDAG relies on a series of contracts and grant agreements with consultants, non-profit organizations, government entities, and local agencies to assist in providing coordination, management, and monitoring services related to 69 distinct projects. Approved activities include invasive plant and animal species management, vegetation mapping, wildlife corridor linkages monitoring, open space enforcement, and rare plant and invertebrate monitoring and recovery, as indicated in Table 23.

Table 22: Habitat Conservation Activities and Expenditures through June 30, 2011

Regional Habitat Conservation Fund approved Activities	Activity Type	Number of Projects	Approved Budget (FY 2006-2011)	Amount Expended as of June 30, 2011
Program Developer	Coordination	1	\$600,000	\$431,343
Management/Monitoring Coordinator	Coordination	2	\$900,000	\$282,607
Administrative & Science Support	Coordination	1	\$90,000	\$5,586
GIS Support	Coordination	0	\$300,000	\$0
Database Support	Coordination	2	\$200,000	\$81,489
Rare and Endemic Plant Monitoring and Recovery	Monitoring	2	\$300,000	\$99,963
Post-wildfire Monitoring	Monitoring	3	\$2,050,000	\$1,724,369
Vegetation and Landscape Monitoring	Monitoring	1	\$395,000	\$294,849
Vertebrate Monitoring and Recovery	Monitoring	5	\$1,485,000	\$1,252,296
Invertebrate Monitoring and Recovery	Monitoring	2	\$330,000	\$160,461
Wildlife Corridor and Linkages Monitoring	Monitoring	1	\$500,000	\$55,402
Other Species Monitoring	Monitoring	0	\$340,000	\$0
Conserved Lands Database Management	Management	1	\$175,000	\$163,600
Invasive Plant Species Management	Management	1	\$250,000	\$1,867
Invasive Animal Species Management	Management	1	\$225,000	\$0
Updated Vegetation Mapping	Management	4	\$800,000	\$371,619
Enforcement	Management	2	\$370,000	\$127,690
Preserve level management plan standardization	Management	3	\$225,000	\$0
Land Management Implementation (competitive grant program)	Management	37	\$9,315,000	\$3,903,629
Emergency Land Management Fund	Management	0	\$150,000	\$0
Total		69	\$19,000,000^(A)	\$8,956,790

Source: Fiscal records from IFAS system, contract documents, grant agreements, and funding strategy documents.

Note: (A) Of the budgeted \$19 million, \$16 million covered activities between 2008 and 2011 in compliance with the \$4 million per year 2008 allocation and another \$3 million was approved prior to the 2008 allocation.

However, as the conservation program evolves, SANDAG should continue to incorporate additional aspects to fully coordinate the various global and local management and monitoring activities that will better ensure that goals are established, conservation efforts are monitored, reliable data is captured and analyzed, and program objectives are met.

Regional Habitat Conservation Fund Lacks Strategic Focus and Measurable Objectives

While SANDAG has made great strides in coordinating the environmental program's conservation efforts, the goals and policies of the regional plans lack enough specificity to effectively allocate funding and measure performance toward meeting regional habitat goals. SANDAG has recognized these issues and is in the process of working with local agencies to develop comprehensive strategic management and monitoring plans with specific goals and objectives.

Specifically, in 2005, prior to the *TransNet* Extension Ordinance becoming effective, the EMP Working Group conducted an assessment to identify major action items and tasks associated with the MHCP and MSCP conservation plans in a comprehensive and coordinated way as well as developed a five-year funding strategy to prioritize funding for specific coordination, management, and monitoring activities identified through the needs assessment process. While the regional needs are reviewed annually through the funding process, the regional needs assessment has not been formally updated since 2005. Recently, SANDAG prepared a September 2011 update of the 2005 needs assessment that is expected to be presented to the SANDAG Board for approval during the upcoming fiscal year. The 2011 draft needs assessment also identified major impediments that impact the effectiveness and efficiency of SANDAG's regional management and monitoring such as:

1. Lack of an approved strategic plan, based on science, for reserve-wide monitoring and management.
2. Lack of a centralized database and information system that allows access to data and products that can inform MSCP monitoring and management.
3. Funding challenges, such as inadequate funding levels, systems by which funding is allocated internally and externally to management organizations, and restrictions on uses imposed by funders.
4. Poorly defined roles and responsibilities of participants in a leaderless, decentralized cooperative network, which results in poorly-defined decision-making processes.
5. Lack of coordination among land managers on best management practices.
6. Intra- and interagency differences in mandates, priorities, goals, objectives, and authority.
7. Delays and inefficiencies in regulatory agency permitting processes that authorize monitoring and management activities involving listed species.

In addition to the lack of a comprehensive management and monitoring strategic plan for the region with measurable objectives, the individual local jurisdiction's subarea implementation plans are also missing quantifiable program goals and objectives resulting in the following:

- Funding strategies that are reactive in nature as priorities are set by the habitat and conservation needs identified by local agencies, rather than established objectives to accomplish;
- Local agencies carrying out activities independently and, according to the draft 2011 needs assessment, resulting in "gaps in implementation, redundancies, inefficiencies, and uncertainties" as land managers work in "silos" without a unified approach;

- Limited ability to determine if Regional Habitat Conservation Fund allocations have resulted in the successful implementation of effective and cooperative regional habitat plans and activities; and
- Missing evaluation and assessment processes to identify whether actions are achieving the intended outcomes for the program meeting the intended goals of the program.

Although SANDAG is challenged in that it has no authority to mandate local agencies to revise their approved habitat subarea plans and include better defined goals and objectives, it is still closely collaborating with the locals to develop comprehensive regional strategic management and monitoring plans with specific goals and objectives.

For instance, SANDAG conducts monthly land manager workshops to facilitate discussion and identify the similarities and differences in jurisdictional needs. These workshops will be used by SANDAG to draft standardized management plans for the local agencies. As part of its coordination efforts, SANDAG has recently approved a contract with an environmental solutions consultant to develop and implement multi-year strategic plans for regional management and monitoring. Sections of the plan have been drafted and include basic components related to specific goals, objectives, priorities, actions, and program assessment. SANDAG hopes to utilize funding to ensure local land managers work in a unified manner to accomplish the needs of the region.

Although SANDAG’s ability to measure the program’s performance is limited beyond determining if specific funded activities resulted in the agreed upon deliverable or product without strategic goals and measurable objectives, we found that progress has been made in each of the three main areas in the last three years as shown in Table 24.

Table 23: SANDAG Progress to Date With EMP Conservation Efforts

Progress Related to Management Efforts
<ul style="list-style-type: none"> • 55 land management grants issued since the start of the <i>TransNet</i> EMP program. With the new round of grants, the EMP program has been able to narrow the focus to specific needs.
<ul style="list-style-type: none"> • Recommendations for improving the EMP land management grant process were provided to the EMP Working Group by independent consultants in October 2011.
<ul style="list-style-type: none"> • Reports on an Enforcement Pilot Study performed in collaboration with the County Sheriff and Fish and Game Warden have been drafted.
<ul style="list-style-type: none"> • Consultants from the San Diego Management and Monitoring Program and San Diego State Institute have assisted SANDAG in standardizing management plans.
<ul style="list-style-type: none"> • Emergency Management Fund was established; although, this contingency fund has not been utilized to date.

Progress Related to Monitoring Activities
<ul style="list-style-type: none"> • Species Monitoring Reports are available on some species—such as rare plants, California gnatcatcher, and California cactus wren—that will help determine what the collected data means for the conservation program.
<ul style="list-style-type: none"> • The “Connectivity Monitoring Strategic Plan for the San Diego Preserve System” was drafted including performance goals and measures and will serve as a chapter within a larger overall monitoring strategic plan.
Progress Related to Management Efforts
<ul style="list-style-type: none"> • Report on Governance Structure was prepared.
<ul style="list-style-type: none"> • MSCP Monitoring Data was collected and analyzed.
<ul style="list-style-type: none"> • A 2010 Needs Assessment (Dalhem Conference) was prepared through a Regional Stakeholder Workshop on Management and Monitoring Gaps and finalized in December 2011. This needs assessment will served as the foundation for the 2010 update to the “Five-Year Funding Strategy for Management and Monitoring” and will be updated every 10 years.

Additionally, there are plans to develop a “State-of-the-Preserve Report” that will measure large improvements and gaps that exist within the entire region.

Economic Benefit Concept Requires Clarification and Definition

TransNet Extension Ordinance EMP Principles provide a separate funding stream for habitat conservation activities that can be allocated upon the achievement of “economic benefits” associated with Transportation Project Mitigation Fund improvement projects to encourage the region to meet mitigation requirements in advance of projects starting by purchasing land and taking advantage of lower costs. At the time the *TransNet* Extension Ordinance EMP Principles were drafted in 2004, \$200 million was the estimated total “economic benefit” that would be derived and be available for local agencies to implement regional habitat conservation plans. To release funds from the \$200 million component, regional transportation improvement projects (funded via the Transportation Project Mitigation Fund) must achieve and demonstrate “economic benefits” or cost savings as determined by the SANDAG Board. According to *TransNet* Ordinance Extension EMP principles, economic benefit is achieved as a result of including transportation projects in regional habitat conservation plans and purchasing mitigation land in advance of need in larger blocks at a lower cost.

In 2008, as part of the agreement between SANDAG, Caltrans, and the federal and state wildlife agencies, the SANDAG Board of Directors allocated \$40 million as an advancement of the anticipated economic benefit that would occur over the 10-year period of the agreement between 2008 and 2018. According to SANDAG staff, it was anticipated that at the end of the 10-year period, SANDAG would conduct a review to reconcile the actual economic benefit achieved from the various transportation improvement projects with the estimated benefit allocated. However, a formal determination has not yet been made related to the methodology for

calculating the amount of economic benefit achieved, amount of additional economic benefit funding that should be released, or process to be used to allocate funding throughout the region.

While the 10-year period has not yet elapsed, Senate Bill 468 chaptered in October 2011 has accelerated the need to determine the methodology for the economic benefit calculation as some have interpreted the legislation to mandate the allocation of these monies for the region's North Coast Corridor based on the economic benefit achieved associated with transportation improvement projects along the corridor. The new legislation, effective January 2012, states:

... "SANDAG shall commit to dedicate a portion of the TransNet Regional Habitat Conservation Fund for regional habitat acquisition, management, and monitoring activities necessary to implement habitat conservation plans based on the estimated economic benefits derived from permitting and approval efficiencies on the north coast corridor project as a result of the procedures of this section, with that funding to be released by SANDAG in phases based upon the proportion of project work that has been issued permits, consistency reviews, or other applicable approvals, and in accordance with any other criteria as deemed appropriate by SANDAG taking into account the purpose and intent of TransNet."

According to SANDAG's Chief Economist, formal economic benefit determinations including funding calculations and release methodologies will be developed and presented to the Board by the end of 2012 for approval. Additionally, the EMP Working Group, along with its environmental stakeholders and experts, will provide the SANDAG Board with recommendations on allocating the economic benefit funds. It is anticipated that such recommendations would be based on the goals, objectives, and needs assessments currently under development and could also include exceptional circumstances where portions of funding would be directed to specific areas in the region due to statutory requirements.

Lack of Information Management Systems to Capture EMP Conservation Results

Currently, there are no automated information systems that can share habitat management and monitoring results between land managers of local agencies as well as provide EMP performance statistics to the public. Although regional management, monitoring, and coordination activities result in significant amounts of information collected by many different entities, a significant gap exists as there is no centralized system for local land managers to store, analyze, and retrieve habitat and species information. To address this issue, SANDAG has been working with the United States Geological Survey Department to develop a database as a centralized repository of information. The system should reduce redundancies among the local agencies and allow staff to systematically analyze collected data, determine where gaps exist, and target management and monitoring efforts appropriately. A pilot program is anticipated to begin in spring 2012.

Further, SANDAG is also working to create a content management system—or single source for all EMP information—based on the existing *TransNet* Dashboard format. SANDAG plans to utilize a newly developed EMP website currently available to the public to display EMP performance output measures related to both the mitigation activities funded through the Transportation Project Mitigation Fund and monitoring and management activities funded through the Regional Habitat Conservation Fund. Data would include metrics such as total acreage bought, total EMP dollars spent, and types of EMP activities conducted. A link to

additional status and metrics of progress will be incorporated into the *TransNet* Dashboard and is projected to be available to the public by summer 2012.

Recommendations

To continue strengthening the EMP to ensure *TransNet* funding is utilized in the most effective manner, the ITOC should have SANDAG do the following:

8. Continue efforts working with wildlife agencies and conservancies to identify coastal wetland opportunities and develop wetland mitigation bank. Also, continue negotiating with regulatory permitting agencies to accept a package of mitigation efforts that provide “no net-loss.”
9. Develop a process to track local mitigation activity expenditures separately from regional mitigation activity expenditures.
10. Continue efforts and establish timelines for developing comprehensive and coordinated strategic plans and measurable program objectives related to the Regional Habitat Conservation Fund program activities and efforts including the following:
 - Providing ITOC and other oversight bodies a timeframe to have these plans implemented with high-level activities and tasks needed, milestones, and assignment of staff “owners” responsible for task completion as warranted;
 - Developing performance measures that measure progress and success while also linking strategic plans and objectives to funding priorities; and
 - Ensuring impediments identified via the 2011 draft needs assessment are adequately addressed.
11. Maintain focus on clarifying and defining how to apply the economic benefit concept, and identify tasks and timelines needed to address economic benefit issue. Develop corresponding methodologies to calculate the amount of economic benefit achieved as well as processes to release and allocate the resulting funding.
12. Continue efforts and establish timelines to develop information management systems that can share habitat management and monitoring results between local agencies and serve as a single source of EMP information.
13. Strengthen conservation efforts in its regional entity role by:
 - Preparing a succession plan for the critical independent consultants—such as those charged with the San Diego Monitoring and Management Program—to ensure institutional knowledge gained over the last several years related to strategic planning and administering a centralized data repository and reporting system is appropriately transferred to SANDAG;
 - Establishing a central monitoring function to oversee and coordinate the activities of the various independent consultants as well as ensure accountability for delivering services that move the program forward; and
 - Finalizing efforts to establish a strategic plan and measurable program objectives.

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Chapter 5: Good Practices Exist over *TransNet* Grants, Although Additional Monitoring and Performance Tracking will Enhance Programs

Complementing the transportation and transit projects as well as environmental mitigation and conservation activities, the *TransNet* grant programs exercise strong protocols over processes, use appropriate organizational structures, and conduct relevant functional activities in managing and overseeing its competitive grant performance. For instance, the four grant programs reviewed—EMP land management, smart growth incentive, senior mini-grants, and bicycle, pedestrian, and neighborhood safety—all employ leading grant practices for:

- Defining grant eligibility and award criteria;
- Employing a competitive grant process;
- Using scoring sheets for fairness and consistency;
- Developing written grant agreements with scopes and deliverables;
- Requiring quarterly status reporting;
- Reviewing invoice support and deliverables; and,
- Monitoring of grant activities.

While testing of individual grant activities reveals that SANDAG staff are following these best practices, several of the grant programs have not established clear goals to help staff assess progress. We believe that additional monitoring and performance tracking could enhance the grant programs and allow SANDAG and the public to better determine if grants are achieving the intended goals and outcomes of the programs. Further, we found instances where processes caused delays and should be streamlined for future grant solicitations.

TransNet Funds a Variety of Grant Programs

As part of the *TransNet* program, there are several grants available for a variety of different purposes related to environmental mitigation, smart growth, and mobility. Between Fiscal Years 2008-2009 and 2010-2011, there were 83 individual grants awarded totaling more than \$25.2 million for these programs as shown below.

✓ **Land Management Grants**

In 2008, the Board allocated \$40 million for a ten-year period (\$4 million per year) pertaining to regional habitat conservation efforts, including land management, program coordination, and biological monitoring. Annually, the SANDAG Board sets aside approximately \$2 million of this amount for land management grant awards. As of June 30, 2011, approximately \$7.4 million in land management grants have been awarded through 40 individual grants. Of this amount, \$3.9 million has been expended on activities associated with the grants.

✓ **Smart Growth Incentive Program Grant**

Under provisions of the *TransNet* Ordinance, 2.1 percent of annual net revenues are allocated to smart growth incentive grants to support projects that will help better coordinate transportation and land use in the San Diego region. Thus far, there has been approximately \$9.4 million allocated to 14 grants with 20 percent of the funds available for

planning projects and at least 80 percent available for capital projects. The next call for projects anticipated for early 2012 after the update of the Smart Growth Concept Map.

✓ **Senior Mini-Grants**

The *TransNet* Extension Ordinance also sets aside 16.5 percent of its annual net *TransNet* revenues for transit operating services—of this amount, 3.25 percent is designated for the senior grant program to increase mobility for seniors in the region and improve the quality of life for those seniors. The three-year grants are awarded by SANDAG on a triennial basis, and provide a wide range of transportation options for older adults to preserve dignity, maximize independence, and provide access. Services under this grant could include special shuttle services, taxi vouchers, or hospital transportation. During the period of our review, SANDAG has awarded 14 grants totaling nearly \$3.7 million.

✓ **Bicycle, Pedestrian, and Neighborhood Safety Grants**

Lastly, the *TransNet* Extension Ordinance allocates 2 percent of annual *TransNet* sales tax revenues to the existing Bicycle, Pedestrian and Neighborhood Safety Program. Program funds are intended to leverage matching federal, state, local, or private funds and maximize the number of related improvements implemented. As such, SANDAG combines *TransNet* funds with available state Transportation Development Act money as well. Since the *TransNet* program was launched, SANDAG has awarded more than \$4.7 million in funding to 15 capital grant projects.

SANDAG Cannot Fully Assess Whether Program Performance Goals Have Been Met

While grant program staff track and communicate certain performance results for their individual grants, SANDAG cannot fully assess whether *TransNet* grants are achieving goals set out for individual programs and for the *TransNet* Extension Ordinance itself. To some extent, this is a result of certain grant programs lacking defined goals and plans to be able to measure performance against and some grant projects being in process—so performance cannot be assessed at this stage. Yet, other grants are more structured with established goals and metrics tracked to assess performance. The available goals and performance for each grant program are summarized in Table 25 and discussed in the following sections.

Table 24: Elements Currently Available Allowing for Comprehensive Performance Measurement

Elements Available Allowing Performance Measurement	EMP Land Mgmt	Smart Growth	Senior Mini	BPNS
Strategic Plan		✓	✓	P
Clear Goals and Objectives		✓	✓	P
Performance Metrics Available		✓	✓	
Able to Determine Whether Grant Is Achieving Program Intent		✓	✓	

P = Partially available

❖ **Land Management Grants**

As described in detail in Chapter 4 of this report, part of the EMP funding is set aside for habitat acquisition, management, and monitoring activities necessary to implement the Multiple Species Conservation Program and Multiple Habitat Conservation Program in accordance with the goals and policies of each local jurisdiction's regional plans approved by state and federal wildlife agencies. While a regional needs assessment and five-year funding strategy process are in place for EMP overall, the EMP Land Management grant program lacks strategic plans and measurable program objectives. Local jurisdiction plans are also missing quantifiable program goals and objectives. Without a strategic plan with goals and measurable objectives, activities could result in gaps in implementation, redundancies, inefficiencies, and inconsistencies in managing the environmental programs. Thus, while the EMP Land Management grant activities should help local agencies implement their habitat plans through regional coordination, management, and monitoring activities, the program did not have defined goals to allow us to compare expectations with what has been achieved to date.

As a stop-gap measure until strategic plans and goals and objectives are developed, an adhoc committee was established in 2010 to strategize identifiable needs of the region and narrow the grant criteria focus on 2011 grants. For example, in 2011, the Board adopted the following three eligible activities for the land management grants—invasive control and habitat restoration; species-specific management; and habitat maintenance, access control/management, and volunteer coordination.

❖ **Smart Growth Incentive Program Grants**

The *TransNet* Smart Growth Incentive Program funds transportation and transportation-related infrastructure improvements in addition to planning efforts supporting smart growth development through capital projects and planning projects. The stated goal of the program is to “fund public infrastructure projects and planning activities that will support compact, mixed use development focused around public transit, and will provide more housing and transportation.” SANDAG's Regional Comprehensive Plan for the San Diego region includes a “concept map” identifying where “targeted investments” in smart growth should occur within “existing” areas including planning and infrastructure grants and “potential” areas using planning grants only. Approved grants must be substantially within a smart growth opportunity area as identified on the concept map, be within ½ mile of a regional or corridor service station or transit center if it is a capital project, or will result in development that increases transportation and housing choices if it is a planning project.

According to SANDAG, the Regional Comprehensive Plan and Smart Growth Concept Map serve as the strategic planning documents with goals for the Smart Growth Incentive Program. Grant applications have associated project evaluation matrices based on the Regional Comprehensive Plan, and detailed project scopes of work and schedules with measurable objectives. For example, for one Smart Growth Incentive Program grant reviewed, the project scope encompassed creating a safer path of pedestrian travel between a busy bus stop and the Trolley Depot. If the project is completed as described in the grant agreement, the project should assist SANDAG in measuring progress toward its performance indicator to “increase in annual weekday transit ridership.”

❖ Senior Mini-Grants

Through the Senior Mini-Grant Program, SANDAG allocates financial assistance for transportation services planned, designed, and carried out to meet the special transportation needs of elderly individuals in urban, suburban, and rural areas. Guiding the strategic vision for the Senior Mini-Grant Program are two plans—the Coordinated Plan, which incorporates components of the Short Range Transit Plan with the region’s human service and social service network of transportation services, and the Project Management Plan, outlining goals and objectives to ensure policies and regulations are fulfilled related to improving mobility for seniors throughout the county. Efforts include volunteer driver services, senior shuttles, non-emergency medical transportation, taxi voucher programs, and travel training.

To capture performance progress toward meeting these goals, SANDAG established a robust monitoring and reporting program in collaboration with local stakeholders as part of its Social Services Transportation Advisory Council requiring Senior Mini-Grantees to report on their progression towards meeting agreement provisions, and highlight milestones, lessons learned, and performance data related to the specifics of the grant agreement. Certain “performance indicators” are evaluated and communicated by SANDAG staff to oversight bodies assessing the effectiveness of the grantees in meeting goals such as:

- **Cost Efficiency:** Operating cost per vehicle hour
- **Cost Effectiveness:** Operating cost per passenger
- **Service Effectiveness:** Passenger utilization as a percentage of available seats

Moreover, evaluation criteria for Senior Mini-Grant applications use these metrics in selecting and distributing grants. Specifically, SANDAG specifies targets for each performance indicator used in scoring applications at different point levels. For instance, if proposed passenger utilization is greater than 35 percent in the first year of service, a grantee would earn the highest point level. If utilization is less than 35 percent, but above 25 percent, a lower point level would be awarded—and so forth. Once a grant is in effect and services are being provided to the older adult population, each grantee must report on their performance with indicators applicable to the type of projects funded by the grant. For instance, operating grants providing shuttle services may have different outcome metrics, such as number of vehicle trips or ridership, then would a capital project to purchase vanpools or provide accessible taxis. Other projects provide trip planning services or escort assistance would also track unique performance metrics such as number of clients served.

Performance results are shared with oversight bodies—including ITOC—for several of the *TransNet* grant programs including the Senior Mini-Grant program. While the other grants provide mostly project status in narrative terms such as “project is 70 percent complete,” Senior Mini-Grant staff also present more traditional performance results including number of trips provided and costs per trip by grantee.

As grantees submit quarterly progress reports, Senior Mini-Grant staff are reviewing performance to assess whether grantees are meeting their grant goals. While the data captured is very useful as performance indicators to assess program progress in meeting goals, staff should use this information to assess historical trends and compare performance across grantees. More global conclusions can be drawn to report how the grants have contributed to the overall goal of increasing mobility for seniors.

❖ **Bicycle, Pedestrian, and Neighborhood Safety Grants**

In general, the Bicycle, Pedestrian, and Neighborhood Safety Grant Program provides funding for bikeway facilities and connectivity improvements, pedestrian and walkable community projects, bicycle and pedestrian safety projects and programs, and traffic calming projects. While SANDAG considers its 2050 Regional Bicycle Plan to be its guiding strategic planning document with formal goals and objectives specific to the program, it does not include goals or objectives for the pedestrian and neighborhood safety aspects of the grant program. Yet, the goals included in the plan are measurable. For instance, one 2050 Regional Bicycle Plan objective is “to improve the connectivity and quality of the regional bicycle network” which could assist in meeting Regional Transportation Plan and Regional Comprehensive Plan goals of increasing mobility and realizing less traffic fatalities.

The 2050 Regional Bicycle Plan also describes several measures that SANDAG may consider for monitoring and evaluating progress including targets and goals such as “increasing the proportion of arterial streets with bicycle facilities...by 25 percent by 2017.” The 2050 Regional Bicycle Plan also recommends developing an Annual Regional Progress Report including what progress has been made each year toward the implementation of bicycle facilities and programs. However, it does not appear that progress towards meeting targets has been tracked or that an Annual Regional Progress Report has been developed as yet. Moreover, while the Regional Transit Plan outlines how many miles of bike trails it wants to create or improve by 2050 as mirrored in the 2050 Regional Bicycle Plan, it does not appear that SANDAG is tracking that information.

Using the Regional Comprehensive Plan and Regional Transportation Plan, Bicycle, Pedestrian, and Neighborhood Safety Grant Program evaluation criteria was developed to support regional transportation goals. Each matrix describes minimum criteria for 11 different categories with each category assigned maximum number of points which grantees may receive for effectively meeting the criteria described. For example, the criteria for “Completes Connection/Linkage in Existing Bicycle Network” requires that projects provides segments of an identified and approved bicycle facility or complete connections in the existing network or upgrades an existing facility. While the Bicycle, Pedestrian, and Neighborhood Safety Grants we reviewed are still in progress, if the projects are completed as planned and described in the grant agreement, the miles within the newly constructed bike path could be captured to track progress towards meeting the 2050 performance goals.

Many Best Practices Employed Consistently Across all Grants

While individual aspects of each grant may vary, most of SANDAG’s operational processes are similar across all of the grant programs. Our results generally indicate that processes employed over the award, implementation, and monitoring of grant activities follow best practices. For instance, evidence of strong protocols exist such as employing needs assessments, having program goals, defining grant eligibility and award criteria, using scoring sheets for fairness and consistency, requiring written grant agreements with scopes and deliverables, requiring quarterly status reporting, reviewing invoice support prior to approval, and monitoring of grant activities.

Typically, program discussions start with working groups that develop consistent grant eligibility criteria based on statutes and other requirements. Once that criteria is approved by the SANDAG Transportation Committee or SANDAG Regional Planning Committee, a competitive “call for projects” is advertised to request applications. Applications undergo a thorough review process to score each application against the specific criteria ensuring fairness and consistency. During the grant award phase, an internal evaluation review panel prioritizes submitted grant applications. Typically, a review panel is comprised of SANDAG staff members and external stakeholders who do not have any conflicts of interest with the program, and who are knowledgeable about the specific grant principles. For each application received, the review panel measures each grant proposal against the relevant program criteria and assigns points that are compiled into a numeric score.

Recommendations are submitted through a rigorous approval process involving several SANDAG committees, and approved grants are formalized into written agreements signed by the grantees. Following approval by the Board of Directors, the selected project grants are included in the Regional Transportation Improvement Program as necessary. Once grant activities commence, grantees must submit quarterly status reports to assist SANDAG staff in monitoring timely progress toward completion of the grant, as well as submit invoices for payment approval. SANDAG staff also provide regular status reports to various SANDAG committees, including ITOC, regarding grant progress and performance.

Grant Programs are Monitored, but Efforts Could be Enhanced

Based on our review, SANDAG is employing several good practices for monitoring its grants through comparing monthly invoice charges against allowable grant agreement provisions, tracking budget to actual spending, monitoring the completion of milestones and other grant deliverables, analyzing quarterly status reports and supporting documentation, and assessing close-out reports. Much of SANDAG’s monitoring efforts focus on grantee performance towards meeting timelines, complying with terms of the grant, and meeting grant deliverables.

Specific monitoring efforts depend on the individual grants, but all SANDAG program staff appear to closely collaborate with grantees throughout the project to discuss emerging concerns or provide guidance. For instance, for Smart Growth Incentive planning grants, SANDAG actively monitors related issues discussed at local stakeholder and community meetings through review of agendas and meeting minutes—or by attendance at meetings as appropriate. Similarly, for Smart Growth Incentive capital grants, SANDAG asks grantees to submit project designs for review and comment at the 30 percent, 60 percent, 90 percent, and 100 percent design phases.

In addition to a final close-out report, SANDAG requires grantees to provide project progress throughout the grant term by submitting a Quarterly Progress Report. The Quarterly Progress Report requires grantees to provide the following information for each task in its project schedule so that SANDAG program staff can add assistance in areas as needed:

- Detailed Accomplishments
- Progress Anticipated for Next Period
- Pending Challenges or Problems
- Action Towards Resolution of Issues
- Status of Budget and Schedule

The Quarterly Progress Report also requires grantees to summarize overall project progress and indicate whether any changes are needed to adjust the scope of work, project budget, or project schedule. *TransNet* grant program managers and staff use the information provided in the Quarterly Invoice and Progress Report to monitor the progress of grant tasks and deliverables and ensure budgets and schedules are not exceeded. Other beneficial data is provided on total expenditures to date and percent of funding expended to date. Further, SANDAG program staff closely monitor compliance with SANDAG’s “Use it or Lose it” policy (Board Policy 35) approved in January 2010 that provides for remedies if grantees do not hit certain agreed-upon milestones in accordance with project schedules—namely, SANDAG can withhold future payments until the situation is rectified or an extension is justified and approved.

To capitalize on the success of SANDAG’s grant monitoring efforts, the program could be augmented by conducting site visits using a risk-based approach, employing a checklist to guide the site visits, verifying deliverables and data reported to SANDAG, and using performance details provided by grantees to help track overall impact and performance towards meeting grant and *TransNet* goals. Staff in certain grant programs—EMP Land Management and Senior Mini-Grant—are already conducting site reviews of grantees to confirm information and assess grantee performance. For instance, the SANDAG program staff over Senior Mini-Grants conduct site visits at least annually and often semi-annually—issues identified are discussed with the grantee on site, with informal notes maintained documenting the site visit. Moreover, Senior Mini-Grant staff is developing a thorough and valuable “monitoring checklist” to help focus site visits on critical path items and ensure consistency of review. Using the checklist as a guide, staff will measure areas such as:

- ***Cost Per Unit:***
Comparing proposed cost per unit of service delivered to actual cost per unit of service delivered, and the percentage above or below the grant proposal.
- ***Quantity of Service Delivered:***
Comparing proposed number of units of service delivered to actual number of units of service delivered, and the percentage above or below the grant proposal.

- **Project Management:**

Focusing on grant agreement compliance, invoice and report quality and consistency, project schedule and service area adherence, level of coordination, allowability of administration costs, adequacy of records, and sufficiency of budget management.

- **Service Quality:**

Reviewing quality control measures, customer satisfaction, safety, and outreach.

Similar protocols to those employed in the Senior Mini-Grant Program could be utilized in the other grant programs as well. Specifically, developing and using some type of risk-based approach for conducting on-site visits with a similar type of standardized guide or checklist will strengthen the effectiveness of grant oversight and may result in identifying efficiencies and cost savings that could be realized as well. Moreover, with some of the performance data captured through the monitoring efforts—whether on-site visits or in-house reviews of quarterly reports—program data can be used to track and monitor overall performance towards achieving goals.

Grant Process Can be Streamlined

As part of its grant management practices, SANDAG has inserted a series of approval steps at various stages of a grant lifecycle. Specifically, approvals are needed at the following phases:

1. Initial funding available and allocated for a grant program;
2. Grant application evaluation criteria;
3. Individual applications recommended to receive funding; and,

At each phase of approval, grant activities are reviewed and approved by no fewer than three individual oversight bodies—ITOC, Transportation Committee, and Board of Directors. For EMP land management grants, two additional review layers are added at each phase with the inclusion of reviews by the EMP Working Group and SANDAG Regional Planning Committee. Our testing revealed that approvals for certain grants reviewed took a long time and seemed to add delays to the process. Further, most all grants reviewed experienced overall processing delays between the time of Board of Director approval and the date of actual grant execution. Some of the delays related to initial development of written grant agreements; since the boilerplate language has been set and approved, it is expected that delays during this step will now be minimized.

In our testing of 22 individual grants, we found a significant amount of time elapsed between the date grant applications were received to the date when the contract was ultimately executed as summarized in Table 26. Total grant processing times ranged between 5.3 months to more than 20 months. In fact, for half of the grants we reviewed, it took SANDAG more than a year to process the grants. For instance, for Bicycle, Pedestrian, and Neighborhood Safety Grants, processing time between Board approval and contract execution typically ranged between 6 and 7 months—although in two instances, that delay extended to more than a year. One grant agreement took 14 months to be executed after approval, while the other grant took 18 months to finalize.

Table 25: Total Processing Time for Grants Reviewed

Grant Information	Grant Number	Months Between Application and Board Approval	Months between Board Approval and Grant Execution	Total Processing Time
Land Management				
City and County Vernal Pools	5000687	2.1	3.2	5.3 months
Wright’s Field MSCP Preserve	5000762	2.1	6.2	8.3 months
Invasive Removal	5001138	3.7	8.5	12.2 months
Rancho Jamul Fencing	5001327	3.7	6.7	10.4 months
Myers Property	5001329	3.7	11.7	15.4 months
Smart Growth				
8 th Street Corridor Revitalization	5001347	3.5	8	11.5 months
Lemon Grove Trolley Plaza	5001352	3.5	7	10.5 months
4 th & 5 th Ave/Nutmeg Ped Crossing	5001358	3.5	14	17.5 months
Industrial Blvd Bike Lane and Ped	5001356	3.5	11	14.5 months
Mid-City SR 15 BRT Station Planning	5001348	3.5	9	12.5 months
Palomar Gateway District Plan/EIR	5001346	3.5	8	11.5 months
Senior Mini-Grants				
All Congregations Together	5001097	5.7	6	11.7 months
Solutions for Seniors On-The-Go	5001100	5.7	6	11.7 months
Vista Out & About	5001101	6.6	3.5	10.1 months
NCTD Mobility/Travel Training	5001096	5.8	6	11.8 months
Redwood Elder Link Out & About	5001107	5.6	6	11.6 months
Bicycle, Pedestrian, and Neighborhood Safety				
SR 15 Bike Path Design and EIR	5001368	1.7	14.4	16.1 months
Carlton Oaks Dr. Class II Bike Lane	5001213	1.7	7.2	8.9 months
Boys and Girls Club Sideway	5001212	1.7	5.6	7.3 months
Sidewalk Safety Improvements	5001218	1.7	6.1	7.8 months
Ash Street Undercrossing	5001364	1.7	18.5	20.2 months
Sweetwater River Bike Path Gaps	5001209	1.7	6.2	7.9 months

Source: Grant applications, grant agreements, and Board meeting minutes.

We were informed that some of the delay was necessary to ensure the written grant agreements contained appropriate terms and conditions and that scope, budget, and deliverables were clearly defined. With the relative newness of the grant programs under the *TransNet* umbrella, it is reasonable that additional time was needed to work through these items and develop solid agreements. However, we also believe that individual process steps should be revisited to ensure practices are streamlined and efficient.

Other Testing Revealed Policies and Practices are Followed

To gauge whether the robust grant processes were employed as intended, we reviewed the 22 grants shown in Table 26 and found that policies and established practices are followed. Moreover, the processes employed appear to be appropriate and competitive, grantees complied with grant agreement terms, and oversight committees are kept informed on grant progress.

- Award Processes are Appropriate and Competitive

Regardless of the specific grant program tested, each grant award process employed similar rigorous practices for a competitive and fair application process. Most grant programs have some type of goal or program intent specified, from which application and evaluation criteria were developed in collaboration with internal and external stakeholders. Our testing of 22 grants indicate that independent evaluation panel scoring was consistent with established criteria and those grants selected for funding aligned with the nature of grant program.

- Grant Agreements are Fairly Comprehensive and Grantees Comply with Terms

Overall, we found grant agreements to be thorough and appropriately adhered to by the individual grantees. For instance, in each of the grant programs tested, the written agreements contained critical elements surrounding scope of work, schedule and cost, reporting and other requirements, and deliverables. Yet, we found that the agreement expiration dates were not always specified in the text of agreements. Further, documentation submitted by grantees reveals compliance with terms of the agreements. For each of the grants tested, grantees mostly submitted required documentation related to invoices and quarterly reports including progress on grant task completion and operating performance data. Generally, grantees reviewed appeared to be meeting schedule milestones, staying within budgets, and providing deliverables identified in the grant agreements.

- Oversight Committees are Kept Informed

As discussed in an earlier section of this Chapter, several SANDAG committees and its Board in addition to ITOC are heavily involved throughout the grant process during initial solicitations, grant application reviews and grantee selection, and grant agreement execution. Thus, program staff keep the overseers informed and provide documents showing grant evaluation criteria and scoring, grant selection and justification, and grant funding and progress. On at least an annual basis, grant program staff also provide status reports on each grantee including some performance metrics for certain of the grant programs.

Grants Coordination Team Makes Continual Improvements

Given its innovative organizational environment, SANDAG staff endeavor to make improvements in strategy, process, and practices throughout the organization. This is evident across the *TransNet* grant programs with the formation of the Grants Coordination Team—an internal team formed as a mechanism for collaborative engagement and input from a variety of functional areas to make recommendations for process improvements and best practices. SANDAG staff from Planning, Finance, Contracts and Procurement, and Legal departments work in partnership on the Grants Coordination Team to review, discuss, and update grant processes. While the team does not make policy decisions, their recommendations are elevated to those charged with decision-making authority.

Since its inception, the Grants Coordination Team has already considered a wide-range of grant related areas including administrative costs, budgeting needs, resources and workload, roles and responsibilities, approval processes, processing schedules, implementation guidelines, board

policies, and evaluation panel conflict of interest provisions. For instance, the team is working on improvements in several of the areas mentioned in our report as follows:

- In August 2011, proposed changes to Board Policy 35 were recommended through the Grants Coordination Team to execute grant agreement within 21 days of SANDAG presenting the agreement to the grantee. No decisions have been made as of time of our fieldwork.
- The team has created a streamlined Grant Implementation Process Flowchart providing a series of proposed steps for each of the grant phases related to approval of the solicitation, award of grant funds, grant implementation, and grant monitoring and reporting. While it is not intended to become official policy or procedures, it is a first step towards implementing best practices throughout the process to be more efficient.
- To ensure the efficient and consistent processing of grants throughout the organization, the team created a “Grant Administration Checklist” outlining key steps and tasks within the various grant phases including who is responsible for individual tasks.
- In addition, the Grants Coordination Team has been working on a set of Grant Implementation Guidelines that contain agreed-upon practices for use across all grant programs. These guidelines cover many aspects of the grant award process, but do not specifically address the issues we have identified in this audit report related to streamlined approval processes and enhanced performance monitoring. Final guidelines are expected to be available and in use by early 2012.
- Finally, the Grants Coordination Team is also discussing measures for improving its monitoring of grantee performance. Specifically, the team inquired as to how they can capture actual staff time and resources used to manage inadequate grantee performance.

Although outside the purview of the Grants Coordination Team, SANDAG sought an independent assessment of the EMP Land Management Grant Program process in August 2011 using one of its environmental partners to gather feedback on the program from past grantees and provide recommendations for improvement to the program for Fiscal Year 2011-2012. With almost half of the grantees responding, the overall process received good marks along with a few noted recommendations for improvements such as clarifying program priorities, simplifying invoices, and re-crafting quarterly reporting requirements among other ideas. SANDAG’s EMP Working Group incorporated many of the recommendations into the 2011 new grant cycle, and has discussed the EMP process improvements as part of the regular meetings with the Grants Coordination Team. Additionally, as mentioned earlier in this chapter, program staff for the Senior Mini-Grant program is working on improving monitoring activities related to grant performance through a focused checklist to guide site visits. It is expected that any other best practices would be shared and discussed with the Grants Coordination Team as well.

Recommendations

To assess whether grant activities are meeting program outcomes and make grant processes more efficient, ITOC should have SANDAG:

14. Develop clear goals and objectives for the Land Management and all aspects of the Bicycle, Pedestrian, and Neighborhood Safety Grant Program so that outcomes can be tracked and measured to evaluate whether grant activities are achieving what was intended for the program.
15. Augment grant monitoring practices by conducting site visits or desk-audits using a risk-based approach to determine what grantees to visit or review and in what frequency.
16. Employ a checklist, or other standardized documentation, as guidance for conducting grant program site-visits or desk-audits to ensure all critical items are reviewed and that monitoring activities are consistently applied. Consider discussing and using a checklist similar to that used in the Senior Mini-Grant program.
17. Verify grant program deliverables and data reported to SANDAG, as appropriate, through site visits or desk-audits.
18. Use grant result details reported on quarterly progress reports as well as on close out reports to track and measure grant program outcomes and progress toward meeting goals by individual grants, nature of service, and overall grant program. Communicate these performance metrics to oversight bodies and the public through the Dashboard, other on-line format, annual performance reports, or other widely distributed vehicle.
19. Revisit grant processes to identify steps that can be streamlined to minimize delays and process awards on a timely basis.
20. Ensure that grant expiration dates are clearly stated in the grant agreement provisions.

Chapter 6: *TransNet* Transit Services Earn High Performance Marks

A critical component of the *TransNet* program supplies funding for transit services provided by MTS and NCTD. Our review found that MTS and NCTD work together in a cooperative manner to help achieve a coordinated regional system and perform well towards goals of increasing mobility around the region. In fact, overall transit use has increased more than 8 percent between Fiscal Years 2004-2005 and 2008-2009 according to SANDAG's State of the Commute report for 2010—this increased transit usage reduces traffic congestion and increases mobility. Specifically, data shows systemwide rail ridership increased from approximately 30 million annual boardings in Fiscal Year 2004-2005 to 40 million by Fiscal Year 2008-2009. During the same period, bus ridership climbed slightly from approximately 58 million boardings to close to 64 million.

Using standard industry performance metrics such as farebox recovery ratios and operating cost per boarding, our review revealed that MTS and NCTD's fixed route and light rail systems outperformed peer systems throughout the nation including Los Angeles, Orange County, Denver, and Dallas. Moreover, prior audits of the transit operations and performance of both entities have been mostly positive. While San Diego's systemwide transit operations are high-performing, SANDAG could enhance its practices by employing a better vehicle to communicate and provide performance information captured by MTS and NCTD as part of measuring how well the *TransNet* program is accomplishing its goals.

TransNet Funds Transit Services and Operations

As part of the *TransNet* Extension Ordinance, 16.5 percent of sales tax revenues is dedicated to transit services shared between MTS and NCTD. The 16.5 percent is further split between American with Disabilities Act services (2.5 percent) and Senior Mini Grant program (3.25 percent), with the majority, or 94.25 percent, allocated for general transit operations including passes and subsidies.

- ❖ Since 2008, MTS has received nearly \$71 million from *TransNet* funds—averaging approximately \$24 million annually depending on actual sales tax revenues. According to MTS, the majority of *TransNet* dollars are used for transit operations, while less is spent on capital improvements as those can be built with other funding sources such as Transportation Development Account funds. In the next few months, MTS plans on using *TransNet* dollars to purchase vehicles.
- ❖ Since 2008, NCTD has received nearly \$30 million from *TransNet* funds—although annual revenues vary between \$8 and \$10 million dollars depending on actual sales tax revenues. *TransNet* dollars used for transit operations mainly pay for NCTD's operator contracts for the BREEZE bus, COASTER commuter rail, SPRINTER light rail, and LIFT para-transit. These funds cannot be tracked at a route or line level; rather, NCTD uses *TransNet* monies to fill gaps in funding.

Fixed Route Bus Service Performs Better than Most of its Peers

Both MTS and NCTD capture and track standard performance metrics used in the industry. We compared San Diego County fixed route bus performance as reported in the National Transit

Database against ten identified peers. It is important to note, the data reported in the National Transit Database is self-reported by operators; as a result, there is an inherent risk that data reported may not be accurate. However, this is the best comparable data widely available. As such, our comparison found that San Diego County’s systemwide fixed route bus service—provided by MTS and NCTD—generally performed better than its peers, with overall systemwide performance outperforming the ten peer average in all categories.

Table 26: Comparison of San Diego County's 2010 Fixed Route Performance with Peers

Transit System	Farebox Recovery Ratio ¹	Operating Cost Per Boarding ²	Subsidy per Boarding ³	Operating Cost per Revenue Mile ⁴	Average Boardings Per Revenue Mile ⁵
San Diego (Systemwide)	33.8%	\$3.02	\$2.00	\$7.68	2.54
San Diego (NCTD)	19.9%	\$5.37	\$4.30	\$7.86	1.47
San Diego (MTS)*	38.1%	\$2.66	\$1.65	\$7.62	2.86
Dallas (DART)	11.5%	\$6.52	\$5.77	\$9.00	1.38
Denver (RTD)	26.6%	\$3.71	\$2.72	\$7.43	2.00
Los Angeles (LACMTA)	26.5%	\$2.58	\$1.90	\$10.86	4.20
Minneapolis (Metro Transit)	31.0%	\$3.59	\$2.48	\$10.53	2.93
Orange (OCTA)	24.1%	\$3.62	\$2.75	\$9.38	2.59
Phoenix (RPTA)	16.9%	\$5.35	\$4.45	\$6.35	1.19
Portland (TriMet)	22.8%	\$3.95	\$3.05	\$11.28	2.86
Sacramento (RT)	21.9%	\$4.27	\$3.34	\$10.68	2.50
Salt Lake (UTA)	17.7%	\$4.89	\$4.02	\$6.46	1.32
Santa Clara (VTA)	13.9%	\$6.29	\$5.41	\$13.22	2.10
10 Peer Average	21.3%	\$4.48	\$3.59	\$9.52	2.31

Source: 2010 National Transit Database Report; Chula Vista Transit Performance Combined with MTS

Notes: (1) Farebox Recovery Ratio = Fare Revenue/Operating Expenses (2) Operation Cost Per Boarding = Operating Expenses/Total Boardings (3) Subsidy per Boarding = (Operating Expenses net Fare Revenue)/ Total Boardings (4) Operating Cost per Revenue Mile = Operating Expenses/Annual Revenue Miles (5) Average Boardings per Revenue Mile= Total Boardings/Annual Revenue Miles

* MTS includes information reported for Chula Vista from the 2010 National Transit Database Report.

For example, as illustrated in Table 27, the San Diego systemwide farebox recovery ratio was approximately 33.8 percent, or 12.5 percent higher than the 21.3 percent ten peer average—meaning San Diego offset 33.8 percent of its operating costs through fare revenues. In another example, we found that San Diego’s average operating cost per revenue mile was \$7.67, or \$1.85 less than the \$9.52 peer average.

Light Rail Performs Better than its Peers

We compared San Diego's Light Rail performance against nine national peers based on performance information reported in the 2009 National Transit Database Report. San Diego's systemwide 47.7 percent farebox recovery ratio was the highest amongst its peers and more than 20 percent higher than the nine peer average, indicating San Diego successfully offsets nearly 48 percent of its total operating costs with farebox revenues. In addition, San Diego's systemwide operating cost per boarding of \$2.26 was the second lowest amongst its peers and \$1.32 less than the \$3.58 nine peer-average as illustrated in Table 28.

Table 27: Comparison of San Diego County's 2010 Light Rail Performance with Peers

Light Rail System	Farebox Recovery Ratio ¹	Operating Cost Per Boarding ²	Subsidy per Boarding ³	Operating Cost per Revenue Mile ⁴
San Diego (Systemwide)	47.7%	\$2.26	\$1.18	\$8.94
<i>San Diego (MTS)</i>	54.3%	\$2.00	\$0.91	\$7.87
<i>San Diego (NCTD)</i>	16.2%	\$6.03	\$5.05	\$25.62
Dallas (DART)	12.6%	\$6.29	\$5.50	\$22.66
Denver (RTD)	31.1%	\$3.56	\$2.45	\$8.96
Los Angeles (LACMTA)	18.3%	\$3.62	\$2.96	\$17.41
Minneapolis (Metro Transit)	40.3%	\$2.46	\$1.47	\$12.78
Phoenix (VMT)	28.1%	\$2.72	\$1.96	\$12.43
Portland (TriMet)	34.7%	\$2.51	\$1.64	\$13.06
Sacramento (RT)	30.2%	\$3.12	\$2.18	\$11.75
Salt Lake (UTA)	37.2%	\$2.09	\$1.31	\$8.62
Santa Clara (VTA)	15.2%	\$5.81	\$4.93	\$18.77
9 Peer Average	27.5%	\$3.58	\$2.71	\$14.05

Source: 2010 National Transit Database Report

Notes: (1) Farebox Recovery Ratio = Fare Revenue/Operating Expenses (2) Operating Cost Per Boarding = Operating Expenses/Total Boardings (3) Subsidy per Boarding = (Operating Expenses net Fare Revenue)/ Total Boardings (4) Operating Cost per Revenue Mile = Operating Expenses/Annual Revenue Miles

Although San Diego systemwide performance is better than its peers, performance at the agency level varies significantly. Although MTS out-performs its peers, NCTD ranked at or near the bottom in comparison. The lower ratios experienced by NCTD may be attributed to the fact that the SPRINTER light rail system began operation in March 2008 and is still in the early phase of its operations.

Operational Audits Reveal Favorable Performance Results

To comply with the State of California's Transportation Development Act, each transit operator receiving Transportation Development Act funds must undergo a triennial performance audit

focused on general compliance with law, systemwide performance trends for efficiency and effectiveness, functional area performance results, and opportunities for improving the efficiency and effectiveness of operations. The audits focus on the entirety of the entities' operations—not just those portions funded through the Transportation Development Act. In the most recent audits conducted at MTS, NCTD, and SANDAG, auditors found that the three agencies complied with relevant laws and exhibited improved coordination to build positive working relationships since the last audits. Of particular note, the audits commented on the strong performance of the transit operators. While *TransNet* funds are a relatively small portion of the monies used by the operators, the *TransNet* funds are leveraged with other sources and have realized successful performance outcomes. Highlights from the audits include the following:

NCTD Performance Results

- ***Productivity Increased with Higher Passenger Yields:***
Passengers per service hour increased by more than 12 percent and passengers per service mile rose by nearly 11 percent during the audit period.
- ***NCTD Exercised Significant Cost Containment Efforts:***
In an effort to contain costs during the economic downturn and decreased demand, NCTD took appropriate measures to contain operating costs per service hour for fixed route bus service in-line with inflation.
- ***Improved BREEZE Operations:***
During the audit period, NCTD increased the service reliability and speed, reduced costs, and improved performance. Specifically, missed trips reported decreased by 45 percent, transportation operating costs decreased by nearly six percent, and passengers per service mile increased by nearly four percent.

MTS Performance Results

- ***Major Cost Containment Measures Implemented:***
MTS achieved measurable successes in cost containment, increased ridership, and realized significant farebox recovery during the audit period.
- ***Operating Cost Increases Aligned with Inflation:***
Systemwide operating costs increased by 8.6 percent which roughly aligned with the 7.4 percent consumer price index inflation rate for the same period.
- ***Operating Cost per Passenger Declined:***
Operating cost per passenger, a measure of cost effectiveness, decreased by four percent.
- ***Increased Service Productivity:***
MTS experienced an 11 percent increase in unlinked passenger trips (ridership) despite service reductions. The increased ridership and decreased service resulted in increased productivity levels. Specifically, passengers per service hour and service mile increased by 13 percent and nearly 18 percent, respectively.
- ***Farebox Recovery Significantly Higher than Required Recovery:***
MTS farebox recovery ratio increased from 37 percent to more than 43 percent, which was significantly higher than the 31.9 percent required recovery ratio.

However, the Transportation Development Act Audit of SANDAG identified two instances related to fare policy and service planning where the agencies could better coordinate their efforts. Specifically, the audit found that the COASTER Connection Shuttle and Sorrento Valley Coaster Station lacked coordinated fare policies and found that connections between MTS and NCTD at the North County Fair Shopping Center along the Interstate 15 corridor require passengers to walk a significant distance. According to NCTD, it is working with MTS and SANDAG to develop a more coordinated fare policy; however, it is unclear when a new fare ordinance will be developed and implemented. NCTD also indicated that fares are currently coordinated for passengers using monthly COASTER passes. Moreover, according to NCTD, a new transit station was built at the North County Fair Shopping Center and passengers no longer have to walk long distances when making connections between service providers.

SANDAG Could Make Transit Performance Data More Easily Accessible to the Public

Although the transit agencies provide SANDAG certain performance information quarterly and have performance related data available, this information is not included in SANDAG's Dashboard or other easily accessible public portal. Some transit performance information is presented in SANDAG's Transit Coordinated Plan Technical Appendices and ridership information is shown in its annual State of the Commute report; additionally, operator performance data is provided in Quarterly Transit Performance Monitoring Reports. Aside from this information, each transit operator also inputs performance statistics into National Transit Database such as subsidy per boarding, operating cost per boarding, and on-time performance. Moreover, MTS and NCTD also capture and provide performance information through annual budgets and board meetings. For instance, MTS reported the following metrics:

- Revenue Miles and Total Miles
- Vehicle Revenue and Service Hours
- Trips Operated and Total Boardings
- Passengers Per Revenue Hour
- Operating Subsidy Per Passenger
- Fare Revenue and Farebox Recovery Ratio

MTS also reports performance data to its Board of Directors including several years of historical data on operating subsidy, operating cost, fare revenue, and ridership. While this data appears to be used to make route adjustments and improve system efficiency and effectiveness, this data is not easily accessible unless the public conducts in-depth searches of the MTS website.

Similarly, NCTD provides some performance information on their website. While NCTD did not provide a long range of historical data, NCTD data between November 2009 and Fiscal Year 2010-2011 in its "Report to the Community" included high level information on systemwide NCTD operations, customer service, and financials, including the following metrics:

- Revenue Miles Provided and Vehicle Service Hours
- Trips Operated and Total Boardings
- Customer Concerns Per 100,000 Boardings
- Fare Revenue and Farebox Recovery Ratio

Additional performance indicators are available on NCTD’s public website related to on-time performance and percent of trips completed—as well as some of the above metrics—specific to the BREEZE, COASTER, and SPRINTER rail lines. According to NCTD, this data was used to complete their 2011 Mobility Plan aimed at providing faster, more frequent service on busy routes, less travel and waiting times, and better connections between rail and bus services.

While information provided by both transit operators allow customers and the general public to get a snapshot of system performance, it would be beneficial for SANDAG to capture the historical transit data in one location easily available for comparison purposes—or, at a minimum, provide a direct link to where specific performance data is available on the individual transit operator sites. In addition, as resources permit, providing context and verbiage explaining what the statistics mean would help riders and the public have a better understanding of system performance and the impacts of their *TransNet* sales tax. Other peer organizations, such as the Regional Public Transportation Authority in Maricopa County, Arizona, capture indicators through annual performance reports for transit operations illustrating systemwide transit performance and route level performance funded through a similar local dedicated sales tax. These performance reports are available on the public website.

We also found that MTS and NCTD did not set systemwide or route specific performance targets related to performance metrics such as farebox recovery ratios or on-time performance. However, MTS has developed some internal targets that were vague and not route specific. For example, most targets were to improve the operator average or improve the route category average. Similarly, NCTD reports estimated operation statistics in its annual budget; however, these estimates appear to be used for budget and reporting purposes rather than a targeted level of performance to be achieved.

Although San Diego's transit system generally outperformed its peers during the period of our review, better defining targets and providing the public with easily accessible and comprehensive historical and current performance reports provides additional accountability to voters and demonstrates the effectiveness of transit operations.

Recommendations

To increase transparency to the public related to the performance of *TransNet*’s Transit Services program, the ITOC should request that SANDAG:

21. Work with its transit operator partners to identify and implement the best vehicle to distribute and communicate transit performance to the taxpayers. Additionally, peer comparison statistics could be valuable information to share as another tool to use in gauging program accomplishment.
22. Obtain specific performance targets related to metrics such as farebox recovery ratio or on-time performance, through collaboration with its transit partners, to increase accountability to the public and help those charged with oversight to better assess whether program is achieving intended benefits.

Chapter 7: ITOC is Fulfilling its Responsibilities and Using Leading Practices

Established in 2004 through the *TransNet* Extension Ordinance, the ITOC is a key safeguard created to “provide an increased level of accountability for the allocation of *TransNet* revenues.” Since that time, ITOC has made significant achievements and progress in fulfilling its responsibilities and commitment to the public trust for overseeing taxpayer expenditure. The prior *TransNet* Triennial Performance Audit noted that the ITOC members’ allegiance to working with SANDAG and the other transportation partners in meeting *TransNet* goals was steadfast. This dedication continued through the three-year period of the current review where we found that the ITOC members and actions are fulfilling their responsibilities under the *TransNet* Extension Ordinance and incorporating best practices used by many of its peers throughout the country. Maintaining the strong relationship between SANDAG and ITOC as well as ITOC’s diligence, accountability, and strength of function over the life of the 40-year program are important components of the *TransNet* program.

Members Possess Requisite Expertise

Consisting of seven individuals from a variety of professional fields, the ITOC members collectively offer SANDAG the benefit of their experience to assist with the timely and efficient implementation of *TransNet* projects. Specifically, based on our review of membership applications and individual resumes for each of the current ITOC members, we found that the ITOC members are appropriately qualified to serve in their respective areas of expertise.

Members are chosen by a selection committee panel of city mayors and county supervisors to serve staggered four-year terms. As specified in the *TransNet* Extension Ordinance, the ITOC should consist of seven voting members representing the following seven areas of expertise:

- Municipal/Public Finance and/or Budgeting;
- Licensed Architect, Civil Engineer or Traffic Engineer in field of Transportation and/or Urban Design;
- Real Estate, Land Economics and/or Right-of-Way Acquisition;
- Management of Large Scale Construction Projects;
- Licensed Engineer in Field of Transportation Design or Construction in Senior Decision Making Position;
- Chief Executive Officer or similar Senior Decision Making Position of a Major Private Sector Employer; and
- Biology or Environmental Science Professional with expertise in Environmental Regulations and Major Project Mitigation Requirements or Habitat Acquisition and Management.

For each of the current ITOC members, their resumes of experience align with the positions of expertise they were selected to hold on the ITOC.

For example, the *TransNet* Ordinance requires that one ITOC member must be a Biology or Environmental Science Professional with a minimum of 10 years demonstrated experience with environmental regulation and major project mitigation requirements or habitat acquisition and management. In fact, the current member’s qualifications include 25 years experience with mitigation and conservation programs, guiding habitat acquisition and management, and assisting the public sector in meeting state and federal endangered species regulations—thus, the individual is very qualified to provide the necessary environmental expertise and perspective on related matters brought before the ITOC.

ITOC is Fulfilling its Roles and Responsibilities

Under the provisions of the Ordinance, ITOC has quite a few responsibilities including conducting annual fiscal and compliance audits and triennial performance audits of the *TransNet* program, participating in the ongoing refinement of the SANDAG performance measurement process, and providing recommendations to the SANDAG Board on any proposed amendments to the Ordinance among others shown in Table 29. These responsibilities are further delineated and clarified in a variety of documents including the “Statement of Understanding Regarding the Implementation of the ITOC for the *TransNet* Program,” ITOC Bylaws adopted by the committee, and Implementation Procedures developed by the ITOC. Throughout the audit period under review, the ITOC members appropriately and diligently fulfilled their roles and responsibilities.

Meeting Frequency Adheres to Ordinance and are Regularly Attended

According to the *TransNet* Extension Ordinance, the ITOC must meet on a regular basis (at least quarterly) to carry out its roles and responsibilities. Based on the documentation of meetings held between Fiscal Years 2008-2009 and 2010-2011, ITOC’s meeting frequency adheres to the Ordinance requirements. For the most part, it has scheduled monthly meetings since its inception in 2005 in addition to special meetings as needed. We found that of the 41 originally scheduled ITOC meetings during that three-year period, 8 meetings, or 19.5 percent, were cancelled. For the most part, the cancellations occurred when there were consent-only agenda items or no critical business items to bring forward for discussion.

However, we did find an instance where a cancelled ITOC meeting in 2008 may have delayed *TransNet* activities related to several land management grant approvals. Specifically, for the 2008 Environmental Mitigation Program grant projects, the Regional Planning Committee approved the rank ordered list of recommendations on August 1, 2008 and prepared to send the list of recommendations to the ITOC for its review. However, the August 13, 2008 ITOC meeting was cancelled and not rescheduled; thus, the grants were not discussed until the next regularly scheduled meeting on September 10, 2008. Given its responsibilities to conduct “reviews in such a manner that does not cause unnecessary project delays” and that particular meeting cancellation appears to have impacted the timing of the grant approval process, SANDAG should work closely with the ITOC to ensure they are aware of pending business and the criticality of rescheduling meetings when necessary.

Table 28: Comparison of ITOC Responsibilities with Actions Taken

Responsibilities Per <i>TransNet</i> Ordinance	Actions Taken
Annual Fiscal and Compliance Audits	Hired an independent audit firm to review local jurisdictional adherence to Ordinance, Board policies, and maintenance of effort requirements.
Annual Reports to SANDAG Board of Directors	ITOC has developed and issued annual reports that include <i>TransNet</i> program projects' progress and status and summary of revenues and expenditures.
Triennial Performance Audits of <i>TransNet</i> Funded Projects	The first audit report was issued in 2009; the second audit is currently in progress.
Make Recommendations on Proposed Amendments to <i>TransNet</i> Ordinance	ITOC reviewed and made recommendations on amendments to the <i>TransNet</i> Ordinance and Expenditure Plan.
10-year Review of <i>TransNet</i> Program	Not applicable until 2018 when 10-years have elapsed in the <i>TransNet</i> Program.
Participate in Ongoing Refinement of Project Evaluation Criteria and Project Prioritization in the RTP and RTIP	ITOC received and reviewed a variety of documentation such as the 2050 RTP and the various RTIPs as well as prioritization criteria.
Provide Independent Analysis of Information in State of the Commute Report	ITOC received and analyzed the State of the Commute Report as part of its standard meeting process as well as through its own Annual ITOC report.
Review and Comment on the Programming of <i>TransNet</i> Revenues in the RTIP	RTIPs and related amendments are brought to ITOC for review, discussion, and recommendation.
Review Proposed Debt Financing	ITOC receives and reviews debt service ratios and financing proposals to monitor SANDAG's ability to pay for <i>TransNet</i> Program debt on a regular basis.
Quarterly Review of Major Congestion Relief Projects Identified in the Ordinance	ITOC receives and reviews a variety of quarterly reports provided by SANDAG and its partners on status, progress, and performance.

ITOC bylaws establish a standard for attendance and require that members attend more than 50 percent of regular ITOC meetings in each calendar year; members may be removed for cause from the committee if they fail to meet the threshold. Further, a minimum of four members must be in attendance to constitute a quorum. For those voting members in place during Fiscal Years 2008-2009 and 2010-2011, all the ITOC individuals easily complied with the attendance threshold.

Specifically, we evaluated the attendance of those active ITOC members in place during the three-year period under review tracking total absences and percent absent for the period and on an annual basis. Using ITOC meeting minutes, we calculated the number of meetings a member was eligible to attend based on the dates when each member joined or left the committee as shown in Table 30. Excluding the two newest members appointed in May 2011, our results found the remaining members were absent between 11 percent and 39 percent of the time over the last three fiscal years.

Moreover, at each ITOC meeting over the three-year period of review, a sufficient number of committee members were always in attendance to form a quorum as outlined in ITOC bylaws with no less than four voting members present at each meeting. Additionally, we verified that each individual ITOC member was in attendance at least 50 percent of the time on a calendar year basis in accordance with the ITOC bylaws.

Table 29: ITOC Attendance between Fiscal Years 2008-2009 and 2010-2011

Committee Member	Eligible Number of Meetings to Attend	Total Number Absences	Percent Absent
Bahadori	28	5	18 %
Cummins	18	7	39 %
Fromer	11	3	27 %
Garcia	28	3	11 %
Gerow	9	2	22 %
Harrison	15	3	20 %
Kenney	1	0	0 %
Lee	20	4	20 %
Lloyd	9	1	11 %
Meyer	29	9	31 %
Ryan	29	7	24 %
Tibbitts	1	0	0 %

Source: ITOC Meeting Minutes, Fiscal Years 2007-2008 through 2010-2011.

ITOC Leads Peers with its Best Practices

Throughout the nation, there are other taxpayer or transportation oversight committees in regional areas with sales tax or dedicated funding sources for transportation and transit projects. Several of them have similar responsibilities as San Diego’s ITOC to review, advise, and make recommendations on matters related to projects funded by the transportation tax. While each transportation oversight committee functions differently and employs varying practices, it appears that San Diego’s ITOC subscribes to unique best protocols in addition to incorporating many, if not all, the best practices of its peers as highlighted below:

- ✓ Members must possess a wide breath of expertise as defined in the Ordinance. While all peers have membership criteria, not all peers require as varied experience as does ITOC.
- ✓ Similar to its peers, San Diego’s ITOC issues annual reports summarizing its activities and those of the transportation program, contracts for independent financial audits of the tax revenues, and conducts regular meetings to received project status updates.

- ✓ Like most oversight committees, initial statutes or ordinance provisions surrounding the function of these oversight committees can be vague. To clarify and ensure consistent application, the San Diego ITOC developed guidance and implementation procedures detailing its duties, how to fulfill them, and its functional role as a partner to SANDAG. While some other oversight committees have similar operating protocols, guiding principles, or bylaws, not all the other committees employed the practice.
- ✓ San Diego’s ITOC plays a more critical and active role in their regional transportation process than some of its peers through voting on options presented and formally making recommendations indicating approval or disapproval of project actions taken. Several other transportation oversight committees also employ this process, but not all do. In one metropolitan city, the safeguards anticipated to be provided by the oversight committee have been diluted with the combined passive role taken by the committee and the lax approach assumed by the partner agencies in mostly providing project status updates and not looking to the committee for useful advice, comment, and or public perspective. As a result, the committee does not function as effectively as it could to represent the public’s investment in the program.
- ✓ Further, San Diego’s ITOC requests and reviews substantive information such as alternatives considered when reviewing proposed program or project changes. In representing the public’s interests in these issues, if the data is not sufficient to assess the reasonability and deliberate processes surrounding the issues presented before the ITOC, members will ask questions and request additional information. Many, but not all, of the other oversight committees receive this type of critical information related to options for making proposed changes, alternatives considered, risks and impact of various alternatives, underlying data behind changes, and rationale behind ultimate action recommended.
- ✓ Not only does ITOC seem to incorporate most of the best protocols used by its peers, but it also incorporates additional steps to strengthen its integrity. For instance, it requires its members to disclose their personal assets and income as part of a Statement of Economic Interest form (California Form 700) and file a Declaration Concerning Conflicts statement that are updated annually. It also has established standards for meeting attendance with provisions for committee membership removal where warranted.

Through employing these strong practices, ITOC is a leader in ensuring the public’s investment is protected through its input into the *TransNet* program over the 40-year life of the program. To assist in ensuring that ITOC continues its strength of operation over time, SANDAG provides the ITOC with an “ITOC Binder” transferring knowledge such as ITOC Bylaws, Implementation Guidelines, and conflict of interest provisions. With the size of the *TransNet* program and complexity of its programs, it is important for the ITOC and SANDAG to keep the binder current and complete with critical program components. As warranted, other items could be incorporated into the binder as the program evolves to memorialize the strong dynamics of the working relationship in place between SANDAG and other *TransNet* partners—to ensure future leaders continue to use and consider the ITOC as a valuable resource, and have ITOC remain diligent in fulfilling their responsibilities to the *TransNet* program.

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Chapter 8: Summary of Conclusions and Recommendations

Over the last three years, SANDAG and its partners have continued to propel the *TransNet* program through challenges creating a well-run comprehensive transportation, transit, and environmental program. All parties involved with *TransNet* activities demonstrate the necessary commitment, expertise, and focus to ensure the program is transparent in its efforts to accomplish the goals set forth in the Ordinance.

While only a few years have elapsed of the 40-year TransNet program, many leading practices have been employed throughout the individual TransNet programs and much has been accomplished. Strong practices are in place over program development and delivery, environmental mitigation, cost and schedule control, contracting and construction, and general management and oversight.

To assist SANDAG in its quest for continual improvement in terms of efficiency, effectiveness, and accountability to the taxpayers of the San Diego region, ITOC should have SANDAG and its partners consider the following series of recommendations. We believe these recommendations could be implemented without significant use of resources, and that no significant barriers exist to impede that implementation.

Recommendation	Report Reference	Priority
To build upon the improved performance measure foundation and enhance current tracking and measurement of the impact and outcome of TransNet modes and programs, the ITOC should ask SANDAG to:		
<p>1. Continue ongoing efforts and develop a plan to incorporate arterial roadway and transit performance metrics into SANDAG’s performance processes and develop additional performance measures including multi-modal measures or those related to other goals of the Regional Transportation Plan such as safety and environment. Plans and efforts should be documented and include:</p> <ul style="list-style-type: none"> • Timelines and milestones for development and completion; • Methods for compiling, tracking, and using performance data; • Targets or goals for performance; and • Vehicles to be used for communicating actual performance results. 	Chapter 1, pages 18-20	Medium

To better enhance transparency and communicate <i>TransNet</i> performance, the ITOC should have SANDAG:			
2.	Make the performance indicators such as vehicle-hours of delay and vehicle-miles of travel for individual corridors and projects shown on the internal Dashboard site available to the public either through Dashboard portals, or through some other mechanisms such as an annual report.	Chapter 2, pages 27-29	Medium
To more closely manage and monitor the Local Street and Road program performance as well as eliminate process inefficiencies, the ITOC should have SANDAG work collaboratively with the local agencies to:			
3.	Consider assigning certain Local Street and Road Program responsibilities and activities— such as setting and monitoring program goals, reviewing and modifying rules and processes in place, and measuring program performance towards meeting overall <i>TransNet</i> goals—to a SANDAG program staff.	Chapter 3, Pages 32-38	Medium
4.	Develop a method, process, or practice over the Local Street and Road program to more closely monitor program outcomes and performance towards congestion relief and maintenance of roadways including the following: <ul style="list-style-type: none"> • Establishing defined program goals; • Revisiting and redesigning program policies as warranted; • Determining performance data to be captured and monitored; and • Identifying, defining, and implementing better mechanisms for monitoring project performance related to getting projects done more timely and achieving better outcomes upon project completion. 	Chapter 3, Pages 32-38	High
5.	Require local agencies to submit specific Local Street and Road performance statistics currently available—such as ratio of miles resurfaced to miles maintained, pavement condition indices over time, or others related to level of service ratings of roadway operating conditions—on a predetermined set schedule and make the data available to the public.	Chapter 3, Pages 41-44	Medium
6.	Analyze Local Street and Road performance data provided for trends or comparisons between local agencies; further, use analysis to make program changes as warranted.	Chapter 3, Pages 41-44	Medium

7.	<p>Revisit existing rules and practices in the Local Street and Road program, and consider the following:</p> <ul style="list-style-type: none"> • Replacing the 30 percent fund balance limitation with a more effective measure to monitor performance (such as those described in Recommendation 5) where SANDAG and ITOC could observe progress and performance through administrative processes rather than through an audit compliance mechanism; and • Exploring the feasibility of revising the interest allocation rule to allow local agencies to use interest earnings as “savings account” that can be used on eligible projects—similar to a construction project contingency fund—where interest could be pooled and drawn down for projects as needed. 	Chapter 3, Page 38-40	Medium
<p>To continue strengthening the EMP to ensure <i>TransNet</i> funding is utilized in the most effective manner, the ITOC should have SANDAG do the following:</p>			
8.	<p>Continue efforts working with wildlife agencies and conservancies to identify coastal wetland opportunities and develop wetland mitigation bank. Also, continue negotiating with regulatory permitting agencies to accept a package of mitigation efforts that provide “no net-loss.”</p>	Chapter 4, Pages 54-57	High
9.	<p>Develop a process to track local mitigation activity expenditures separately from regional mitigation activity expenditures.</p>	Chapter 4, Page 60	Low
10.	<p>Continue efforts and establish timelines for developing comprehensive and coordinated strategic plans and measurable program objectives related to the Regional Habitat Conservation Fund program activities and efforts including the following:</p> <ul style="list-style-type: none"> • Providing ITOC and other oversight bodies a timeframe to have these plans implemented with high-level activities and tasks needed, milestones, and assignment of staff “owners” responsible for task completion as warranted; • Developing performance measures that measure progress and success while also linking strategic plans and objectives to funding priorities; and • Ensuring impediments identified via the 2011 draft needs assessment are adequately addressed. 	Chapter 4, Pages 62-67	High

11.	Maintain focus on clarifying and defining how to apply the economic benefit concept, and identify tasks and timelines needed to address economic benefit issue. Develop corresponding methodologies to calculate the amount of economic benefit achieved as well as processes to release and allocate the resulting funding.	Chapter 4, Pages 67-68	High
12.	Continue efforts and establish timelines to develop information management systems that can share habitat management and monitoring results between local agencies and serve as a single source of EMP information.	Chapter 4, Pages 68	Medium
13.	Strengthen conservation efforts in its regional entity by: <ul style="list-style-type: none"> • Preparing a succession plan for the critical independent consultants—such as those charged with the San Diego Monitoring and Management Program—to ensure institutional knowledge gained over the last several years related to strategic planning and administering a centralized data repository and reporting system is appropriately transferred to SANDAG; • Establishing a central monitoring function to oversee and coordinate the activities of the various independent consultants as well as ensure accountability for delivering services that move the program forward; and • Finalizing efforts to establish a strategic plan and measurable program objectives. 	Chapter 4, Pages 62-68	High
To assess whether grant activities are meeting program outcomes and make grant processes more efficient, ITOC should have SANDAG:			
14.	Develop clear goals and objectives for the Land Management and all aspects of the Bicycle, Pedestrian, and Neighborhood Safety Grant Program so that outcomes can be tracked and measured to evaluate whether grant activities are achieving what was intended for the program.	Chapter 5, Pages 71-74	High
15.	Augment grant monitoring practices by conducting site visits or desk-audits using a risk-based approach to determine what grantees to visit or review and in what frequency.	Chapter 5, Pages 75-77	Medium

16.	Employ a checklist, or other standardized documentation, as guidance for conducting grant program site-visits or desk-audits to ensure all critical items are reviewed and that monitoring activities are consistently applied. Consider discussing and using a checklist similar to that used in the Senior Mini-Grant program.	Chapter 5, Pages 75-77	Medium
17.	Verify grant program deliverables and data reported to SANDAG, as appropriate, through site visits or desk-audits	Chapter 5, Pages 75-77	Medium
18.	Use grant result details reported on quarterly progress reports as well as on close out reports to track and measure grant program outcomes and progress toward meeting goals by individual grants, nature of service, and overall grant program. Communicate these performance metrics to oversight bodies and the public through the Dashboard, other on-line format, annual performance reports, or other widely distributed vehicle.	Chapter 5, Pages 75-77	Medium
19.	Revisit grant processes to identify steps that can be streamlined to minimize delays and process awards on a timely basis.	Chapter 5, Pages 77-78	High
20.	Ensure that grant expiration dates are clearly stated in grant agreement provisions.	Chapter 5, Pages 79	High
To increase transparency to the public related to the performance of <i>TransNet's</i> Transit Services program, the ITOC should request that SANDAG:			
21.	Work with its transit operator partners to identify and implement the best vehicle to distribute and communicate transit performance funded in part by TransNet monies to the taxpayers. Additionally, peer comparison statistics would be valuable information to share as another tool to use in gauging program accomplishment.	Chapter 6, Pages 86-87	Medium
22.	Obtain specific performance targets related to metrics such as farebox recovery ratio or on-time performance, through collaboration with its transit partners, to increase accountability to the public and help those charged with oversight better assess whether program is achieving intended benefits.	Chapter 6, Pages 86-87	Medium

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Appendix A: Detailed Audit Methodology

The *TransNet* Extension Ordinance established a requirement that ITOC conduct triennial performance audits of the agencies involved in the implementation of *TransNet*-funded projects. In August 2011, Sjoberg Evashenk Consulting, Inc. was selected by the ITOC to conduct the second in a long series of triennial performance audits of *TransNet*-funded programs. The period covered by this audit was July 2008 through June 2010, except where we needed to obtain contextual or underlying support data from periods prior to 2008 or more recent information to fully analyze project activities and practices.

The main audit objectives were to:

1. Evaluate the status of implementation of the recommendations from the first triennial performance audit and effectiveness of these prior recommendations.
2. Determine whether the organizational structure and operational processes allow for effective and efficient project delivery, cost control, and schedule adherence.
3. Identify process changes in contracting, construction, permitting, and other procedures that could improve the efficiency and effectiveness of the program.
4. Evaluate the efficiency and effectiveness of the ITOC, including adherence to bylaws.
5. Identify and evaluate any potential barriers to and opportunities for proposed changes.

To understand changes made to the *TransNet* program since the prior audit, we reviewed federal, state, local code, and ordinance updates and amendments in addition to prior year audit status of corrective action, annual budgets, fact sheets, and online data, including:

- *TransNet* Extension Ordinance and Expenditure Plan, and amendments;
- Regional Comprehensive Plan of 2004;
- Regional Comprehensive Plan Annual Performance Monitoring Report for 2008;
- Regional Transportation Congestion Improvement Plan of 2006, 2008, and 2010;
- Regional Transportation Improvement Program of 2006, 2008, and 2010;
- 2030 Regional Transportation Program of 2003 and 2007 as well as the 2050 Regional Transportation Program of 2011;
- Prior Year Audit Recommendations Status Matrix; and
- SANDAG's Capital Improvement Program and Overall Work Program for Fiscal Years 2008 through 2011.

To analyze and consider the full complement of challenges and successes surrounding the organizational and operational procedures in the implementation of the *TransNet* program, we researched similar programs and current best practices, as well as conducted a wide-range of interviews to ascertain perspectives, insights, challenges, and recommendations on the implementation of the *TransNet* program. Specifically, we met with nearly 100 executives, officials, managers, staff, consultants, and stakeholders in areas related to transportation and transit planning, capital construction, environmental mitigation, grant and program management,

finance and economics, transit operations, local public works and engineering, and program oversight. For programs reviewed under the first triennial audit, we focused on any changes made to processes or practices; alternately, for new *TransNet* programs funded during the period of this current second triennial audit, we conducted thorough walk-through of processes, reviewed policies and practices, assessed documentation in project files, tested grant files and records, reviewed available performance metrics, and studied Dashboard data.

To follow-up on the status of prior year audit recommendations, we assessed SANDAG's and Caltrans' status of actions to implement the recommendations by reviewing documentation and interviewing staff to determine the actual status of implementing the recommendations as of December 2011. Further, we selected a sample of task order amendments from the universe of all amendments processed during our period of review to identify whether previous issues related to timeliness had been corrected. Our sample of nine amendments was selected from a variety of consultants, service types, and time periods.

Additionally, to analyze the efficiency and effectiveness of practices and processes over the Local Street and Road program, we:

- ✓ Gained an understanding of SANDAG's management and administration of the program including obtaining applicable policies, rules, and audits associated with the program. We also reviewed annual financial and compliance audits conducted by external audit firms that assess local agency compliance with Board Policy 31—Rule 17.
- ✓ Selected a representative sample of local agencies to conduct more detailed review based on geographical location, size, type of local street and road projects, and dollar value of projects.
- ✓ Through interviews and review of project files for a sample of local jurisdictions, determined whether adequate processes were in place to control cost and schedule, ensure appropriate contracting and construction practices, and use effective delivery methods. We interviewed local engineering, public works, community development project and department management staff to gain an overall understanding of local processes and procedures related to project selection, design, right-of-way, environmental, construction, close-out, and contractor/consultant procurement.
- ✓ Using data from SANDAG's ProjectTrak system and the Fiscal Year 2009-2010 ITOC financial audit, compiled a universe of projects funded by *TransNet* Extension Ordinance monies to select a sample of projects from the City and County of San Diego, cities of Chula Vista, Santee, and Vista for more in-depth review. For each of the projects, we interviewed project management staff and evaluated supporting project file documentation including schedules, budgets, progress payments, progress reports, and change orders.
- ✓ Assessed available performance data by obtaining and reviewing pavement condition indices, level of service ratings, contracts, internal city audits, and other documentation provided to local oversight bodies.

As part of our evaluation of the Environmental Mitigation Program, we performed the following activities:

- ✓ Reviewed various pertinent reports and documents, including *TransNet* Extension Ordinance, EMP Memorandum of Agreement between SANDAG and wildlife agencies, EMP policies and guidelines, draft strategic plans and objectives, EMP status reports and discussion memos to decision makers, and SANDAG Board decisions.
- ✓ Interviewed SANDAG and Caltrans management and staff involved in the EMP as well as pertinent stakeholders including the EMP Working Group Chairperson, EMP consultants, and EMP external academic experts.
- ✓ Analyzed financial data, including budgeted allocations and actual program expenditures related to acquisitions, restoration, management, and administration activities as well as projected program expenditures.
- ✓ Reviewed EMP funding strategies and approaches for major high way and transit project mitigation and regional habitat conservation efforts and activities.
- ✓ Compared actual land acquisitions acres and costs against estimated budget allocations and reviewed a sample of land acquisition appraisals. Ascertained the reasons for variances and planned corrective actions to remedy variances.
- ✓ Considered the potential land acquisition cost savings-to-date achieved and sought clarification regarding methodologies associated with calculating, utilizing, and allocating economic benefits.
- ✓ Reviewed regional conservation plans and stakeholder involvement in developing plans.

To assess the processes, controls, and oversight exercised over the remaining *TransNet* programs funded during the period of our review, we performed the following:

- ✓ As part of our review over Major Corridor Capital Construction Program for transportation and transit projects, we used budget and schedule data available in the Dashboard to assess current project status. Specifically, we reviewed data at the program, corridor, or project segment level to assess cash flow, schedule, trends, and budget history. For areas of noted delays or budget increases, we drilled down to identify what project phase the variances were occurring such as environmental, design, right of way, general support, or construction support.

Additionally, we reviewed performance metrics and project status as indicated by red, green, or yellow icons to identify acceptable, cautious, or critical project conditions. Finally, we interviewed SANDAG and Caltrans Corridor Directors and other project staff as well as reviewed project documentation to understand changes in project management practices since the first triennial audit.

- ✓ For the grant programs including Land Management, Smart Growth, Senior-Mini, and Bicycle, Pedestrian, and Neighborhood Safety, we reviewed available strategic plans and goals, call for project documentation, ProjectTrak system data, grant evaluation criteria, scoring matrices and scoring sheets, grant applications, quarterly performance reports, site visit documentation, and Board and committee meeting minutes. Further, we selected a representative sample of 22 grants—6 Land Management, 5 Smart Growth, 5 Senior-Mini, and 6 Bicycle, Pedestrian, and Neighborhood Safety grants—for detailed testing based on geographical region, agency size, grant dollar amount, and type of grant service or project awarded. Using grant file documentation, we reviewed timeliness of grant awards, consistency and fairness of application process, compliance of grantee to agreement terms and deliverables, SANDAG administration of grant, and level of monitoring conducted.
- ✓ To assess performance of transit services, we reviewed San Diego’s operation as reported to the National Transit Database for common performance metrics used in industry such as farebox recover ratios, operating costs per boarding, and total boardings. These metrics were compared and assessed with other peer entities in terms of size and operations including Los Angeles, Orange County, San Jose, and Sacramento in California as well as entities in Arizona, Colorado, and Texas. Additionally, we obtained and reviewed independent Transportation Development Act audits conducted at MTS, NCTD, and SANDAG as well as budget books, financial statements, Schedule of Baseline Statistics (Form C), and community reports prepared by the entities.
- ✓ Finally, to assess ITOC’s compliance with bylaws and effectiveness in fulfilling its obligations, we obtained and reviewed the “Statement of Understanding Regarding the Implementation of the ITOC for the *TransNet* Program” in addition to ITOC bylaws and implementation procedures developed in concert with SANDAG. We reviewed ITOC meeting agendas and minutes between Fiscal Years 2008-2009 and 2010-2010, attendance lists, conflict of interest forms, Statements of Economic Interests, resumes, and annual ITOC reports. Further, we compared ITOC experience requirements, activities, and practices with peers in Arizona, California, and other regions.

The audit findings and conclusions were presented and discussed with representatives of SANDAG, Caltrans, MTS, NCTD, City of San Diego, County of San Diego, and other local agencies within the county in addition to the ITOC prior to completion of the audit. Their management views and comments were considered and incorporated into the audit report as appropriate.

We conducted this audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix B: Status of Prior Audit Recommendations

Prior Audit Recommendation	Corrective Action Taken
<p><i>To assist management and oversight bodies in deliberating project activities, weighing options before making decisions, and strengthening general levels of oversight, SANDAG should work in conjunction with Caltrans to:</i></p>	
<p>1 Develop and deliver a brief, high-level summary, or “Report Card,” to the ITOC and other oversight bodies for each transportation project describing project budget and schedule by phase, project performance, project benefits and risks, financial assumptions, project cost range, and highlights of project changes to scope, schedule and cost as well as budget-to-actual and project-to-date information. Also, consider summarizing Report Card performance on a monthly, quarterly, or annual basis, as appropriate, to identify trends or systemic issues.</p>	<p>SANDAG Finance has been providing ITOC with Quarterly Reports since September 2009 that include information such as <i>TransNet</i> allocation amounts per entity, local entity fund balance compliance, and balance held with SANDAG as of each fiscal year-end.</p> <p>At the October 2009 ITOC meeting, SANDAG and Caltrans staff provided examples of <i>TransNet</i> related project expenditure reports and charts to the ITOC. Resulting from the meeting, ITOC directed SANDAG to use some of the expenditure charts for the 2009 ITOC annual report. In fact, we found that the 2009 ITOC report provided a summary of the Performance Audit recommendations as well as included some of the <i>TransNet</i> expenditure charts requested by ITOC.</p> <p>In addition, SANDAG’s Dashboard also was modified to have a “project health report” feature that details budgets versus actual for certain milestones allowing the reader to capture project progress at a snap-shot level.</p> <p>☑ Recommendation addressed and implemented.</p>
<p>2 Summarize and distribute data reflecting key project milestones and performance indicators where period-to-period trends for the program overall, as well as at a corridor or segment level, could be analyzed. Statistics should include budget and schedule targets compared to actual performance, as well as progress towards meeting program objectives such as reducing levels of congestion and travel times, minimizing project cost per mile, and increasing the percentage of projects completed on time and on budget.</p>	<p>In addition to the items already discussed under recommendation #1 above, the Caltrans Corridor Director also provided information on performance measures and change order processes, especially seeking guidance from ITOC on the type of measures they consider valuable for their oversight role. As mentioned under recommendation #1, one of the Dashboard reports addressing the audit recommendation regarding project performance statistics was implemented in the “Project Health Report” which compares baseline vs. actual schedules and budgets by phases.</p> <p>☑ Recommendation addressed and implemented.</p>
<p>3 Provide status information regarding existing audit requirements and status updates on internal and external audits in progress or completed of SANDAG, Caltrans, or other transportation partners outlining scope of audit work, results of audit efforts, corrective actions planned or taken, and outstanding findings and unresolved issues as they relate to the <i>TransNet</i> program. In particular, the SANDAG Internal Auditor</p>	<p>The 2009 <i>TransNet</i> Fiscal and Compliance Audit reports were accepted by the ITOC at its June 28, 2010, meeting. Presentation to the Board of Directors took place as part of the 2010 ITOC Annual Report on September 24, 2010.</p> <p>Further, SANDAG Finance staff frequently updates the ITOC on the status of the annual financial audits either during scheduled ITOC meetings throughout the year or as part of the quarterly reporting process.</p>

Prior Audit Recommendation		Corrective Action Taken
	should report to the ITOC, or its newly formed Audit Subcommittee, once the current in-process audit of contracting and task order practices is completed.	Although SANDAG indicated that work completed by the SANDAG internal auditor will only be reported back to the ITOC if there is correlation to <i>TransNet</i> , most process or project reviews at SANDAG would involve <i>TransNet</i> since most on-going projects would be using <i>TransNet</i> dollars. Thus, SANDAG should provide the ITOC with the scope/objective of each audit completed and report on audit results if requested by ITOC. ☑ Recommendation addressed and implemented.
4	Work collaboratively with the ITOC to identify other type of oversight data needed from SANDAG, Caltrans, or other transportation partners where appropriate and within reason.	As described in the previous implementation status sections, SANDAG has partnered with ITOC to develop reports and information as requested by ITOC. ☑ Recommendation addressed and implemented.
<i>To monitor overall program adherence with the TransNet Extension Ordinance and assess the overall program impacts resulting from project budget and schedule deviations, the ITOC should:</i>		
5	Analyze suggested Report Card data and performance indicator data provided looking for trends, issues, and progress toward overall <i>TransNet</i> goals, as well as consider the multi-faceted project performance details impact on travel time and congestion as well as project performance in terms of schedule and budget adherence. Moreover, the data could be used to monitor effectiveness of operational strategies and the success of SANDAG in meeting targets.	As described in the previous implementation status sections, SANDAG has expanded the Dashboard to generate program and project status reports used during ITOC presentations. ☑ Recommendation addressed and implemented.
6	Work collaboratively with SANDAG to identify other type of oversight data needed from SANDAG, Caltrans, or other transportation partners that can be captured in matrices or other formats enabling a period-to-period review of data and results over time.	As described in the previous implementation status sections, SANDAG has partnered with ITOC to develop reports and information as requested by ITOC. ☑ Recommendation addressed and implemented.
7	Develop matrices or tracking documents to summarize critical ITOC concerns, issues, and decisions resulting from discussions at monthly meetings, as well as to memorialize resolutions or action items carried forward to subsequent meetings complete with owners assigned and timeframes for completion established. Progress and actions taken could be tracked and progress updated at subsequent meetings, and the matrices could serve as an institutional transfer of knowledge as new ITOC members are appointed.	SANDAG staff presented a chronology document to the ITOC at its September 8, 2010 meeting which summarized key ITOC discussions and actions taken beginning with the proposal to add the SPRINTER as a <i>TransNet</i> Early Action Program Project in October 2006. In addition, we confirmed that the recurring ITOC agenda item documenting Board and Transportation Committee actions was included beginning with the October 2010 ITOC agenda package. Specifically, the item is always presented under the "Reports" section of the ITOC agenda. ☑ Recommendation addressed and implemented.

Prior Audit Recommendation		Corrective Action Taken
8	Identify additional entities, positions, or individuals to regularly provide status reports and data to the ITOC (such as the SANDAG Internal Auditor), and incorporate standard monthly meeting agenda categories to address the new areas and ensure all critical <i>TransNet</i> program areas also receive an oversight focus in addition to project-specific activities. Refer to suggested categories in Chapter 1. Also, consider protocols regarding specified time allocations allowing for adequate deliberation prior to decisions rendered for the more critical areas with high-dollar or high-profile impact.	SANDAG staff shares an abundant amount of information in form of staff reports and presentations during ITOC meetings. Additionally, SANDAG partners such as Caltrans, local cities, the county, and transit operators present to ITOC on <i>TransNet</i> related areas as warranted. <input checked="" type="checkbox"/> Recommendation addressed and implemented.
9	Consider using the newly formed ITOC Audit Subcommittee as the information portal for audit status updates, especially those of a more sensitive nature. The Subcommittee could report back to the ITOC at large in the more public setting.	As described in the previous implementation status sections, ITOC has not formed an audit subcommittee to address SANDAG audit updates as of the time of this audit. However, the ITOC uses a “subcommittee” format to received status updates on the Triennial Performance Audit. <input checked="" type="checkbox"/> Recommendation addressed, but not implemented.
10	Revisit its intent and vision for the Dashboard to determine whether it should include all <i>TransNet</i> Early Action Program (EAP) projects and report on all Extension Ordinance programs, as well as determine whether the Dashboard is meant to function as an “in-progress” management tool for current projects or should be established as a comprehensive historical data warehouse for the 40-year duration of the <i>TransNet</i> program. Also, use the Dashboard data to summarize performance indicators and monitor progress of indicators such as “percent of work completed compared to total costs” and “support costs as a percent of capital construction costs.”	In addition to the “Project Health Report” mentioned under recommendation #2, the Dashboard contains a variety of other reports including performance reports for projects outlined in the <i>TransNet</i> Extension Ordinance. Two project performance measures used in the Dashboard based on PeMS source data are vehicle-hours of delay and vehicle-miles of travel. Those measures are correlated to improvements made on that particular stretch of roadway and thus allowing for a general determination of the success of the improvement in terms of increased mobility and decreased travel-time. Addressing the recommendation to track and compare support costs, the Dashboard can generate “resource reports” that show SANDAG and Caltrans planned and actual support cost for each project, by project phase. <input checked="" type="checkbox"/> Recommendation addressed and implemented.
11	Add an explanatory note to better clarify cumulative data presented or isolate and remove the pre-2005 expenditures to more accurately reflect the <i>TransNet</i> program costs.	An explanatory note has been added to the Dashboard explaining changes to a project’s budget history. The notes provide reasons for budget fluctuations from fiscal year to fiscal year such as “budget increased due to rapidly escalating construction costs, or project split and budget transferred to a different project.” <input checked="" type="checkbox"/> Recommendation addressed and implemented.

Prior Audit Recommendation	Corrective Action Taken
<i>To refine its existing Dashboard integrated budget and schedule tool, SANDAG should:</i>	
<p>12 Develop a mechanism to report project budget and schedule history and key changes over the course of the <i>TransNet</i> program.</p>	<p>As described under the implementation status section for recommendation #11, the Dashboard contains and explains budget changes beginning with Fiscal Year 2006-2007 through the current fiscal year Fiscal Year 2011-2012.</p> <p>Project schedule histories contain planned versus current data beginning with the start of the project (typically draft environmental document) through close-out.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and implemented.</p>
<p>13 Ensure all Dashboard views and tables are complete and accurate such as “percent of completion” data by clearly identifying and communicating to project managers responsible for the data, the assumptions, and definitions behind the percent complete calculations as well as monitoring the indicator for reasonableness. Additionally, reassess the need and use of the “Trends, Risks, and Issues” section in the Dashboard to ensure complete and current information or eliminate the section and capture similar data through a different vehicle.</p>	<p>The “Trends” section of the Dashboard has been updated to reflect more current data for construction and materials cost (data as of March 2011) and right-of-way based on single family home median resale price (data as of January 2010).</p> <p>With regard to implementing new policies and procedures to ensure data accuracy, the SANDAG <i>TransNet</i> Project Office informed us that a consultant has been hired to assist in the development of Dashboard policies and data streamlining procedures. The current completion date is scheduled for October 2012.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and pending full implementation.</p>
<i>Building upon strong existing protocols related to transparency holding project owners accountable and economical to demonstrate performance results to the public, SANDAG should work in conjunction with Caltrans to:</i>	
<p>14 Develop and define concrete performance goals and targets to measure project outcomes as well as performance efficiencies as part of a comprehensive performance monitoring system linking goals with strategic planning, specific goals, and resource allocations and evaluating progress toward objectives, such as levels of reduced congestion, project cost per mile, and percent of projects completed on time and budget. Performance measures should track program and project delivery effectiveness and efficiency indicators related to hitting targets on meeting delivery milestones, staying within certain percentages of cost estimates, and reducing support costs and overhead by prescribed amounts. Performance measures should be challenging yet attainable targets used to assess timelines and cost-effectiveness of projects.</p> <p>Once program-wide performance data is collected, it should be made available to the ITOC and other oversight bodies through the Quarterly Report process whereby program level milestones could be</p>	<p>As described under the implementation status section for recommendations #1 and 2, SANDAG has worked with ITOC and its Board to identify the most suitable set of transportation performance measures for its region.</p> <p>Although a variety of performance measures are available and summarized in various formats and reports, the measures SANDAG’s reports on <i>TransNet</i> freeway projects are vehicle-miles of travel and delay. On its annual State of the Commute report, the reported measures include vehicle-miles of travel, travel time, transit ridership, and delay for its major corridors. On a regional level, SANDAG has identified 23 performance measures to track its 6 overarching RTP goals. For example, its mobility goal is captured by average work trip travel time, and travel speed.</p> <p>According to SANDAG, limited data is available for transit and arterial performance measures, which unlike freeway data is often not in-real time and inconsistent between local agencies or transit operators. To capture arterial or local performance, SANDAG has to rely on local agencies to install and maintain detectors. Those roadway measures are</p>

	Prior Audit Recommendation	Corrective Action Taken
	<p>communicated and success or struggle with meeting benchmarks could be discussed to highlight accomplishments or improvements needed as well as month-to-month changes to identify trends and patterns. Indicators that could be measured include the following hypothetical examples:</p> <ul style="list-style-type: none"> ✓ Each fiscal year, meet XX percent of project delivery milestones ✓ By XXX, reduce the support to capital ratio to XX percent or lower and reduce overhead cost to XX percent <p><i>Each year, keep the total of all low bids within X percent of the total of all engineers' estimates.</i></p>	<p>compiled on SANDAG's website under "transportation data" where average weekday traffic volume and vehicle-miles of travel is summarized by the region's local agencies and state freeways and highways. However, the data contains gaps and its reliability depends on conditions of local traffic counters.</p> <p>However, per SANDAG's 2050 RTP, SANDAG is moving towards improving the availability and reliability of transit and arterial performance measures in the future.</p> <p>☑ Recommendation addressed and implemented.</p>
15	<p>Consider using baseline data available in other models, such as the Caltrans California Life-Cycle Benefit/Cost Analysis Model that considers items including travel time savings and reduced emissions, to compare expected project benefits against actual results once projects are completed. Similarly, performance could be weighed against quantitative criteria and calculations used during the regional transportation planning process whereby projects are ranked and prioritized based on estimated cost per person-miles traveled and cost per travel time savings calculations. SANDAG could perform these calculations after project completion to identify variances from anticipated cost-effectiveness measures, discuss reasons for the differences, and use results to adjust future modeling or trend and compare projects against each other.</p>	<p>SANDAG's approved 2050 RTP identifies 23 regional performance measures—comparing existing conditions (2008) with 2050 "no build" and "revenue constraint" models. Considering numerous other factors such as population, housing, and employment, the 2050 RTP estimates that while the daily vehicle delay per capita will increase overall additional delay would only be 5 minutes if improvements were made compared with 8 minutes under no build conditions.</p> <p>In addition, as described under the implementation status section for Recommendation 10, SANDAG tracks two selected project level performance measures (vehicle-hours-of-delay and vehicle-miles of delay) for <i>TransNet</i> Ordinance projects in the Dashboard.</p> <p>☑ Recommendation addressed and implemented.</p>
16	<p>Once a comprehensive performance monitoring system is designed as discussed above and performance data is captured, designate individual staff follow-up on missed targets, assure corrective actions where needed, or assess the impact of any shortfalls to the overall <i>TransNet</i> program. Such performance monitoring should be routinely conducted to assess the impact of performance not meeting target goals.</p>	<p>As indicated in SANDAG's response, the Corridor Directors and <i>TransNet</i> Project Office staff continues to be the primary point of contact as well as share responsibilities for all <i>TransNet</i> matters. On a regular basis, staff provides project updates to the ITOC in form of quarterly financial reports as well as quarterly progress reports on transportation projects, which is also shared with the Board of Directors. The quarterly report on transportation projects summarizes the status for all <i>TransNet</i> funded programs and projects and lists the projects' current stage as well as whether project completion is on schedule, ahead, or behind.</p> <p>☑ Recommendation addressed and implemented.</p>

Prior Audit Recommendation	Corrective Action Taken
<i>As funding is an ongoing challenge and projects are continually shifted and reprioritized to stretch limited resources, to monitor financial risks and availability of funds to complete projects as well as increase accountability, SANDAG should:</i>	
<p>17 Continue to regularly monitor and review the debt-to-revenue ratio as well as total financing costs to ensure it meets short- and long-term obligations as well as continue to consistently analyze projected debt service costs and compare planned program financing costs to track any higher than expected bond issuance and debt services costs. Further, SANDAG should determine whether the POF strategies should be modified in the long-term, and report to the ITOC on the status of the debt-to-revenue ratio on a regular basis.</p>	<p>SANDAG continues to monitor and review the debt-to-revenue ratio as well as financing costs and reports debt-to-revenue ratio, revenue bond, and commercial paper activity data to ITOC as part of the ITOC Quarterly Reports.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and implemented.</p>
<p>18 Establish a mechanism to link and track the Extension Ordinance planned projects and amounts with current plans and budgets for all <i>TransNet</i> projects to reduce confusion and better justify to the public how project promises from the Extension Ordinance were amended to result in actual projects delivered. Such on-going tools should specifically identify and document the history or evolution of a project's budget over time by tracking all significant changes to project funding, prioritization, and scope over the life of the <i>TransNet</i> program. Moreover, the data should be shared with the ITOC and other oversight bodies to better oversee and understand the cumulative impact of recommendations related to <i>TransNet</i> funding.</p>	<p>The 2011 ITOC Annual Report provides cost and schedule baseline and current actual data for the <i>TransNet</i> Early Action Projects. For example, the Mid-Coast light rail transit project was estimated to cost \$660,000 in 2002 (baseline year for the 2004 Ordinance) which escalated to 2011 dollars translates to \$947,100, while its current budget is \$1.25 million. The baseline open to public date shifted from December 2014 to December 2015. Additional project data is presented to the ITOC in form of quarterly reports as described under recommendation #1.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and implemented.</p>
<i>To expand and enhance the current project management and delivery practices, SANDAG and Caltrans should consider the following:</i>	
<p>19 Ensure post-evaluation forms are consistently used and completed for all highway construction and transit projects after each project phase to ensure appropriate changes are made mid-stream rather than waiting until a project is formally closed-out. Communicate key results to the ITOC as appropriate. Additionally, consider capturing various process best practices in shared databases that can be easily accessed and considered for application across all <i>TransNet</i> projects as well.</p>	<p>Caltrans staff presented project close-out quality assurance processes as part of the presentation on example performance reports at the October 14, 2009, ITOC meeting.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and implemented.</p>
<p>20 Build upon, improve, and formalize transit project documentation of current SANDAG processes and procedures to better ensure long-term continuity of in-house expertise. Towards this end, SANDAG should consider establishing working-level policies and procedures to ensure the uniform application of</p>	<p>According to SANDAG Mobility Management and Project Implementation staff, SANDAG finalized the bus design criteria and will be sharing the document with MTS and NCTD for final review. The light rail design criteria is complete with few changes to be made as result of lessons learned from the Trolley Rehab project.</p>

	Prior Audit Recommendation	Corrective Action Taken
	<p>project delivery and management techniques and make such documentation of practices, controls, and preferences available to SANDAG staff for reference and training purposes. At a minimum, SANDAG should consolidate Board policies into a comprehensive delivery manual where further defined procedures could be established and practices memorialized.</p>	<p>With NCTD using Metrolink’s heavy rail design standards for decades, SANDAG is building upon Metrolink’s criteria for developing its own heavy rail design manual and anticipates its completion by Spring 2012.</p> <p>Lastly, an initial draft of the configuration management plan was completed in June 2011 and was shared with MTS and NCTD for comment. Currently, final changes are being incorporated after which the document should become final and serve as the standard procedure and policy for controlling changes to transit systems and facilities.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and implemented.</p>
21	<p>Create a uniform filing system to strengthen transit project management where critical project documentation such as cost estimates, project budget history, project development team meetings, change orders, and other data are organized and located under a similar numbering system to ensure consistency and availability of important project data. Further, SANDAG may want to create a shared database to house the electronic copies of project documentation.</p>	<p>SANDAG has hired a consultant that will develop a draft configuration management plan and document control plan for Metropolitan Transit System (MTS), North County Transit (NCTD), and SANDAG capital projects. SANDAG is currently in the final stages of finalizing these documents and anticipates completing them in Spring 2012. Once finished, the plan provides guidance various areas including document control, design configuration, construction management, system safety, deviations from baseline documents, and change management.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and nearly implemented.</p>
22	<p>Conduct an intensive, hands-on workshop in which SPRINTER project management could formally share critical lessons learned and practical experiences with SANDAG and Caltrans executives including discussing specific implementation details deliberated and benefits versus cost analysis employed. These meetings could result in the establishment of stronger project delivery tools and written policies and procedures to assure best practices are implemented such as:</p> <ul style="list-style-type: none"> ▪ Using risk mitigation registers evaluating project risks related to cost, scope, and schedule including descriptions, cause, potential impact, likelihood of impact materializing, mitigation strategy, and costs to mitigate. ▪ Merging highway construction and transit risk assessment results into an integrated risk plan that can be overseen for the entire <i>TransNet</i> program. 	<p>The Federal Transit Administration conducted a lessons learned workshop for the SPRINTER project on April 6, 2009, where topics such as organizational structure, project scheduling, robust project budgeting process, dispute resolution, and communication were discussed. The SPRINTER project has been formally closed out and the final funding plan was presented to the ITOC at its September 8, 2010 meeting.</p> <p>One of the features of the Dashboard is the Risk Registry report, which identifies based on data entered by project managers, specific risk areas associated with a project. For example, one of the risks for one segment of the Interstate 15 relates to the potential incompatibilities between traffic management electrical system hardware and software, which has a low impact on scope, but medium impact on cost and schedule. The risk registry also describes the planned mitigation strategy and the probability of the risk to materialize, date risk identified, how modified, and target date for completion of a phase. Currently, the Risk Registry Report contains data for projects within the Interstate 15 and North Coast corridors.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and implemented.</p>

Prior Audit Recommendation		Corrective Action Taken
23	Revisit the task order approval process to identify which individuals are needed for approvals or consider implementing a higher delegated authority level for certain types of amendments wherein a streamlined process could be employed on lower value amendments to ensure approval protocols are not causing unnecessary delays on projects.	<p>Our review of a sample of task orders and associated amendments for general engineering, construction, and environmental consultants revealed that task order amendments involving time extension only did not require the approval of finance and general counsel. The change in approval protocols appeared to reduce the total processing time of task order amendments.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and implemented.</p>
24	Ensure task order amendments for time extension have sufficient written justification explaining why a project needs the extension and assessing the impact of the delay on other project activities and downstream project phases.	<p>As of October 2008, written justification is required for task order time extension requests. This documentation is reviewed by a senior contracts engineer as a quality assurance measure. We confirmed for a sample of task order amendments, that a senior contracts engineer is one of the signatories approving task order amendments.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and implemented.</p>
25	Enhance practices by tracking change orders and contract amendments for the <i>TransNet</i> program overall and developing and trending performance indicators to provide another tool to gauge project and program status or level of success.	<p>Caltrans staff presented contract change order processes as part of the presentation on example performance reports at the October 14, 2009, ITOC meeting. Also, SANDAG and Caltrans share select project performance measures and baseline-to-actual data amongst other information with ITOC. The Caltrans "District 11 <i>TransNet</i> Fiscal Year in Review" report intended to address ITOC audit concerns related to performance monitoring (schedule, costs, quality and transportation benefits), delivery efficiency (support cost ratios), and budget control. During the presentation, Caltrans conveyed data on accuracy of its capital improvement program planning (dollar amount planned compared to money spent), construction change order types and volumes, and supporting cost data.</p> <p><input checked="" type="checkbox"/> Recommendation addressed and implemented.</p>

Appendix C: Breakdown of *TransNet* Project Mitigation Costs

Transportation Project Mitigation Fund Projects	Projected Mitigation Costs
Regional Projects	
Interstate 5	\$76,000,000
Interstate 5/Interstate 805	\$1,110,000
Interstate 805	\$4,525,000
State Route 11	\$3,610,000
State Route 52	\$2,305,000
State Route 76	\$81,350,000
Coastal Rail Double tracking	\$66,000,000
Mid-Coast Light Rail	\$5,275,000
Interstate 5/ State Route 56	\$1,110,000
State Route 54/ State Route 125	\$2,360,000
State Route 905	\$23,330,000
Interstate 5	\$4,525,000
Interstate 5/ Interstate 8	\$15,250,000
Interstate 5/ State Route 78	\$1,110,000
State Route 94/ State Route 125	\$555,000
Oceanside to Escondido Transit Enhancements	\$3,610,000
Interstate 8	\$3,055,000
Interstate 15	\$5,275,000
Interstate 15/ State Route 78	\$555,000
Interstate 15/ State Route 94	\$1,055,000
Interstate 805	\$3,610,000
Interstate 805/ State Route 52	\$1,055,000
State Route 52	\$1,055,000
State Route 56	\$1,805,000
State Route 67	\$40,275,000
State Route 75/SR 282	\$555,000
State Route 78	\$2,360,000
State Route 94	\$9,580,000
State Route 94/ State Route 125	\$1,805,000
State Route 125	\$1,360,000
Kearny Mesa Transit way	\$1,805,000
Sorrento Mesa Transit way	\$14,025,000
Sprinter Extension to North County Fair	\$555,000
Minor Regional Projects	\$46,765,000
Support Costs	\$21,425,000
Regional Transportation Projects	\$450,000,000
Local Transportation Projects	\$200,000,000
Total Transportation Project Mitigation Fund Costs	\$650,000,000

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Appendix D: Auditee Response



401 B Street, Suite 800
 San Diego, CA 92101-4231
 (619) 699-1900
 Fax (619) 699-1905
 www.sandag.org

March 6, 2012

File Number 1500100

Ms. Cathy Brady, Director
 Sjoberg Evashenk Consulting, Inc.
 455 Capitol Mall, Suite 700
 Sacramento, CA 95814

Dear Ms. Brady:

SUBJECT: Transmittal of Responses to FY 2012 *TransNet* Triennial Performance Audit Report and Recommendations

We thank you for the opportunity to respond to the FY 2012 *TransNet* Triennial Performance Audit report and recommendations as conducted by Sjoberg Evashenk Consulting, Inc., on behalf of the *TransNet* Independent Taxpayer Oversight Committee (ITOC). SANDAG appreciates the staff time and effort your firm has dedicated to the comprehensive review of the overall *TransNet* program. The recommendations received will assist us as we continue to implement processes that improve the overall performance of the program to ensure all voter mandates are carried out as required by the *TransNet* Extension Ordinance.

The FY 2012 Triennial Performance Audit is the second performance audit conducted by the ITOC. The audit included a review of the three-year period between FY 2009 and FY 2011 focusing on the changes implemented since the first audit was conducted. Key audit results reveal that SANDAG and its partner agencies continue implementing strong practices to continually enhance operations and proactively address recommendations for improvement.

We agree in general with the recommendations as set forth in the audit report, and our responses to the audit recommendations are attached. SANDAG is committed to working with the ITOC and our partner agencies to address the recommendations and continue to implement best practices for the *TransNet* program.

We are pleased that throughout the audit process, members of your staff were accessible and helpful in clarifying issues raised. We appreciate your efforts in assisting SANDAG and its partner agencies to ensure the continued success of the *TransNet* program.

Sincerely,


 GARY L. GALLEGOS
 Executive Director

GGA/AZU/sgr

Attachment: Responses to FY 2012 *TransNet* Triennial Performance Audit Report Recommendations

cc: Jim Ryan, ITOC Chair; Paul Fromer, ITOC Vice Chair

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

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<p>To build upon the improved performance measure foundation and enhance current tracking and measurement of the impact and outcome of <i>TransNet</i> modes and programs, the ITOC should ask SANDAG to:</p>			
<p>1.</p>	<p>Continue ongoing efforts and develop a plan to incorporate arterial roadway and transit performance metrics into SANDAG’s performance processes and develop additional performance measures including multi-modal measures or those related to other goals of the Regional Transportation Plan such as safety and environment. Plans and efforts should be documented and include:</p> <ul style="list-style-type: none"> ● Timelines and milestones for development and completion; ● Methods for compiling, tracking, and using performance data; ● Targets or goals for performance; and ● Vehicles to be used for communicating actual performance results. 	<p>Chapter 1, pages 14-23</p>	<p>In collaboration with our local and regional partners, SANDAG will continue to develop and implement systems to monitor the performance of the region’s multimodal transportation network. Specific efforts include:</p> <ul style="list-style-type: none"> ● The Arterial Performance Measurement System Module (A-PeMS) and Transit Performance Measurement System Module (T-PeMS) were completed in 2011 and is scheduled to go live in February 2013 as part of the I-15 Integrated Corridor Management (ICM) project. ● Current efforts are focused on defining a regional arterial detection deployment plan (expected to be completed in fall 2012) that will define an arterial network priority system for installation of future detection infrastructure. ● SANDAG in partnership with local, state, and federal agencies will be initiating work to complete a Corridor System Performance Measurement Module (C-PeMS). The project is an integral part of SANDAG efforts for establishing a multimodal performance measurement tool that will leverage the completion of the A-PeMS and T-PeMS with the Freeway PeMS. SANDAG intends to use C-PeMS for tracking and evaluating the performance of the I-15 ICM project to attain multimodal performance measures (expected completion spring 2013). ● As arterial detection is introduced and transit vehicles in the region are outfitted with automated passenger counters (APC) and automated vehicle location (AVL) units, the A-PeMS and T-PeMS modules will serve as the regional

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			<p>platform/vehicle to analyze and assess arterial and transit performance data. These statistics will be incorporated into the established Coordinated Plan and Regional Short-Range Transit Plan, ITOC Quarterly Reports, State of the Commute Reports, and Regional Comprehensive Plan Performance Reports.</p> <ul style="list-style-type: none"> • Additionally, the Coordinated Plan and Regional Short-Range Transit Plan annually track 21 transit performance measures, 11 specialized transportation performance measures, and include the six performance metrics required by the state’s Transportation Development Act (TDA). <p><i>Staff leads: Richard Chavez, Alex Estrella, and Phil Trom</i></p>
To better enhance transparency and communicate <i>TransNet</i> performance, the ITOC should have SANDAG:			
2.	Make the performance indicators such as vehicle-hours of delay and vehicle-miles of travel for individual corridors and projects shown on the internal Dashboard site available to the public either through Dashboard portals, or through some other mechanisms such as an annual report.	Chapter 2, pages 24-30	<p>SANDAG staff will develop a public Dashboard portal for reporting freeway segment performance data (expected completion December 2012). Additionally these data will be incorporated into the State of the Commute reports.</p> <p><i>Staff lead: Richard Chavez</i></p>
To more closely manage and monitor the Local Street and Road program performance as well as eliminate process inefficiencies, the ITOC should have SANDAG work collaboratively with the local agencies to:			
3.	Consider assigning certain Local Street and Road Program responsibilities and activities—such as setting and monitoring program goals, reviewing and modifying rules and processes in place, and measuring program performance towards meeting overall <i>TransNet</i> goals—to a SANDAG program staff.	Chapter 3, Pages 32-41	<p>The effort required by Recommendation Nos. 3 to 6 could be costly to implement and could delay the delivery of local agency projects. There also is the question of whether this type of detailed oversight is permitted by the <i>TransNet</i> Extension Ordinance. Staff proposes discussing this recommendation with the ITOC to gain a better understanding and to address their concerns by working collaboratively with both ITOC and the Cities/County Transportation Advisory Committee</p>

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			<p>(CTAC) to evaluate how the Local Street and Roads program may be improved. Some initial steps toward this effort could include the following:</p> <ol style="list-style-type: none"> 1. Gathering Local Streets and Roads program policies, goals, and performance measures for each jurisdiction; 2. Drafting sample report(s) that would provide useful information for ITOC and CTAC review; 3. Reviewing data collected with both ITOC and CTAC; and 4. Proposing an approach on next steps that will meet the overall intent of the <i>TransNet</i> Extension Ordinance. <p><i>Staff lead: Jim Linthicum</i></p>
<p>4. Develop a method, process, or practice over the Local Street and Road program to more closely monitor program outcomes and performance towards congestion relief and maintenance of roadways including the following:</p> <ul style="list-style-type: none"> • Establishing defined program goals; • Revisiting and redesigning program policies as warranted; and • Determining performance data to be captured and monitored; and • Identifying, defining, and implementing better mechanisms for monitoring project performance related to getting projects done more timely and achieving better outcomes upon project completion. 	<p style="text-align: center;">Chapter 3, Pages 32-41</p>	<p style="text-align: center;">High</p>	<p>See response to Recommendation No. 3 above.</p> <p><i>Staff lead: Jim Linthicum</i></p>

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<p>5. Require local agencies to submit specific Local Street and Road performance statistics currently available—such as ratio of miles resurfaced to miles maintained, pavement condition indices over time, or others related to level of service ratings of roadway operating conditions—on a predetermined set schedule and make the data available to the public.</p>	<p>Chapter 3, Pages 44-48</p>	<p>Medium</p>	<p>See response to Recommendation No. 3 above. <i>Staff lead: Jim Linthicum</i></p>
<p>6. Analyze Local Street and Road performance data provided for trends or comparisons between local agencies; further, use analysis to make program changes as warranted.</p>	<p>Chapter 3, Pages 44-48</p>	<p>Medium</p>	<p>See response to Recommendation No. 3 above. <i>Staff lead: Jim Linthicum</i></p>
<p>7. Revisit existing rules and practices in the Local Street and Road program, and consider the following:</p> <ul style="list-style-type: none"> • Replacing the 30 percent fund balance limitation with a more effective measure to monitor performance (such as those described in recommendation 5) where SANDAG and ITOC could observe progress and performance through administrative processes rather than through an audit compliance mechanism; and • Exploring the feasibility of revising the interest allocation rule to allow local agencies to use interest earnings as “savings account” that can be used on eligible projects—similar to a construction project contingency fund—where interest could be pooled and drawn down for projects as needed. 	<p>Chapter 3, Page 36</p>	<p>Medium</p>	<ul style="list-style-type: none"> • See response to Recommendation No. 3, above. Staff will work with the ITOC to determine alternate measures that could replace the 30 percent fund balance rule. • Staff will explore the feasibility of revising the interest allocation rule as suggested, while taking into account programming guidelines. Staff will discuss possible rule revisions with ITOC. <p><i>Staff leads: Lisa Kondrat-Dauphin and Sookyung Kim</i></p>

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To continue strengthening the EMP to ensure <i>TransNet</i> funding is utilized in the most effective manner, the ITOC should have SANDAG do the following:			
8.	Continue efforts working with wildlife agencies and conservancies to identify coastal wetland opportunities and develop wetland mitigation bank. Also, continue negotiating with regulatory permitting agencies to accept a package of mitigation efforts that provide “no net-loss.”	Chapter 4, Pages 58-61	<p>SANDAG and Caltrans staffs have identified a package of coastal wetland opportunities in the Interstate 5 North Coast Corridor (I-5 NCC). Profiles of these opportunities will be included in the I-5 NCC Public Works Plan (PWP) for approval by the California Coastal Commission (CCC) with the support of the other regulatory agencies. The draft PWP is currently scheduled for public review draft in the late fall 2012.</p> <p><i>Staff leads: Keith Greer (SANDAG); Bruce April (Caltrans)</i></p>
9.	Develop a process to track local mitigation activity expenditures separately from regional mitigation activity expenditures.	Chapter 4, Page 64	<p>SANDAG staff will insert a separate tracking column to account for mitigation expenditures associated with local streets and roads. SANDAG staff also will track the use of any mitigation acreage once they are utilized.</p> <p><i>Staff leads: Keith Greer (SANDAG); Bruce April (Caltrans)</i></p>
10.	<p>Continue efforts and establish timelines for developing comprehensive and coordinated strategic plans and measurable program objectives related to the Regional Habitat Conservation Fund program activities and efforts including the following:</p> <ul style="list-style-type: none"> • Providing ITOC and other oversight bodies a timeframe to have these plans implemented with high-level activities and tasks needed, milestones, and assignment of staff “owners” responsible for task completion as warranted; 	Chapter 4, Pages 66-71	<p>SANDAG will continue efforts to enhance collaboration and continued coordination among regional entities. The Strategic Management and Monitoring Plans identified in the response to Recommendation No. 13 below will define these objectives, activities and milestones. SANDAG staff will continue to update ITOC, Policy Advisory Committees, and the Board of Directors on Environmental Mitigation Program (EMP) progress on at least an annual basis as well as when any significant policy or funding issues arise.</p> <p>Together the efforts of these plans and the funding are geared to ensuring the impediments identified in the 2011 needs assessment are addressed.</p> <p><i>Staff leads: Keith Greer (SANDAG); Bruce April (Caltrans)</i></p>

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<ul style="list-style-type: none"> Developing performance measures that measure progress and success while also linking strategic plans and objectives to funding priorities; and Ensuring impediments identified via the 2011 draft needs assessment are adequately addressed. 			(See response on previous page)
<p>11. Maintain focus on clarifying and defining how to apply the economic benefit concept, and identify tasks and timelines needed to address economic benefit issue. Develop corresponding methodologies to calculate the amount of economic benefit achieved as well as processes to release and allocate the resulting funding.</p>	Chapter 4, Pages 71-72	High	<p>As the audit identifies, the memorandum of understanding (MOU) implementing the EMP program allowed for a 10-year period to form a track record to establish economic benefit. Through Senate Bill 468 (Kehoe, 2011), SANDAG agreed to prepare an economic benefit analysis in conjunction with the permitting for the I-5 NCC project. SANDAG staff is working on determining the methodology and process for release of these funds. A proposal is scheduled to be vetted in summer 2012, with review and action by the various working groups, ITOC, Policy Advisory Committees, and in the Board of Directors in late 2012.</p> <p><i>Staff leads: Marney Cox, Keith Greer (Caltrans); Bruce April (Caltrans)</i></p>
<p>12. Continue efforts and establish timelines to develop information management systems that can share habitat management and monitoring results between local agencies and serve as a single source of EMP information.</p>	Chapter 4, Pages 71-72	Medium	<p>SANDAG is under contract with the USGS to expand an existing centralized database that could be accessible by the public and flexible enough to be used across Southern California. A draft of the new database is scheduled to be completed in June 2012 with a final version scheduled for completion by December 2012.</p> <p><i>Staff leads: Keith Greer (SANDAG); Bruce April (Caltrans)</i></p>
<p>13. Strengthen conservation efforts in its role as the regional entity by:</p> <ul style="list-style-type: none"> Preparing a succession plan for the critical independent consultants—such as those 	Chapter 4, Pages 66-71	High	<p>SANDAG is currently under contract to have both a Strategic Plan for Management and a Strategic Plan for Monitoring completed. The draft Strategic Plan for Management is scheduled to be completed in November 2012 and finalized in May 2013. The Strategic</p>

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<p>charged with the San Diego Monitoring and Management Program—to ensure institutional knowledge gained over the last several years related to strategic planning and administering a centralized data repository and reporting system is appropriately transferred to SANDAG;</p> <ul style="list-style-type: none"> • Establishing a central monitoring function to oversee and coordinate the activities of the various independent consultants as well as ensure accountability for delivering services that move the program forward; and • Finalizing efforts to establish a strategic plan and measurable program objectives. 			<p>Plan for Monitoring is scheduled for completion in the following year.</p> <p>These strategic plans will have goals, objectives, and prioritized activities to meet objectives for strengthening conservation efforts in the San Diego region. Once in place, these plans will guide the regional management and monitoring efforts. In essence, they are assembling the institutional knowledge of the collective region and formalizing this knowledge into an action plan, which will allow strategic decisions to be made on where and how best to fund projects identified in the plans.</p> <p><i>Staff leads: Keith Greer (SANDAG); Bruce April (Caltrans)</i></p>
<p>To assess whether grant activities are meeting program outcomes and make grant processes more efficient, ITOC should have SANDAG:</p>			
<p>14. Develop clear goals and objectives for the Land Management and all aspects of the Bicycle, Pedestrian, and Neighborhood Safety Grant Program so that outcomes can be tracked and measured to evaluate whether grant activities are achieving what was intended for the program.</p>	<p>Chapter 5, Pages 75-78</p>	<p>High</p>	<ul style="list-style-type: none"> • As discussed above in the response to Recommendation No. 13, the strategic plans for habitat conservation management and monitoring (currently under development) will include the goals, objectives, and prioritized activities to meet objectives for strengthening conservation efforts in the San Diego region, including providing a framework for future allocation of <i>TransNet</i> Land Management grants. • The Regional Bicycle Plan, adopted by the Board of Directors in May 2010, serves as a strategic plan with goals and objectives for the bicycle component of the <i>TransNet</i> Bicycle, Pedestrian, and Neighborhood Safety (BPNS) grant program.

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			<ul style="list-style-type: none"> • For the pedestrian and neighborhood safety components, the Board made a commitment as part of the October 2011 adoption of the 2050 Regional Transportation Plan and its Sustainable Communities Strategy to develop an Active Transportation “early action program” within two years (October 2013). The SANDAG draft FY 2013 Program Budget and Overall Work Program includes a work element to develop this program; it will involve the development of clear goals and objectives for all aspects of Active Transportation, including the pedestrian and neighborhood safety elements of the <i>TransNet</i> BPNS grant program. <p><i>Staff leads: Muggs Stoll, Keith Greer, Coleen Clementson</i></p>
15.	Chapter 5, Pages 80-81	Medium	<p>The SANDAG internal auditor plans to do an assessment of grant administrative practices as a follow up to the recommendations identified in this Triennial Performance Audit. Recommendation Nos. 15 through 19 will be addressed as part of this internal grant assessment process.</p> <p><i>Staff leads: Coleen Clementson and Muggs Stoll</i></p>
16.	Chapter 5, Pages 80-81	Medium	<p>See response to Recommendation No. 15, above.</p> <p><i>Staff leads: Coleen Clementson and Muggs Stoll</i></p>
17.	Chapter 5, Pages 80-81	Medium	<p>See response to Recommendation No. 15, above.</p> <p><i>Staff leads: Coleen Clementson and Muggs Stoll</i></p>

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18. Use grant result details reported on quarterly progress reports as well as on close out reports to track and measure grant program outcomes and progress toward meeting goals by individual grants, nature of service, and overall grant program. Communicate these performance metrics to oversight bodies and the public through the Dashboard, other on-line format, annual performance reports, or other widely distributed vehicle.	Chapter 5, Pages 80-81	Medium	See response to Recommendation No. 15 above. <i>Staff leads: Coleen Clementson and Muggs Stoll</i>
19. Revisit grant processes to identify steps that can be streamlined to minimize delays and process awards on a timely basis.	Chapter 5, Pages 81-84	High	See response to Recommendation No. 15 above. <i>Staff leads: Coleen Clementson and Muggs Stoll</i>
20. Ensure that grant expiration dates are clearly stated in grant agreement provisions.	Chapter 5, Pages 84-85	High	Staff will ensure that the grant expiration dates are clearly stated in the grant agreements. <i>Staff leads: Coleen Clementson and Muggs Stoll</i>
To increase transparency to the public related to the performance of <i>TransNet's</i> Transit Services program, the ITOC should request that SANDAG:			
21. Work with its transit operator partners to identify and implement the best vehicle to distribute and communicate transit performance funded in part by <i>TransNet</i> monies to the taxpayers. Additionally, peer comparison statistics would be valuable information to share as another tool to use in gauging program accomplishment.	Chapter 6, Pages 92-94	Medium	SANDAG will continue to communicate transit performance data via the Coordinated Plan & Regional Short-Range Transit Plan. SANDAG also will work with MTS and NCTD to explore other opportunities to communicate transit performance data to the general public via methods, such as the State of the Commute report, agency web sites, dashboard reports, or other venues. <i>Staff leads: Muggs Stoll, Dave Schumacher, Phil Trom</i>
22. Obtain specific performance targets related to metrics such as fare box recovery ratio or on-time performance, through collaboration with its transit	Chapter 6, Pages 92-94	Medium	SANDAG maintains a robust transit performance monitoring program (covering both transit operators) that is published in Chapter 4 of its Coordinated Plan & Regional Short-Range Transit Plan. This monitoring

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	<p>partners, to increase accountability to the public and help those charged with oversight better assess whether program is achieving intended benefits.</p>		<p>program includes 21 specific transit measures that cover the following categories: greenhouse gas reduction; ridership growth; financial performance (including fare box recovery); productivity; access; convenience; reliability and speed (including on-time performance); environmental justice; and comfort. As discussed in response to Recommendation No. 21 above, SANDAG also will work with MTS and NCTD to explore other opportunities to communicate transit performance data to the general public and the ITOC.</p> <p><i>Staff leads: Muggs Stoll , Dave Schumacher, Phil Trom</i></p>