TransNet **Independent Taxpayer Oversight Committee**

Fiscal Year 2021 *TransNet* Triennial Performance Audit

June 2021 – Final Report

SJOBERG EVASHENK
CONSULTING, INC

June 9, 2021

Michael Kenney, Chair
TransNet Independent Taxpayer Oversight Committee
401 B Street, Suite 800
San Diego, CA 92101

Dear Chair Kenney and Members of the *TransNet* Independent Taxpayer Oversight Committee (ITOC),

Sjoberg Evashenk Consulting is pleased to submit our report for the *Fiscal Year 2021 TransNet Triennial Performance Audit*. The audit is mandated by the *TransNet* Extension Ordinance requiring an independent performance audit of the efficiency and effectiveness of *TransNet* Extension Ordinance expenditures every three years. The audit focused on the status of Major Corridor projects, compliance, fiscal responsibility, transparency, implementation of Assembly Bill 805, bicycle and pedestrian safety, evacuation planning, Regional Bikeway Early Action Program (EAP), and ITOC practices.

Overall, our report concluded that the San Diego Association of Governments (SANDAG) completed many planned Major Corridor projects as intended by the *TransNet* Extension Ordinance less than 16 years into the 40-year program. However, it was uncertain whether the remaining Major Corridor projects will be completed as planned given funding deficits and changes being considered as part of the 2021 Regional Transportation Plan. Futher, capital projects in the Bike EAP will likely not be completed when expected.

Additionally, we found SANDAG was generally compliant with *TransNet* Extension Ordinance provisions, focused on transparancy, strengthened its financial models and controls, and experienced improved bicycle and pedestrian safety in the region. Nonetheless, we noted areas for improvement including better tracking and reporting against *TransNet* Extension Ordinance goals and plans, more enhanced quality control documentation, and the need for Board collaboration on Bike EAP permitting issues, among other areas.

Of particular note is that SANDAG was in a state of flux over the past three years including voting changes for the SANDAG Board of Directors, the hire of a new Executive Director, turnover at the executive management level, and an office reorganization redefining roles, responsibilities, and lines of authority—in addition to developing a revamped 2021 Regional Transportation Plan—that all added challenges.

We appreciate the professionalism, cooperation, and dedication of all SANDAG staff and *TransNet* Extension Ordinance partner agencies who assisted us throughout the course of the audit as well as the ITOC Audit Subcommittee who provided insight and perspective on the audit.

Respectfully Submitted,

Cathy Brady, Partner
Sjoberg Evashenk Consulting, Inc.

AT-A-GLANCE EXECUTIVE SUMMARY

As required by the *TransNet* Extension Ordinance, the Independent Taxpayer Oversight Committee (ITOC) contracted with Sjoberg Evashenk Consulting, Inc. to conduct the Fiscal Year 2021 *TransNet* Triennial Performance Audit of the San Diego Association of Governments (SANDAG) and others' implementation of *TransNet* Extension Ordinance-funded projects and programs between July 1, 2017 and June 30, 2020. Critical recommendations are summarized below and key audit results are highlighted on the next page.

FISCAL YEAR 2021
CRITICAL AUDIT RECOMMENDATIONS

Major Corridors   Report Chapter 1

- Clearly identify whether the remaining *TransNet* Extension Ordinance projects will be part of the 2021 Regional Transportation Plan, before the SANDAG Board approves the 2021 plan, and provide a similar identification with any changes in future Regional Transportation Plans.

Finance   Report Chapter 2

- Develop and adopt a formal process to address issues identified during annual Plan of Finance updates that discusses short-term and long-term funding scenarios and how options specifically impact the scope and schedule of remaining *TransNet* Extension Ordinance projects. The plan should include clear methodology, criteria, and triggers for making decisions on *TransNet* Extension Ordinance projects if funding does not materialize as expected and how to make choices to reduce scope, delay, or eliminate projects from the *TransNet* Extension Ordinance portfolio.

Compliance, Transparency, Accountability   Report Chapter 3

- Clearly and comprehensively report on actual progress and accomplishments (or lack thereof) on a regular, periodic basis for project scope, costs, schedule, accomplishments, and outcomes against *TransNet* Extension Ordinance plans.

Bike Early Action Program (Bike EAP)   Report Chapter 6

- Estimate and communicate to the Board the quantifiable impact of permit delays on individual Bike EAP projects and to the overall Regional Bikeway Program.

- Work with the SANDAG Board to have leadership collaborate with its representatives from the City of San Diego to rectify critical permit issues.

- Revise existing quarterly status reports to compare progress against initial Bike EAP plans for costs, schedules, and miles expected and clearly communicate whether the 10-year Bike EAP completion goals or other future project goals are realistic or in jeopardy—in addition to proposing action steps and options to remedy any identified issues.

In addition, there was one critical audit recommendation from the FY 2018 *TransNet* Triennial Performance Audit that was still in-progress as follows—SANDAG stated its implementation was dependent on the in-development Transportation Performance Management Framework.

FISCAL YEAR 2018 IN-PROGRESS CRITICAL AUDIT RECOMMENDATION

Performance Framework   FY 2018 Report Chapter 2

Establish a comprehensive performance framework by:

- Setting targets to measure *TransNet* performance against the *TransNet* Extension Ordinance goals in-line with federally mandated deadlines or at a faster pace. At a minimum, some narrative could accompany performance reporting to help others understand whether data and results were favorable or unfavorable.

- Capturing performance outcome data related to safety metrics, pavement condition, and bridge condition for highways, local roadways, and bicycle and pedestrian modes.

Major Corridors

- SANDAG made significant progress completing many projects as intended by the *TransNet* Extension Ordinance, but delivery of remaining portfolio is uncertain.
- SANDAG still does not track progress against planned improvements outlined in the *TransNet* Extension Ordinance

Finance

- Projected funding was insufficient to complete existing Major Corridor projects.
- No formal, annual process existed to address impacts of funding shortfalls on remaining projects.
- Fiscal safeguards were functioning as intended with quality assurance and quality control protocols in place.

Compliance, Transparency, Accountability

- SANDAG focused on compliance and transparency with *TransNet* Extension Ordinance provisions through its Plan of Excellence and conventional tools.
- Important information was presented to oversight bodies, but it did not communicate against *TransNet* Extension Ordinance plans and goals.

AB 805 Impacts

- Out of approximately 200 items voted on between 2018 and 2020, Board members exercised the weighted vote option only 12 times and reversed tally vote results in only three instances related to the *TransNet* Extension Ordinance.
- None of the weighted vote outcomes significantly impacted the delivery of *TransNet* Extension Ordinance programs and projects.

Safety

- SANDAG considered transportation safety planning, although it did not use a safety coordinator or regional safety plan like some other entities reviewed.
- Emergency evacuation capacity planning was outside of SANDAG's purview, but cross-agency collaboration would strengthen safety focus.
- Bicyclist and pedestrian safety improved since 2015.

Bike Early Action Program

- Planned projects will likely not be completed by the expected 2024 target date.
- Approximately 76 percent of projects were delayed for a variety of reasons, often related to permitting.
- Progress was not tracked and reported against initial Bike Early Action Program plans and expectations.

ITOC

- Practices aligned with similar committees we reviewed.
- Conflict of Interest policy and new member selection could afford more clarity.
- Additional member expertise could assist with its oversight role.

Table of Contents

Summary of Recommendations

As part of its responsibility for conducting triennial performance audits of the San Diego Association of Governments (SANDAG) and other agencies involved in the implementation of *TransNet* Extension Ordinance-funded projects and programs, the Independent Taxpayer Oversight Committee (ITOC) contracted with Sjoberg Evashenk Consulting, Inc. to conduct the Fiscal Year (FY) 2021 *TransNet* Triennial Performance Audit for the three-year period from July 1, 2017 to June 30, 2020. Results of the audit work are presented in the following chapters, and recommendations are discussed below.

Specifically, to improve efficiency, effectiveness, and accountability to the taxpayers of the San Diego region, ITOC should request that the SANDAG Board direct its staff to consider and implement recommendations summarized in the table that follows. Priority classifications and significance of recommendations were categorized into four separate rankings based on the impact on *TransNet* Extension Ordinance goals and functions, critical path activities, accountability, and timing. Priority categories are:

- **Critical Priority**: Substantial risk to achievement of *TransNet* Extension Ordinance goals, is fundamental to the *TransNet* Extension Ordinance's success and critical path activities, is crucial for accountability, or has a time-sensitive component. Immediate attention is warranted.

- **High Priority**: Significant risk to achievement of *TransNet* Extension Ordinance goals, is fundamental to the *TransNet* Extension Ordinance's success or program activities, or is important for accountability. Prompt attention is warranted.

- **Medium Priority**: Some risk to achievement of *TransNet* Extension Ordinance goals, is important to the *TransNet* Extension Ordinance's success or program activities, or would help strengthen accountability. Moderate attention is warranted.

- **Low Priority**: Opportunity for improvement, but not vital to the *TransNet* Extension Ordinance's success or program activities. Routine attention is warranted.

COMPREHENSIVE AUDIT RECOMMENDATION MATRIX

	Audit Recommendation	Report Page	Priority
Chapter 1: Many *TransNet* Extension Ordinance Major Corridor Projects were Implemented or In-Progress as Intended, Although Delivery of Remaining Portfolio is Uncertain			
1.	Clearly identify whether the remaining *TransNet* Extension Ordinance projects will be part of the 2021 Regional Transportation Plan, before the SANDAG Board approves the 2021 plan, and provide a similar identification for any key changes in future Regional Transportation Plans.	15-19	**Critical**
2.	Develop regular crosswalks to summarize and compare planned major corridor projects outlined in the *TransNet* Extension Ordinance with current improvement implementation status by identifying project progress in terms of "complete", "in-progress", "cancelled", or "moved beyond 2048 and outside the *TransNet* Extension Ordinance period". SANDAG should complete this reconciliation annually, at the minimum when it revises its Capital Improvement Program Budget, or when SANDAG makes a major update to the Regional Transportation Plan and explain deviations from the *TransNet* Extension Ordinance including scope expansions, reductions, or mergers with other project segments through a log that captures all explanations. When performing this reconciliation, SANDAG	12-15	High

Audit Recommendation	Report Page	Priority
should utilize a consistent numbering format or key identifier for each project to facilitate the tracking of changes over time.		
Chapter 2: Improved Financial Models and Controls were in Place, but Plans are Needed to Address Insufficient Funds for Remaining Major Corridor Projects		
3. Develop and adopt a formal process to address issues identified during annual Plan of Finance updates that discusses short-term and long-term funding scenarios and how options specifically impact the scope and schedule of remaining *TransNet* Extension Ordinance projects. The plan should include clear methodology, criteria, and triggers for making decisions on *TransNet* Extension Ordinance projects if funding does not materialize as expected and how to make choices to reduce scope, delay, or eliminate projects from the *TransNet* Extension Ordinance portfolio.	24-25	**Critical**
4. Develop a risk-based approach for Quality Assurance/Quality Control testing and indication of review to strengthen documentation of Quality Assurance/Quality Control activities employed and results to better demonstrate data verifications.	28-29	Medium
5. Enhance organization of Peer Review Process supporting documents by providing a corresponding table to capture topics discussed, reference items to checklists, and close out memos to better link what was planned, what was done, and how issues were addressed.	28-29	Medium
6. Clearly describe to the Board the Quality Assurance/Quality Control sampling methodology employed, any limitations of the data, and associated cost-benefits or risks of the approach.	30	Low
7. Continue valuable efforts to formalize and pursue a mature system of Quality Assurance/Quality Control policies and procedures as well as consistent implementation of the policies and procedures.	28-29	Low
Chapter 3: SANDAG Focused on *TransNet* Extension Ordinance Compliance and Transparency, but it could Better Demonstrate Accountability		
8. Clearly and comprehensively report on actual progress and accomplishments (or lack thereof) against the *TransNet* Extension Ordinance on a regular, periodic basis—such as quarterly or annually— for project scope, costs, schedule, accomplishments, and outcomes against promises.	35-36	**Critical**
9. Demonstrate compliance with the *TransNet* Extension Ordinance by identifying, tracking, and reporting on various requirements and provisions to the Board and ITOC on a regular, periodic basis—such as quarterly or annually.	36-37	High
10. Implement shorter-term steps to report on performance, while waiting on the longer-term Transportation Performance Management Framework, including continued development of SANDAG's proposed "Goals and Provisions" document to distribute to the Board and ITOC.	38-40	High
11. Create summarized graphics to quickly indicate *TransNet* Extension Ordinance status based on data in the revised quarterly reports for reporting to the Board and ITOC.	34-40	Medium
Chapter 4: AB 805 Weighted Voting Did not Significantly Change Delivery of *TransNet* Extension Ordinance Programs and Projects – No recommendations in this Chapter.		
Chapter 5: Enhancements could be made to SANDAG's Regional Safety Planning Efforts, although Bicycle & Pedestrian Safety Improved		
12. Consider the benefits of identifying a regional safety planning coordinator to synchronize safety efforts of the region and regularly communicate progress on safety goals to the Board and ITOC.	46-48	Medium
13. Consider and prepare a regional safety plan that complements Caltrans' Statewide Plan and details SANDAG's vision, goals, objectives, and strategies to address regional trends, road conditions, and driving behaviors.	46-48	Medium
14. Consider ways to encourage state and local emergency, planning, and response entities to include SANDAG in discussions and local plans related to emergency capacity so that regional planners stay informed and collaborate on emergency and resilience issues.	48-51	Medium

Audit Recommendation	Report Page	Priority
Chapter 6: Bike EAP will likely not be Completed when Expected, and Improvements are Needed to Communicate Challenges		
15. Estimate and communicate to the Board and ITOC the quantifiable impact of permit delays on individual Bike Early Action Program projects and the overall Regional Bikeway Program.	57-59	**Critical**
16. Work with the Board to have leadership collaborate with its representatives from the City of San Diego to rectify critical Bike Early Action Program project permit issues.	57-59	**Critical**
17. Revise existing quarterly status reports to compare progress against initial Bike Early Action Program plans for costs, schedules, and miles expected and clearly communicate whether the 10-year Bike Early Action Program completion goals or other future project goals are realistic or in jeopardy—in addition to proposing action steps to remedy any identified issues.	63-64	**Critical**
18. Develop a crosswalk that summarizes and compares planned Bike Early Action Program projects outlined in the Regional Bikeway Program with current project segment implementation status by budget, schedule, phase, and miles. SANDAG should complete this reconciliation annually, at a minimum when it revises its Capital Improvement Program Budget, and explain any deviations from Bike Early Action Program plans including scope expansions, reductions, or mergers with other project segments through a log that captures all explanations.	63-64	High
19. Modify *TransNet* Dashboard data or Board reports to compare actual individual project data against original baseline budgets and schedule by project phase to more clearly show progress against initial plans and provide explanatory context in addition to aligning *TransNet* Dashboard project phase categories with those used in individual project management tools.	59-61	Medium
20. Track and analyze more granular internal project milestones within Bike Early Action Program project phases—such as planned and actual schematic design, detailed design, right-of-way, utility coordination, and construction documents, to better identify where possible impediments and delays occur and may need to be addressed.	59-61	Medium
21. Provide extra scrutiny on less certain Regional Bikeway Program assumed funding from less certain sources, including the state's Active Transportation Program competitive grant source, during subsequent updates to the Regional Bikeway Program Plan of Finance to identify potential capacity and revenue constraints or opportunities and have annual processes in place to evaluate and modify the mix of projects if funding does not occur as expected.	61-63	Medium
22. Ensure *TransNet* Dashboard Bike Early Action Program schedule and budget fields are complete and include explanatory notes on why particular data may not be applicable to a project stage in addition to consider splitting certain projects and their related cost and schedule data into phases on the *TransNet* Dashboard when SANDAG plans for a staggered delivery.	63-64	Low
Chapter 7: ITOC Practices Aligned with Other Entities Reviewed		
23. Incorporate existing conflict-of-interest policy clarifications from ITOC new member on-boarding resources into recruitment materials, emphasize in recruitment efforts that a potential conflict does not automatically disqualify prospective applicants, and clarify when members should recuse themselves from certain decisions because of potential perceived conflicts.	68	High
24. Modify the *TransNet* Extension Ordinance language to be consistent with the service limits for all members regardless of whether a member joins the committee to fill a full-term position or mid-term vacancy.	66-67	Medium
25. Consider expanding the ITOC qualifications to include knowledge of emerging topics SANDAG presents before the committee such as multi-modal planning, active transportation, transportation system management and operations, transportation planning, performance measures, and legal issues.	68	Low
26. Explore options and feasibility of moving ITOC candidate screening and selection process outside of the SANDAG Board to maximize appointment transparency and minimize any perceived selection bias.	68-69	Low

Introduction and Background

To provide congestion relief, improve safety, and expand highways, streets, and transit 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 paved the way for dedicated local funds to be leveraged through state and federal matching dollars for improving regional systems as part of the *TransNet* Extension Ordinance and Expenditure Plan (*TransNet* Extension Ordinance) as approved by the San Diego Association of Governments (SANDAG) Board of Directors (Board). SANDAG is ultimately responsible for administering the projects and programs funded through the *TransNet* Extension Ordinance in coordination with several *TransNet* Extension Ordinance partner entities, while the Independent Taxpayer Oversight Committee (ITOC) is responsible for conducting triennial performance audits of SANDAG and other agencies involved in the implementation of *TransNet* Extension Ordinance-funded programs and projects.

TransNet Extension Ordinance and Expenditure Plan

Recognizing the continued need for transportation improvement projects in the region and the importance of minimizing their environmental impacts, the SANDAG Board authorized the *TransNet* Extension Ordinance to expand upon the foundation and projects completed under the original *TransNet* Program approved by voters. The SANDAG Board, as the San Diego County Regional Transportation Commission, has the responsibility to implement the tax measure through the *TransNet* Extension Ordinance with transportation improvements that were anticipated to do the following:

- Relieve congestion
- Improve safety
- Match state and federal funds
- Expand freeways
- Maintain and improve roads
- Increase transit for seniors and persons with disabilities
- Expand commuter express bus, Trolley, and COASTER services

Under provisions of the *TransNet* Extension Ordinance, funds generated must be allocated to each *TransNet* Extension Ordinance program area using a specified percentage or amount, as shown in Exhibit 1, to improve transportation facilities and services countywide in a manner consistent with the Regional Comprehensive Plan, Regional Transportation Plan, and the Regional Transportation Improvement Program. [1] More than 44 percent of net *TransNet* Extension Ordinance funds are dedicated to Major Corridor capital projects for highway and transit in addition to an Environmental Mitigation Program (EMP) with another 29.1 percent required for local street and road capital projects.

---

[1] At its May 25, 2012 meeting, the SANDAG Board of Directors approved the integration of the Regional Comprehensive Plan update with the development of the Regional Transportation Plan/Sustainable Communities Strategy. The 2015 Regional Transportation Plan was the first integrated plan (San Diego Forward: The Regional Plan) which the Board adopted on October 9, 2015. Since then, the SANDAG Board adopted a subsequent integrated plan as part of the 2019 Regional Transportation Plan.

The remaining 27 percent is allocated specifically for alternate modes of transportation such as transit operations, bike and pedestrian projects, neighborhood safety projects, and grants for specialized transportation activities.
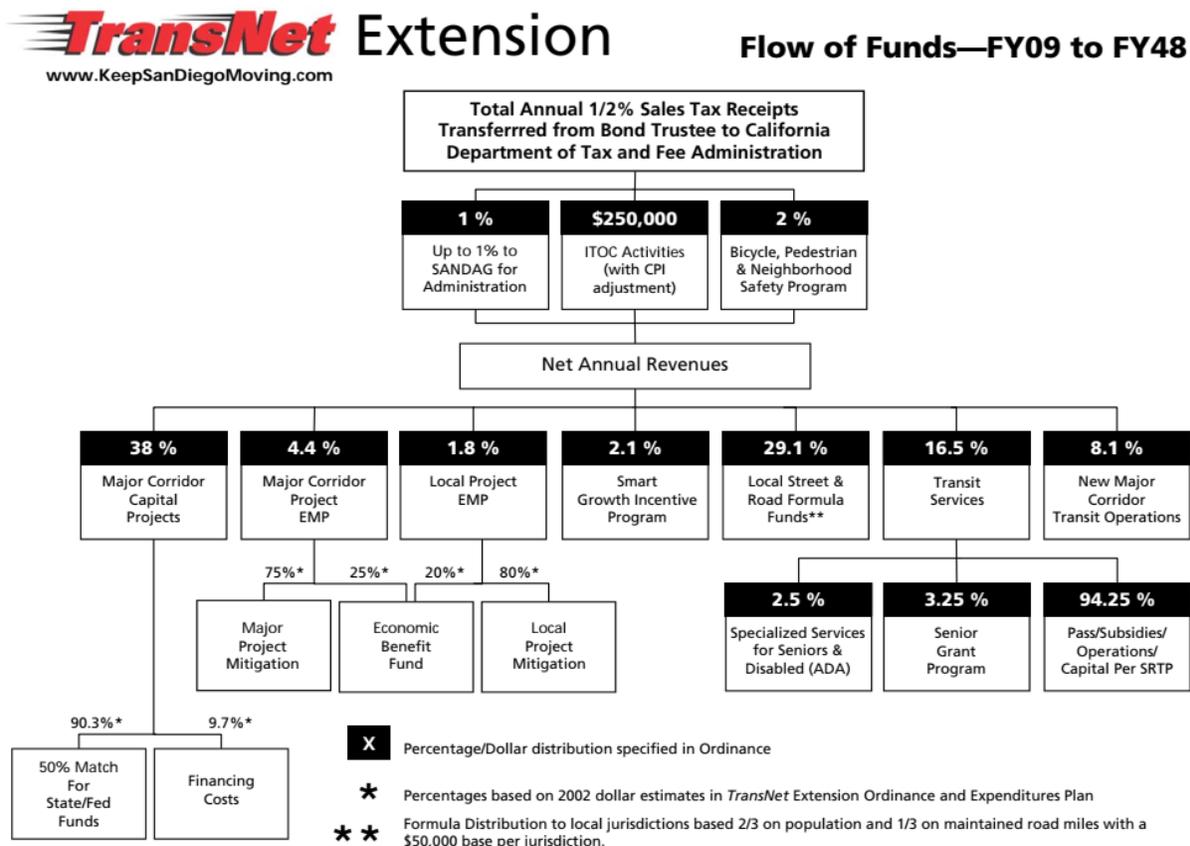
Source: SANDAG and the 2004 *TransNet* Extension Ordinance and Expenditure Plan.

TransNet Extension Ordinance Projects and Early Action Program

To relieve traffic congestion and improve safety, the *TransNet* Extension Ordinance identified 48 specific capital projects along 15 major highway and transit corridors scheduled for completion by 2048. In addition to these highway and transit capital projects, there are approximately 40 proposed bike construction projects and hundreds of local street and road capital projects identified on a biennial basis as part of each local jurisdiction's transportation improvement plan. Other *TransNet* Extension Ordinance areas scheduled individual projects on an annual basis for environmental mitigation needs, transit service analysis, or SANDAG grants targeted for activities surrounding active transportation, smart growth, and services to seniors.

Although collections from the *TransNet* Extension Ordinance did not start until 2008, the SANDAG Board made a strategic decision in 2005 to launch an "Early Action Program" (EAP) that accelerated 19 major corridor capital construction project segments through long-term bonding activity based on future tax

revenues and a shorter-term commercial paper program to leverage state and federal funds. Specifically, the SANDAG Board intended to jump-start these segments "to help minimize disruption to the traveling public and give full utility to the corridor within a condensed timeframe, as opposed to phasing the improvements in smaller stages over a greater number of years." [2] Another critical factor considered to better ensure success of the EAP was advancement of the Environmental Mitigation Program. From the early stages, the intent was to advance project mitigation packages to facilitate and expedite EAP project delivery. This involved discussions, collaboration, and agreements with external resource agencies and permit holders. Since 2005, the SANDAG Board approved additional project segments consistent with the *TransNet* Extension Ordinance for a total of 97 project segments as of June 2020 as shown in Appendix C. In addition to the Major Corridor project segments, the SANDAG Board also launched a Regional Bike Plan EAP in 2013. This $200 million initiative to expand the bike network countywide and finish high-priority projects within a decade involved approximately 38 projects totaling 77 miles of new bikeways.

While specific highway and transit capital projects and programs to be funded were set in the 2004 *TransNet* Extension Ordinance, the mix or prioritization of the projects can change. For instance, the *TransNet* Extension Ordinance projects must be amended as necessary to align with SANDAG's Regional Transportation Plan (RTP) that serves as the planning roadmap for the region's long-term transportation needs, priorities, and investments. Because transportation planning organizations such as SANDAG are required to update or submit a new RTP to the federal government at least every four years, entities revisit and make decisions on the best mix of planned projects that a region wants to fund based on changing travel demand patterns, new technologies, and other forecasted needs. Additionally, the *TransNet* Extension Ordinance required SANDAG to conduct a comprehensive review every ten years of all projects and programs allowing plan revisions to improve performance over the subsequent ten years. Thus, SANDAG can make changes to the *TransNet* Extension Ordinance portfolio of projects initially identified—except for certain prioritized projects identified from the original sales tax measure passed in 1987—if those changes align with the RTP.

SANDAG Authority and Relationship with *TransNet* Extension Ordinance Partners

SANDAG is the Metropolitan Planning Organization for the San Diego region with many responsibilities including planning regional transportation projects, overseeing transportation infrastructure, and programming financial investments in highways, roadways, public transit, and bicycle and pedestrian infrastructure. [3] Additionally, SANDAG's dual role as the San Diego County Regional Transportation Commission affords additional responsibilities for authorizing payments from any local sales-tax—such as the *TransNet* Extension Ordinance. SANDAG's efforts and activities are governed by a 21-member Board of Directors as well as a seven-member Independent Taxpayer Oversight Committee that aid in the implementation of the *TransNet* Extension Ordinance and provide an increased level of accountability for expenditures of *TransNet* Extension Ordinance funds.

---

[2] SANDAG Board Agenda, December 2004 and January 2005. Board approved an initial list of 22 project segments, but three segments were subsequently merged into other project segments for a total of 19 EAP project segments.

[3] A Metropolitan Planning Organization (MPO) is an agency created by federal law to provide local officials input into the planning and implementation of federal funds in urban areas with populations greater than 50,000. In San Diego, the SANDAG MPO has joined together elected officials from all 18 cities and the County of San Diego as a regional council of governments. See Glossary of Term in Appendix A.

While SANDAG is the primary entity responsible for administering the *TransNet* Extension Ordinance, other entities share responsibilities for managing and implementing projects and programs funded through *TransNet* Extension Ordinance as well as maintain and operate part of the transportation. As shown in Exhibit 2, key *TransNet* Extension Ordinance partners include Caltrans, Metropolitan Transit System, North County Transit District, and 19 local jurisdictions—although there are a multitude of grantees, non-profits, conservancy groups, and other federal and state agencies that assist with implementation of the *TransNet* Extension Ordinance.

EXHIBIT 2. KEY *TransNet* PARTNERS

Source: Fiscal Year 2015 and Fiscal Year 2018 *TransNet* Triennial Performance Audits.

Organizational and Environmental Changes Affecting *TransNet* Extension Ordinance

Over the last three years, SANDAG's organization has undergone sweeping changes. From state legislation in Assembly Bill 805 (AB 805) changing Board structure and voting practices to a new Executive Director and executive team, oversight and leadership focused on a complete reorganization of divisions, staff reporting, and responsibilities. This movement also included an Organization Effectiveness Plan that intended to improve the performance of SANDAG overall and created programs to provide staff necessary tools for further development and growth within the organization. Moreover, SANDAG employed sustained focus on "continuous process improvement" at the overall enterprise level, department level, and individual level including the implementation of the Plan of Excellence (POE) with processes to validate regional and revenue forecasting for the *TransNet* Extension Ordinance among other purposes.

At the same time, SANDAG also embarked on the development of an ambitious vision to reshape the future of how San Diegans will travel through the region. This new vision, called the "5 Big Moves" as

shown in Exhibit 3, is guiding the development of SANDAG's revised Regional Transportation Plan it expects to finalize in 2021.

EXHIBIT 3. 5 BIG MOVES VISION OVERVIEW
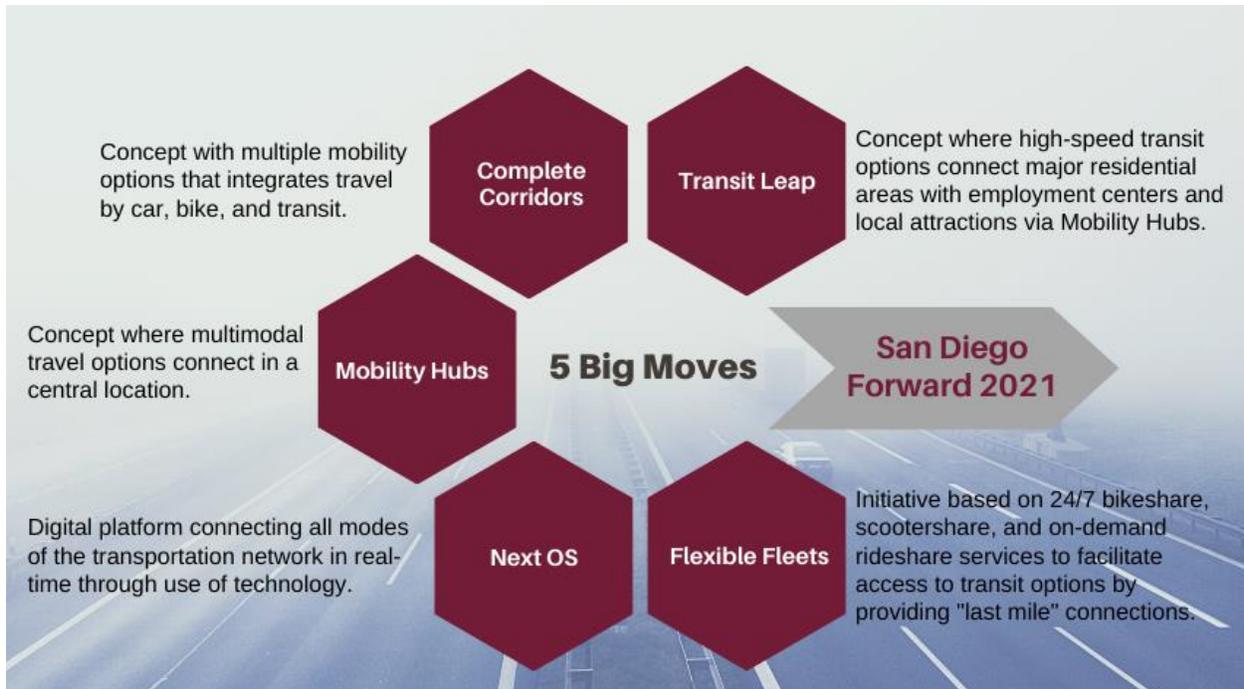
Source: Auditor-Generated from 5 Big Moves brochures available on SANDAG San Diego Forward website: www.sdforward.com

Under the "5 Big Moves", efforts are focused on complete managed corridor planning, flexible fleet options, expansion of high-speed transit, and connecting multimodal travel via mobility hubs and technology advancements—with the intent to incorporate more principles of sustainability and mobility into transportation planning and infrastructure delivery. These SANDAG efforts could potentially modify features or projects in the *TransNet* Extension Ordinance since related Major Corridor projects must be in alignment with the Regional Transportation Plan per federal and state planning provisions.

Finally, in addition to the internally-driven organizational changes and external changes imposed by legislation, SANDAG's organization, staff, project work, and funding have been affected by the global COVID-19 pandemic beginning in early 2020 and continuing into 2021.

Scope and Methodology

In accordance with the *TransNet* Extension Ordinance, the Independent Taxpayer Oversight Committee (ITOC) has the responsibility for conducting triennial performance audits of the San Diego Association of Governments (SANDAG) and other agencies involved in the implementation of *TransNet* Extension Ordinance-funded projects and programs and review project delivery, cost controls, schedule adherence, and related activities.

Audit Scope and Objectives

ITOC contracted with Sjoberg Evashenk Consulting Inc., to conduct a performance audit for the three-year period between July 1, 2017 and June 30, 2020. The primary objectives identified for this performance audit were to:

- Assess the performance of *TransNet* recipients on the efficient delivery of *TransNet* Extension Ordinance projects and programs.

- Assess the efficiency and effectiveness of expenditures of *TransNet* Extension Ordinance revenues.

- Identify any potential barriers to success and opportunities for process improvements.

- Assess the performance of the ITOC.

ITOC identified the following 10 audit scope areas of focus for the audit that examined the performance of SANDAG, Caltrans, San Diego Metropolitan Transit System, North County Transit District, County of San Diego, City of San Diego, other cities of the San Diego regions, ITOC, key stakeholder groups, or consultants used by the transportation agencies as warranted:

1. Project Delivery
2. Program Management
3. Compliance
4. Fiscal Responsibility
5. Transparency & Accountability

6. Follow-up of Prior Audit Recommendations
7. Impact of Implementation of AB 805
8. Deep Dive into Safety
9. Deep Dive into Bike Early Action Program
10. Review of ITOC

Audit Methodology

To fulfill these objectives in the various focus areas, we conducted a series of audit tasks involving data mining and analysis, documentary examinations, peer comparisons, source data verification, and interviews. Appendix B provides the detailed methodology employed on this audit. We conducted this performance 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.

Chapter 1: Many *TransNet* Extension Ordinance Major Corridor Projects were Implemented or In-Progress as Intended, Although Delivery of Remaining Portfolio is Uncertain

With less than 16 years into the 40-year program, SANDAG completed many projects. However, delivery of remaining future *TransNet* Extension Ordinance projects is dependent on the 2021 Regional Transportation Plan where the possibility exists that improvements envisioned by the 2004 *TransNet* Extension Ordinance may not be considered as the region moves forward with its plan.

- *TransNet* Major Corridor Projects accomplishments involved over:
  - 68 miles of new express, general purpose, and high-occupancy vehicle lanes;
  - 18 miles of rail double-tracking;
  - 27 improved transit stations and 6 new routes; and
  - Various other improvements including direct access ramps, and new transit vehicles.

- Identifying Major Corridor delivery status in relation to improvements outlined in the 2004 *TransNet* Extension Ordinance was still challenging due to lack of a comprehensive cross-walk.

- Existing available data from the 5 Big Moves and its Comprehensive Multimodal Corridor Plan components did not provide sufficient information to determine the future of improvements across 26 Ordinance Projects that had remaining planned work to complete.

TRANSNET MAJOR CORRIDOR DELIVERY STATUS OVERVIEW, AS OF JUNE 2020

16 Ordinance Corridors with 48 Ordinance Projects (OPs)

Columns: Open to Public | In Construction | In Design | In Environmental | Future

- I-15 (8 OPs)
- I-805 (10 OPs)
- I-5 South (6 OPs)
- I-5 North (7 OPs)
- SR 52 (2 OPs)
- SR 94 / SR 125 (4 OPs)
- SR 54 / SR 125 (1 OP)
- SR 67 (1 OP)
- I-8 (1 OP)
- SR 78 (2 OPs)
- SR 76 (1 OP)
- SR 56 (1 OP)
- Mid-City BRT (1 OP)
- Coronado Tunnel (1 OP)
- Border Access Improvements (1 OP)
- SR 125 Toll Road Purchase (1 OP)
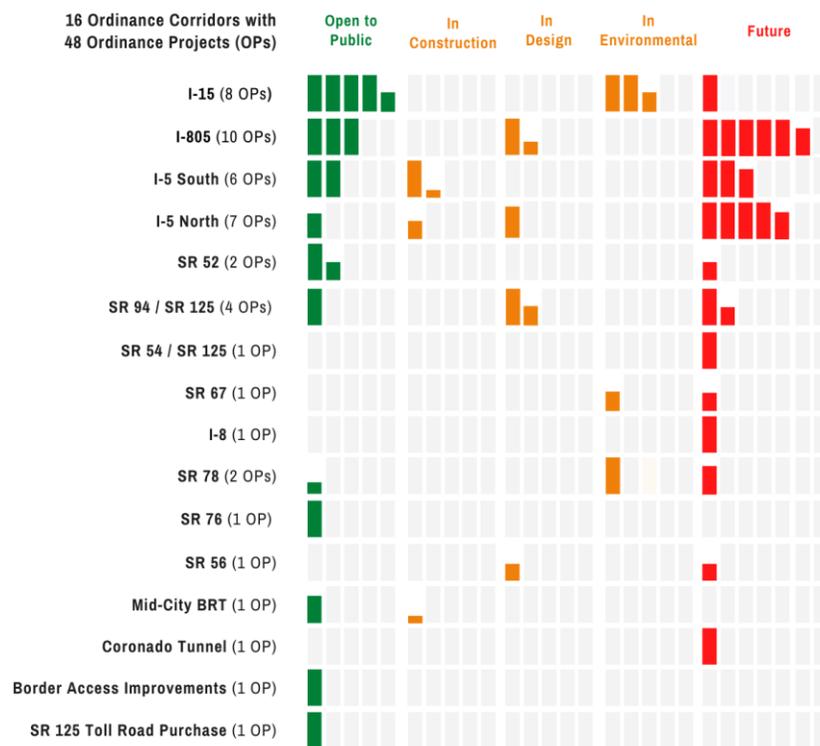
Note: Each bar represents one Ordinance Project (OP) or a fraction of a project to show status for each Corridor. For example, the I-15 Corridor had 8 OPs of which 4.5 were open to the public (green), 2.5 OPs were in the environmental phase (orange), and 1 OP was planned for completion in 2035 or beyond.

Key Recommendations

✓ **Critical Priority**. Clearly identify whether the remaining *TransNet* Extension Ordinance projects will be part of the 2021 Regional Transportation Plan, before the SANDAG Board approves the 2021 plan, and provide a similar identification for any key changes in future Regional Transportation Plans.

✓ **High Priority.** Develop regular crosswalks to summarize and compare planned major corridor projects outlined in the *TransNet* Extension Ordinance with current improvement implementation status by identifying project progress in terms of "complete", "in-progress", "cancelled", or "moved beyond 2048 and outside the *TransNet* Extension Ordinance period". SANDAG should complete this reconciliation annually, at the minimum when it revises its Capital Improvement Program Budget, or when SANDAG makes a major update to the Regional Transportation Plan and explain deviations from the Ordinance including scope expansions, reductions, or mergers with other project segments through a log that captures all explanations. When performing this reconciliation, SANDAG should utilize a consistent numbering format or key identifier for each project to facilitate the tracking of changes over time.

Chapter Introduction

With 38 percent of net annual revenues dedicated to major corridor capital projects, the program is not only the largest component of the *TransNet* Extension Ordinance, but its improvements are also the most visible and tangible to the public as new roadways open for use and transit experiences are enhanced throughout the region. As of June 2020, with only 16 years of the 40-Year *TransNet* Extension Ordinance timeframe elapsed, SANDAG and its partner entities completed 35 percent of those capital improvements proposed to voters in 2004, with another 23 percent in either construction, design, or environmental phases. Thus, SANDAG made significant progress delivering projects planned in the *TransNet* Extension Ordinance.

SANDAG also scheduled other major corridor capital improvements to start construction nearer to the end of the *TransNet* Extension Ordinance in 2035 or 2040. In fact, there were 42 percent of capital improvement projects remaining to complete over the remaining 29 years of the *TransNet* Extension Ordinance. [4] For these "future" projects where SANDAG and its partner entities have not started planning or design activities, project delivery and completion is highly-dependent on SANDAG's in-process 2021 Regional Transportation Plan (RTP) that will revisit and prioritize project needs or schedule phasing to align with changes in transportation demands, state and federal directives, or funding constraints. Because SANDAG had not yet completed its 2021 RTP as of the end of our audit fieldwork in December 2020, we could not determine with certainty which, if any, of the remaining *TransNet* Extension Ordinance projects SANDAG would move forward or potentially choose to eliminate in its next plan. [5]

Background

When San Diego County voters approved the *TransNet* Extension Ordinance in 2004, SANDAG identified 15 major transportation corridors to receive various congestion-relief related improvements. Work on the corridors was originally planned through 47 individual projects. In 2012, the SANDAG Board amended the *TransNet* Extension Ordinance to add the SR 125 Toll Road purchase as a 16th corridor increasing the total number of *TransNet* Extension Ordinance Projects (Ordinance Projects) to 48. [6]

Of particular importance to note when discussing project delivery status, the *TransNet* Extension Ordinance specifically stipulated that its projects must be consistent with the RTP and amended as necessary to align with the latest RTP. Thus, while voters approved the sales-tax measure allowing the SANDAG Board to fund and adopt the original portfolio of *TransNet* Extension Ordinance projects in 2004, those projects may change overtime as SANDAG updates its RTP at least every four years. With SANDAG currently preparing its new 2021 RTP, the delivery of any in-progress or future *TransNet* Extension Ordinance Major Corridor projects discussed in this section may be impacted as SANDAG finalizes the 2021 RTP.

---

[4] Auditor defined "future" projects as those that did not have any activity at all and did not yet enter the environmental phase. In most instances, "future" projects were not planned for construction until 2035 or later and may include projects that were moved outside the *TransNet* Extension sunset year of 2048. This also includes projects that may be studied as part of the 5 Big Moves and Comprehensive Multimodal Corridor Plans.

[5] To assess progress against the *TransNet* Extension Ordinance, we reviewed documents described in Appendix B. Further, we provide a complete *TransNet* Extension Ordinance Major Corridor project listing in Appendix C.

[6] The 2012 Board approved an amendment to the *TransNet* Extension Ordinance to add the SR 125 Toll Road purchase, among other items.

Nearly 60 Percent of *TransNet* Extension Ordinance Major Corridor Projects were Completed or in-Progress with Only 16 Years of the 40-Year Ordinance Timeframe Elapsed, But SANDAG did not Track Status

When the *TransNet* Extension Ordinance passed in 2004, improvements along the region's 16 major corridors were envisioned through 48 individual Ordinance Projects—although these projects were split into discrete project segments where the total number of segments contracts or expands depending on project engineering, environmental circumstances, or community travel demands. As of June 30, 2020, nearly 60 percent of the improvement projects promised were completed or were in progress through environmental, design, right-of-way, or construction stages as shown in Exhibit 4.

While SANDAG provided frequent project specific updates to its oversight bodies, it did not provide a status of actual improvements against the 48 Ordinance Projects planned under the *TransNet* Extension Ordinance. Thus, the Board and oversight bodies cannot know how well accomplishments performed against initial plans supporting information provided to voters. SANDAG staff asserted that a comprehensive revision to its current interactive *TransNet* Dashboard will address this missing connection; however, that crosswalk was not fully completed at the time the audit concluded. [7]

EXHIBIT 4. *TransNet* EXTENSION ORDINANCE FREEWAY & TRANSIT COMPLETION STATUS SUMMARY, AS OF JUNE 2020

2004 *TransNet* Extension Ordinance Corridors	# of Projects Defined in Ordinance		% Complete	% In-Progress	% Future
	Freeway	Transit			
1 I-15	6 (D)	2	56	31	13
2 I-805	8 (D)	2	30	13	57
3 I-5 South	3	3	33	25	42
4 I-5 North	6 (D)	1	10	21	69
5 SR 52	2 (D)	-	75		25
6 SR 94 / SR 125	3	1	25	38	37
7 SR 54 / SR 125	1	-	Future		
8 SR 67	1	-		50	50
9 I-8	1	-	Future		
10 SR 78	1	1	13	50	37
11 SR 76	1	-	Complete		
12 SR 56	1	-		50	50
13 Mid-City BRT	-	1	95		5
14 Coronado Tunnel (A) (B)	1	-	Future		
15 Border Access Improvements (B)	1	-	Complete		
16 SR 125 Toll Road Purchase (C)	1	-	Complete		
Sub-Total	37	11	35% Complete	23% In-Progress	42% Future
48 Ordinance Projects (E)					

Source: 2004 *TransNet* Extension Ordinance and Expenditure Plan – Commission Ordinance 04-01 and other documents noted in Appendix B. Note: (A) The Coronado Tunnel was cancelled by the Coronado City Council in 2010. (B) The *TransNet* Extension Ordinance provided $25 million for construction only. (C) The SR 125 Toll Road was added in 2012. (D) Ordinance Project(s) with Managed Lanes components. (E) Percentages based on completion status at the Ordinance Project level.

---

[7] As of February 2021, SANDAG was working on changes to its internal *TransNet* Dashboard to crosswalk projects to *TransNet* Extension Ordinance numbers. Once the internal database is complete, SANDAG stated it will revise the public-facing Dashboard to show status.

Completed *TransNet* Extension Ordinance Projects Realized Many Accomplishments as Envisioned

Though challenging to capture and summarize, SANDAG and its *TransNet* Extension Ordinance partners have delivered many projects envisioned. As shown in Exhibit 5, completed freeway project improvements added express lanes, high occupancy lanes, and various improvements such as access ramps, auxiliary lanes, and direct connectors to aid with congestion relief. Transit projects completed included several new bus rapid transit service routes, completing commuter rail projects, and updating stations.

EXHIBIT 5. HIGHLIGHTS OF *TRANSNET* EXTENSION ORDINANCE MAJOR CORRIDOR ACCOMPLISHMENTS

Source: SANDAG *TransNet* Dashboard, SANDAG FY 2021 Capital Budget, and 2019 Federal Regional Transportation Plan.

When distinguishing the 48 *TransNet* Extension Ordinance projects between freeway or transit improvements, we identified 37 freeway-related projects with planned improvements such as adding general purpose or high occupancy vehicle lanes and improving interchanges, connectors, and ramps. As shown in Exhibit 6, of those 37 freeway projects, nearly half were completed or in-progress—specifically, 26 percent were completed as of June 2020 with another 23 percent of projects in-progress. [8] SANDAG planned the remaining 51 percent of projects and their respective project segments for start and completion in future years. However, two corridors—the SR 54 / SR 125 corridor and the I-8 corridor—did not have any activity, thus far, and improvements on those corridors were not planned until 2050, which is after the 2048 sunset year of the *TransNet* Extension Ordinance.

---

[8] Auditor defined "in-progress" projects as those that are in construction, design, or have at least entered the environmental phase with efforts already underway for a draft environmental document.

EXHIBIT 6. *TransNet* EXTENSION ORDINANCE FREEWAY COMPLETION STATUS SUMMARY, AS OF JUNE 2020 (C)

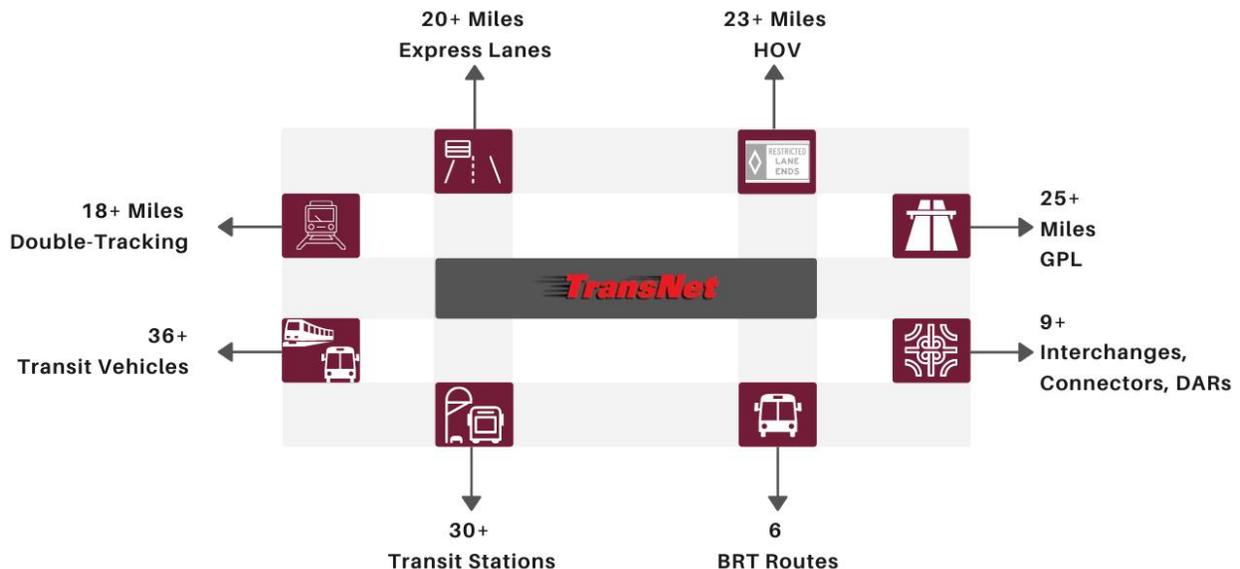| 2004 *TransNet* Extension Ordinance Corridors		# of Projects Defined in Ordinance 🚗 Freeway	% Complete	% In-Progress	% Future
1	I-15	6 (D)	42	42	16
2	I-805	8 (D)	25	16	59
3	I-5 South	3	8	8	84
4	I-5 North	6 (D)	6	19	75
5	SR 52	2 (D)	75		25
6	SR 94 / SR 125	3	50		50
7	SR 54 / SR 125	1	Future		
8	SR 67	1	50		50
9	I-8	1	Future		
10	SR 78	1	In-Progress		
11	SR 76	1	Complete		
12	SR 56	1	50		50
13	Mid-City BRT	-	No Freeway Component		
14	Coronado Tunnel (A)	1	Future		
15	Border Access Improvements	1	Complete		
16	SR 125 Toll Road Purchase (B)	1	Complete		
	Sub-Total	37	**26%** Complete	**23%** In-Progress	**51%** Future
	37 Freeway Ordinance Projects				

Source: 2004 *TransNet* Extension Ordinance and Expenditure Plan – Commission Ordinance 04-01 and other documents noted in Appendix A. Note: (A) The Coronado Tunnel was cancelled by the Coronado City Council in 2010. (B) The SR 125 Toll Road was added in 2012. (C) Auditor categorized projects that involved construction on freeways such as building HOV lanes, express lanes, managed lanes, and connectors as "freeway" improvements. (D) Ordinance Project(s) with Managed Lanes components.

Additionally, for the 11 transit projects we identified from the *TransNet* Extension Ordinance, SANDAG and its *TransNet* Extension Ordinance partners completed or were working on approximately 81 percent of the planned projects. Specifically, 66 percent of the projects were completed and 15 percent of projects were in-progress as shown in Exhibit 7. Unlike the freeway projects, all seven corridors with transit components received some type of improvements such as building bus rapid transit stations, expanding trolley platforms, adding direct access ramps for bus rapid transit, double-tracking and grade separations for the SPRINTER, and completion of the Super Loop.

With notable progress in delivering transit improvements, there were only 19 percent of projects that SANDAG had not started and remained to be completed. Some of those future projects were pushed to 2035 such as the bus rapid transit route from San Ysidro to Sorrento Mesa or even beyond the *TransNet* Extension Ordinance 2048 horizon such as the SPRINTER double tracking/grade separations. Moreover, since the San Ysidro to Sorrento Mesa bus rapid transit route is dependent on the completion of managed lanes infrastructure on the related I-805, I-15, and SR 52 freeways, any delays on the freeway projects will also impact the delivery schedule of those transit components.

EXHIBIT 7. *TransNet* EXTENSION ORDINANCE **T**RANSIT COMPLETION STATUS SUMMARY, AS OF JUNE 2020 (C)

2004 *TransNet* Extension Ordinance Corridors	# of Projects Defined in Ordinance — Transit	% Complete	% In-Progress	% Future
1 I-15	2	Complete		
2 I-805	2	50		50
3 I-5 South	3	58		42
4 I-5 North	1	33	33	33
5 SR 52	-	No Transit Component		
6 SR 94 / SR 125	1	Complete		
7 SR 54 / SR 125	-	No Transit Component		
8 SR 67	-	No Transit Component		
9 I-8	-	No Transit Component		
10 SR 78	1	25		75
11 SR 76	-	No Transit Component		
12 SR 56	-	No Transit Component		
13 Mid-City BRT	1	95		5
14 Coronado Tunnel (A)	-	No Transit Component		
15 Border Access Improvements	-	No Transit Component		
16 SR 125 Toll Road Purchase (B)	-	No Transit Component		
Sub-Total	**11**	**66% Complete**	**15% In-Progress**	**19% Future**
11 Transit Ordinance Projects				

Source: 2004 *TransNet* Extension Ordinance and Expenditure Plan – Commission Ordinance 04-01 and other documents noted in Appendix A.

Note: (A) The Coronado Tunnel was cancelled by the Coronado City Council in 2010. (B) The SR 125 Toll Road was added in 2012. (C) Auditor categorized projects that involved rail tracks, bus rapid transit routes, transit stations, signal priority systems, and grade separations as "transit" improvements.

Future of Remaining *TransNet* Extension Ordinance Improvements Is Closely Tied to the in-development 2021 Regional Transportation Plan, and it is Uncertain if Projects will be Completed as Originally Planned

As transportation needs and technology evolve, regional planning entities must adjust and adapt to changing demands for greater connectivity as well as state and federal legislation focused on multi-modal solutions to reduce greenhouse gas emissions, provide social equity and environmental justice, and select entities with Comprehensive Multimodal Corridor Plans (CMCPs) when distributing discretionary grant funds. [9] SANDAG expected its in-development 2021 RTP to address these requirements when planning the future of San Diego County's transportation network. Yet, at the time of our audit, it was unclear how the remaining *TransNet* Extension Ordinance projects that have some type of improvements planned in future years would be incorporated into the 2021 RTP—if at all. Thus, it is uncertain whether future remaining *TransNet* Extension Ordinance projects will be completed as initially planned. As shown in Exhibit 8, there were 26 original *TransNet* Extension Ordinance Projects that had one or more components that had not yet started and were not planned to be built until 2035 or beyond.

---

[9] Related laws include Senate Bill 743 Environmental Quality, Assembly Bill 32 Global Warming Solutions Act of 2006, Title VI Social Equity, and Senate Bill 1 Transportation Funding.

EXHIBIT 8. TransNet EXTENSION ORDINANCE PROJECTS WITH SOME IMPROVEMENTS PLANNED IN FUTURE YEARS (A)

26 ORDINANCE PROJECTS WITH FUTURE IMPROVEMENTS	PLANNED CONSTRUCTION BY		
TransNet	**2035**	**2040**	**2050**
I-15			
1. **OP 3:** 2 HOVL from SR 163 to SR 94	▬		
I-805			
2. **OP 9:** 1 ML from SR 905 to Palomar Street / East Naples Street	▬		
3. **OP 10:** 2 ML from SR 54 to SR 94; 2nd ML from SR 94 to I-15; 2 ML from I-15 to SR 163	▬▬▬▬▬		▬
4. **OP 11:** 4 ML on Mission Valley Viaduct			▬
5. **OP 12:** 2ML from I-15 to SR 163; 1 ML from SR 163 to SR 52	▬▬▬▬▬		
6. **OP 16:** BRT from San Ysidro to Sorrento Mesa	▬		
7. **OP 17:** 2 HOVL from I-15 to I-805 on SR 52			▬
8. **OP 18:** HOV to HOV Connectors at I-805 / SR 52 Interchange			▬
I-5 South			
9. **OP 19:** 2 HOVL from SR 905 to R 54	▬		
10. **OP 20:** 2 HOVL from SR 54 to I-8	▬		
11. **OP 21:** 2 HOVL from I-8 to La Jolla Village Dr.; 2 HOVL from La Jolla Villa Dr. to I-5 / I-805	▬▬▬▬▬		
I-5 North			
12. **OP 25:** 4 ML on I-5 / I-805 Merge	▬		
13. **OP 27:** 4 ML from SR 78 to Vandergrift Blvd.			▬
14. **OP 28:** HOV to HOV Connector at I-5 / I-805	▬		
15. **OP 29:** FWY to FWY Connector at I-5 / SR 56		▬	
16. **OP 30:** FWY to FWY Connector at I-5 / SR 78		▬	
17. **OP 31:** Coaster Phase II Double-Tracking			▬
SR 52			
18. **OP 32:** 2 GPL from Mast Blvd. to SR 125	▬		
SR 94 / SR 125			
19. **OP 35:** Widen to 6 Lanes from SR 125 to Avocado Blvd.			▬
20. **OP 36:** 2 HOVL from I-805 to I-8			▬
SR 54 / SR 125			
21. **OP 38:** 3 GPL & 1 HOVL from I-805 to SR 94			▬
SR 67			
22. **OP 39:** 4 GPL from Gold Bar Ln. to Dye Rd.			▬
I-8			
23. **OP 40:** 2 GPL from Second St. to Los Coches Rd.			▬
SR 78			
24. **OP 42:** SPRINTER Extension & Double Tracking, BRT Palomar Airport Rd.			▬
SR 56			
25. **OP 44:** 1 GPL from I-5 to I-15.			▬
Coronado Tunnel			
26. **OP 46:** Matching Funds for Tunnel from Glorietta Blvd. to Alameda Bvld.			▬

Source: 2019 Regional Transportation Plan, CMCP Information Available through November 2020, and SANDAG FY 2021 CIP Budget.
Note: (A) Each of the 26 original TransNet Extension Ordinance Projects (OP) shown in this Exhibit either have all or just some fraction of its project segments remaining to be completed; thus, this Exhibit's presentation differs slightly from Exhibit 4 that summarizes status as a percentage of the original 48 TransNet Extension Ordinance improvements.

SANDAG's Comprehensive Multimodal Corridor Plans did not yet Contain Sufficient Detail to Assess How the 2021 RTP will Address Remaining TransNet Extension Ordinance Major Corridor Projects

As part of the 2021 RTP efforts, SANDAG first introduced the concept for the Comprehensive Multimodal Corridor Plans (CMCPs) in April 2019 that envisioned several "critical connections" such as north-inland to downtown, east to west, or border to north coastal. CMCPs are not new transportation planning concepts, but have gained greater focus with recent state legislation such as the competitive Solutions for Congested

Corridors Program under Senate Bill 1 tying state funding to improvements that would reduce congestion through diverse transportation choices rather than increased roadway capacity. [10]

For the *TransNet* Extension Ordinance projects, this means that several improvements outlined in 2004 may not be completed as envisioned as SANDAG develops and refines the 2021 RTP and during that process reassesses the need for individual projects identified in prior RTPs—including *TransNet* Extension Ordinance projects—to determine whether to move forward with the remaining *TransNet* Extension Ordinance projects that were not yet started. In particular, those projects that had not entered preliminary engineering or environmental phases have greater uncertainty of being completed as planned than those projects that have attained environmental clearance or had already advanced to design stages.

When we attempted to align the outstanding *TransNet* Extension Ordinance improvements with in-progress 2021 RTP planning efforts, we analyzed and compared segment and planned construction data from the 2019 RTP and CMCP data presented to SANDAG Board and oversight committees against the planned *TransNet* Extension Ordinance provisions. However, SANDAG's CMCPs did not contain sufficient detail by the end of our audit fieldwork in December 2020 for us to determine with certainty which remaining projects would continue as planned or which projects could be eliminated.

For example, as shown in Exhibit 8, *TransNet* Extension Ordinance Project 21 had two components—I-8 to La Jolla Village Drive and La Jolla Village Drive to the I-5 / I-805 Merge—with estimated construction completion years in 2035 and 2050, respectively. For these two components, we could not identify whether they were being considered as part of the current CMCP planning efforts in place to guide the development of the 2021 RTP or whether the projects might be considered at some point as part of future CMCP efforts and future RTPs. While other elements of this TransNet Extension Ordinance Project were completed or in construction, the future implementation and delivery of these two additional components was uncertain. [11]

In addition, since SANDAG first presented the CMCPs as part of the 5 Big Moves, the CMCP have undergone several iterations that considered different geographical study area boundaries and resulted in many corridor name-changes that made our comparison of remaining *TransNet* Extension Ordinance projects to the changing CMCPs even more challenging as shown in Exhibit 9.

For example, when the Board approved the start of the studies for the twelve CMCPs in September 2019, there was a separate "Blue Line Express / I-5 South & Palomar St Rail Xing" and "Purple Line / I-805" corridor. Nearly one year later at the July 2020 Board update when the Board decided to prioritize planning efforts for five corridors, those two CMCP corridors were combined as the "Purple Line / I-805 / Blue Line / I-5 South" study corridor. In October 2020, SANDAG renamed the entire corridor again and it is now being studied as part of the "South Bay to Sorrento" CMCP.

---

[10] Senate Bill 1 Solutions for Congested Corridors Programs designated $250 million annually for projects that are part of a Comprehensive Multimodal Corridor Plan.

[11] *TransNet* Extension Ordinance Project 21 had four project elements—I-5 / I-8 interchange open to traffic, I-5 / Voigt Drive realignment in construction, and two segments planned for future years (I-8 to La Jolla Village Drive and La Jolla Village Drive to I-5 / I-8 Merge). Also, refer to footnote 4 for explanation of "future years."

April 2019 "Big Reveal"	September 2019 Board Approval	July 2020 Board Update (A)	October 2020 Transportation Committee Update
1. **Mobility Hubs** 2. **Blue Line Express** 3. **Purple Line** 4. **East – West Complete Corridor** 5. **UTC – Sorrento Valley Connector** 6. **High Speed Complete Corridor** 7. **Del Mar Trench**	Central Mobility Station / I-5 / Coronado Connection & Downtown Connection	**Central Mobility Hub and Connections** (Priority Corridor)	No change
	Blue Line Express / I-5 South & Palomar St Rail Xing	**Purple Line / I-805 / Blue Line / I-5 South** (Priority Corridor)	South Bay to Sorrento
	Purple Line / I-805		
	High Speed Transit / SR 52 / SR 67 Evacuation Plan	**San Vicente Corridor (SR 67)** (Priority Corridor)	No change
		Sea to Santee (SR 52) (Priority Corridor)	Coast, Canyons, and Trails
	SPRINTER / Palomar Airport Road / SR 78	**North County Corridor (SR 78)** (Priority Corridor)	No change
	Sorrento Circular / High Speed Transit / SR 56	High Speed Transit / SR 56	No change
	High Speed Transit / SR 94	High Speed Transit / SR 94	No change
	High Speed Transit / SR 125	High Speed Transit / SR 125	
	High Speed Transit / I-15	High Speed Transit / I-15	
	High Speed Transit / I-8	High Speed Transit / I-8	
	North Coast Corridor / I-5	North Coast Corridor / I-5	
	Airport to Airport Connections (Cross Border Express to San Diego Airport)	Airport to Airport (Cross Border Express to San Diego Airport)	

Source: April 26, 2019 Joint SANDAG Board, Policy Advisory Committees, *TransNet* Independent Taxpayer Oversight Committee Meeting; September 6, 2019 and July 10, 2020 SANDAG Board Meeting; October 16, 2020 SANDAG Transportation Committee Meeting.

Note: (A) "July 2020 Board Update" Column bold font corridor names represent the five priority corridors approved by the Board in July 2020.

SANDAG staff explained to the Board that as studies began and parameters were more closely assessed, redrawing the corridor boundaries made sense based on various considerations such as economic development and goods movement, preserve existing transportation infrastructure, or prevent residential and small business displacement. While it is understandable that planning efforts and studies change boundaries and naming conventions, SANDAG should maintain a crosswalk of the evolution to add clarity and transparency to their planning process and, particularly for *TransNet* Extension Ordinance projects, clearly communicate to the Board through some type of crosswalk how past *TransNet* Extension Ordinance project plans align or deviate from future goals. [12]

Moreover, while SANDAG shared that the in-development 2021 RTP may cost $177 billion to fulfill its vision, it is not yet known how much of that will address outstanding *TransNet* Extension Ordinance improvements or how much the remaining portfolio will cost to complete based on the next Plan of Finance update as discussed in more detail in Chapter 2 of this report. Thus, SANDAG needs to clearly

---

[12] Subsequent to the end of our audit fieldwork, SANDAG indicated that its legal team is in the process of reviewing a draft 2021 RTP project list and comparing the list with *TransNet* Extension Ordinance project descriptions.

communicate to the Board through some type of crosswalk how past *TransNet* Extension Ordinance project promises align or deviate from future goals.

Recommendations

To strengthen data provided for oversight and guidance, the ITOC should request the SANDAG Board to direct staff to:

1. **Critical Priority**. Clearly identify whether the remaining *TransNet* Extension Ordinance projects will be part of the 2021 Regional Transportation Plan, before the SANDAG Board approves the 2021 Regional Transportation Plan, and provide a similar identification for any key changes in future Regional Transportation Plans.

2. **High Priority**. Develop regular crosswalks to summarize and compare planned Major Corridor projects outlined in the *TransNet* Extension Ordinance with current improvement implementation status by identifying project progress in terms of "complete", "in-progress", "cancelled", or "moved beyond 2048 and outside the *TransNet* Extension Ordinance period." SANDAG should complete this reconciliation annually, at the minimum when it revises its Capital Improvement Program budget, or when SANDAG makes a major update to the Regional Transportation Plan to explain deviations from the Ordinance including scope expansions, reductions, or mergers with other project segments through a log that captures all explanations. When performing this reconciliation, SANDAG should utilize a consistent numbering format or key identifier for each project to facilitate the tracking of changes over time.

Chapter 2: Improved Financial Models and Controls were in Place, but Plans are Needed to Address Insufficient Funds for Remaining Major Corridor Projects

Through renewed focus on improving revenue forecasts and expenditure models over the past few years, SANDAG identified a $9.8 billion funding shortfall for the *TransNet* Extension Ordinance Major Corridor Program that needs to be addressed with consideration given to the impact on the remaining projects to be started or completed. While SANDAG made positive changes to bolster fiscal safeguards, some slight enhancements could be implemented.

- Impacts from the Great Recession, optimistic leveraging expectations, and construction cost increases resulted in a $9.8 billion funding shortfall for *TransNet* Extension Ordinance Major Corridor projects.

- While SANDAG expected to address the funding challenges and remaining portfolio of *TransNet* Extension Ordinance projects with the upcoming 2021 Regional Transportation Plan, the agency should adopt a formal process to address issues identified in annual Plan of Finance updates, especially during periods between new or revised Regional Transportation Plans, that discuss short-term and long-term funding scenarios and how those options specifically impact the scope and schedule of remaining *TransNet* Extension Ordinance projects.

2019 PLAN OF FINANCE MAJOR CORRIDOR REVENUE AND EXPENDITURES

Description	2019 POF Amount (YOE in Billions)
Revenues:	
TransNet Sales Tax Revenues	$6.0 Billion
Programmed Grants, State and Federal Formula Funds, Debt Financing, and Loans	$3.1 Billion
Additional Formula Funds	$6.3 Billion
Additional Competitive Funds	$6.0 Billion
Total Revenues	**$21.4 Billion**
Expenditures:	
Capital Project Costs	$26.7 Billion
Anticipated Debt Service	$4.5 Billion
Total Expenditures	**$31.2 Billion**
Difference	**$9.8 Billion**

- Sound debt management and past growth in *TransNet* Extension Ordinance revenues helped reduce debt service obligations for the Major Corridor Program, and positioned SANDAG well to meet debt service obligations.

- SANDAG's Plan of Excellence put fiscal safeguards in place that included peer review of data models and thorough Quality Assurance/Quality Control protocols.

Key Recommendations

✓ **Critical Priority.** Develop and adopt a formal process to address issues identified during annual Plan of Finance updates that discusses short-term and long-term funding scenarios and how options specifically impact the scope and schedule of remaining *TransNet* Extension Ordinance projects. The plan should include clear methodology, criteria, and triggers for making decisions on *TransNet* Extension Ordinance projects if funding does not materialize as expected and how to make choices to reduce scope, delay, or eliminate projects from the *TransNet* Extension Ordinance portfolio.

✓ **Medium Priority**. Develop a risk-based approach for Quality Assurance/Quality Control testing and indication of review to strengthen documentation of Quality Assurance/Quality Control activities employed and results to better demonstrate data verifications.

✓ **Medium Priority**. Enhance organization of Peer Review Process supporting documents by providing a corresponding table to capture topics discussed, reference items to checklists, and close out memos to better link what was planned, what was done, and how issues were addressed.

✓ **Low Priority**. Clearly describe to the Board the Quality Assurance/Quality Control sampling methodology employed, any limitations of the data, and associated cost-benefits or risks of the approach.

✓ **Low Priority.** Continue valuable efforts to formalize and pursue a mature system of Quality Assurance/Quality Control policies and procedures as well as consistent implementation of the policies and procedures.

Chapter Introduction

Over the last three years, SANDAG made improvements both in the methodologies used to forecast revenues and expenditure models as well as how those efforts were communicated to the Board. As a result, the Plan of Finance (POF) and other tools used by SANDAG clarified and quantified the *TransNet* Extension Ordinance's funding challenges. Specifically, SANDAG's updates to the POF in 2019 clearly showed that revenue was not sufficient to pay for the remaining *TransNet* Extension Ordinance projects and that the agency has potential capacity issues between Fiscal Year (FY) 2024 and FY 2035. Several factors impacted the shortfall, including the lasting effects from the Great Recession, optimistic leveraging expectations not being realized as planned, and industry-wide significant construction cost increases.

Currently, SANDAG is preparing its 2021 Regional Transportation Plan (RTP) which could impact the potential portfolio of regional projects and ultimately which planned remaining *TransNet* Extension Ordinance projects would be included or excluded. Given revenue constraints, SANDAG must clearly explain what remaining *TransNet* Extension Ordinance projects are expected to be funded, which projects will only be completed if additional revenues are available, and which initial *TransNet* Extension Ordinance projects will not be funded because the region's needs changed or did not meet the State of California's greenhouse gas directives. [13] Moreover, as raised during the FY 2018 *TransNet* Triennial Performance Audit, SANDAG needs to develop a process to formally consider issues identified in annual POF updates with clear methodology, criteria, and triggers for making decisions on the scope and schedule for remaining *TransNet* Extension Ordinance projects if funding does not materialize as expected, especially during periods between RTP updates.

Further, to instill additional confidence to external reviewers and stakeholders , SANDAG could also refine its Peer Review Process (PRP) and Quality Assurance/Quality Control (QA/QC) documentation by developing a risk-based approach for QA/QC testing to indicate completion of QA/QC activities and providing relevant details to the SANDAG Board of Directors (Board) on QA/QC methodologies.

Insufficient Long-Term Capacity to pay for Remaining Planned *TransNet* Extension Ordinance Major Corridor Projects Exists

The POF is SANDAG's tool for projecting annual revenues, expenditures, and capital costs for *TransNet* Extension Ordinance projects and as well as for the entire *TransNet* Extension Ordinance to ensure funding is available to meet capital needs. In April 2019, the most recent POF showed $26.77 billion in remaining capital costs to complete the remaining *TransNet* Extension Ordinance major corridor projects, as well as $4.5 billion in anticipated debt service.

To match capital construction costs and debt service with the $21.4 billion in available revenues, roughly $9.8 billion in adjustments were made to the Major Corridor Program POF —in essence, cutting expenditures. Without sufficient funding, the SANDAG Board may have to delay projects, reduce scope, or

---

[13] As part of Senate Bill 32 (Pavley, 2016), California must reduce greenhouse gas emission to certain levels by 2050 and state directives discuss the need to achieve the State's long-term climate goals through the reduction of vehicle miles of travel.

eliminate projects and therefore critically needs to implement plans to guide the methodology for how it would make those determinations.

Projected Funding is not Sufficient to pay for Remaining *TransNet* Extension Ordinance Major Corridor Projects, But Project Implementation is Dependent on 2021 Regional Transportation Plan

The Major Corridor Program is largest *TransNet* Extension Ordinance component. In February 2019, staff provided the Board with an update estimating that $21.4 billion in revenues would be available to complete Major Corridor projects; at the same time, the total cost to complete remaining Major Corridor projects based on cost estimates at that time was 31.2 billion. [14] As a result, SANDAG estimated it would need an additional $9.8 billion to complete the remaining Major Corridor projects as shown in Exhibit 10. Based on these projections, SANDAG would have to leverage a record-high of at least $4.20 in other local, state, and federal funding sources for each $1 of *TransNet* Extension Ordinance funds expended.

The *TransNet* Extension Ordinance set a goal of leveraging these other funds at a 1:1 rate—thus, bringing in $1 dollar in other local, state, and federal funding sources for each $1 of *TransNet* Extension Ordinance funds expended. Historically, SANDAG experienced a program-wide leveraging rate of roughly 3:1, while the FY 2018 *TransNet* Triennial Performance Audit found that the Major Corridor Program had leveraged state and federal funds at a rate of roughly $1.89 for every $1 of *TransNet* Extension Ordinance revenue since 2005. Since FY 2017, SANDAG reported it had leveraged roughly $2.40 in other local, state, and federal funding sources for each $1 of *TransNet* Extension Ordinance funds expended. While SANDAG effectively leveraged *TransNet* Extension Ordinance funds at a much higher rate than anticipated in the *TransNet* Extension Ordinance, it has not approached the $4.20 rate needed to complete the remaining Major Corridor projects based on current projections. Thus, it is unlikely that SANDAG will realize the rate of leveraging needed to fund its existing remaining Major Corridor projects.

EXHIBIT 10. 2019 PLAN OF FINANCE MAJOR CORRIDOR REVENUE AND EXPENDITURES

Description	2019 POF Amount (YOE billions)
Revenues:	
TransNet Sales Tax Revenues	$6.0 billion
Programmed Grants, State and Federal Formula Funds, Debt Financing, and Loans	$3.1 billion
Additional Formula Funds	$6.3 billion
Additional Competitive Funds	$6.0 billion
Total Revenues	**$21.4 billion**
Expenditures:	
Capital Project Costs	$26.7 billion
Anticipated Debt Service	$4.5 billion
Total Expenditures	**$31.2 billion**
Difference	**$9.8 billion**

Source: Plan of Finance documents provided by SANDAG.

---

[14] Figure includes estimates of capital costs of $26.7 billion and anticipated debt service of $4.5 billion.

In addition, based on project timelines in the 2019 RTP and current funding sources, SANDAG faces a capacity shortfall of $11.9 billion between 2024 and 2035. However, they have roughly $2.1 billion in surplus capacity between 2036 and 2048, resulting in the overall shortfall of $9.8 billion. The surplus capacity from FY 2036 to FY 2048 means that SANDAG could shift some projects to match cashflow, but significant funding challenges remain.

As of the end of audit fieldwork in December 2020, SANDAG staff were still working on updating the POF for FY 2021—the first update since COVID-19 that could see notable changes to projected revenues as well as other impacts considering the COVID-19 pandemic. Moreover, the revised Regional Transportation Plan expected in 2021 could result in potentially significant changes to the *TransNet* Extension Ordinance Major Corridor projects. Until those efforts are completed, it is uncertain whether SANDAG will modify project scopes, delay projects outside the *TransNet* Extension Ordinance timeframe, or eliminate remaining *TransNet* Extension Ordinance Major Corridor projects given projected shortfalls.

Funding Shortfalls Affected by both External and Internal Factors

Several factors—both external and internal to SANDAG—influenced the existing funding shortfalls in the *TransNet* Extension Ordinance. For instance, revenues were hit hard by the Great Recession and construction costs on the West Coast increased more than industry expectations. These events were external to SANDAG and outside its control. Yet, a significant internal factor affecting the shortfall was SANDAG's optimistic outlook in its leveraging and funding assumptions. Although the FY 2018 *TransNet* Triennial Performance Audit found that SANDAG effectively leveraged other local, state, and federal funds, SANDAG had not achieved the 3.40:1 leveraging ratio anticipated in the 2017 Plan of Finance.

Additionally, previous Plans of Finance included estimations of revenues from sources that were less certain such as revenues from future legislation. For example, in a September 22, 2017 presentation to the Board on the FY 2017 POF revenue assumptions, SANDAG assumed that state Senate Bill 1 would generate between $4.3 and $6.5 billion in future revenues. Senate Bill was introduced in December 2016 and signed into law on April 28, 2017, and so SANDAG asserted the funding assumptions made were more than reasonable. Using that logic, SANDAG also assumed that an additional $3.3 to $5.0 billion from similar, future legislation would occur roughly every ten years starting in 2030. While historical experience revealed a variety of new transportation funding legislation packages that were introduced over the years, it was far less certain than the other revenue sources included in the POF and seems overly optimistic as a certain funding stream for the remaining *TransNet* Extension Ordinance projects.

SANDAG's Board also approved projects totaling at least $500 million of *TransNet* Extension Ordinance funds not initially envisioned in 2004 when the *TransNet* Extension Ordinance passed. For instance, SANDAG spent an approximate $105 million on completing the I-15 "Middle" Segment between SR 56 and Centre City Parkway in Escondido and adding FasTrak to the I-15 Corridor. While the I-15 Middle Segment, along with the I-15 FasTrak, I-15 BRT Wifi, was not specifically called for in the *TransNet* Extension Ordinance, the projects were necessary components of the I-15 to ensure seamless travel between North County and downtown San Diego. Similarly, the Board approved $65 million to finish the SPRINTER single-track as well as assume ownership of the SR 125 for $342 million to generate additional revenues.

More recently, the Board approved another $13 million in *TransNet* Extension Ordinance funds for the development of the twelve CMCPs as part of SANDAG's 5 Big Moves described in Chapter 1. [15]

SANDAG did not have a Formal Annual Process to Address Impact of Funding Shortfalls identified in the Plan of Finance and Balance its Remaining Major Corridor Project Portfolio

While the most recent POF identified significant funding challenges, there was no follow-up response or formal process that considered and discussed what possible changes might be needed to balance the *TransNet* Extension Ordinance Major Corridor project portfolio. As previously mentioned, POF expenditures were adjusted by $9.8 billion to match likely available revenues, but SANDAG did not present to the Board options for "balancing" available funds through possible changes to the mix of projects, projects scopes, or schedules were made. Instead, SANDAG indicated that those challenges would be addressed as part of the upcoming 2021 RTP—which given the timing of the 2021 RTP, was a reasonable approach for now. However, SANDAG still needs a process to consider issues identified in the POF that is specifically tied to impacts on the scope and schedule of remaining *TransNet* Extension Ordinance portfolio of projects.

Thus, SANDAG should develop a formal annual process to discuss and consider how to address issues identified through the POF process beyond adjusting expenditures downward to match likely revenues, especially during periods between RTP updates. For example, when the POF identifies an issue like the $9.8 billion shortfall between RTP updates, the agency could consider the factors that lead to the shortfall and if the issues are likely to worsen with subsequent updates; consider how much of the shortfall could be addressed through shifting project timelines; or assess a menu of potential scope changes across projects to provide the Board with possible ranges of savings. Ultimately, the result of the process might be to defer any large actions to the next RTP update. Either way, such a process would help improve the nexus between the annual POF process and the 4-year RTP updates. This concern was raised in the FY 2018 *TransNet* Triennial Performance Audit where auditors recommended SANDAG establish a protocol to review funding sources and uses over the last 10 to 20 years of the *TransNet* Extension Ordinance and assess contingency options such as delaying projects, eliminating projections, or reducing scope as warranted. Given the significant funding shortfall for the Major Corridor projects, it is critical that SANDAG have a plan in place and clear prioritization for the end of lifecycle projects that are planned or what process and steps will be employed to determine whether and which projects to delay, cut scope, or eliminate.

SANDAG is not unique in the funding shortfalls faced—especially due to the Great Recession and excessive construction cost increases experienced by many transportation planning organizations. Yet, some other entities we reviewed used different methods to manage funding their portfolio of projects. For instance, the Maricopa Association of Governments in Phoenix, Arizona conducts an annual life cycle balancing that serves as a tool for aligning in-progress and planned improvements with expected revenues from sales tax and other state and federal sources. When significant funding changes occurred, the Maricopa Association of Governments rebalanced its projects promised under its sales tax measure that resulted in the entity delaying projects outside the measure's timeframe or cancelling projects. Subsequently, when additional revenues materialized, the Maricopa Association of Governments prioritized

---

[15] Several of the CMCPs correspond to *TransNet* Extension Ordinance corridors; California Senate Bill (SB) 1 requires the use of CMCPs for project planning to be eligible for the SB 1 state funding.

certain projects back into the portfolio with rebalancing exercises occurring twice over 15 years of its 20-year measure. For projects initially identified as part of its sales-tax measure, but ultimately not funded, the Maricopa Association of Governments identified these items as "illustrative projects" in their RTP to highlight projects they would implement if money ultimately became available.

Interestingly, the *TransNet* Extension Ordinance Section 5 discussed the option of "doing more projects if more funds became available," but never considered or addressed what steps to take if funds were not available to complete planned projects. It did call for a 10-year comprehensive program review to make revisions to the *TransNet* Extension Ordinance, which would allow SANDAG the opportunity to prioritize projects given the availability of funding or evolving transportation needs. It is critical that SANDAG develop and the Board approve a decision-making process on steps to take to evaluate and prioritize projects to match likely available funds as well as the circumstances under which it should consider when to take those steps.

SANDAG indicated it expected the 2021 RTP to address the remaining portfolio of *TransNet* Extension Ordinance projects and funding challenges. Staff described certain exercises employed to test how the mobility needs of the region could be met given the limited availability of resources and rising project costs. Even with a pending revised RTP, SANDAG should ensure it has protocols and contingency plans in place to more actively manage its portfolio of projects.

SANDAG's Debt Management Combined with Past Growth in *TransNet* Revenues Helped Alleviate some Cash Flow Concerns

To accelerate the start of 19 major corridor capital construction project segments through design and environmental permit stages, the SANDAG Board authorized the use of debt financing in 2005 before the sales tax extension began. The prior FY 2018 *TransNet* Triennial Performance Audit noted that while annual *TransNet* Extension Ordinance revenues were projected to exceed debt service, there were high-risk periods in the near-term for which the amount of estimated revenues were very similar to the amount of debt service owed. Most of the debt SANDAG issued was for Major Corridor projects with 86.3 percent of SANDAG's $126.8 million total debt service obligation in FY 2019. [16]

Debt issued to fund major corridor projects, however, was secured against all *TransNet* revenues and not just the 38 percent allocated to major corridors through the *TransNet* Extension Ordinance. Thus, if debt service were to exceed *TransNet* Extension Ordinance collections allocated for the Major Corridor projects, *TransNet* Extension Ordinance funds designated for other *TransNet* Extension Ordinance programs might instead be needed to meet SANDAG's debt service obligations. However, with stronger than projected growth in *TransNet* Extension Ordinance revenues over the last three years and SANDAG actions such as changes to the structure of the debt obligations, the audit concerns were obviated and short-term cash flow issues were somewhat alleviated.

---

[16] Debt service for each *TransNet* program was capped at 1.0x, which served as an inherent maximum even when all *TransNet* revenue are pledged against a particular debt issuance. The result was generally higher ratings and a lower cost of borrowing.

Restructuring reduced the FY 2026 Major Corridors Debt Service Obligation

Additionally, over the last three years, SANDAG restructured and refunded some of its existing debt to reduce its annual debt service costs by more than $16 million when comparing debt service needs captured in the 2017 POF to the April 2020 updated debt service data.[17] As shown in Exhibit 11, the FY 2026 debt service obligation for the Major Corridor Program was significantly lower than projected in 2017 or in the April 2019 POF. Some of the difference was due to SANDAG's previous methodology employed during the FY 2018 *TransNet* Triennial Performance audit, which assigned all debt associated with certain bond issuances to the Major Corridor Program.[18]

EXHIBIT 11. REDUCTION IN DEBT SERVICE BETWEEN VARIOUS PLANS OF FINANCE

FY	Debt Service per 2017 POF documented in FY 2018 *TransNet* Triennial Performance Audit	Debt Service per April 2019 POF Major Corridor Program	Debt Service per April 2020 Debt Service Data Major Corridor Program	Difference Between 2017 and April 2020
2024-25	$105,264,151	$91,715,452	$88,408,786	($16,855,365)
2025-26	$134,667,192	$121,049,419	$117,749,441	($16,917,751)

Source: 2017 and 2019 Plans of Finance April 2020 Debt Service Schedule and Coverage provided by SANDAG.

While 2017 calculations allocated as much as 65.8 percent of *TransNet* Extension Ordinance revenues for the Major Corridor projects to pay debt obligations, April 2020 revenue data (prior to the impact of COVID-19) showed that percentage dropped to 58.5 percent of *TransNet* Extension Ordinance revenues for major corridors needed for debt obligations.

Projections indicated SANDAG was Well-Positioned to Meet Debt Service Obligations

Given pre-COVID revenue levels, SANDAG appeared to be well-positioned to meet both its total program and Major Corridor debt service obligations based on the most recent 2019 POF. With FY 2019 revenues of approximately $115 million and a FY 2026 debt service of $117.7 million, *TransNet* Extension Ordinance revenues would only need to grow 2.42 percent for SANDAG to meet its major corridors debt service obligations without impacting other program areas.

SANDAG Board Policy 036 requires that the agency maintain a 1.0x revenue-to-debt coverage ratio for any *TransNet* Extension Ordinance sub-programs, including the Major Corridor Program. Data from April 2020 (which was not yet impact by the COVID-19 pandemic) showed that SANDAG was expected to meet or exceed the 1.0x ratio over the remaining life of the ordinance. While the coverage ratio dips as low as 1.08x and 1.12x in FYs 2020 and FY 2021, and 1.19x when debt service rises in FY 2026, coverage increases after that point reaching 2.08x in FY 2045 when debt service is at its highest at $141.5 million. Moreover, for the program as a whole, the data from the March 31, 2020 Quarterly Finance Report showed a senior lien coverage ratio of at least 2.92x, and a subordinate lien obligation of at least 2.38x.[19]

---

[17] SANDAG issued bonds in 2019 (Series 2019A) to refund portions of bond issued in 2012 and 2014 (Seiders 2012A & 2014A).

[18] At the time of the 2018 *TransNet* Triennial Performance Audit, SANDAG was only tracking debt coverage for the total program.

[19] Senior liens are debt obligations which have priority for repayment in the event of a default or bankruptcy; subordinate liens are only repaid after senior debt is paid back.

Improvements to Revenue Forecasts and Cost Estimation Processes Clarified SANDAG's Cash Flow and Capacity Issues

Between FY 2018 and FY 2020, SANDAG made several improvements to its processes for projecting future revenues and project costs. On the revenue side, staff continued using a simplified and less risky model for projecting *TransNet* Extension Ordinance revenues and limited its projections of other revenues to those that were reasonably certain. Similarly, SANDAG updated project cost expectations and aligned capital projects in the POF with those in the RTP. Together, these changes clarified the challenge of financing the *TransNet* Extension Ordinance program both overall as well as in specific periods where there may be a projected lack of capacity to complete additional project activities.

✓ **Revenue Forecast Models were Reasonable and Limit Risk**

Over the period under audit, SANDAG targeted substantial effort and attention on its revenue projections and modeling processes—particularly, to understand the impacts of COVID-19 and funding for the revised RTP expected in 2021. We found past revenue forecasts were extremely accurate with SANDAG projecting $913 million between FY 2018 and FY 2020, while actual sales tax income came in at $912.7 million—a mere three-hundredths of a percent difference.

Since the FY 2018 *TransNet* Triennial Performance Audit, SANDAG implemented several practices to improve the quality and reliablity of data sets used in its forecasting sales tax revenues. For instance, SANDAG simplified the model used to forecast *TransNet* Extension Ordinance revenues and reduced the risk or errors by basing growth estimates on a consensus of four forecasts from regional experts. Moreover, SANDAG took visible steps to improve transparency of its forecasts of revenues by clarifying for the Board estimated revenues from reasonably certain sources only, the amount of leveraged non-*TransNet* Extension Ordinance funds that would be needed, and the agency's historical leveraging rate.

✓ **Cost Estimation appeared sound and SANDAG improved the Scheduling of Capital Costs in the Plan of Finance**

Since the FY 2018 *TransNet* Triennial Performance Audit, SANDAG also employed considerable effort into updating cost estimates for Major Corridor capital construction projects and aligning the POF to the RTP.

Specifically, as part of its POF, SANDAG combined individual project estimates into total capital construction costs for each year through FY 2048. SANDAG refined project estimates at various stages along a project's lifecycle as staff and consultants better define scope allowing for more precise estimates of costs and included the revised cost estimates as part of each quarterly update on *TransNet* Extension Ordinance Major Corridor projects. Additionally, SANDAG improved how it scheduled Major Corridor capital projects in its POF to align with planned phases from the RTP. For example, if the RTP showed a project phase year of 2035 and SANDAG expected the project to take three years to complete, SANDAG's finance plan spread the project cost evenly between FY 2032 and 2035. This change in methodology provided more definition for costs over the remaining life of *TransNet* Extension Ordinance and clearer expectations of when expenditures would be spent.

To account for increases in construction costs, SANDAG escalated projects from their current year dollar estimate to the year in which a project begins construction using a 10-year moving average of the Engineering News Record Construction Cost Index. This is generally a sound approach to cost escalation; however, a competitive construction market and rapidly rising material prices have led to large construction cost increases in recent years. This experience was not unique to SANDAG— similar construction cost spikes for all types of capital projects across the Western United States.

✓ **Short Term Cash Flow Issues Could Impact Project Delivery Pace**

In November 2020, SANDAG identified a short-term funding need to the Board ranging from $170 to $220 million between FY 2021 and FY 2025 to keep pace on the projects currently in construction. Staff cited two factors that led to the shortfall: first, progress on projects in construction continued at a faster rate than initially anticipated and, second, some external funding sources operated on a reimbursable basis, so SANDAG must advance money and seek reimbursement later. As it transitions to a pay-as-you-go approach, SANDAG may not have the large cash balances necessary to cover upfront costs and wait for reimbursement—which could cause projects to slow until cash is available.

Staff asked the Board to consider a package of options, including refinancing existing debt, expanding the commercial paper program, and executing interfund loans. If these options are not sufficient, SANDAG may have to delay the start of upcoming *TransNet* Extension Ordinance projects.

Improved Fiscal Safeguards and Controls were in Place, although Slight Enhancements could be Made

Over the last three years, SANDAG implemented several positive changes to improve accountability, including steps related to validating the quality and reliablity of data sets used in forecasting sales tax revenues as part of its Plan of Excellence (POE). [20] These efforts greatly improved fiscal safeguards, although there are some slight enhancements that would bolster the strength of the process.

Planned Safeguards were put in Place

Supplementing the broadsweeping initiatives included in the POE, SANDAG proposed specific fiscal safeguards related to data governance, regional forecasting practices, and cost and revenue plans. We found that SANDAG instituted most of the planned safeguards including conducting a dependency analysis of forecast model impacts, reviewing process flows to identify potential flaws, and implementing a PRP to validate forecasting methodologies.

The audit focused on data governance practices since that was a key correction intended to prevent future forecasting errors. Among the initiatives SANDAG adopted to improve data governance, two key valuable data validation initiatives were the PRP and the QA/QC process. According to staff, SANDAG developed the PRP for assessing methods of data analysis, interpretation of data, or decisions needed on data sources; whereas, the QA/QC process was a more traditional approach to review the accuracy and integrity of underlying data. While the PRP and QA/QC exemplify SANDAG's notable effort in adding controls to

---

[20] The "Plan of Excellence" is an 8-point plan for strengthening SANDAG's accountability and transparency. It was developed in response to recommendations made to SANDAG from several sources, including the FY 2018 *TransNet* Triennial Performance Audit.

minimize the risk of errors, SANDAG can make some refinements to both processes and better demonstrate that the safeguards are working as intended as discussed in the sections that follow.

Peer Review Process Adds Layer of Transparency and Risk Mitigation, but Could be Enhanced

Based on our review of sample documentation of the PRP process, we found SANDAG's PRP using internal and external experts to review models, calculations, and assumptions against industry best practices was substantial with detailed documentation of discussions. Since 2017, SANDAG conducted over 100 PRPs on areas such as forecast reviews, transportation scenarios, performance measures, and cost estimates.

From a list of all PRPs done and in-progress, we reviewed supporting documentation for two processes given the complex and time-consuming nature of the review. We found underlying documentation including initiation checklists, meeting minutes identified issues, and memos documenting follow-up on action steps—all in accordance with SANDAG's internal policies and procedures for the processes we reviewed.

Nonetheless, we identified one process enhancement to provide additional clarity into the PRP activities where SANDAG could better organize PRP support and presentation of the review to convey how reviews are done by highlighting how experts reviewed models, calculations, and assumptions in the PRP process. This could be easily accomplished by providing a corresponding table in each of the documents in a PRP set where staff can note all topics discussed in addition to referencing items to the initiation checklist and close out memo so that any reviewer could see the relationship between what was planned, what was done, and how any issues were addressed and/or action steps taken. Some of the PRPs do this to a limited level, but SANDAG should ensure a consistent approach across all PRPs.

SANDAG Performed Robust QA/QC Activities that could be Improved by Stronger Documentation

Since 2018, SANDAG employed QA/QC efforts on data sources and analytic methods such as comparisons between forecast models and baseline calculations in addition to developed guidelines for reviewing exceptionally technical topics or documents using a test plan, documenting test results, and providing support documentation. Further, SANDAG staff employed a detailed and robust QA/QC process that aligned with its policies and functioned as a solid safeguard over data integrity. Nonetheless, there are some modest enhancements SANDAG could make to better document its activities. [21]

For instance, some supporting files we reviewed did not always include explanatory notes or labeling to determine the purpose of a file or specific data validated by reviewers. As such, there was not always an indication of which specific data elements reviewers checked—such as staff initials, check marks, or other typical notations to indicate that the appropriate verification was done. As staff work to improve and mature their data validation program, SANDAG should consider better organizing and linking supporting documentation to demonstrate they properly employed QA/QC steps and verified data. While it would be

---

[21] While we wanted to review the QA/QC results for the most recent sales tax revenue forecast, SANDAG had planned to conduct the sales tax forecast QA/AC activities as part of its 2021 Plan of Finance update. Instead, we reviewed the QA/QC process employed on SANDAG's Transportation Model as SANDAG stated the process employed was comparable to the one planned on the revenue forecast. Given the massive amounts of technical with multiple data points validated through the QA/QC process, we reviewed documentation for elements of the Series 14 Growth Forecast as the primary input for demographic, economic, and land use data for the Transportation Model.

prohibitively time-consuming to check every data point and indicate staff review, SANDAG could develop a risk-based approach for testing and indication of completed review.

Status Updates to the Board should also discuss Certain QA/QC Details and Potential Risks

Since 2017, SANDAG staff provided formal implementation reports with status updates to the Board on each element of the POE and description of SANDAG's efforts to comply with its pledges—these updates were valuable and demonstrated SANDAG's commitment toward accountability and continual improvement. Yet, SANDAG should also include certain methodology details and related limitations of the QA/QC sampling activities that would be of interest to decision makers.

Specifically, SANDAG should clarify that staff do not validate every data element used in revenue projections due to limited staff resources and the overabundance of data that could be subject to the QA/QC verifications. Given the massive amounts of technical data and multitude of data points that SANDAG could review for accuracy, staff reasonably validated a risk-based sample selection of the data points—not each figure. Because there is a cost and benefit to verifying each piece of data and an associated risk that must be assessed and possibly accepted with any QA/QC effort, staff should be clear with the Board on the sampling approach used in data validation processes and any risks with the accuracy of data produced. In this way, the Board could discuss and weigh-in on what data should be prioritized and which areas should undergo more detailed review than others.

Chapter Recommendations

To strengthen fiscal accountability and fiscal planning, the ITOC should request the SANDAG Board to direct staff to:

3. **Critical Priority**. Develop and adopt a formal process to address issues identified during annual POF updates that discusses short-term and long-term funding scenarios and how options specifically impact the scope and schedule of remaining *TransNet* Extension Ordinance projects. The plan should include clear methodology, criteria, and triggers for making decisions on *TransNet* Extension Ordinance projects if funding does not materialize as expected and how to make choices to reduce scope, delay, or eliminate projects from the *TransNet* Extension Ordinance portfolio.

4. **Medium Priority**. Develop a risk-based approach for Quality Assurance/Quality Control testing and indication of review to strengthen documentation of Quality Assurance/Quality Control activities employed and results to better demonstrate data verifications.

5. **Medium Priority**. Enhance organization of Peer Review Process supporting documents by providing a corresponding table to capture topics discussed, reference items to checklists, and close out memos to better link what was planned, what was done, and how issues were addressed.

6. **Low Priority**. Clearly describe to the Board the Quality Assurance/Quality Control sampling methodology employed, any limitations of the data validation, and associated cost-benefits or risks of the approach.

7. **Low Priority**. Continue valuable efforts to formalize and pursue a mature system of Quality Assurance/Quality Control policies and procedures as well as consistent implementation of the policies and procedures.

Chapter 3: SANDAG Focused on *TransNet* Extension Ordinance Compliance and Transparency, but it could Better Demonstrate Accountability

SANDAG demonstrated commitment to compliance with *TransNet* Extension Ordinance provisions and focused efforts toward continued improvement. However, SANDAG could further incorporate certain leading practices to better demonstrate its accountability to taxpayers.

- Past audits generally found SANDAG to be compliant with *TransNet* Extension Ordinance provisions, although improved reporting against *TransNet* Extension Ordinance compliance and plans would bolster accountability.

- SANDAG made progress addressing prior audit recommendations, but it still needs to do more in the short-term to report on performance outcomes while it develops a longer-term performance framework.

- Without access to better outcome data, the Board may set future transportation direction without understanding past outcomes and impacts of previous efforts.

SANDAG PLAN OF EXCELLENCE SUMMARY & STATUS
All safeguards were implemented, but SANDAG was still working on some components of "Regional Forecasting Practices" and "Data Governance" elements.

ORGANIZATION STRUCTURE	REGIONAL FORECASTING PRACTICES
COST & REVENUE PLANS	DATA GOVERNANCE
INDEPENDENT PERFORMANCE AUDITS	TRANSPARENCY INITIATIVES
RECORDS MANAGEMENT	STAKEHOLDER COMMUNICATION

Key Recommendations

- ✓ **Critical Priority.** Clearly and comprehensively report on actual progress and accomplishments (or lack thereof) against *TransNet* Extension Ordinance plans on a regular, periodic basis—such as quarterly or annually— for project scope, costs, schedule, accomplishments, and outcomes against promises.

- ✓ **High Priority.** Demonstrate compliance with the *TransNet* Extension Ordinance by identifying, tracking, and reporting on various requirements and provisions to the Board and ITOC on a regular, periodic basis—such as quarterly or annually.

- ✓ **High Priority.** Implement shorter-term steps to report on performance while waiting on the longer-term Transportation Performance Management Framework, including continued development of SANDAG's proposed "Goals and Provisions" document to distribute to the Board and ITOC.

- ✓ **Medium Priority.** Create summarized graphics to quickly indicate *TransNet* Extension Ordinance status based on data in the revised quarterly reports for reporting to the Board and ITOC.

Chapter Introduction

Through its practices and interactions with the Board, ITOC, public, and auditors, SANDAG staff demonstrated commitment to the region and the *TransNet* Extension Ordinance portfolio of projects, focused on compliance with *TransNet* Extension Ordinance provisions, and appeared earnest and open in efforts for continued improvement. Yet, we found certain leading practices that SANDAG should incorporate to better demonstrate its accountability to taxpayers.

SANDAG was Generally Compliant with *TransNet*, although Certain Focused Reporting would Bolster Accountability

While SANDAG and its *TransNet* Extension Ordinance partners were committed to compliance with the *TransNet* Extension Ordinance and approaches used generally aligned with traditional practices of peers reviewed, SANDAG should specifically track and report on its progress and compliance against the *TransNet* Extension Ordinance to enhance transparency.

External ITOC Annual Audits found SANDAG to be Compliant

According to SANDAG's Office of the Independent Auditor's FY 2020 Annual Report of Audits, there were 29 external audits conducted between FY 2008 and FY 2020 with 131 total recommendations made to SANDAG and its *TransNet* Extension Ordinance partners—of which 125 of the 131 recommendations pertained to the *TransNet* Extension Ordinance. Results of those audits generally found SANDAG to be compliant with provisions. While auditors did not review every aspect of the *TransNet* Extension Ordinance for compliance, there were certain outstanding issues that SANDAG was in process of addressing as described later in this chapter. [22]

Another transportation entity we reviewed employed a noteworthy technique for demonstrating compliance with its similar sales-tax program. Specifically, the Orange County Transportation Authority used a simple internal spreadsheet to annually track its compliance against its specific ordinance provisions with links to supporting documents or activities demonstrating compliance, responsible owners, and status. Staff in various divisions throughout the organization assigned as an "expert owner" provided detailed status that management reviewed and verified to demonstrate compliance.

SANDAG could employ similar protocols to track, summarize, and present how its efforts comply with *TransNet* Extension Ordinance provisions. In fact, in December 2020, SANDAG introduced a framework for reporting on its compliance through a one-page sheet showing key ordinance provisions organized into line items by fiscal year with icons that would mark items as compliant, in progress, or not compliant with footnotes available for needed explanations. Concerns were raised at the meeting about the staff resources needed to track and report on compliance; however, we believe SANDAG efforts to track and report this compliance would be minimal especially once a framework is in place.

SANDAG used Conventional Tools to Monitor Progress with a Dashboard Better than Most

In general, we found SANDAG used conventional tools in place to monitor and assess program progress that generally aligned with many other entities we reviewed. These standard systems included program management software such as Primavera in addition to dashboard features to monitor, control, and report on cost. While a handful of other entities reviewed used dashboards to provide high-level information for their similar sales-tax funded transportation programs, SANDAG's *TransNet* Dashboard contained much more detail on schedule, cost, and progress at the project level, corridor level, or program level than most.

---

[22] While the FY 2019 *TransNet* Fiscal and Compliance Audit Report noted the North County Transit District's noncompliance with eligibility of funds due to increase over its operating cost more than the allowed consumer price index, North County Transit District resolved the issues by requesting and obtaining an exclusion of cost allowance. This issue was discussed in the FY 2018 *TransNet* Triennial Performance Audit as well. Also, the compliance auditors found that three local jurisdictions needed an approved exaction fee which they were in process of collecting as of the end of our audit fieldwork.

While other entities provided high-level schedule and budget information, SANDAG provided greater detailed budget information by various categories, percentage of approved budget spent, and schedule data detailed by phase.

Efforts to Implement Plan of Excellence Showed Progress

Prompted by forecasting errors discovered in 2017, SANDAG developed a Plan of Excellence (POE) to strengthen data integrity, provide additional controls surrounding forecasting and record management, and enhance transparency, communication, and independent audits as shown in Exhibit 12. Overall, SANDAG made significant progress in implementing its plans, although some efforts were still in process.

EXHIBIT 12. SANDAG PLAN OF EXCELLENCE STATUS

GOALS		STATUS
ORGANIZATION STRUCTURE	Conduct an independent review of department structure and staffing resources necessary for success.	✓
COST & REVENUE PLANS	Improve communication of funding capacity, revenue projections, and project cost estimates.	✓
INDEPENDENT PERFORMANCE AUDITS	Enhance operational oversight and review by establishing a Board-level audit program.	✓
RECORDS MANAGEMENT	Prepare policies, procedures, and training for SANDAG employees regarding the creation, maintenance, and retention of public records.	✓
REGIONAL FORECASTING PRACTICES	Implement tools and practices to improve the accuracy, reliability, dissemination, and transparency of SANDAG forecasts.	✓ Conducted detailed review of forecasting model, dependency analyses; mapped process flows, developed data warehouse and extraction routines; and used peer review panel to validate forecasting models. ◐ Working on check points to disclose process, assumptions, and data processing; developing formal processes with staff roles, work flows, and technology.
DATA GOVERNANCE	Develop and implement practices to ensure the management, accuracy, and reliability of SANDAG data.	✓ Implemented several strong practices to ensure data reliability as discussed in Chapter 2. ◐ Working on standards for data through Capability Maturity Modeling Implementation.
TRANSPARENCY INITIATIVES	Enhance internal and external information sharing by ensuring SANDAG communications are straightforward, easy to understand, and reach a variety of audiences.	✓ Several steps taken, but will be on-going effort.
STAKEHOLDER COMMUNICATION	Proactively inform member agencies, stakeholders, and the public to increase awareness of SANDAG programs and projects.	✓ Several steps taken, but will be on-going effort.

Source: Auditor-Generated based on Plan of Excellence analysis.

Within the eight areas of focus in the POE, SANDAG planned and implemented a series of detailed actions within each area—most of which were complete or well under development as shown in Exhibit 12.
For instance, SANDAG studied how internal staff and external people use its data and implemented a

system in place to track data requests. It also reorganized its structure and established an independent performance audit function. Further, staff implemented a robust peer review process where a panel of internal and external experts examine reasonableness of funding assumptions and methodology as discussed in Chapter 2 of this report. We also found that SANDAG's 2019 Plan of Finance excluded revenues from less-certain sources to provide more transparency into the financial projections with staff providing more historical context when discussing projected revenues. Similarly, staff highlighted changes to individual project costs and more regularly presented information on the overall cost environment.

Staff presented Board Important Data, but Summarized Information Showing Actual Results against *TransNet* Extension Ordinance Plans would Provide Greater Insight

Overall, SANDAG was focused on the *TransNet* Extension Ordinance and steadfast in providing important progress data to the Board and ITOC through a variety of efforts and mechanisms. Facilitated by the *TransNet* Project Office responsible for managing and updating *TransNet* Extension Ordinance data, SANDAG staff throughout the organization collaborated to share data through the *TransNet* Dashboard, individual Major Corridor project cards, and quarterly reports on various *TransNet* Extension Ordinance areas including tax collections, revenue projections, and cost estimations. While this was important data to provide, SANDAG should also prepare summarized information, or brief synopses, for the Board and ITOC to more clearly indicate actual status and results against *TransNet* Extension Ordinance plans in terms of project scope, cost, and schedule.

SANDAG used a Variety of Conventional Methods to Track and Share *TransNet* Extension Ordinance Data

Generally, SANDAG used conventional tools to monitor and communicate *TransNet* Extension Ordinance progress that generally aligned with other entities we reviewed. Methods used to share data included:

- ✓ *TransNet* Dashboard
  Staff relied on standard financial and project management systems to monitor, control, and report on cost through SANDAG's *TransNet* Dashboard, and we found SANDAG's *TransNet* Dashboard was more robust than most other entities reviewed. Several entities either did not employ a dashboard at all or did not have the data analytic functionality as SANDAG to view summary, corridor level, or individual project data for budgets, expenditures, or schedules. In 2021, SANDAG plans to enhance its *TransNet* Dashboard functionality by linking projects to the *TransNet* Extension Ordinance and general SANDAG website for consistency and greater transparency.

- ✓ Project Cards
  Using *TransNet* Dashboard data as well as annual budget documents, SANDAG staff created and used individual project cards for its Major Corridors capital construction projects providing information on scope, costs, and schedule—although there were no comparisons of these results against planned cost and schedule.

- ✓ Quarterly Reports
  SANDAG provided several different quarterly status reports that communicated status on sales tax collections and allocations by *TransNet* Extension Ordinance category, monthly and yearly expenditures, high-level project milestones, financial market activities, and cost index reports.

Further, SANDAG operated a dedicated *TransNet* Project Office to manage, track, and update data and be the primary conduit for information and communication concerning the *TransNet* Extension Ordinance. Only one other entity we reviewed appeared to employ a similar type of office.

SANDAG should Clearly Communicate *TransNet* Extension Ordinance Progress against Plans

Striking the right balance between overburdening decision-makers with complicated matters and condensing information without affecting necessary detail that may get lost is difficult. While SANDAG recognized the need to summarize dense Board materials and took steps towards "right-sizing" effective information shared with the Board and ITOC, it needs to also summarize progress and accomplishments into an easy-to-digest format and more clearly report on *TransNet* Extension Ordinance opportunities and challenges.

For instance, we found SANDAG implemented several improvements over the last three years for communicating its *TransNet* Extension Ordinance efforts such as:

- **New *TransNet* Extension Ordinance Quarterly Status Reports for the Major Corridor and Regional Bikeway Programs** contained a lead one-page summary providing high-level information for the Major Corridor and Bike EAP projects such as funding allocations and major milestones for projects that were in progress. This snapshot was followed by more detailed charts for items such as expenditures by month and phase as well as construction cost and bidding trends.

- **"Short-Form" Staff Reports** accompanied Board discussions and information items limited to a maximum of two pages with descriptive information.

- **Reaching Out to Individual Board Members** started in March 2020 to provide explanation of materials or to answer questions.

- **New Distribution Protocols** for posting Board materials on the Board meeting website—including planned PowerPoint presentations—seven to ten days before the meeting to allow for sufficient review.

- **Streamlined Public Presentations and Graphics** that received positive affirmations from Board member in meetings.

However, while SANDAG provided an abundance of data to the Board and ITOC, there are opportunities for improvements by providing the Board and ITOC actual results against plans at the overall *TransNet* Extension Ordinance level and summarizing information into clearer and easier-to-read graphics. For instance, to summarize information for busy Board and ITOC members, SANDAG should create summarized graphics to quickly indicate program status based on data in the revised quarterly reports. Additionally, SANDAG could consider similar auditor-developed graphics such as shown in Chapter 1 of this report providing completion status of the Major Corridor Program's portfolio of projects at the 16 *TransNet* Extension Ordinance Corridor level and summarizing how much of the individual *TransNet* Extension Ordinance Projects within each corridor have been completed, are in-progress, or have moved beyond 2048 and outside the *TransNet* Extension Ordinance period. [23]

---

[23] Refer to Report Exhibits in Chapter 1 to use as a starting foundation for summary graphics to communicate more clearly to the Board.

Summarizing the information in this way would better allow decision makers to quickly identify deviations from plans and discuss risks or actions needed. In addition, it would increase visibility into all the work and effort SANDAG and its *TransNet* Extension Ordinance partners have put into delivering the program planned in 2004 and provide opportunities to explain any deviations from plans.

Other Entities Employed Strong Ordinance Tracking Practices that SANDAG Should Implement

While SANDAG demonstrated dedication to the *TransNet* Extension Ordinance and made progress on program commitments, it did not necessarily track, summarize, or report on overall *TransNet* Extension Ordinance progress in a clear or direct way as some other entities we reviewed. Some information on the *TransNet* Dashboard summarized projects done, in-progress, or completed, but it did not comprehensively compare that status against the original *TransNet* Extension Ordinance plans. SANDAG also provided an abundance of information to its Board and the ITOC on specific *TransNet* Extension Ordinance-funded projects or overall financial plans, but it did not summarize or compare its progress toward meeting those initial *TransNet* Extension Ordinance commitments. Several entities we reviewed employed excellent tools to report on actual results compared against plans that SANDAG should consider for its program.

For instance, as shown in Exhibit 13, the Pima Association of Governments in Tucson prepared a one-page document showing promised projects under their similar sales-tax funded measure against how many projects completed to date.

EXHIBIT 13. EXAMPLE STATUS REPORTING FROM PIMA ASSOCIATION OF GOVERNMENTS

Source: Regional Transportation Authority (RTA) FY 2019 Annual Report.

Similarly, the Maricopa Association of Governments in Phoenix used an annual report to communicate the status of implementation, changes, outlook, expenditures, and future costs for its sales-tax measure. While the annual report was voluminous, it provided details on the sales-tax requirements and plans, roles and responsibilities of all stakeholders, and status of how promised projects were being provided. The Orange County Transportation Authority also published a quarterly and annual report for its tax measure—in particular, its quarterly reports were notable with charts showing emerging issues and risks with proposed action steps, graphics communicating progress against promised schedules, and a master chart of all

projects and status of project stage. In another example, the Los Angeles Metropolitan Transportation Authority published its program updates on its Measure R program in a status report format that showed a list of projects funded by the tax measure, what phase each project is in, whether the project is on budget and on schedule, and a short narrative update for each. Also included in this report format were icons that indicated whether there were possible problems with the project, major issues, or if it was generally on target with plans. As such, SANDAG should review these tools used by other entities and create similar tracking and reporting documents for communicating actual results against *TransNet* Extension Ordinance plans conceived and describe reasons for plan changes or variances.

Progress was made on Prior ITOC Audit Recommendations, but Several Areas still Remain Outstanding and Need to be Addressed

As discussed earlier in this Chapter, SANDAG was responsive and made progress implementing many of the outstanding FY 2018 *TransNet* Triennial Performance Audit recommendations—although more than half, or 52 percent, of the recommendations from the audit remained outstanding as shown in Exhibit 14. Of the 40 prior recommendations made from the prior audit, SANDAG fully addressed 19 recommendations and provided general target completion dates of Fall 2021 for the remaining items. [24] Some outstanding recommendations related to updating the Story Map web tool to show accomplishments, implementing website and *TransNet* Dashboard updates to enhance clarity and accountability, reviewing local projects in light of SANDAG's Complete Streets Policy, revisiting expenditure plan 70/30 definitions, and more. Yet, most of the unresolved areas related to performance and tracking progress which are critical to gauging whether efforts to date met *TransNet* Extension Ordinance goals.

EXHIBIT 14. STATUS OF FY 2018 *TRANSNET* TRIENNIAL PERFORMANCE AUDIT RECOMMENDATION IMPLEMENTATION

21
In-Progress

19
Completed

40 Recommendations Total
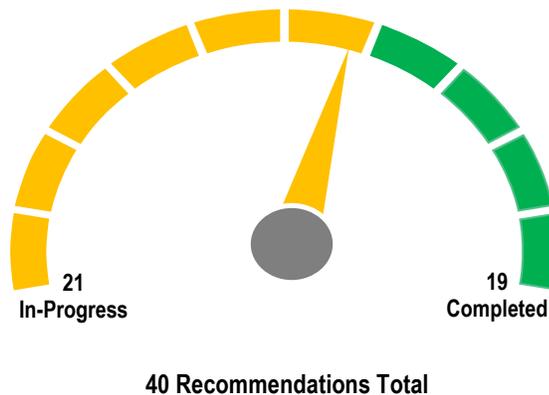
Source: Auditor analysis and verification of SANDAG's efforts to address FY 2018 *TransNet* Triennial Performance Audit recommended action.

---

[24] Although the FY 2018 *TransNet* Triennial Performance Audit listed 26 recommendations, several recommendations had subparts a, b, or c that resulted in a count of 40 recommendations. SANDAG addressed all recommendations from the FY 2009 and FY 2012 *TransNet* Triennial Performance Audits—although there are three outstanding recommendations (out of 18 recommendations) that were still in-progress from the FY 2015 *TransNet* Triennial Performance Audit. Those three outstanding recommendations related to capturing and reporting performance of local streets and roads and *TransNet* Extension Ordinance grants, in addition to establishing an overarching performance measurement framework—for which implementation is closely tied to the results of SANDAG's in-progress Transportation Performance Management project that was still underway as of February 2021.

In addition to drafting changes for its revised Regional Transportation Plan (RTP) expected in 2021, SANDAG has been in a state of flux that may have impacted its efforts in addressing the *TransNet* Triennial Performance Audit recommendations. Changes over the past three years involved Board structural and voting changes, the hire of a new Executive Director, turnover at the executive management level, and an entire office reorganization redefining roles, responsibilities, and lines of authority.

Efforts were in Progress, but more Could be Done in the Short-Term to Report on Performance

While SANDAG seems to have kept pace for compliance with federal requirements related to performance measurement, it has not yet captured, tracked, or reported performance specific to its *TransNet* Extension Ordinance goals. [25] Efforts were in progress to establish a comprehensive framework to capture, analyze, and report performance data as well as address prior audit concerns, but more could be done in the short-term to track performance and progress towards *TransNet* Extension Ordinance goals.

Specifically, after the last audit was released in 2018, SANDAG started working on inventorying internal performance activities across the agency. Efforts were placed on hold in 2019 until early 2020 when SANDAG initiated its Transportation Performance Management project by hiring an external firm to conduct a performance peer review, identify duplicate efforts and streamline activities, and help SANDAG establish a performance framework by the end of November 2020. The consultants are using the Federal Highway Administration's Transportation Performance Measurement guidebook to create a framework using data related to areas such as congestion, safety, and greenhouse gas and develop an implementation plan for SANDAG defining processes, level of effort needed, and analytical tools for Board discussion and approval. However, as of December 2020, target completion dates for a consultant report continued to be delayed into 2021 and the report was unavailable for us to review during our audit.

While the more comprehensive Transportation Performance Management framework may ultimately allow SANDAG to measure performance against regional goals, SANDAG still had not tracked performance against the existing *TransNet* Extension Ordinance goals over the last three years. We understand SANDAG's in-progress 2021 Regional Transportation Plan might create new goals and performance measures for the region and SANDAG wants to align those performance measures with performance measures in development for the *TransNet* Extension Ordinance to achieve efficiency to the extent possible. Yet, the original goals of the *TransNet* Extension Ordinance remained the same and SANDAG could take simple steps to measure or report on performance more immediately without requiring a significant staff burden.

Simpler shorter-term actions for tracking and reporting against *TransNet* goals could include:

- ✓ **Using results from some of the performance indicators** captured during the 2019 RTP update process such as fatalities and serious injuries per vehicle miles traveled to measure safety in the area. That data existed and was readily available from the California Highway Patrol's Statewide Integrated Traffic Records System (SWITRS): https://www.chp.ca.gov/Programs-Services/Services-Information/SWITRS-Internet-Statewide-Integrated-Traffic-Records-System

---

[25] The federal Moving Ahead for Progress in the 21st Century (MAP-21) implemented in 2012 established national performance goal areas and the Fixing America's Surface Transportation (FAST) Act strengthened MAP-21 by requiring target setting to be incorporated into performance-based planning.

✓ **Incorporating an easy scorecard feature** like Houston-Galveston Area Council produced: https://www.h-gac.com/transportation-performance-measures/scorecard

✓ **Preparing straightforward charts, narratives, and reports** with visuals and short narratives like the Sacramento Area Council of Governments that graphically showed annual fatalities per 100 million vehicle miles traveled over time compared with the State using 5-year rolling averages. https://www.sacog.org/sites/main/files/file-attachments/appendix_e___final.pdf?1573685716.

Similarly, the Houston-Galveston Area Council produced a performance measure report where it presented simple tables showing performance targets and actuals for safety, pavement condition, and congestion, among others: https://www.h-gac.com/getmedia/c27f3ae7-4dfc-4ff2-ab70-e65a3ba5abc2/performance-measures-report.pdf as well as a separate performance measures webpage at http://www.h-gac.com/transportation-performance-measures/default.aspx.

✓ **Developing quick performance status tools** like auditors prepared for the FY 2018 *TransNet* Triennial Performance Audit where key provisions were organized into line items and could be marked off as meeting or not meeting performance expectations by fiscal year. Those exhibits were simple and not time-consuming to prepare.

✓ **Linking safety performance to projects** and investments like the Metropolitan Transportation Commission did in its Federal Performance Report: https://mtc.ca.gov/sites/default/files/Federal_Performance_Report_Final_2019_TIP.pdf. [26]

✓ **Considering the assignment of a designated staff** to track, coordinate, and report on performance efforts and outcomes like the Maricopa Association of Governments: https://azmag.gov/Programs/Transportation/Transportation-Performance

SANDAG offered some potential ways to demonstrate accountability and be more transparent. While considering various options as part of the development of its Transportation Performance Management Framework, staff developed and offered a draft infographic to track and report on performance and progress against *TransNet* Extension Ordinance goals and address a FY 2018 *TransNet* Triennial Performance Audit Recommendation. [27] The proposed "Goals and Provisions" document would track progress against seven *TransNet* Extension Ordinance goals as compliant, in-progress, or not compliant. [28] If SANDAG completes the document with supporting details, it could be a useful and effective tool.

Some concerns were raised about the potential staff resources needed to populate the tracking document, but we feel strongly that it is important to have that accountability to the *TransNet* Extension Ordinance goals. Moreover, capturing the supporting details and data for an annual report would take an insignificant amount of staff time as the FY 2018 *TransNet* Triennial Performance auditors were able to capture this information with nominal effort during their previous audit. Nonetheless, without performance outcome data compared against *TransNet* Extension Ordinance goals more than 13 years into the program, SANDAG is

---

[26] Metropolitan Transportation Commission's "Federal Performance Report: Assessment of 2019 TIP Investments in Addressing Federally-Mandated Performance Measures."

[27] SANDAG presented its "Goals and Provisions" document at the December 9, 2020 ITOC meeting.

[28] Seven *TransNet* goals were (1) relieve traffic congestion, (2) improve safety, (3) match state/federal funds, (4) expand Major Corridors, (5) maintain/improve local roads, (6) increase transit for seniors/disabled, and (7) expand commuter express bus/trolley/coaster.

at a great disadvantage and challenged to know if its activities made an impact, decisions are data driven, and practices ensure accountability to the *TransNet* Extension Ordinance.

Recommendations

To incorporate best practices and demonstrate greater accountability to the *TransNet* Ordinance, the ITOC should request the SANDAG Board to direct staff to:

8. **Critical Priority.** Clearly and comprehensively report on actual progress and accomplishments (or lack thereof) against *TransNet* Extension Ordinance plans on a regular, periodic basis—such as quarterly or annually—for project scope, costs, schedule, accomplishments, and outcomes against promises.

9. **High Priority.** Demonstrate compliance with the *TransNet* Extension Ordinance by identifying, tracking, and reporting on various requirements and provisions to the Board and ITOC on a regular, periodic basis—such as quarterly or annually.

10. **High Priority.** Implement shorter-term steps to report on performance, while waiting on the longer-term Transportation Performance Management Framework, including continued development of SANDAG's proposed "Goals and Provisions" document to distribute to the Board and ITOC.

11. **Medium Priority.** Create summarized graphics to quickly indicate *TransNet* Extension Ordinance status based on data in the revised quarterly reports for reporting to the Board and ITOC.

Chapter 4: AB 805 Weighted Voting Did Not Significantly Change Delivery of *TransNet* Extension Ordinance Programs and Projects

> Chaptered into law in October 2017, Assembly Bill 805 affected the composition of the SANDAG Board and its voting structure, as well as created within SANDAG an Office of Independent Performance Auditor. The weighted voting changes imposed by Assembly Bill 805, however, did not significantly impact the delivery of *TransNet* Extension Ordinance programs and projects.

- **Weighted Votes were not Often Utilized during Board Meetings over the Audit Period.**
  - Only 9 of 67 Board meetings reported members calling for weighted votes—just 12 times in total.
  - City of San Diego called or seconded motions for a weighted vote most often, at 8 of the 12 times and its vote subsequently changed the result of the tally vote in 11 instances.

- **Weighted Vote Results did not Significantly Change the Planned Implementation or Delivery of *TransNet* Extension Ordinance Programs and Projects.**
  - Of approximately 200 unique agenda items voted on between July 1, 2017 and October 29, 2020, a weighted vote only occurred 12 times—and in only three instances did the weighted vote reverse the result of the tally vote related to a *TransNet* Extension Ordinance program or project.[29]
  - Those three votes related to a Bike Early Action Program Bond issuance, an environmental exemption on the Imperial Avenue Bikeway, and the Downtown Bus Stopover & Multiuse Facility. None of the weighted votes, however, significantly changed the delivery of programs or projects outlined in the *TransNet* Extension Ordinance.

Chapter Introduction

In February 2017, Assembly Member Lorena Gonzalez Fletcher introduced Assembly Bill 805 (AB 805) to "reform SANDAG because taxpayers deserve more accountability, better transparency and more proportional representation at our regional transportation agency." Not only did the state legislation create an independent auditor position to report to the Board, but AB 805 also changed the composition of the SANDAG Board and its voting structure and provided additional voting power to larger more populous cities like San Diego and Chula Vista. Yet, while AB 805 changed the SANDAG Board governance and voting structure, it did not significantly impact planned *TransNet* Extension Ordinance program or project implementation over the last three years.

Weighted Votes were Not Often Utilized During Board Meetings over Audit Period

Between July 1, 2017 and October 29, 2020, the Board voted on approximately 200 items during 67 Board meetings—with just a few instances where members exercised the weighted vote option. Specifically, at least one weighted vote was reported during nine different Board meetings. Within these nine meetings, a weighted vote was called 12 times as shown in Exhibit 15.

---

[29] Weighted votes were reported differently in 2017 where tally votes were assigned weights based on jurisdiction population, rather than tracked as a separate vote taken when called by a Board member to challenge the tally vote results. Thus, we excluded the 2017 weighted votes counts from our tabulation and analysis.

Calendar Year	Number of Meetings	Number of Weighted Votes
2018	3	3
2019	2	4
2020	4	5
Total	**9**	**12**

Source: SANDAG Board of Directors' agendas, meeting minutes, and vote tallies.

Note: Does not include meetings from July 1, 2017 to December 31, 2017 because weighted votes were counted differently. Specifically, 2017 votes were reported as tally votes that were assigned weights based on jurisdictional population—rather than tracked as a separate weighted vote called by a Board member to challenge the tally vote results.

Post-AB 805, Weighted Voting Trends Changed

Though there were few weighted votes occurring overall, auditors noted changes in post-AB 805 voting patterns as described in the bullets that follow:

- **More Members Voted against Board Motions More Often Post-AB 805**
  Starting in 2018, significantly more Board members voted against weighted vote items—although more than half of those votes related to the regional housing needs assessment which is not *TransNet* Extension Ordinance-related. For instance, for the weighted votes occurring in 2017, on average, only one "no" vote occurred against a motion. When compared with the 12 weighted votes cast between 2018 and 2020, an average of 9 votes were cast against a motion—although as many as 14 votes were cast against an item in some instances. However, these results were somewhat skewed in that more than 58 percent of the post-AB 805 weighted votes related to the same topic of the regional housing needs assessment.

- **City of San Diego Called for Weighted Votes Most Often and Was Often the Tie-Breaker**
  During the 12 weighted votes occurring between January 1, 2018 and October 29, 2020, the City of San Diego called for (or seconded) the weighted vote motion most often at 8 times. The Cities of Carlsbad and Chula Vista were the jurisdictions that second most often called for a weighted vote at 3 times apiece. Additionally, during the 12 weighted votes, the City of San Diego's vote changed the result of the tally vote on 11 of the 12 occasions due to its voting weight being the heaviest.

Weighted Vote Results Did Not Significantly Change the Planned Implementation or Delivery of *TransNet* Extension Ordinance Projects

In terms of unintended impacts of AB 805, changes to the weighted vote process did not significantly affect the planned scope, timing, or delivery of *TransNet* Extension Ordinance programs or projects over the three and one-half years since the last audit period.

- Specifically, we identified 67 Board meetings that occurred between July 1, 2017 and October 29, 2020 and approximately 200 unique agenda items where Board members voted.

- Of the approximate 200 votes, only 12 votes, or 6 percent, were weighted votes—and only three of those 12 weighted votes changed the voting outcome related to the *TransNet* Extension Ordinance.

- Those three votes related to the Bike EAP bond issuance (January 2020), an environmental exemption for the Imperial Avenue Bikeway (May 2018), and the Downtown Bus Stopover & Multiuse Facility (June 2018). However, none of these weighted votes changed the delivery or implementation of programs or projects promised with *TransNet* Extension Ordinance.

- For instance, the Bike EAP motion was only a financing mechanism borrowing against the future revenues allocated to Bike EAP and the Downtown Bus Stopover *TransNet* Extension Ordinance project related to right-of-way on the project. While the Bike EAP bond issuance motion initially failed with SANDAG reporting some Board comments suggesting the funds could be re-directed to other non-Bike EAP infrastructure uses, the Board ultimately passed the motion with a weighted vote allowing the Bike EAP to be completed in accordance with the *TransNet* Extension Ordinance.

AB 805 Did not Significantly Impact Board Voting Participation related to *TransNet* Extension Ordinance Items

As part of our audit, we reviewed attendance during Board voting and did not identify any significant voting absences or notable attendance trends over the audit period that could be attributed to AB 805. While there could be multiple items where a vote was taken during a Board meeting and Board members were absent for certain agenda line items and present for others within the same Board meeting, most jurisdictions were not absent from a vote more than 10 percent of the time. Specifically, only three jurisdictions had a higher percent of absences from a vote— the County of San Diego (12 percent) and the Cities of Imperial Beach (13 percent) and El Cajon (21 percent). These jurisdictions represent both larger and smaller populations as well as different geographical regions; thus, there was no clear correlation between size, location, and attendance patterns. Additionally, we compared these results to Board meeting attendance prior to the passage of AB 805 for a six-month period between July 1, 2017 and December 31, 2017 and also found no discernable trends with similar absence levels.

While our review found that generally only one or two jurisdictions were absent from a vote at any given time, there were a small number of occurrences where more than four jurisdictions were missing at a time. Mostly notably, these cases related to separate meetings for the development of the 2019 Regional Transportation Plan, motorist aid services, and SANDAG audit matters.

Only a Few Other Entities Reviewed Used Similar Weighted Vote Structure

Our review of 15 other transportation and transit agencies revealed that several were like SANDAG in terms of Board structure, members, and general voting ideology as shown in Exhibit 16—although SANDAG's use of the weighted vote was less common than other entities. Most used a tally vote weighted by population, although four entities used separate weighted votes like SANDAG. One entity had the ability to call a separate weighted vote that would have to pass on both a tally majority and a weighted majority. Specifically, the Maricopa Association of Governments in Phoenix had the ability to call a weighted vote, although it was rarely used.

According to the Federal Highway Administration, weighted voting was uncommon among with only 13 percent of 276 Metropolitan Planning Organizations nationwide reporting using weighted votes. [30] Of those with weighted vote provisions, several stated they never or rarely employed the feature.

EXHIBIT 16. OTHER TRANSPORTATION OR TRANSIT ENTITY VOTING STRUCTURES

	Organization	Structure Type	Elected Officials	# Voting Members	Higher Population = More Votes	Separate Weighted Vote
	SANDAG	**Board**	**Y**	**21**	**Y**	**Y**
1	Metropolitan Transportation Commission	Commission	Y	18	Y	N
2	Sacramento Area Council of Governments	Board	Y	31	Y	N
3	Maricopa Association of Governments	Council	Y	34	Y	Y
4	Southern California Association of Governments	Council	Y	86	Y	N
5	Puget Sound Regional Council	Council	Y	36	Y	N
6	Miami-Dade Transportation Planning Organization	Board	Y	24	N	N
7	Regional Transportation District Denver	Board	N	15	Y	N
8	Orange County Transportation Authority	Board	Y	17	Y	N
9	Pima Association of Governments	Council	Y	9	N	N
10	Metropolitan Council	Council	N	17	N	N
11	North County Transit District	Board	Y	9	Y	Y
12	San Diego Metropolitan Transit System	Board	Y	15	Y	Y
13	Valley Metro	Board	Y	16	Y	Y
14	Houston-Galveston Area Council	Board	Y	36	Y	N
15	Portland Metro	Council	N	7	N	N

Source: Comparable entities organizations' Board policies, handbook, bylaws, and Board webpages.

In terms of board structure, 12 of the 15 agencies' Boards (or Board equivalent) we reviewed were comprised of elected officials like SANDAG. One entity—the Regional Transit District in Denver was comprised of publicly elected members. Members of another entity, the Metropolitan Council in the Twin Cities Metropolitan Area of Minnesota, were elected, but could not hold other separately elected positions while serving on the council. Board size largely depended on the population of the greater region, but it ranged from 7 to 36 voting members (with an outlier of 86 members) across the other agencies reviewed—with the average membership being 25 members similar to voting members like SANDAG.

Recommendations
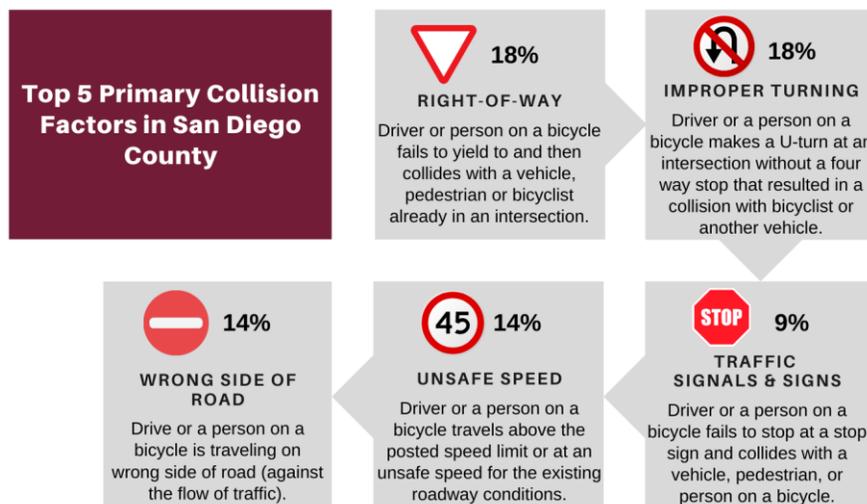
There were no recommendations for this Chapter.

---

[30] According to the U.S. Department of Transportation's Federal Highway Administration's Metropolitan Planning Organizational Structures Report issued in October 2017.

Chapter 5: Enhancements could be made to SANDAG's Regional Safety Planning Efforts, although Bicycle & Pedestrian Safety Improved

With safety as a stated *TransNet* Extension Ordinance goal, SANDAG conducted regional safety planning efforts— although it did not perform certain safety activities as were employed by some other entities we reviewed. Additionally, we found bicycle and pedestrian safety improved in San Diego County over the past few years.

- SANDAG conducted regional safety planning as part of its Regional Transportation Plan activities, but could enhance practices through a dedicated coordinator and development of a regional safety plan with strategies.

- Like its peers, emergency evacuation capacity planning was mostly outside of SANDAG's purview—although more cross-agency collaboration would strengthen regional safety focus.

- Bicycle and pedestrian safety improved in San Diego County with fewer bicyclists and pedestrians injured or killed each year between 2015 and 2018.

- Primary factors contributing to collisions involving bicycles related to car drivers or bicyclists failing to yield and improper U-turning at intersections with car drivers at fault most of the time.

BICYCLE AND PEDESTRIAN COLLISION FACTORS, 2016 TO 2019

Top 5 Primary Collision Factors in San Diego County

18% RIGHT-OF-WAY
Driver or person on a bicycle fails to yield to and then collides with a vehicle, pedestrian or bicyclist already in an intersection.

18% IMPROPER TURNING
Driver or a person on a bicycle makes a U-turn at an intersection without a four way stop that resulted in a collision with bicyclist or another vehicle.

14% WRONG SIDE OF ROAD
Drive or a person on a bicycle is traveling on wrong side of road (against the flow of traffic).

14% UNSAFE SPEED
Driver or a person on a bicycle travels above the posted speed limit or at an unsafe speed for the existing roadway conditions.

9% TRAFFIC SIGNALS & SIGNS
Driver or a person on a bicycle fails to stop at a stop sign and collides with a vehicle, pedestrian, or person on a bicycle.

- City of San Diego and City of Escondido employed solid safety strategies such as identifying hotspots and implementing targeted counter measures to address the high frequency incident area.

Key Recommendations

- ✓ **Medium Priority.** Consider the benefits in identifying a regional safety planning coordinator to synchronize safety efforts of the region and regularly communicate progress on safety goals to the Board and ITOC.

- ✓ **Medium Priority.** Consider and prepare a regional safety plan that complements Caltrans' Statewide Plan and details SANDAG's vision, goals, objectives, and strategies to address regional trends, road conditions, and driving behaviors.

- ✓ **Medium Priority.** Consider ways to encourage state and local emergency, planning, and response entities to include SANDAG in discussions and local plans related to emergency capacity so that regional planners stay informed and collaborate on emergency and resilience issues.

Chapter Introduction

With a *TransNet* Extension Ordinance goal to improve safety of the transportation system and federal requirements also focused on safety, SANDAG employed conventional Metropolitan Planning Organization (MPO) required activities that focused on and considered safety through its transportation planning. Yet, we identified best practices for SANDAG to consider incorporating to enhance its safety planning efforts such as assigning a dedicated person or unit to coordinate safety planning needs and efforts related to *TransNet* Extension Ordinance safety goals in addition to crafting safety strategies through a regional safety plan coordinated with Caltrans's statewide plans.

Further, like its peers, SANDAG did not get heavily involved with regional emergency evacuation or capacity planning for safety hazards as those activities seemed to fall under the authority of Caltrans over highways or local jurisdictions for streets and roads. While Caltrans, local jurisdictions, and transit operators generally assumed primary safety responsibilities for their respective highway, streets and roads, or transit networks, SANDAG could consider implementing innovations and activities used by other similar entities to enhance its safety culture.

Although SANDAG is currently developing a formal Transportation Performance Measurement framework that staff stated would include safety aspects on all roadways, the ITOC asked the auditors to solely focus on bicycle and pedestrian safety. We found that both bicycle and pedestrian injuries and fatalities declined in the San Diego region over the three-year period under audit, and there were several programs at the state and local levels to address higher safety risk areas.

SANDAG Considered Safety in Regional Planning, but could Enhance Practices through More Coordinated Efforts

Although SANDAG fulfilled its federal safety planning responsibilities and other entities conducted safety activities statewide and at the local level, there were limited regional safety activities.[31] Several staff at SANDAG considered safety as part of regional planning for the Regional Transportation Plan; yet, there was no dedicated unit or team charged to manage or coordinate safety planning for the region.

SANDAG's efforts included the use of statewide safety statistics to forecast future travel and identify areas of need as well as to identify solutions during project planning and development work. Additionally, SANDAG staff reviewed safety data using state and federal databases to help set targets in compliance with federal requirements as well as to assess *TransNet* Extension Ordinance-funded grant applications. [32] Another SANDAG safety planning activity included identifying local project funding where project selection and evaluation criteria included safety features such as reducing frequency of collisions.

While SANDAG staff reviewed safety data for regional planning, they did not specifically track or report on actual safety statistics or coordinate with locals to gauge what specific projects were needed to improve

---

[31] Federal Highway Administration/Federal Transit Administration (FHWA/FTA)) planning certification reviews in both 2016 and 2020 found SANDAG fulfilled its planning responsibilities—several that pertain to requirements to increase safety of the transportation system.

[32] Safety data is captured by the California Highway Patrol's Internet Statewide Integrated Traffic Records System (SWITRS) database, and can be used to establish targets and assess performance in accordance with the federal Moving Ahead for Progress in the 21st Century (MAP-21) and the Fixing America's Surface Transportation (FAST) Act.

safety outcomes. Mostly, SANDAG relied on Caltrans to collect safety statistics, identify trends, and implement efforts to improve safety with Caltrans assuming the lead statewide through public campaigns and performance measurement related to highway and roadway safety in collaboration with local jurisdictions who implemented their own dedicated safety projects or safety analysis.

For instance, Caltrans prepared a Strategic Highway Safety Plan where it tracked collision rates and causes as well as developed a plan to address safety through the five 'E's—(1) engineering, (2) enforcement, (3) education, (4) emergency response, and (5) emerging technologies. Additionally, Caltrans was required to develop a Highway Safety Improvement Plan to meet safety targets and identify challenge areas to address through workgroups led by state officials that included staff from SANDAG.[33] Local jurisdictions also assumed responsibilities for safety in their area by collecting local safety data, identifying "high risk" roadways, and conducting analysis to inform their capital improvement programs.

Yet, SANDAG's degree of focus on safety planning aligned with most of the 12 other entities with similar responsibilities we reviewed—in fact, nine entities appeared to conduct similar activities as SANDAG. However, a few of the entities employed certain best practices and dedicated efforts to enhance their safety planning cultures that SANDAG may want to consider implementing as follows:

✓ **Designation of Safety Coordinator and Committee**

Three entities—the Maricopa Association of Governments, Pima Association of Governments, and Regional Transportation District—designated a specific individual to coordinate safety in the region. At the Maricopa Association of Governments, the Transportation Safety Program Manager was responsible for coordinating and planning regional transportation safety issues through its Transportation Safety Planning Program. Similarly, the Safety Coordinator for the Pima Association of Governments conducted safety assessments and provided recommendations for identified transportation safety concerns.

Further, Maricopa Association of Governments also utilized a Transportation Safety Committee, in addition to its Public Safety Committee similar to SANDAG's Public Safety Committee, that provided oversight by identifying ways to address safety issues and needs through the regional transportation planning process. Moreover, approximately 17 percent of nearly 280 MPOs surveyed by the Federal Highway Administration reported employing staff with some type of safety specialization as larger or complex metropolitan areas often required staff with more specialized planning expertise. [34] While SANDAG considered safety issues as part of its regional planning, designating a coordinator or committee help highlights the importance of safety and provides a more centralized, regional focus.

✓ **Development of Regional Safety Plan**

At least three other entities—Houston-Galveston Area Council of Governments, Maricopa Association of Governments, and Pima Association of Governments—developed regional strategic safety plans looking at crash data, discussing targets, and describing how their efforts supported and were closely coordinated with statewide safety plans. The entities coordinated their regional safety

---

[33] State officials included the Governor's Office, Caltrans, and California Highway Patrol.

[34] U.S. Department of Transportation Federal Highway Administration, MPO Staffing and Organizational Structures, October 2017.

plans with overarching statewide safety plans developed by their state departments of transportation and documented how and what the entities could focus on in the region. For instance, the purpose of the Pima Association of Governments' plan was to discuss security-related issues and efforts to protect transportation networks and facilities and was prepared as part of the MPO's planning process to consider projects and strategies to increase security of the transportation system in accordance with U.S Code Title 23, Section 134.

Additionally, the Maricopa Association of Governments' plan identified a culture of safety and established a vision, goals, objectives, strategies, countermeasures, and performance measure for transportation safety that is serving as a cornerstone in the development of its next Regional Transportation Plan and anticipated extension of its local sales-tax measure. The Maricopa Association of Governments looked at regional trends, road conditions, and driving behaviors on freeways and streets and included detailed strategies on how to meet targets. Strategies included implementing a road safety assessment program to screen intersections for high crash risk or high volume of bicyclists and pedestrians, prioritizing those improvements based on high crash risk intersections, encouraging and prioritizing local projects with safety elements that met evaluation criteria, and identifying new practices of standards that integrate safety into planning and design. To monitor the effectiveness of its regional safety plan, the Maricopa Association of Governments will produce an annual Transportation Safety Performance Report. Moreover, a working group was commissioned to explore ways to mainstream road safety consideration into regular MPO planning.[35]

Similarly, the Houston-Galveston Area Council of Governments developed its regional plan because safety had not been addressed in a "coordinated, comprehensive manner" as state and local governments worked on their individual priorities. Like Maricopa Association of Governments, the Houston-Galveston Area Council of Governments' plan supports the state's highway strategic plan.

Given that safety continues to be one of the goals of the *TransNet* Extension Ordinance and the existing 2019 RTP as well as is likely to be part of the upcoming 2021 RTP as safety is a primary transportation goal, SANDAG should consider designating a safety coordinator to synchronize safety efforts of the regional and develop a regional safety plan with regular communication on safety progress.

Emergency Evacuation Capacity Planning Mostly Outside of SANDAG's Purview, Although more Cross-Agency Collaboration could Benefit Safety in the Region

In terms of system capacity for emergency evacuations, Caltrans together with the California Highway Patrol and local emergency entities took the lead on determining the most appropriate evacuation routes in the event of an emergency rather than SANDAG. While not a specific federal responsibility for SANDAG or other MPOs, some entities we reviewed were slightly more involved with regional collaboration related to emergency planning than SANDAG—and some federal experts and others in industry encouraged MPOs to get more engaged.

---

[35] Maricopa Association of Governments FY 2016 Strategic Transportation Safety Plan available at https://azmag.gov/Programs/Transportation/Safety-and-TSM-O-Programs/Transportation-Safety-Planning-Program.

Several Entities Involved with Emergency Planning, but *TransNet* Extension Ordinance-Funded Planning for System Capacity was Limited

Many organizations at the local and state level were involved with San Diego County preparedness, incident management, operations, and response, although there did not seem to be a central point of contact or an entity "responsible" for intergovernmental transportation planning of system capacity for emergency evacuation in San Diego similar to other regions we reviewed. For instance, the County of San Diego Office of Emergency Services was responsible for the coordination of the San Diego region's response to emergency management, including mitigation, preparedness, response, and recovery. Further, it appeared that Caltrans, California Department of Forestry and Fire Protection, and local law enforcement coordinated annually on fire evacuation drills which may include consideration or plans for temporarily increasing capacity such as opening freeway shoulders to alleviate the impact from mass evacuations. While there was no centralized function at SANDAG or specific *TransNet* Extension Ordinance effort coordinating assessment of system capacity needs or directly planning for natural hazard incidents, SANDAG stated it had done some collaboration with local jurisdictions throughout the region over the last few years through its studies of climate resilience focused on seawalls and storm surge.

Additionally, these local and state entities created several formal plans that mostly discussed emergency response efforts such as the San Diego Emergency Operations Plan and the Multi-Jurisdictional Hazard Mitigation Plan. Some plans focused on hazards and certain capital planning projects (such as for State Route 67), but there were scarce capacity assessment methodologies incorporated. Rather, most plans seemed to focus on evacuation, communication, and outreach once an emergency was in place—but not necessarily the preplanning education or capital project designing aspects of hazard mitigation. These plans described collaboration among agencies such as the San Diego County Emergency Operations Center, San Diego Sheriff's Department, Caltrans, California Department of Forestry and Fire Protection, California Highway Patrol, and others to identify evacuation points and transportation routes.

Yet, while various local entities often coordinated with state agencies to develop emergency plans, there was no mention of contact or inclusion with SANDAG representatives. Although emergency evacuation system capacity was not a specific MPO responsibility, the challenge remains on how SANDAG is made aware of and can get involved in emergency planning conversations with locals.

System Capacity was Mostly Considered When Specific Project Planning was Underway

Like other MPOs, SANDAG worked with local, state, and federal partners to improve the general safety and security of the transportation system. Yet, it had not conducted any specific studies or planning to address or mitigate natural hazard incidents in the region as others seemed responsible for those activities—nor had it assessed, prepared, or measured system capacity for emergency evacuations—in particular, the inland areas in case of wildfires.

Nonetheless, Caltrans described its protocols to coordinate with local jurisdictions once specific projects enter the environmental planning phase where engineers conduct alternative analysis on the best scope or configuration for a project. At that time, Caltrans considers traffic control measures such as shoulder use or reverse lane flow to increase capacity and analyzes vehicle miles of travel at the time a project will start

with a general capacity rule that you can move 1,000 cars per lane per hour—although capacity decreases in rural areas with windy roads and many people towing recreational trailers and horse trailers.

For instance, on the SR 67 *TransNet* Extension Ordinance project, the SANDAG Board authorized $600 million in September 2019 that included funding to consider evacuation route improvements along SR 67 including hard shoulders and additions of general-purpose lanes. Caltrans and SANDAG were working together with California Department of Forestry and Fire Protection and the San Diego County's road and public works teams considering emergency evacuation options during our audit fieldwork. Moreover, SANDAG is currently considering emergency events as an element of its in-progress CMCP being prepared for roadway configurations and capacity needs for the next Regional Transportation Plan in 2021. Specifically, according to SANDAG, its CMCP efforts currently underway for SR 67 will evaluate evacuation alternatives, among other needs, to determine the most optimal design configuration.

SANDAG's Level of Emergency Evacuation Planning Aligned with Most Other Entities We Reviewed

Like SANDAG, most MPOs we reviewed also did not specifically plan for emergency evacuation or capacity assessments in their regional transportation plans. Specifically, our review of seven agencies revealed that most were not directly involved with emergency planning in their region, although a few entities discussed certain hazard planning efforts as shown in Exhibit 17.

EXHIBIT 17. HAZARD MITIGATION OR EMERGENCY PLANNING EFFORTS REPORTED AT OTHER ENTITIES REVIEWED

Agency	Hazard Mitigation & Resiliency or Emergency Planning	Regional Transportation Plan Efforts
Maricopa Association of Governments		• Detailed types of emergency management programs and functions regional entities provided. • Clarified that emergency planning is not part of its responsibilities.
Metropolitan Transportation Commission	✓	• Described resilience planning for flood/earthquake protection. • Had broad policy planning, climate strategies, and grant opportunities. • Developed a resilience action plan with regional agencies including Caltrans, local jurisdictions, Federal Emergency Management Agency, California Earthquake Authority, and Environmental Protection Agency.
Pima Association of Governments		• Separate Regional Safety Plan that detailed types of emergency management programs and functions regional entities provided. • Clarified that it does not have a direct role in emergency planning, but will work to coordinate activities and provide high level of support.
Portland Metro Regional Council	✓	• Programmed project for emergency planning and transportation routes. • Updated agreements with others for regional disaster preparedness.
Puget Sound Regional Council	✓	• Conducted a regional survey to understand players and roles in related to climate resiliency and natural hazards.
Sacramento Area Council of Governments		• Nothing related to emergency planning or resiliency/hazard mitigation.
Southern California Association of Governments		• Assisted other agencies in a supporting role such as participating in an earthquake preparedness plan in 2008. • Stated Federal Emergency Management Agency limited its ability to assist with hazard preparedness for individual jurisdictions.

Source: Auditor-Generated based on recent Regional Transportation Plan reviews at agencies listed.

In fact, the Pima Association of Governments reported the importance of understanding the role that MPOs can play in "promoting coordinated planning in anticipation of unexpected events or natural disasters."

However, the limited level of MPO involvement in system capacity for emergency evacuations is likely because those entities are not specifically responsible for addressing emergency evacuation routes as part of their federal requirements over regional planning efforts.

For instance, Portland Metro included a discrete planning project as part of the regional transportation plan related to emergency planning through an evaluation of transportation routes having a high likelihood of being damaged or cut-off during an earthquake as well as updated its memorandum of understanding agreement in place with other entities in the five-county region to partner with a regional disaster preparedness organization. In another example, the Metropolitan Transportation Commission in the Bay Area developed a resilience action plan outlining several actions, related partners, and timeframes for implementation related to establishing a technology services team to broadly share data, best practices, and grant opportunities for climate adaption and natural hazard mitigation. Further, the Puget Sound Regional Council administered a regional collaborative survey to identify specific roles and actions of entities in their region and was part of a collaborative that brings agencies locally and statewide to work within a common framework and enhance coordination for climate resiliency work.

Implementing Suggested Practices Could Strengthen Regional Focus in San Diego

While not a required MPO activity, some in industry argue that MPOs are well-suited to coordinate or liaison disaster planning activities on the transportation network. For instance, the Transportation for America's book *The Innovative MPO* notes that while it is NOT common that many regional partners were involved in emergency work, MPOs were in a good position to participate or lead in various disaster planning activities including conducting vulnerability analyses on transportation facilities and services, analyzing the transportation network for ways to improve how to move large numbers of people during street closures, and more.

Thus, SANDAG may want to consider strategically maximizing its unique powers and influence over these types of safety activities and realize the regional benefits derived from SANDAG's coordination and collaboration with state and local emergency planners. Given that certain Federal Emergency Management Agency publications reported wanting more planning to have resilience infrastructure systems with the ability to accommodate variable and unexpected conditions without catastrophic failure, maybe there are potential grants or funding opportunities to offset the cost of SANDAG being part of such regional coordination.

Moreover, the Transportation Research Bureau acknowledged that emergencies introduce infinite numbers of highly variable and often unforeseen conditions that cannot always be anticipated or planned for in advance. However, they also argued that MPOs can use their models to predict evacuee behavior as part of travel demand and decision-making, evaluate the benefits and costs of competing options and alternative responses during emergencies, and identify potential "weak links" or other essential items that would benefit the region as part of regional transportation planning.

Bicycle and Ped Safety Improved in the Area During Period under Audit

Over the last four years of data available, safety in the San Diego area improved for bicyclists and pedestrians with fewer injuries and fatalities in general—similar to trends seen in most other California

regions we reviewed as shown in Exhibit 18. Among the five counties we analyzed, San Diego County results were in the mid-range of bicyclist injuries and fatalities per 100 million vehicle miles traveled.

EXHIBIT 18. BICYCLISTS INJURED OR KILLED PER 100 MILLION VMT IN CALIFORNIA COMPARISON COUNTIES, 2015-2018
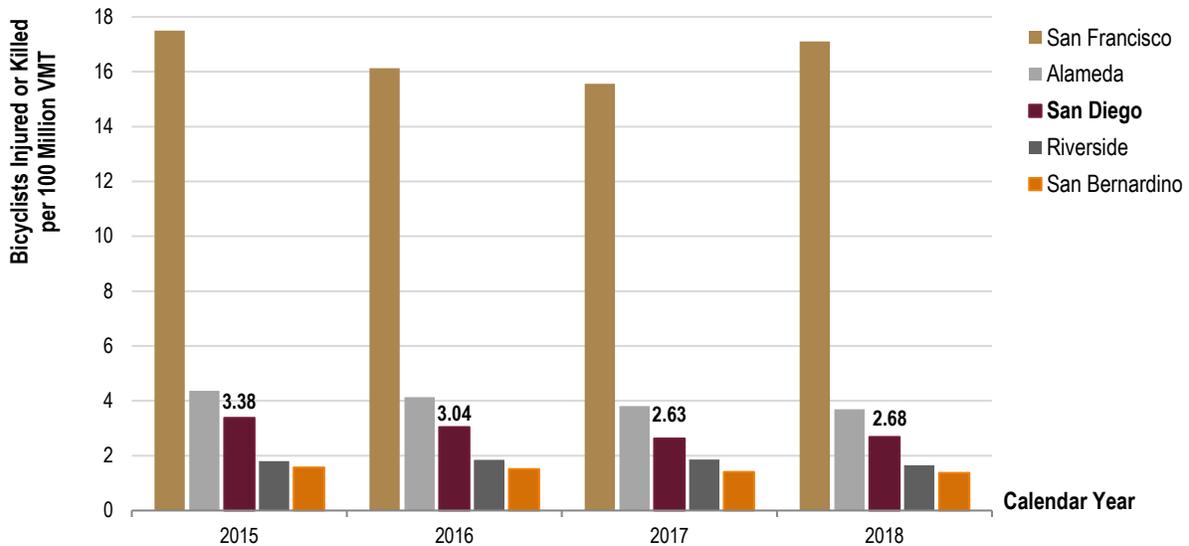
Source: California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) and Caltrans Public Road Data (PRD) Reports.

While all comparison areas showed a decrease, San Diego County had the greatest decrease in bicycle-involved collisions resulting in an injury or fatality at 21 percent between calendar years 2015 and 2018 as shown in Exhibit 18. While SWITRS data for 2019 was not yet finalized at the time of the audit, the trend appears to hold with the number of bicycles injured or killed in 2019, based on preliminary statewide data, at its lowest since 2005—breaking the previous upward trend where injury and fatality collisions in the region involving bicyclists increased 21 percent between calendar years 2005 and 2015.

The rate of pedestrians injured or killed in the San Diego region has fluctuated each year since calendar year 2015, but showed an overall decrease by 2018. Similar to the bicyclist trends, the trend for pedestrian related injuries also had an upward trend between 2005 and 2015 that was reverse during this more recent trend showing a decrease by six percent from 4.21 pedestrian injuries and fatalities per 100 million VMT in 2015 to 3.98 in 2018, as shown in Exhibit 19. [36]

---

[36] 2018 *TransNet* Extension Ordinance: 10-Year Look-Back Report, January 2018
https://www.sandag.org/index.asp?classid=30&projectid=549&fuseaction=projects.detail

EXHIBIT 19. PEDESTRIANS INJURED OR KILLED PER 100 MILLION VMT IN CALIFORNIA COMPARISON COUNTIES, 2015-2018

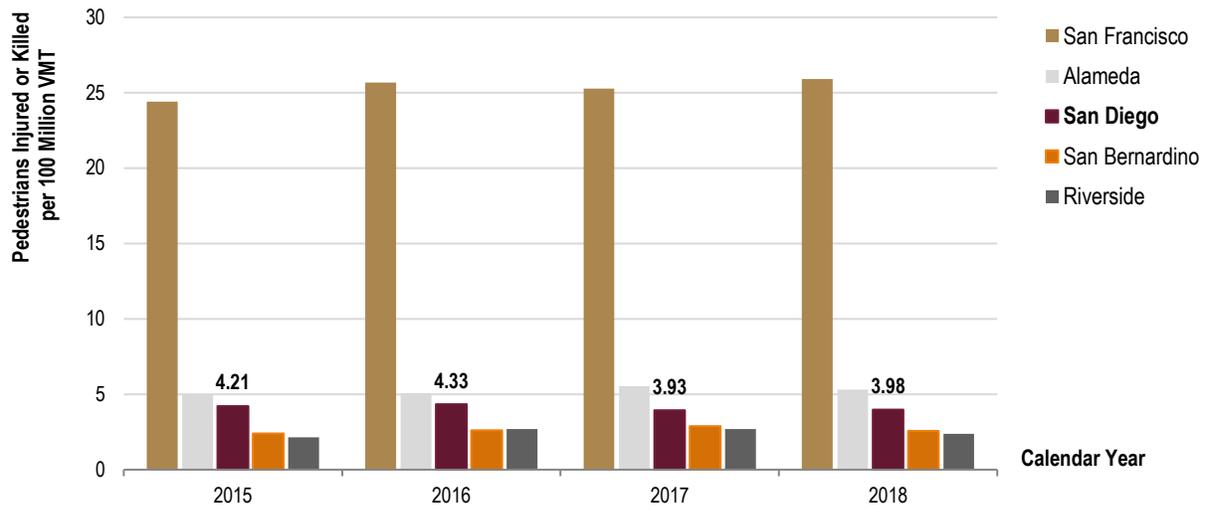Source: California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) and Caltrans Public Road Data (PRD) Reports.

Most Bicycle Collisions were Caused by Rider or Driver Behavior

To identify causes contributing to injuries and fatalities, we looked at the primary collision factor reported in SWITRS for bicycle collisions over the three-year period from January 1, 2016, to December 31, 2019. Primary reasons for bicycle incidents in San Diego were caused by rider or driver behavior including unsafe turning, being on wrong side of road, or unsafe speeds as shown in Exhibit 20. For example, of the 3,221 collisions that occurred during the period reviewed, 575 were related to a violation of right-of-way.

EXHIBIT 20. PRIMARY COLLISION FACTOR (PCF) FOR COLLISIONS INVOLVING BICYCLES IN SAN DIEGO COUNTY, 1/1/2016 THROUGH 12/31/2019

Primary Collision Factors	Example	Percent	Count
Right-of-Way	Fails to yield to and then collides with a vehicle, pedestrian, or bicyclist already in an intersection.	18%	575
Improper Turning	Makes a U-turn at an intersection without a four-way stop that resulted in a collision with bicyclist or another vehicle.	18%	571
Wrong Side of Road	Traveling on wrong side of road (against the flow of traffic).	14%	458
Unsafe Speed	Travels above the posted speed limit or at an unsafe speed for the existing roadway conditions.	14%	451
Traffic Signals and Signs	Fails to stop at a stop sign and collides with a vehicle, pedestrian, or person on a bicycle.	9%	290

Source: California Highway Patrol (CHP) Internet Statewide Integrated Traffic Records System (SWITRS).

When looking at the party at fault, drivers were found at fault in 63 percent of collisions related to violations of right-of-way, whereas bicyclists were at fault 97 percent of the time in collisions related to riding on the wrong side of the road as shown in Exhibit 21.

Source: Transportation Injury Mapping System query of California Highway Patrol Statewide Integrated Traffic Records System (SWITRS).

Mitigation Plans were in Place to address High Frequency Incident Areas

Using the primary collision factor data, we identified high frequency incident sites to understand whether any actions were taken to address or improve safety. Specifically, we reviewed two sites in San Diego and one site in Escondido—(1) Fairmount Avenue & Poplar Street & Redwood, (2) Beyer Way & Palm Avenue & Picador Boulevard, (3) Ash Street & SR 78 & Valley Parkway and found that the local jurisdictions conducted many activities to identify and address high incident areas through local safety programs.

For instance, the City of San Diego employed its Vision Zero program with a goal of zero traffic-related fatalities or severe injuries by 2025 that incorporated a variety of strategies. As part of Vision Zero, City of San Diego implemented a Systemic Safety Analysis Reporting Program in April 2019 that identified systemic hotspots—such as 27 vehicle-pedestrian collisions occurred involving a vehicle turning left from a one-way road to another one-way road—and countermeasures that the City could implement to address the systemic hotspot. In addition, the City prepared annual analysis on intersections with high frequency of collisions to inform which projects should be programmed in its annual budget.

Recommendations

To enhance SANDAG's safety culture and strengthen focus on *TransNet* Extension Ordinance's safety goals, the ITOC should request the SANDAG Board to direct staff to:

12. **Medium Priority**. Consider the benefit of identifying a regional safety planning coordinator to synchronize safety efforts of the region and regularly communicate progress on safety goals to the Board and ITOC.

13. **Medium Priority**. Consider and prepare a regional safety plan that complements Caltrans' Statewide Plan and details SANDAG's vision, goals, objectives, and strategies to address regional trends, road conditions, and driving behaviors.

14. **Medium Priority**. Consider ways to encourage state and local emergency, planning, and response entities to include SANDAG in discussions and local plans related to emergency capacity so that regional planners stay informed and collaborate on emergency and resilience issues.

Chapter 6: Bike EAP will likely not be Completed when Expected, and Improvements are Needed to Communicate Challenges

The Bike Early Action Program (EAP) experienced significant delays that will likely impact its 2024 completion target and may require changes to future Regional Bikeway Program projects to remain within planned budgets and funding.

- Bike Early Action Program will likely not be completed within 10-year timeframe as expected because of project delays especially with permitting.

- While the 2019 Plan of Finance showed sufficient funding to complete the Bike Early Action Program, the Bike non-Early Action Program projects remaining in the Regional Bikeway Program are at greater risk of not being completed on schedule or as planned.

- SANDAG reported status and challenges, but needs to be compare status with original Bike EAP plans.

BIKE EAP PROJECT SEGMENT STATUS, BUDGETED AS OF JULY 7, 2020

Capital Construction Project Phase	Number of Projects in Each Phase	Percent of Projects in Each Phase	
Environmental	6	21%	55% in Design
Advertisement	10	34%	
Construction	2	7%	24% in Construction
Open to public but construction ongoing	5	17%	
Open to public and construction complete	6	21%	21% Completed
Total	**29**		

Key Recommendations

- ✓ **Critical Priority.** Estimate and communicate to the Board and ITOC the quantifiable impact of permit delays on individual Bike Early Action Program projects and the overall Regional Bikeway Program.

- ✓ **Critical Priority.** Work with the Board to have leadership collaborate with its representatives from the City of San Diego to rectify critical Bike Early Action Program project permit issues.

- ✓ **Critical Priority**. Develop a crosswalk that summarizes and compares planned Bike Early Action Program projects outlined in the Regional Bikeway Program with current project segment implementation status by budget, schedule, phase, and miles. SANDAG should complete this reconciliation annually, at a minimum when it revises its Capital Improvement Program Budget, and explain any deviations from Bike Early Action Program plans including scope expansions, reductions, or mergers with other project segments through a log that captures all explanations.

- ✓ **Critical Priority.** Revise existing quarterly status reports to compare progress against initial Bike Early Action Program plans for costs, schedules, and miles expected and clearly communicate whether the 10-year Bike Early Action Program completion goals or future project goals are realistic or in jeopardy—in addition to proposing action steps to remedy any identified issues.

- ✓ **Medium Priority.** Modify *TransNet* Dashboard data or Board reports to compare actual individual project data against original baseline budgets and schedule by project phase to more clearly show progress against initial plans and provide explanatory context in addition to aligning *TransNet* Dashboard project phase categories with those used in individual project management tools.

- ✓ **Medium Priority.** Track and analyze more granular internal project milestones within Bike Early Action Program project phases—such as planned and actual schematic design, detailed design, right-of-way, utility coordination, and construction documents, to better identify where possible impediments and delays occur and may need to be addressed.

- ✓ **Medium Priority.** Provide extra scrutiny on less certain Regional Bikeway Program assumed funding, including the state's Active Transportation Program competitive grant source, during subsequent updates to the Regional Bikeway Program Plan of Finance to identify potential capacity and revenue constrains or opportunities and have annual processes in place to evaluate and modify the mix of projects if funding does not occur as expected.

- ✓ **Low Priority.** Ensure *TransNet* Dashboard Bike Early Action Program schedule and budget fields are complete and include explanatory notes on why particular data may not be applicable to a project stage in addition to consider splitting certain projects and their related cost and schedule data into phases on the *TransNet* Dashboard when SANDAG plans for a staggered delivery.

Chapter Introduction

In 2013, the SANDAG Board of Directors approved a Bike Early Action Program (EAP) designating $200 million in *TransNet* Extension Ordinance funds for a series of capital improvement projects to be built within 10 years, starting in 2014. Subsequent planning efforts identified approximately 77 miles of bike projects in the Cities of Chula Vista, Encinitas, Imperial Beach, National City, Oceanside, San Marcos, San Diego, Santee, and Vista—although 68 percent of the planned miles were in the City of San Diego. Yet, with four years remaining in the Bike EAP and nearly 89 percent of the miles still left to complete, it is unlikely SANDAG will complete the projects along the timeline expected. Some causes for delay were outside of SANDAG's direct control—although other reasons were internal to the projects.

While SANDAG projections showed sufficient funding to complete the remaining Bike EAP projects, it should closely monitor assumptions as it could place other bike projects in the overall Regional Bikeway Program at higher risk of not being completed as planned. [37] Additionally, SANDAG needs to make certain improvements to address its challenges such as tracking more granular internal deadlines to manage project delays, working with the Board on permit issues, and reporting progress against expectations.

Bike EAP will Likely not be Completed within 10-year Timeframe as Expected

While SANDAG planned to develop approximately 77 miles of bikeways by 2024, it only completed 8.8 miles, or 11 percent, that were open to the public as of June 30, 2020 as shown in Exhibit 22—although more than half of the Bike EAP timeframe has passed.

EXHIBIT 22. BIKE EAP STATUS IN MILES, AS OF JUNE 30, 2020
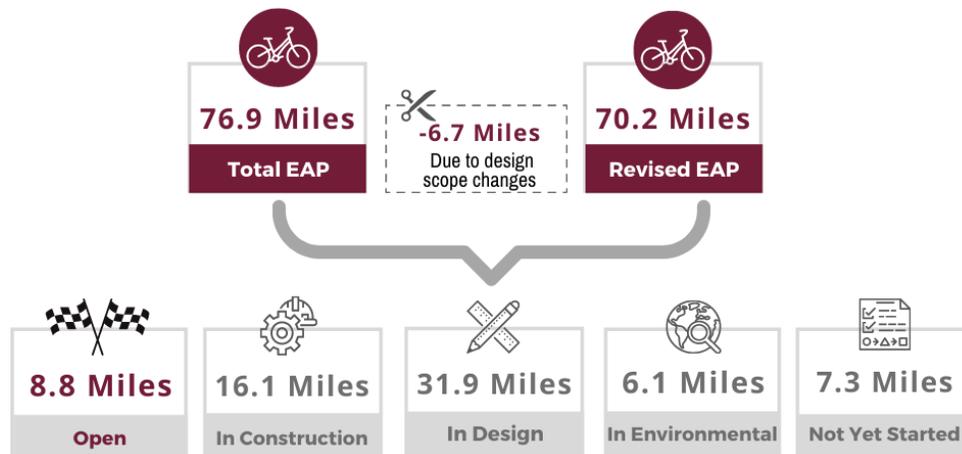
Source: Based on data provided by SANDAG staff using the FY 2020 CIP budgets and other project management file sources.
Note: Of the 76.9 total planned miles, SANDAG provided data showing 62.9 programmed miles based on the FY 2020 Capital Budget and notice that an additional 6.7 miles were reduced through individual project design activities. For the 7.3 miles not yet started, actual miles related to and ultimately constructed for those projects not yet started may vary from this number and increase the overall Bike EAP miles.

While most Bike EAP projects were funded through the end of construction, some projects were only planned through the end of advertisement or right-of-way. Additionally, other projects were being delivered

---

[37] In 2010, the Board approved the 40-year Regional Bikeway Program to guide the development the San Diego regional bicycle system through the year 2050. Subsequently, the Board approved and accelerated several projects in 2013 as part of a Bike EAP to be completed within a 10-year period —with many additional projects to be completed over the remaining 30 years of the Regional Bikeway Program.

in phases such that some miles may be completed, but the project segment itself remains open as later phases await to be funded. Yet, given noted project delays and that SANDAG had not started several Bike EAP projects as of the end of our audit fieldwork, it is unlikely that all planned Bike EAP projects will be completed on the timeframe expected.

In terms of Bike EAP projects, the Board approved 38 projects in 2014—7 projects have not yet been started or budgeted, while 31 projects were in progress. As part of delivering the program, SANDAG split the 31 projects started into various project segments planned for delivery through 33 Capital Improvement Program (CIP) budgets. Four of those 33 project segments/CIPs were administrative in nature; thus, SANDAG had 29 capital project segments as part of the Bike EAP as of July 2020.

As shown in Exhibit 23, SANDAG completed only 6 project segments of those 29 Bike EAP capital project segments that were open to the public, with an additional 5 project segments open to the public although minor plant establishment and close out activities were still on-going. Additionally, more than half of the 29 project segments funded—or 55 percent—still remained in the design stage with 10 project segments advertised for construction and 6 project segments in the environmental planning phase.

EXHIBIT 23. BIKE EAP PROJECT SEGMENT STATUS, BUDGETED AS OF JULY 7, 2020

Capital Construction Project Phase	Number of Project Segments	Percent of Projects in Each Phase	
Environmental	6	21%	55% in Design
Advertisement	10	34%	
Construction	2	7%	24% in Construction
Open to public, but construction ongoing	5	17%	
Open to public, and construction complete	6	21%	21% Completed
Total	**29**		

Source: Auditor Generated based on *TransNet* Dashboard schedule data downloaded on July 7, 2020 from www.*TransNet*trip.com.

While data indicated approximately 11 project segments that were currently in-progress were planned for completion by the promised Bike EAP phase in 2024, some of those projects were in final design stages where other projects encountered problems causing delays that further challenge SANDAG's ability to meet the 2024 deadline. [38] Further, there are still several additional projects that have not yet started—thus, it is unlikely SANDAG will complete all planned projects from the Bike EAP on the timeline initially expected.

Significant Delays Existed With some Reasons Outside of SANDAG's Control

Bike EAP projects experienced unique challenges because of the multitude of entities involved including, but not limited to, railroads, utility companies, cities, business owners, and residents in addition to the unanticipated issues arising from permitting and right-of-way issues. As such, most of SANDAG's Bike EAP projects were behind schedule. In fact, 76 percent of the Bike EAP projects experienced delays of six

---

[38] For the list of scheduled completion dates of individual Bike EAP projects based on *TransNet* Dashboard data, refer to Appendix D.

months or longer as shown in Exhibit 24—some projects started late, while others took longer than anticipated.

EXHIBIT 24. SUMMARY OF BIKE EAP DELAY STATUS, AS OF JULY, 7 2020

76%	10%	14%
Delayed	On Schedule	Unknown

Source: Dashboard schedule data as of July 7, 2020 and SANDAG-provided schedule documentation.
Note: Delay defined as 6 months or more behind baseline schedule start or completion for a particular project phase.

When we compared the expected completion time as reported by *TransNet* Dashboard project phase (environmental, advertise, begin construction, and open to public) to the length of time it actually took to complete the specific project phase, we found that, on average, projects took 1.4 years longer than planned to complete. However, for one project, data on the *TransNet* Dashboard indicated a much longer than planned completion schedule with a calculated delay much greater than the 1.4-year average. Upon further review, we found SANDAG scheduled that particular project for delivery in four phases due to Board-driven approval of funding. Yet, a taxpayer reviewing the *TransNet* Dashboard data could draw flawed conclusions based on the project schedule data reported. For these situations, SANDAG may want to separate and report cost and schedule data at the project phase level on the *TransNet* Dashboard.

Generally, delays mostly occurred in the environmental and advertising phases—resulting from redesign, alignment studies needed, right of way issues, task order processes, and impacts from stalled work in preceding phases in addition to challenges with permitting, value engineering activities, and availability of funding. [39] When we reviewed the six completed projects as of July 7, 2020 in more depth, we did not find a common factor causing delays—although most experienced some type of delay. For example, the Sweetwater Bonita segment had an 8-month delayed start in the advertisement phase which led to compounded delays in all following stages. Another project, the Coastal Rail Trail in Oceanside, had delays in the construction phase. Yet, there was no clear indication of patterns behind the various project delays.

According to SANDAG, staff started most of the Bike EAP projects simultaneously, compared to the Major Corridor capital projects that used staggered starts. This decision impacted project schedules as individual projects ran into delays, with many of them being delayed simultaneously from shared challenges such as permitting, as well as affected SANDAG's ability to show incremental progress through staggered project completion. To better understand causes and impacts of delay and implement lessons learned on future projects, SANDAG should consider tracking more granular internal milestones within project stages—such as design phases, right-of-way, and utility coordination—to study and identify where impediments occur and need to be addressed.

---

[39] *TransNet* Dashboard data accessed on July 23, 2020. We also attempted to access and review individual project management files to determine more specific causes of delay and deviations from schedule, but technology challenges and COVID-19 onsite restrictions precented the large transfer of data. Both the auditors and SANDAG exhausted a variety of methods to provide the data; but, ultimately, we determine the efforts were consuming too many resources to continue troubleshooting. Thus, our results are based on the data available.

Some Reasons for Delay were External Causes

Several delays were attributed to the City of San Diego and its permit process challenged by staffing issues, COVID-19 hiring freeze, heavy workload, and a lack of city bike design standards to assess against SANDAG plans. Review of a permit approvals tracker used by SANDAG staff showed that the average wait time for the projects previously completed was 15 months as of June 30, 2020 when we conducted our review—with the longest wait time recorded at 1.5 years. [40]

Issues with the City of San Diego's permit process have persisted for several years. For instance, two audits performed by the City of San Diego's Auditor released in 2012 and 2018 highlighted various issues with the City of San Diego permit project tracking system. Following an October 14, 2020 presentation to ITOC, the City of San Diego informed auditors about improvements in recent years and its consideration of new changes—although the City of San Diego could not share any specific steps with the auditors. Moreover, the City of San Diego staff we spoke to stated it would realistically still take at least nine months to perform a review and provide an approved project permit.

While outside its direct control, SANDAG took several steps to help address permit challenges such as involving the City of San Diego earlier in project designs and funding a liaison position to assist with plan review and meetings. SANDAG also informed us they held training sessions with the City of San Diego to describe design elements and applicable federal and state guidance. Although SANDAG reported some anecdotal benefits, we did not find significant improvement with the schedule on current projects in progress. Thus, SANDAG staff should estimate the quantifiable impact of permit delays on individual Bike EAP projects and to the overall Regional Bikeway Program. Further, the Board should work collaboratively with its representatives from the City of San Diego to rectify critical permit issues.

With Significant Dollars Spent thus far, Budgets should be closely Monitored as Many Projects have not yet Entered Expensive Construction Phases

To complete Bike EAP projects within the 10-year timeframe, SANDAG's strategy was to start many of the Bike EAP projects simultaneously, rather than prioritizing and staggering individual project delivery start dates. As such, SANDAG spent a significant amount of funds on Bike EAP pre-construction activities as of July 7, 2020 when compared with the number of projects completed. [41] Specifically, SANDAG spent approximately $141 million of the $313 million budgeted thus far on the Bike EAP—or 45 percent—including both *TransNet* Extension Ordinance funds and other funds.[42] Considering many Bike EAP projects had not reached the construction stage where the highest project costs typically occur and seven additional Bike EAP projects estimated at $15.8 million had not yet been started, the Bike EAP is at greater risk of experiencing additional cost additional cost overruns. [43]

---

[40] According to a SANDAG staff update in February 2021, one of the Bike EAP projects—Pershing Bikeway—has been with the City of San Diego for 26 months, or more than two years. At the time of our initial review on June 30, 2020, it had been with the City for 18 months.

[41] According to SANDAG, many projects were or will soon be "shovel ready" to begin construction.

[42] For its Bike EAP, SANDAG planned to leverage $200 million of *TransNet* funds with another $219 million of state and federal funds totaling $419 million to complete the 38 proposed Bike EAP projects. To date, SANDAG budgeted 31 projects totaling $313 million.

[43] See Exhibit 23 for Bike EAP projects not in construction phase—6 projects in Environmental phase and 10 projects in Advertising phase. See Appendix D for the list of 7 projects not yet started.

When we tried to compare individual project budgeted costs to actual costs, we found that SANDAG's *TransNet* Dashboard data only provided the most recent revised and approved budget amounts instead of original baseline budgets. [44] Because projects cannot spend more than is authorized in an approved budget, the constant revisions to the reported budgets do not allow for meaningful comparisons to highlight cost overages or potential cost savings. According to SANDAG, staff compared pre-award project budgets to the project's final cost at completion for closed-out capital improvement project budgets and presented the results in Annual Program Status Reports to ITOC. While this was a good practice that should be continued, SANDAG should also provide original project baseline budgets for various project phases on its *TransNet* Dashboard to more clearly indicate where costs were over or under estimates at each stage of the project and describe general reasons for those deviations.

Yet given that SANDAG has spent nearly half of the Bike EAP expected costs, there were likely cost overruns on some projects. According to SANDAG, construction cost escalation as well as soft costs related to additional SANDAG staff and external consultants' resources consumed by the lengthy permit process resulted in higher-than-expected costs. Further, schedule delays typically increase overall project costs by requiring rework on project designs, keeping consultants on the job longer, and pushing out construction where expenses increase year over year.

When comparing SANDAG's activities with other bike programs, we found some similarities with challenges in delivering capital bike programs. Although available data was limited, other entities reported similar cost challenges caused by design and scope changes, low estimates, environmental concerns, and contracting issues in a hot construction market as shown in Exhibit 25.

EXHIBIT 25. CHALLENGES CAUSING DELAYS IN CAPITAL BIKE PROGRAMS CITED BY OTHER ENTITIES REVIEWED

Entity	Challenges Reported
City of San Diego	• Design changes • Oversight shifted from one department to another • Low estimates
City of Seattle	• Hot construction market • Low estimates • Costly rebuild option
District of Columbia DOT	• Design and environmental concerns
Pima Association of Governments	• Right-of-Way Issues
San Francisco Municipal Transportation Agency	• Scope shifted to another contract*

Note:* This was going to lead to a 5-year delay, but public outcry led the agency to reverse its decision.

For instance, the City of Seattle planned to build 50 miles of protected bike lanes in 2015, but underestimated costs in a volatile construction market and weather delays caused cost overruns resulting in project reductions of planned miles. Although SANDAG experienced similar cost overages, SANDAG

---

[44] As previously mentioned, we attempted to access and review individual project management files so we could compare actual costs against original baseline budgets, but technology challenges and COVID-19 onsite restrictions prevented the large transfer of data. Both the auditors and SANDAG exhausted a variety of methods to provide the data; but, ultimately, we determined the efforts were consuming too many resources to continue troubleshooting. Thus, our results are based on the data available.

asserted they were committed to finishing the projects "promised" as part of the Bike EAP, rather than modifying project scope or eliminating projects like the City of Seattle. In another example in Tucson, Arizona, the Pima Association of Government experienced cost challenges with their capital bike program related to logistical delays caused by right-of-way issues and federal funding.

While the 2019 POF showed Sufficient Funding to Complete the Bike EAP, Other Projects in Regional Bikeway Program are at Heightened Risk for Non-Completion within the Funding and Timeline Envisioned

While projections from the 2019 Plan of Finance (POF) showed that there will likely be sufficient funds to complete the Bike EAP, there is a heightened risk that the remaining projects in the Regional Bike Program could also be delayed, not funded for the full scope as planned, or eliminated if schedule delays and cost overruns continue.

Bike EAP Projections Showed Sufficient Funding for Completion, Although Risk Exists for Completion of Non-EAP Bike projects

Under the *TransNet* Extension Ordinance passed by voters, the Bike and Pedestrian program receives 2 percent of annual gross *TransNet* Extension Ordinance revenues. The most recent SANDAG projections from 2019 show that $1 billion from the *TransNet* Extension Ordinance and other leveraged sources was expected between FY 2020 and FY 2048—of which almost 32 percent, or $325.4 million, was expected from the *TransNet* Extension Ordinance revenues. SANDAG expects another 15.1 percent from another predictable and stable funding source through the state's Transportation Development Act in addition to another 14.4 percent from bond proceeds as shown in Exhibit 26.

EXHIBIT 26. TOTAL FUNDING BY SOURCE FOR OVERALL REGIONAL BIKEWAY PROGRAM, FY 2019 THROUGH FY 2048
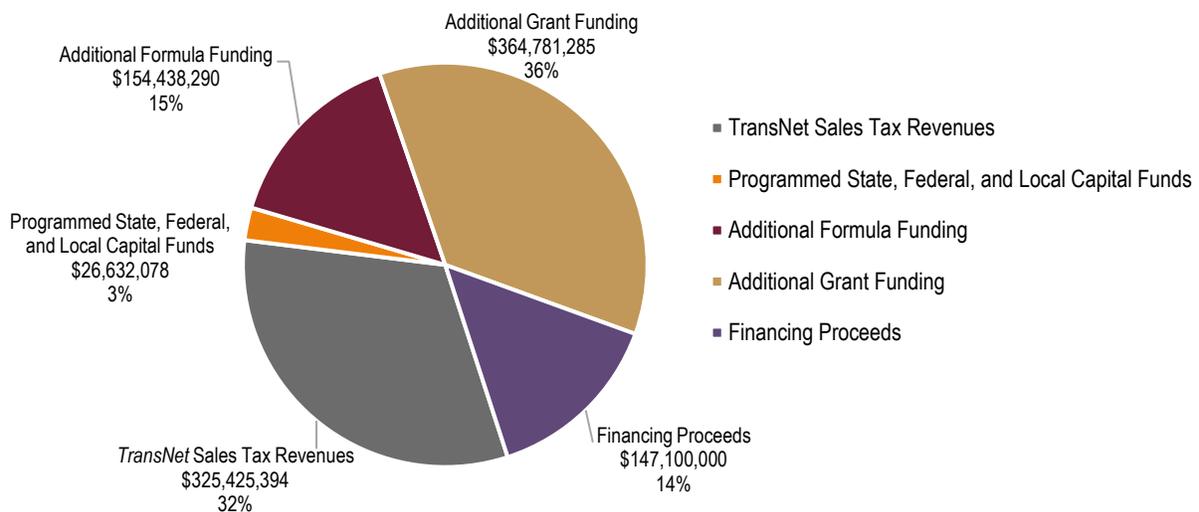
Source: 2019 Plan of Finance for Bike / Pedestrian Program provided by SANDAG.

While SANDAG expects to have sufficient funding to complete the Bike EAP, two factors will impact SANDAG's ability to maximize the number of non-EAP projects in the Regional Bikeway Program projects

delivered. First, based on current budgets and cost estimates, the Bike EAP projects will cost $38.3 million (in 2018 $) more than initially anticipated. Second, while SANDAG generally based its funding on fairly predictable sources that can be estimated, almost 36 percent of potential funds was projected to derive from competitive grants received through the state's Active Transportation Program. SANDAG's funding assumptions and projections of this category appeared reasonable, but there is some degree of risk as it relied on future projects meeting funding criteria and SANDAG's continued success in competing for and receiving those funds.

Given that Bike EAP project costs were greater than SANDAG expected and project schedules were delayed resulting in increased costs, the remaining planned non-Bike EAP projects in the Regional Bikeway Program are at heightened risk to not be funded or completed as expected even though the 2019 POF showed sufficient funding. In light of the risks resulting from increased costs for the Bike EAP program as well as the large share of funding projected from competitive sources, SANDAG should provide extra scrutiny on both projected and actual funding secured from the state active transportation competitive source during subsequent updates to the POF. As warranted, SANDAG should use the updated POF information to make appropriate adjustments and have plans in place to modify its project plan if funding does not occur as expected.

Cost Estimates in the Plan of Finance for the Remaining Non-EAP Bike projects in the Regional Bikeway Program need to be Revisited as the Bike EAP Program is Completed

Although the 2019 POF provided estimates for the non-Bike EAP projects in the Regional Bikeway Program, the method used made it difficult to draw conclusions regarding long-term capacity, funding challenges, or opportunities. Specifically, SANDAG did not include clear schedule expectations for when future projects would enter design or construction as well as indications of how projected revenues compared against estimated project costs. According to SANDAG, completing the initial set of Bike EAP projects was the first priority and then they would identify additional funding for other projects. Yet, without that definition, the Bike Plan of Finance cannot be a useful planning tool for the medium-to-long term outlook.

Specifically, SANDAG established capital costs for non-Bike EAP projects in its financing plan based on its 2013 estimates when the Board adopted the Bike EAP, escalated the total amount into 2018 dollars, and allocated between 2.5 percent and 5 percent of the total non-Bike EAP costs to each year between FY 2024 and FY 2048. SANDAG staff noted that this approach allowed for flexibility in planning as it defined cost with more precision as projects move into the near-term based on actual project delivery schedules and conditions. Yet, one consequence of this approach is that it does not allow for sufficient insight or forewarning into potential challenges or capacity issues of the Regional Bikeway Program and undermines its ability to serve as a useful mid- to long-term planning document.

With the Bike EAP projects set for completion by 2024, this is an opportune time for SANDAG to update its POF assumptions for the non-Bike EAP projects, identify potential capacity and revenue constraints or opportunities, and develop a timeline to ensure that remaining projects can be completed by FY 2048—or planned expectations are adjusted as necessary. We also recommend that those efforts include programming individual projects into the POF, identifying key dates and estimated milestones to determine

whether projects can be completed by FY 2048, and developing a process to evaluate the mix of projects included in the POF on an annual basis to match likely available resources.

SANDAG Reported on Bike EAP Status and Challenges, but Did Not Compare Results Comprehensively Against Initial Budget and Schedule Expectations or Provide Options to Remedy Issues Encountered

SANDAG collected and reported regularly to the Board and public on many aspects of Bike EAP projects through verbal updates, written quarterly reports, and annual *TransNet* Dashboard status reports. These communication methods included data on specific project highlights miles completed and project phase in addition to individual project costs and schedules. Yet, while SANDAG tracked and provided substantial information, but there was no comprehensive information available or communicated comparing progress against the initial Bike EAP plans to provide a sense of overall program status or headway. Thus, SANDAG needs to comprehensively track and report how the Bike EAP is performing against plans for original expected cost and initial project baseline schedule—in addition to the revised budgets and schedules SANDAG currently uses for comparisons—to understand how its progress compares against expectations set when the Bike EAP was first approved as described more in the bullets that follow.

- Several quarterly updates provided status on certain active projects highlighting miles, percent complete, and expected open to public dates—but nothing compared that schedule and accomplishment status against initial promised Bike EAP plans for the comprehensive list of all Bike EAP projects.

- Also, SANDAG's *TransNet* Extension Ordinance quarterly reports provided monthly expenditures for the preceding 12-months and annual expenditures since FY 2009 by support, construction capital, and ROW, but did not compare the expenditure data against the initial Bike EAP baseline budget expectations set in 2014 for comparison and context, nor provide any narrative to explain trends, patterns, accomplishments, or concerns.

- Similarly, in a Board update on January 10, 2020, charts showed the current stage of individual projects and what had been spent to date—but not a comparison of all Bike EAP projects—active, completed, or not yet started—against planned schedule and costs or any context of whether they are meeting, exceeding, or falling behind the original $200 million Bike EAP planned investment along the 10-year timeline.

- In an October 14, 2020 presentation to ITOC, SANDAG discussed delays and reasons that included redesigns, weather issues, and disagreements with utilities and railroads for the Inland Rail Trail project. Yet, there was no supplementary discussion on whether those delays might impact the start or completion of other Bike EAP projects that had not yet started or to the overall 10-year planned schedule of the Bike EAP. Additionally, these concerns were shared verbally, but not documented on the presentation materials provided to ITOC, making it a challenge for decision-makers to track issues if they referred back to these documents.

- In a quarterly report to ITOC in February 2020, SANDAG provided solid graphics presenting banana curves comparing percent complete over time for individual projects and indicators of where

projects aligned with schedule expectations for start of construction—but there were no proposed recommended action steps to remedy issues or prevent future issues

- In the staff reports accompanying its quarterly reports, SANDAG provided statements summarizing the number of projects in various environmental, design, and construction phases—but its narrative did not align with its graphs and tables.

- *TransNet* Dashboard data did not include all project schedule dates or explanation if not applicable to a particular project. Specifically, 26 of the 29 projects in the *TransNet* Dashboard were missing certain fields for planned schedule or current schedule dates. SANDAG staff were able to provide reasonable explanations that some data fields were not applicable to a project, such as an environmental date not being non-applicable as the project was exempt from the California Environmental Quality Act. Other dates were missing because SANDAG only set a schedule up through the phase(s) that had project funding. Given the *TransNet* Dashboard use as a primary information source for the public, data should be complete or have explanatory notes giving context for missing information to better gauge where projects stand in terms of baseline and current cost and schedule.

As such, SANDAG should revise existing quarterly status reports to compare progress against initial Bike EAP plans for costs, schedules, and miles expected and clearly communicate whether the 10-year Bike EAP completion goals or other future project goals are realistic or in jeopardy. Additionally, SANDAG should ensure *TransNet* Dashboard data is complete and includes explanatory notes for missing data.

Recommendation

To make necessary improvements to the Bike EAP by incorporating lessons learned and enhancing transparency and accountability, the ITOC should request the SANDAG Board to direct staff to:

15. **Critical Priority**. Estimate and communicate to the Board and ITOC the quantifiable impact of permit delays on individual Bike Early Action Program projects and the overall Regional Bikeway Program.

16. **Critical Priority**. Work with the Board to have leadership collaborate with its representatives from the City of San Diego to rectify critical Bike Early Action Program project permit issues.

17. **Critical Priority**. Develop a crosswalk that summarizes and compares planned Bike Early Action Program projects outlined in the Regional Bikeway Program with current project segment implementation status by budget, schedule, phase, and miles. SANDAG should complete this reconciliation annually, at the minimum when it revises its Capital Improvement Program Budget, and explain any deviations from Bike Early Action Program plans including scope expansions, reductions, or mergers with other project segments through a log that captures all explanations.

18. **Critical Priority.** Revise existing quarterly status reports to compare progress against initial Bike Early Action Program plans for costs, schedules, and miles expected and clearly communicate whether the 10-year Bike Early Action Program completion goals or other future project goals are realistic or in jeopardy—in addition to proposing action steps to remedy any identified issues.

19. **Medium Priority.** Modify *TransNet* Dashboard data or Board reports to compare actual individual project data against original baseline budgets and schedule by project phase to more clearly show progress against initial plans and provide explanatory context in addition to aligning *TransNet* Dashboard project phase categories with those used in individual project management software.

20. **Medium Priority**. Track and analyze more granular internal project milestones within Bike Early Action Program project phases—such as planned and actual schematic design, detailed design, right-of-way, utility coordination, and construction documents, to better identify where possible impediments and delays occur and may need to be addressed.

21. **Medium Priority**. Provide extra scrutiny on less certain Regional Bikeway Program assumed funding, including the state's Active Transportation Program competitive grant source, during subsequent updates to the Regional Bikeway Program Plan of Finance to identify potential capacity and revenue constrains or opportunities and have annual processes in place to evaluate and modify the mix of projects if funding does not occur as expected

22. **Low Priority**. Ensure *TransNet* Dashboard Bike Early Action Program schedule and budget fields are complete and include explanatory notes on why particular data may not be applicable to a project stage in addition to consider splitting certain projects and their related cost and schedule data into phases on the *TransNet* Dashboard when SANDAG plans for a staggered delivery.

Chapter 7: ITOC Practices Aligned with Other Entities Reviewed

As a critical advisory oversight body of *TransNet* Extension Ordinance expenditures, ITOC continued to fulfill its mandate by thoroughly examining activities and efforts of SANDAG and its *TransNet* Extension Ordinance partners. With recent trends in transportation planning broadening the spectrum of topics and related challenges beyond freeway expansion or adding transit routes, additional member expertise areas could further strengthen ITOC's efforts in advising SANDAG and providing taxpayer oversight of the *TransNet* Extension Ordinance.

- Committee membership was fairly static with staggered terms.

- Member qualifications aligned with other entities.

- Conflict of interest policy aligned with others, although clarifications may help.

- Recruitment and selection practices aligned with others, although options exist for enhancements.

Key Recommendations

✓ **High Priority.** Incorporate existing conflict-of-interest policy clarifications from ITOC new member on-boarding resources into recruitment materials, emphasize in recruitment efforts that a potential conflict does not automatically disqualify prospective members, and clarify when members should recuse themselves from certain decisions because of potential perceived conflicts.

✓ **Medium Priority.** Modify the *TransNet* Extension Ordinance language to be consistent with the service limits for all members regardless of whether a member joins the committee to fill a full-term position or mid-term vacancy.

✓ **Low Priority.** Consider expanding the ITOC qualifications to include knowledge of emerging topics SANDAG presents before the committee such as multi-modal planning, active transportation, transportation system management and operations, transportation planning, performance measures, and legal issues.

✓ **Low Priority.** Explore options and feasibility of moving ITOC candidate screening and selection process outside of the SANDAG Board to maximize appointment transparency and minimize any perceived selection bias.

Chapter Introduction

ITOC fulfilled its responsibilities and provided accountability through its expertise in public questioning and oversight of the *TransNet* Extension Ordinance with practices that aligned with other taxpayer entities through staggered terms, relevant qualifications for members, and diligent recruitment and selection activities. However, there are opportunities for SANDAG and ITOC to incorporate changes to its protocols related to standardizing term limits, enhancing qualifications, clarifying its conflict-of-interest, and modifying selection practices.

Committee Membership was Fairly Static with Staggered Terms

In 2017, SANDAG amended the *TransNet* Extension Ordinance to ensure member terms were sufficiently staggered and historical knowledge would not be lost with all members' terms expiring at the same time. Membership turnover had been fairly static with three of the seven members occupying the same positions since the 2013 to 2015 timeframe, until 2019 and 2020 when SANDAG had to readvertise and fill six of its positions. Several peers used similar staggered terms for its members with lengths of service generally comparable to ITOC's four-year term—although some entities established a shorter two or three-year term, with one having a longer five-year term.

However, we noted an inconsistency related to ITOC's term limits that may have occurred unintentionally when SANDAG revised the *TransNet* Extension Ordinance to add staggered terms for the ITOC members. Currently, the *TransNet* Extension Ordinance allows ITOC members who fill a mid-term vacancy to serve up to a total of 10 years on the committee, while other members can only serve up to eight years. Thus, SANDAG should modify the *TransNet* Extension Ordinance language to be consistent with the service limits for all members regardless of whether a member joins the committee to fill a full-term position or mid-term vacancy.

Member Qualifications Aligned with Other Entities Reviewed

Overall, most of the required ITOC member qualifications were robust and similar with the other six entities we reviewed in addition to involving similar numbers of members on their committees. [45] Specifically, like ITOC, almost all other committees we reviewed also required their members to have experience as a licensed architect or engineer, in some type of finance, and with large-scale construction activities.

Although ITOC's qualifications shared many similarities with some entities reviewed, other entities incorporated different areas of expertise and specialty on their committees using professionals with transit, economic development, and goods movement experience as shown in Exhibit 27. Several entities even included more general experience utilizing retired judges, major employer representatives from the region, academics, student representatives, and general citizens. Moreover, the Transportation Authority of Marin and the San Joaquin Council of Governments held requirements that members represent certain interest groups instead of specific expertise including the League of Woman Voters, Sierra Club, National Association for the Advancement of Colored People, and local bicyclists and pedestrian groups.

EXHIBIT 27. OVERSIGHT COMMITTEE EXPERTISE REQUIREMENTS AT OTHER ENTITIES REVIEWED

Certification Desired or Expertise Category	ITOC Requirement	Number of Other Entities with same Requirement
Licensed Engineer (Transportation)	✓	0
Licensed Architect / Engineer (Traffic, Civil, Planning)	✓	6
Biology, Environmental Science, Habitat Acquisitions, Conservation	✓	2
Large Scale Construction	✓	4
Real Estate, Land Economics, Right of Way Acquisition	✓	1
Chief Executive, Major Employers Groups	✓	2
Professional (Budget, Municipal / Public Finance)	✓	3
Performance Measures	✗	1
Goods Movement, Commerce, Trucking	✗	2
Agriculture, Water Irrigation	✗	2
Economic Development, Small Business	✗	2
Education Representatives, Student Representatives	✗	3
Citizens at Large	✗	4
Retired State or Federal Judge	✗	2
Public Transit User	✗	2

Source: Individual oversight committee websites.

---

[45] The comparable agencies were: (1) Merced County Association of Governments, (2) Los Angeles County Metropolitan Transportation Authority, (3) Council of San Benito County Governments, (4) San Bernardino County Transportation Authority, (5) Pima Association of Governments & Regional Transportation Authority, and (6) Transportation Authority of Marin.

During our audit period, the types of issues presented before ITOC were typically within the requisite types of background or experience covered by current member qualifications. Yet, given some newer topic areas ITOC has started to discuss at its meetings, SANDAG could consider expanding the ITOC qualifications to include knowledge of multi-modal planning and solutions, active transportation, transportation system management and operations, transportation planning, performance measures, and legal issues.

Conflict-of-Interest Policy Aligned with Others, although Clarifications may Help

When compared with other entities, ITOC's conflict-of-interest policy was similar to eight other oversight committees we reviewed. [46] For instance, SANDAG had nearly the same policy as the Los Angeles Metropolitan Transportation Authority and the San Bernardino County Transportation Authority with prohibitions from acting in any commercial activity directly or indirectly with the entity, such as being a consultant to the entity or to any party with pending legal actions against the entity during their tenure on the committee. ITOC's requirements related to having "no financial conflict with regard to allocation of revenues," was like the policy at the Orange County Transportation Authority and the Stanislaus Council of Governments as well—containing controls to mitigate impacts from potential conflicts by members.

Like the SANDAG Board, ITOC members must sign conflict of interest waivers upon joining the committee and were required to file annual statement of economic interest certifications. Additionally, the ITOC required having "no direct commercial interest or employment with any public or private entity, which receives *TransNet* sales tax funds authorized by this Ordinance" that was like the others reviewed.

Yet, SANDAG could better define or provide examples of potential conflicts in new ITOC member recruitment materials, along with clarifying when members should recuse themselves from certain decisions because of potential perceived conflicts, to help broaden the pool of prospective applicants. SANDAG provided examples and types of clarification to new ITOC members during the on-boarding process, but that same information should be provided earlier as part of member recruitment and application processes. Especially in light of recent turnover and longer vacancies, providing more clarity to member conflict-of-interest provisions as part of recruitment efforts could facilitate better understanding of membership requirements by interested persons and minimize any perceived barriers to participating in this important oversight committee.

Recruitment and Selection Practices Aligned with Others, although Options Exist for Enhancements

In general, ITOC recruitment and selection practices aligned with nine other oversight committees we reviewed. [47] More than half of the entities provided clear application forms, described recruitment

---

[46] The eight other oversight committees we reviewed for conflict-of-interest provisions included: (1) Los Angeles County Metropolitan Transportation Authority, (2) Council of San Benito County Governments, (3) San Bernardino County Transportation Authority, (4) San Joaquin Council of Governments, (5) Orange County Transportation Authority, (6) Pima Association of Governments & Regional Transportation Authority, (7) Stanislaus Council of Governments and (8) Transportation Authority of Marin.

[47] The nine oversight committees we reviewed recruitment practices included: (1) Merced County Association of Governments, (2) Los Angeles County Metropolitan Transportation Authority, (3) Council of San Benito County Governments, (4) San Bernardino County Transportation Authority, (5) San Joaquin Council of Governments, (6) Orange County Transportation Authority, (7) Napa Valley Transportation Authority, (8) Stanislaus Council of Governments, and (9) Transportation Authority of Marin.

processes on their websites such as "if you are interested in being on the committee, submit an application here" and announced the "committee had openings" like SANDAG does when there were vacancies. Additionally, most committees reviewed employed a similar selection process with governing board representatives or elected officials selecting taxpayer committee members—although some employed different options that SANDAG and ITOC may want to consider.

For instance, the Orange County Transportation Authority used its County Grand Jurors Association to screen all applications and interview potential candidates. Finalists recommended by the Grand Jurors were then chosen by lottery at an Orange County Transportation Authority Board meeting—separate from influence by any of the Board members. At the San Joaquin Council of Governments, its 16-member citizens advisory committee was also selected outside of its Council membership with committee members appointed by local jurisdictions, public and private organizations, and advocacy groups.

While SANDAG last used a technical screening committee consisting of external members from the Southern California Association of Governments, Imperial County Transportation Commission, and UC San Diego to review applications and recommend two candidates for each vacant position to the Board for final decision and approval, it could consider whether there would be any benefits from amending the *TransNet* Extension Ordinance and moving the selection process outside of SANDAG to minimize possible perceptions of selection bias. [48]

Recommendations

To enhance its already diligent and robust oversight practices, the ITOC should request the SANDAG Board to direct staff to:

23. **High Priority.** Incorporate existing conflict-of-interest policy clarifications from ITOC new member on-boarding resources into recruitment materials, emphasize in recruitment efforts that a potential conflict does not automatically disqualify prospective applicants, and clarify when members should recuse themselves from certain decisions because of potential perceived conflicts.

24. **Medium Priority.** Modify the *TransNet* Extension Ordinance language to be consistent with the service limits for all members regardless of whether a member joins the committee to fill a full-term position or mid-term vacancy.

25. **Low Priority.** Consider expanding the ITOC qualifications to include knowledge of emerging topics SANDAG presents before the committee such as multi-modal planning, active transportation, transportation system management and operations, transportation planning, performance measures, and legal issues.

26. **Low Priority.** Explore options and feasibility of moving ITOC candidate screening and selection process outside of the SANDAG Board to maximize appointment transparency and minimize any perceived selection bias.

---

[48] SANDAG's current selection process is consistent with the *TransNet* Extension Ordinance requirements.

Appendix A: Glossary of Terms

Caltrans	The California Department of Transportation (Caltrans) is the statewide department responsible by statute for highway capital project planning, construction, and maintenance.
CIP	The Capital Improvement Program (CIP) is a planning component of SANDAG's annual budget and includes details on how capital budgets are funded such as with *TransNet* Extension Ordinance dollars, state formula or grant monies, or federal grant and funding allocations. SANDAG assigns each project in the CIP a unique number which serves as an identifier for a project over time. The CIP budget also provides an account of expenditures to-date as well as estimated expenditures for future years and by project phase.
CMCP	Comprehensive Multimodal Corridor Plans (CMCP) are plans to address congestion, climate goals, and community transportation needs by evaluating all travel modes and impacts on local regions. CMCPs are often required to compete for State funding. At SANDAG, as part of the development of the 2021 Regional Transportation Plan, the Board approved the development of 12 CMCPs in September 2019—of those, five were underway as of November 2020.
Fiscal Year	Fiscal Year noted represents the ending year (e.g., FY 2021 = Fiscal Year-ending June 30, 2021).
ITOC	Independent Taxpayer Oversight Committee (ITOC) established by the *TransNet* Extension Ordinance and tasked with representing taxpayer interests and monitoring *TransNet* Extension Ordinance financial integrity and performance.
MPO	A Metropolitan Planning Organization (MPO) is an agency created by federal law to provide local officials input into the planning and implementation of federal funds in urban areas with populations greater than 50,000.
QA/QC	Quality Assurance/Quality Control (QA/QC) is the process in which tests are administered to check validity of data, including proactively preventing defects (the quality assurance aspect) and reviewing after the fact for defects (the quality control aspect).
POE	The Plan of Excellence (POE) is an 8-point plan for strengthening SANDAG's accountability and transparency. It was developed in response to recommendations made to SANDAG from several sources, including the FY 2018 *TransNet* Triennial Performance audit as well as an independent examination of Measure A Revenue Communications conducted as a result of a forecasting error.
POF	The Plan of Finance (POF) is a SANDAG Board-adopted, continually-updated financial planning tool used to project revenues and expenditures over the 40-year life of the *TransNet* Extension Ordinance with a particular focus on funding sources and uses for the Major Corridor and Regional Bikeway Programs over the next 5 to 7 years. It illustrates SANDAG's financing strategies and cash flow considerations to deliver the projects planned in the *TransNet* Extension Ordinance.
PRP	The Peer Review Process (PRP) brings in internal and external experts to review and question models, calculations, assumptions, documentation, and analytics before work is finalized and released.
RTP	The Regional Transportation Plan (RTP) is a federally-required planning document that serves as the blueprint for visioning a region's transportation infrastructure needs. Based on various planning models that evaluate expectations for economic expansion, population growth, and other socio-economic factors, the RTP ultimately maps the transportation network required to address regional needs.
SANDAG	The San Diego Association of Governments (SANDAG) is the Metropolitan Planning Organization and regional decision-making body consisting of 18 cities and the county. In its role as the San Diego County Regional Transportation Commission, it is also charged with administering, planning, implementing, and funding regional transportation programs of the *TransNet* Extension Ordinance.

Appendix B: Detailed Audit Methodology

The *TransNet* Extension Ordinance established a requirement that the Independent Taxpayer Oversight Committee (ITOC) conduct triennial performance audits of the agencies involved in the implementation of *TransNet* Extension Ordinance-funded projects.

ITOC contracted with Sjoberg Evashenk Consulting Inc., to conduct a performance audit for the three-year period between July 1, 2017 and June 30, 2020 and identified the following 10 audit scope focus areas for the Fiscal Year (FY) 2021 audit that examined the performance of the San Diego Association of Governments (SANDAG), Caltrans, San Diego Metropolitan Transit System, North County Transit District, County of San Diego, City of San Diego, other cities of the San Diego regions, ITOC, key stakeholder groups, or consultants used by the transportation agencies as warranted:

1. Project Delivery
2. Program Management
3. Compliance
4. Fiscal Responsibility
5. Transparency & Accountability

6. Follow-up of Prior Audit Recommendations
7. Impact of Implementation of AB 805
8. Deep Dive into Safety
9. Deep Dive into Bike Early Action Program
10. Review of ITOC

To understand changes made to the *TransNet* Extension Ordinance since the prior audit, Sjoberg Evashenk reviewed federal and state regulations, *TransNet* Extension Ordinance updates and amendments, prior audit status of corrective action, annual budgets, fact sheets, and online data, in addition to the following:

- Regional Transportation Improvement Program of 2016 and 2018;
- 2019 San Diego Forward: The Regional Plan;
- State of the Commute Reports for 2017 through 2020;
- *TransNet* Extension Ordinance Quarterly Reports from July 1, 2017 through June 30, 2020; and
- SANDAG's Capital Improvement Program and Overall Work Program for FYs 2016 to 2021.

To analyze and consider the full complement of challenges and successes surrounding the organizational and operational procedures in the implementation of the *TransNet* Extension Ordinance, 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* Extension Ordinance. Specifically, we met with over 50 executives, officials, managers, staff, consultants, and stakeholders in areas related to transportation planning, capital construction, program management, finance and economics, transit operations, business operations, bicycle safety, and program oversight.

Our end of audit fieldwork period was December 31, 2020, although we considered any subsequent events or activities as warranted and practical through February 28, 2021.

To determine the status of Major Corridor Program projects completed and remaining, we conducted the following tasks:

- Using the 2004 *TransNet* Extension Ordinance and Expenditure Plan (*TransNet* Extension Ordinance), identified the initial portfolio of Major Corridor capital project segments by reviewing both project titles and descriptions.

- Reconciled information from improvements identified in the *TransNet* Extension Ordinance to the 2019 Regional Transportation Plan (RTP), *TransNet* Dashboard, project maps and fact sheets from SANDAG's keepsandiegomoving.com website, SANDAG's FY 2021 Overall Work Program Capital Improvement Plan (CIP) Budget, SANDAG Transportation Committee, Board, ITOC meeting materials, and Google maps to determine the status of the projects as well as whether the improvements fulfilled the intent of the *TransNet* Extension Ordinance.

- For projects where status was unclear, discussed progress with SANDAG's *TransNet* Project Office and Engineering & Construction staff, as well as Caltrans Corridor Directors.

To evaluate the financing decisions made by SANDAG to date, we conducted the following tasks:

- Reviewed the reasonableness of the Plan of Finance (POF) and overall financing strategy to consider reasonableness of available funding to finish Early Action Program (EAP) projects, evaluated revenue forecast and cost projection methodologies, and reviewed the analysis developed by SANDAG's external, independent financial experts related to the availability of *TransNet* Extension Ordinance funding for EAP projects.

- Identified changes to SANDAG's debt service obligations between the 2017 POF, 2019 POF, and April 2020 Debt Service Coverage Data and assessed the likelihood that SANDAG could meet future debt service obligations given current revenues and future revenue projections.

- Compared funds provided by debt versus *TransNet* Extension Ordinance revenues to determine the proportion of future revenues that will go to debt service and compared results against the FY 2018 *TransNet* Triennial Performance audit.

- Reviewed revenue projections and underlying assumptions, compared past forecasts to actual collections for the *TransNet* Extension Ordinance and other funding sources, and identified fluctuations in sources.

- Analyzed cost estimates and underlying assumptions, and summarized expectations with actual results for pertinent cost indicators such as construction (including labor) indices.

To evaluate information provided to decision makers and the public as well as the awareness of *TransNet* Extension Ordinance activities, we performed the following:

- Reviewed and compared tools used by SANDAG and 12 peer entities to communicate program progress including *TransNet* Dashboards, annual reports, webpages, and social media.

- Evaluated meeting agendas and packets for the SANDAG Board and several other transportation oversight committees in California, Arizona, and Washington.

- Assessed *TransNet* Extension Ordinance reports and communication to the Board and ITOC.

- Obtained underlying support and evaluated status of completion for components of the Plan of Excellence.

- Reviewed and evaluated policies, procedures, guidelines, and support surrounding Quality Assurance/Quality Control (QA/QC) activities and Peer Review Process (PRP) documentation including meeting minutes, test plans, planned checklists, templates, test result and related memos, data files, and data testing spreadsheets,

To determine the status of prior audit recommendations, we conducted the following tasks:

- Reviewed latest prior audit status reports and listings available on SANDAG's website and updates provided by staff.

- Conducted interviews with staff to understand what progress was made on outstanding recommendations.

- Reviewed the SANDAG Office of the Independent Performance Auditor's latest audit plan and report on prior audit recommendation status.

- Gathered documentary support for corrective action to verify progress or reported completion.

To assess the impact of Assembly Bill (AB) 805, we conducted the following tasks:

- Reviewed applicable sections of the California Public Utilities Code before and after the passage of AB 805 to understand changes.

- Reviewed AB 805 and the *TransNet* Extension Ordinance to identify any impacts or potential conflicting requirements AB 805.

- Conducted an analysis of Board meeting materials, voting records, and agenda listings to identify any trends and patterns in member attendance, member voting, weighted votes, and other shifts before and after the passage of AB 805 to determine if AB 805 had an impact on *TransNet* Extension Ordinance related items.

To identify responsibilities for monitoring and addressing transportation safety planning as well as emergency response and system capacity planning in the region, we:

- Focused only on safety planning overall, rather than safety on project job sites or safety internal to SANDAG or the other *TransNet* Extension Ordinance partner agencies.

- Reviewed 2020-2024 Strategic Highway Safety Plan, 2015-2019 Highway Safety Improvement Plan, SANDAG Board MAP-21 target setting for 2018, and SANDAG 2018 RTP.

- Researched and studied state and local emergency response plans, hazard mitigation plans, and emergency preparedness activities for the San Diego region as well as federal guidelines.

- Inquired and reviewed documents from SANDAG and Caltrans designated representatives related to emergency evacuation and system capacity activities.

- Compared SANDAG's emergency planning and system capacity activities with other entries.

To compare the San Diego region's bicycle and pedestrian safety performance with selected comparable areas, we performed the following steps:

- Obtained external data from sources including the Caltrans' Performance Monitoring System, California Highway Patrol's Statewide Integrated Traffic Records System (SWITRS), and United States Census American Community Survey data.

- Requested collision and injury data by data from SWITRS in one-year sets for calendar years 2016 through 2020.

- Analyze SWITRS data to compare safety performance indicators in the San Diego County region with four California comparison counties. Alameda County, Riverside County, San Bernardino County, San Diego County, San Francisco (City and) County.

- Collected data for daily vehicle miles of travel by downloading the Public Road Data reports from the Caltrans website for calendar years 2016 through 2018.

- Used the Berkeley Transportation Injury Mapping System to gather primary collision factor reported in SWITRS for bicycle collisions for the most recent period data was available from January 1, 2016 to December 31, 2019.

- Used the Berkeley Transportation Injury Mapping System to identify road segments or intersections with high frequency of collisions, calculate rank of clusters of collisions at single intersections or road segments, and worked with transportation planning representatives from two cities with road segments or intersections with highest frequency of collisions to assess what local actions or responses were taken related to focus areas.

Throughout most areas under audit, we compared SANDAG's activities to other entities that were Metropolitan Planning Organizations (MPO), transportation agencies, or transit districts with capital programs, similar population and size of service area, and responsibilities similar to SANDAG including the Metropolitan Transportation Commission, Sacramento Area Council of Governments, Maricopa Association of Governments, Southern California Association of Governments, Puget Sound Regional Council, Miami-Dade MPO, Regional Transportation District Denver, Orange County Transportation Authority, Pima Association of Governments, Metropolitan Council, Houston-Galveston Area Council, and Portland Metro.

- Compared other entities' RTPs to SANDAG's RTP in terms of portfolio mix of projects (transit, highway, aviation, rail, etc.), dollar value of program, and use of sales tax measure funding.

- Reviewed other entities' RTPs to determine depth and scope of safety and emergency planning included in plans and to what extent peers relied on external partners to coordinate efforts.

- Compared how other entities' boards (or board equivalent) were structured and functioned including review of member composition, membership rules, and voting rules.

- Reviewed sample of other entity Board meeting materials and packets to identify similarities and differences compared to SANDAG.

- Reviewed best practices on structures and functions of MPOs and Boards including voting practices and board meeting packets.

- Assessed how other entities tracked, monitored, and reported on delivery plans and performance metrics as outlined in their sales tax measures or RTPs to the public and decision-makers.

- Determined whether other agencies have safety goals and planning in their RTPs, if they collaborate with others (regional partners) on safety planning, and if they do all this using dedicated safety staff.

- Reviewed tools, reports, social media, and other methods other entities used to communicate status and progress.

To review status, processes, controls, and oversight exercised over the Bike Early Action Program (EAP), we performed the following:

- Compiled a universe of Bike EAP projects to assess progress and compared against project delivery list from the original Bike EAP.
- Interviewed SANDAG Bikeway Corridor Director, Active Transportation Program Manager, and bikeway project managers as well as a representative from the City of San Diego.
- Conducted a limited review of project documentation to understand bikeway project delivery framework and project management practices.
- Queried data from the *TransNet* Dashboard as well as analyzed *TransNet* Extension Ordinance budgets and expenditures to determine Bike EAP progress.
- Queried data from the *TransNet* Dashboard to determine bikeway projects' schedule status and identify any reasons for delay.
- Performed a high-level review for a sample of delayed projects to identify any trends in delivery challenges as well as delays specific to projects completed to date.
- Conducted a comparison of peer entities with capital bike programs to identify any similarities, differences, and common challenges in program delivery.
- Assessed materials and reports by staff presented to SANDAG leadership to determine whether quality and types of information provided are sufficient for decision-makers.

Finally, to assess whether ITOC's practices aligned with other taxpayer oversight entities, we conducted the following tasks:

- Assessed ITOC bylaws, annual reports, and implementation procedures.
- Reviewed ITOC meeting agendas and minutes between July 2017 and December 2020.
- Tracked *TransNet* Extension Ordinance experience criteria against member bios.
- Evaluated bylaws, applications, resumes, and measures from comparable taxpayer oversight committees.
- Charted term limits and vacancies for each member active during the audit period.
- Compared ITOC recruitment and selection, qualifications, terms, and conflict of interest policies with similar entities in other regions within California and Arizona.

Audit findings and conclusions were presented and discussed with representatives of SANDAG and the ITOC Audit Subcommittee on several occasions prior to completion of the audit. Management views and comments were considered and incorporated into the audit report, as appropriate.

We conducted this performance 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 C: *TransNet* Extension Ordinance Major Corridor Program Status

Using the *TransNet* Extension Ordinance, *TransNet* Dashboard, Major Corridor Program status table, and Plan of Finance documents provided by SANDAG, the status of the 48 Major Corridor capital construction projects by *TransNet* Extension Ordinance category and capital improvement project (CIP) number is summarized in Exhibit 29 that follows. As of June 2020, 35 percent of the 48 major corridor capital construction projects were completed and 23 percent were in-progress. To-date, SANDAG reported program costs of nearly $7.7 billion and estimates of approximately $24.5 billion in remaining expenditures to complete all projects planned in the *TransNet* Extension Ordinance.

Due to the complex nature of the information, Exhibit 28 provides additional clarification to the status of data subsequently presented in Exhibit 29. Note that the number of project segments in this listing is greater than the number discussed in Chapter 1 of this report due to Chapter 1 discussing the overall status of the Major Corridor Program in relation to the improvements outlined in the Ordinance, while this universe of *TransNet* Extension Ordinance projects identifies all projects that were either paid for using *TransNet* Extension Ordinance or were identified as an original improvement. For instance, the I-15 Middle Segment, I-15 FasTrak, I-15 BRT Wifi, or I-5 Central Mobility Hub were not specifically called for in the *TransNet* Extension Ordinance but became necessary components on the I-15 Corridor.

EXHIBIT 28. CLARIFICATION FOR *TRANSNET* EXTENSION ORDINANCE PROJECT LISTING AT EXHIBIT 29

Exhibit Area	Description
General	All budget and expenditure amounts shown are unaudited.
Ordinance Number	▪ Numbered 1 to 48—representing the 48 major corridor projects from the 2004 *TransNet* Extension Ordinance passed by voters. ▪ EAP (Early Action Program)—19 original project segments from the *TransNet* Extension Ordinance that the SANDAG Board of Directors designated to be completed during the first 10 years of the program. Subsequent EAP project segments were approved by the SANDAG Board of Directors consistent with the *TransNet* Extension Ordinance.

Project / Segment Name	▪ 3 layers—corridor, major corridor project, and project/segment as follows:
	  ✓ **Ordinance Corridor: 15 corridors** per the *TransNet* Extension Ordinance.
	  ✓ **Major Corridor Ordinance Project: 48 major corridor projects** per the *TransNet* Extension Ordinance.
	  ✓ **Project Segment: 97 project segments to date.** Project segments are shown with a seven-digit number that represents the project's Capital Improvement Program (CIP) budget number. Only completed and in-progress projects have a CIP.
	
	Example for I-15 Corridor:
	
	Note: The I-15 stretch between SR 56 and Centre City Pkwy was built as the I-15 Express Lanes Middle Segment.

Exhibit Area	Description
Segment	▪ The 48 initial *TransNet* Extension Ordinance projects resulted in 97 individual project segments as of June 30, 2020, but this number will grow as new project segments are started. ▪ The project listing from the FY 2018 *TransNet* Triennial Performance Audit identified 78 individual project segments as of June 2018—compared to the 97 segments as of June 2020. This segment number will grow as new project segments are added, which also impacts any "point-in-time" status determination. ▪ Specifically, the FY 2018 *TransNet* Triennial Performance Audit identified a completion rate of 33 percent, 28 percent in-progress, and 39 percent as future. These statistics are now 35 percent complete, 25 percent in-progress and 42 percent future. Lastly, some CIP projects (e.g., Blue Line and Orange Line Trolley) support multiple corridors, but were only counted once to arrive at the grand total of 97 project segments.
Status	▪ <u>General</u>: Project segments where only a study was completed are shown because expenses were incurred, but were not counted as a completed project segment. ▪ <u>Project Completed & Open-to-Traffic</u>: At the 48 Ordinance Project level, check (✔) marks represent fully completed segment while percentages represent the portion of the segment that is completed. ▪ <u>In-Progress</u>: Project segments could be in various stages—environmental, design, or construction. ▪ <u>Future</u>: Project or project segments have not started and have not incurred expenses but a CIP budget number has been assigned.
Budgets	▪ <u>General</u>: Due to rounding, some budget figures do not roll-up to the exact dollar figure. ▪ <u>Ordinance Estimate</u>: In 2002 dollars. Amounts per the *TransNet* Extension Ordinance. Data only available at ordinance corridor and major corridor ordinance project level. ▪ <u>Ordinance Escalated to Year Open</u>: Shown for completed project segments only to allow for comparison of 2002 Ordinance cost estimates to costs at time of completion using U.S. Bureau of Labor Statistics CPI data for the San Diego Region. ▪ <u>2005 POF Estimate</u>: In 2005 dollars. Amounts per the 2005 Plan of Finance available for the original EAP project segments only. ▪ <u>2005 POF Escalated to Year Open</u>: Shown for completed EAP project segments only to allow for comparison of 2005 budgets per the POF to the budget at time of project completion using U.S. Bureau of Labor Statistics CPI data for the San Diego Region. ▪ <u>Project CIP Budget</u>: CIP Budget as of June 30, 2020 from *TransNet* Dashboard for in-progress project segments only.
Expenditures	▪ <u>General</u>: Due to rounding, some expenditure figures do not roll-up to the exact dollar figure. ▪ <u>Expenditures through June 2020</u>: Project expenses as reported in SANDAG's FY 2021 Overall Work Program, CIP Budget Chapter 9. This includes some expenditure estimates due to the Budget being issued before Fiscal Year-end. ▪ <u>Variance</u>: Only calculated for completed projects by subtracting current expenditures from the 2005 POF Estimate (escalated to year open). ▪ <u>Estimated Cost to Complete</u>: Amounts per October 2019 Regional Transportation Plan—shown in year of expenditure dollars (YOE) at the Ordinance Project level and includes future projects with no current CIP only.

EXHIBIT 29. STATUS OF MAJOR CORRIDOR CAPITAL PROJECTS AS INCLUDED IN THE *TransNet* EXTENSION ORDINANCE

Ordinance Number	Project/Segment Name	Segment	Status			Budgets					Expenditures		
			Project Completed & Open-to-Traffic	In-Progress	Future Project	Ordinance Estimate (2002 Dollars)	Ordinance Escalated to Year Open	2005 POF Estimate (2005 Dollars)	2005 POF (Escalated to Year Open)	Project CIP Budget June 2020	Expenditures through June 2020[4]	Variance (2005 POF Escalated minus Expenditures)	Estimated Cost to Complete (Escalated to YOE $)
I-15 Corridor						**$1,400M**	**-**	**$1,893M**	**-**	**-**	**$1,246M**	**-**	**$482M**
1	**I-15: SR 163 to SR 56**		✔	-	-	**$220M**	**$286M**	**$423M**	**$482M**	**-**	**$820M**	**-$338M**	
EAP	1201501: I-15 Express Lanes South Segment	1	2011	-	-	-	-	$332M	$380M	-	$330M	$50M	Projects Complete
EAP	1201502: I-15 Express Lanes Middle Segment [1]	2	2009	-	-	-	-	$72M	$79M	-	$464M	-$385M	
EAP	1201504: I-15 FasTrak®	3	2009	-	-	-	-	$20M	$23M	-	$26M	-$3M	
2	**I-15: Centre City Pkwy to SR 78**		✔	-	-	**$120M**	**$156M**	**$179M**	**$208M**	**-**	**$183M**	**$25M**	Projects Complete
EAP	1201503: I-15 Express Lanes North Segment	4	2012	-	-	-	-	$179M	$208M	-	$183M	$25M	
3	**I-15: SR 94 to SR163**		-	✔	-	**$200M**	**-**	**-**	**-**	**-**	**$17M**	**-**	**$131M**
	1280514: I-805/SR 15 Interchange	5	-	✔	-	-	-	-	-	-	$17M	-	-
4	**HOV Connector: I-15 / SR 78**		-	✔	-	**$200M**	**-**	**-**	**-**	**$33M**	**$3M**	**-**	**$171M**
	1207802: I-15/SR 78 HOV Connectors (Study only)	6	-	-	-	-	-	-	-	$33M	$3M	-	-
5	**HOV Connector: I-15 / SR 94**		-	✔	-	**$150M**	**-**	**-**	**-**	**-**	**$21M**	**-**	**$180M**
	1280508: SR 94 Express Lanes I-805 to Downtown	-	-	✔	-	-	-	-	-	Merged with OP 15	$21M	-	-
6	**SR 94: I-5 to I-15**		-	✔	-	**$80M**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	1280508: SR 94 Express Lanes I-805 to Downtown	-	-	✔	-	-	-	-	-	Merged with OP 15	-	-	-
7	**BRT Route 610: via I-15 / SR 94 (Now Route 235)**		**80%**	**20%**	**-**	**$370M**	**-**	**$130M**	**-**	**-**	**$199M**	**-**	**-**
EAP	1201505: I-15 BRT Stations – Rancho Bernardo, Sabre Springs, and Del Lago	7	2009	-	-	-	-	$63M	$69M	-	$49M	$20M	Projects Complete
EAP	1201506: I-15 Mira Mesa DAR & BRT Station	8	2014	-	-	-	-	$58M	$70M	-	$54M	$16M	
EAP	1201508: I-15 Bus *Rapid* Transit	9	2014	-	-	-	-	-	-	-	$34M	-	
	1201509: Downtown BRT Stations	10	2016	-	-	-	-	-	-	-	$17M	-	
EAP	1201512: I-15 BRT Sabre Springs Parking Structure	11	2014	-	-	-	-	$9M	$11M	-	$14M	-$3M	
EAP	1201514: Downtown Multiuse and Bus Stopover Facility	12	-	✔	-	-	-	-	-	$46M	$19M	-	
	1201515: Clairemont Mesa Blvd BRT Stations	13	-	✔	-	-	-	-	-	$14M	$2M	-	
	1201516: I-15 BRT Station Enhancements	14	2014	-	-	-	-	-	-	-	$0.1M	-	Project Complete
	1201517: I-15 BRT WiFi Phase 1	15	2018	-	-	-	-	-	-	-	$0.2M	-	
	1201518: I-15 Mira Mesa Transit Station Parking Structure	16	2018	-	-	-	-	-	-	-	$10M	-	
8	**BRT Route 470: via I-15 / Mira Mesa Blvd (Now Route 237)**		**2015**	**-**	**-**	**$60M**	**-**	**-**	**-**	**-**	**$3M**	**-**	**-**
	1201511: Mira Mesa Blvd BRT Priority Treatments	17	2015	-	-	-	-	-	-	-	$3M	-	Project Complete

Ordinance Number	Project/Segment Name	Segment	Status			Budgets					Expenditures		
			Project Completed & Open-to-Traffic	In-Progress	Future Project	Ordinance Estimate (2002 Dollars)	Ordinance Escalated to Year Open	2005 POF Estimate (2005 Dollars)	2005 POF (Escalated to Year Open)	Project CIP Budget June 2020	Expenditures through June 2020 [4]	Variance (2005 POF Escalated minus Expenditures)	Estimated Cost to Complete (Escalated to YOE $)
I-805 Corridor						**$2,100M**	**-**	**$2,679M**	**-**	**-**	**$663M**	**-**	**$6,468M**
9	**I-805: SR 905 to SR 54**		**50%**	**50%**	**-**	**$150M**	**-**	**$10M**	**-**	**-**	**$74M**	**-**	**$316M**
EAP	1280501: I-805 South – 4 Express Lanes	18	2011	-	-	-	-	$10M	$12M	-	$28M	-$16M	Project Complete
	1280515: I-805 South Soundwalls	19	-	✓	-	-	-	-	-	$89M	$46M	-	-
10	**I-805: SR 54 to I-8**		**25%**	**-**	**75%**	**$450M**	**-**	**-**	**-**	**-**	**$159M**	**-**	**$1,262M**
	1280510: I-805 South – 2 HOV and DAR	20	2017	-	-	-	-	-	-	-	$159M	-	
11	**I-805: Mission Valley Viaduct**		**-**	**-**	**✓**	**$250M**	**-**	**-**	**-**	**-**	**-**	**-**	**$2,197M**
12	**I-805: I-8 to I-5**		**50%**	**-**	**50%**	**$380M**	**-**	**$7M**	**-**	**-**	**$206M**	**-**	**$2,190M**
EAP	1280503: I-805 North 4 Express Lanes	21	2010	-	-	-	-	$7M	$8M	-	$12M	-$4M	Projects Complete
	1280505: I-805 HOV/Carroll Canyon DAR	22	2014	-	-	-	-	-	-	-	$94M	-	
	1280511: I-805 North: 2 HOV Lanes	23	2016	-	-	-	-	-	-	-	$99M	-	
	1280516: I-805 North Auxiliary Lanes	24	-	✓	-	-	-	-	-	$4M	$1M	-	-
	1280517: I-805 HOV Conversion to Express Lanes	25	-	-	✓	-	-	-	-	$35M	-	-	-
	1280518: I-805 Transit Priority Lanes (SR 15 to SR 52)	26	-	-	✓	-	-	-	-	$30M	-	-	-
13	**I-805 / SR 54 Interchange Improvements**		**✓**	**-**	**-**	**$10M**	**$12M**	**-**	**-**	**-**	**$15M**	**-**	**Project Complete**
	1280506: I-805 E Street Auxiliary Lane	27	2009	-	-	-	-	-	-	-	$15M	-	Project Complete
	1280520: I-805 / SR 94 / SR 15 Transit Connection	28	-	-	✓	-	-	-	-	$16M	-	-	-
14	**BRT Route 628: via I-805 / I-15 / SR 94 (Now known as South Bay *Rapid*)**		**✓**	**-**	**-**	**$500M**	**-**	**$106M**	**-**	**-**	**$209M**	**-**	**Project Complete**
EAP	1280504: South Bay BRT	29	2019	-	-	-	-	$106M	-	$126M	$125M	-	Project Complete
	1280512: I-805 Imperial BRT Station	30	-	✓	-	-	-	-	-	-	$1M	-	-
	1280513: I-805/SR 94 Bus on Shoulder Demonstration Project	31	-	✓	-	-	-	-	-	$31M	$23M	-	-
	1201513: South Bay BRT Maintenance Facility	32	2014	-	-	-	-	-	-	-	$60M	-	Project Complete
15	**SR 94: I-805 to I-15**		**-**	**✓**	**-**	**$70M**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	1280518: SR 94 Transit Priority Lanes (I-805 to I-5)	33	-	✓	-	-	-	-	-	Merged with OP 5, 6	-	-	-
16	**BRT Route 680: via I-805 / I-15 / SR 52**		**-**	**-**	**✓**	**$70M**	**-**	**$70M**	**-**	**Merged with OP 3**	**-**	**-**	**-**
17	**SR 52: I-15 to I-805**		**-**	**-**	**✓**	**$70M**	**-**	**-**	**-**	**-**	**-**	**-**	**$503**
18	**HOV Connector: I-805 / SR 52 Interchange**		**-**	**-**	**✓**	**$150M**	**-**	**-**	**-**	**Merged with OP 17**	**-**	**-**	**-**
I-5 South Corridor						**$1,893M**	**-**	**$2,437M**	**-**	**-**	**$2,437M**	**-**	**$1,167M**

Ordinance Number	Project/Segment Name	Segment	Project Completed & Open-to-Traffic	In-Progress	Future Project	Ordinance Estimate (2002 Dollars)	Ordinance Escalated to Year Open	2005 POF Estimate (2005 Dollars)	2005 POF (Escalated to Year Open)	Project CIP Budget June 2020	Expenditures through June 2020 [4]	Variance (2005 POF Escalated minus Expenditures)	Estimated Cost to Complete (Escalated to YOE $)
19	**I-5: SR 905 to SR 54**		-	-	2035	$130M	-	-	-	-	-	-	$627M
20	**I-5: SR 54 to I-8**		-	-	2035	$600M	-	-	-	-	$5M	-	$540M
	1149000: Central Mobility Station	34	-	✓	-	-	-	-	-	$40M	$5M	-	-
	1600501: Central Mobility Hub – Notice of Preparation / P3 Procurement	-	-	✓	-	-	-	-	-	$10M		-	-
21	**I-5: I-8 to I-805**		25%	25%	75%	$193M	-	-	-	-	$175M	-	$2,580M
	1200505: I-5/I-8 West to North Connector Improvements	35	2015	-	-	-	-	-	-	-	$16M	-	Project Complete
	1200506: I-5/Genesee Interchange and Widening	36	2018			-	-	-	-	-	$116M	-	
	1200507: I-5/Voigt Drive Improvements	37	-	✓	-	-	-	-	-	$43M	$20M	-	-
	1200508: I-5/Gilman Drive Bridge	38	2019	-	-	-	-	-	-	-	$23M	-	Project Complete
22	**Route 500 (Blue Line Trolley) Improvements**		95%	5%	-	$270M	$370M	-	-	-	$570M	-	
	1210010: Orange and Blue Line PM	39	2015	-	-	-	-	-	-	-	$19M	-	
	1210020: Blue Line Crossovers and Signals	40	2013	-	-	-	-	-	-	-	$41M	-	
	1210030: Blue Line Station Rehab	41	2015	-	-	-	-	-	-	-	$131M	-	
	1210040: Orange and Blue Line Traction Power Substations	42	2014	-	-	-	-	-	-	-	$29M	-	Projects Complete
	1210050: Orange and Blue Line Communications System	43	2015	-	-	-	-	-	-	-	$6M	-	
	1210070: Orange and Blue Line Platforms	44	2013	-	-	-	-	-	-	-	$69M	-	
	1210080: Low Floor LRT Vehicles	45	2014	-	-	-	-	-	-	-	$275M	-	
	1210091: Palomar Street Rail Grade Separation	46	-	✓	-	-	-	-	-	$5M	$0.2M	-	-
	1600502: CMCP Blue Line / I-5 S	-	-	✓	-	-	-	-	-	$3M	-	-	-
23	**Route 570 (MidCoast)**		-	✓	-	$670M	-	$914M	-	-	$1,660M	-	-
EAP	1257001: Mid-Coast Light Rail Transit (LRT)	47	-	✓	-	-	-	$914M	-	$2,171	$1,660M	-	-
24	**Route 634 (*SuperLoop*) (Now Routes 201, 202, and 204)**		✓	-	-	$30M	$39M	$52M	$61M	-	$31M	$30M	$56M
EAP	1041502: *SuperLoop*	48	2012	-	-	$30M	$39M	$52M	$61M	-	$31M	$31M	Project Complete
	I-5 North Corridor					$1,670M	-	$2,060M	-	-	$1,973M	-	$9,232M
25	**I-5 / I-805 Merge**		-	-	2035	$30M	$41M	$37M	$45M	Merged with OP 21	$73M	-	-
26	**I-5: SR 56 to Leucadia Blvd**		33%	67%	-	$400M	-	$60M	-	-	$587M	-	-
EAP	1200501: I-5 North Coast – 4 Express Lanes (Final Environmental Document)	49	2015	-	-	-	-	-	-	-	$73M	-	Projects Complete
EAP	1200502: I-5 HOV Extension & Lomas Santa Fe Interchange	50	2009	-	-	-	-	$60M	$66M	-	$67M	-$1M	

Ordinance Number	Project/Segment Name	Segment	Project Completed & Open-to-Traffic	In-Progress	Future Project	Ordinance Estimate (2002 Dollars)	Ordinance Escalated to Year Open	2005 POF Estimate (2005 Dollars)	2005 POF (Escalated to Year Open)	Project CIP Budget June 2020	Expenditures through June 2020 [4]	Variance (2005 POF Escalated minus Expenditures)	Estimated Cost to Complete (Escalated to YOE $)
	1200504: I-5 HOV Manchester to Palomar	51	-	✓	-	-	-	-	-	$408M	$193M	-	-
	1200509: I-5 HOV San Elijo Bridge Replacement	52	-	✓	-	-	-	-	-	$337M	$238M	-	-
	1200510: I-5 HOV Carlsbad	53	-	✓	-	-	-	-	-	$128M	$5M	-	-
	1200511: I-5 Ramp Meters	54	2015	-	-	-	-	-	-	-	$7M	-	Project Complete
	1200512: I-5 / Genesee Auxiliary Lane	55	-	✓	-	-	-	-	-	$7M	$4M	-	-
	1200515: CMCP I-5 / I-805 HOV Conversion to Express Lanes	-	-	-	✓	-	-	-	-	$2M	-	-	-
27	I-5: Leucadia Blvd to Vandegrift Blvd		-	50%	50%	$370M	-	-	-	Merged with OP 26	$791M	-	-
28	HOV Connector: I-5 / I-805 Interchange		-	-	✓	$180M	-	-	-	Merged with OP 25	-	-	-
29	FWY Connector: I-5 / SR 56 Interchange		-	-	✓	$140M	-	-	-	-	$13M	-	$487M
	1200503: I-5/SR 56 Interchange (Final Environmental Document)	-	-	✓	-	-	-	-	-	$13M	$13M	-	-
30	FWY Connector: I-5 / SR 78 Interchange		-	-	✓	$150M	-	-	-	-	-	-	$487M
31	Route 398 (COASTER) / BRT Route 472 Improvements		33%	34%	33%	$400M	-	-	-	-	$582M	-	$8,258M
	1239801: Sorrento to Miramar Phase 1	56	2014	-	-	-	-	-	-	-	$45M	-	
	1239803: Oceanside Station Pass-Through Track	57	2019	-	-	-	-	-	-	-	$28M	-	
	1239804: Carlsbad Double Track	58	2012	-	-	-	-	-	-	-	$20M	-	
	1239805: Poinsettia Station Improvements	59	2019	-	-	-	-	-	-	-	$34M	-	Projects Complete
	1239806: San Elijo Lagoon Double Track	60	2019	-	-	-	-	-	-	-	$79M	-	
	1239807: Sorrento Valley Double Track	61	2015	-	-	-	-	-	-	-	$31M	-	
	1239808: Tecolote to Washington Crossovers	62	2013	-	-	-	-	-	-	-	$9M	-	
	1239809: Eastbrook to Shell Double Track	63	-	✓	-	-	-	-	-	$11M	$8M	-	-
	1239810: Carlsbad Village Double Track	64	-	✓	-	-	-	-	-	$3M	$3M	-	-
	1239811: Elvira to Morena Double Track	65	-	✓	-	-	-	-	-	$187M	$182M	-	-
	1239812: Sorrento to Miramar Phase 2	66	-	✓	-	-	-	-	-	$29M	$12M	-	-
	1239813: San Dieguito Lagoon Double Track and Platform	67	-	✓	-	-	-	-	-	$16M	$14M	-	-
	1239814: COASTER Preliminary Engineering	68	-	✓	-	-	-	-	-	$1M	$1M	-	-

Ordinance Number	Project/Segment Name	Segment	Status: Project Completed & Open-to-Traffic	Status: In-Progress	Status: Future Project	Ordinance Estimate (2002 Dollars)	Ordinance Escalated to Year Open	2005 POF Estimate (2005 Dollars)	2005 POF (Escalated to Year Open)	Project CIP Budget June 2020	Expenditures through June 2020 [4]	Variance (2005 POF Escalated minus Expenditures)	Estimated Cost to Complete (Escalated to YOE $)
	1239815: San Diego River Bridge	69	-	✓	-	-	-	-	-	$92M	$91M	-	-
	1239816: Batiquitos Lagoon Double Track	70	-	✓	-	-	-	-	-	$15M	$11M	-	-
	1239817: Chesterfield Drive Crossing Improvements	71	-	✓	-	-	-	-	-	$7M	$7M	-	-
	1143800: Encinitas Grade Separation Pedestrian Crossing	72	2013	-	-	-	-	-	-	-	$6M	-	Project Complete
	1239820: COASTER Train Sets	73	-	✓	-	-	-	-	-	$59M	-	-	-
	1239821: CMCP LOSSAN Corridor Improvements	-	-	✓	-	-	-	-	-	$3M	$0.5M	-	-
SR 52						$410M	-	$498M	-	-	$500M	-	$147M
32	**SR 52: I-15 to SR 125**		50%	-	50%	$170M	-	$210M	-	-	$44M	-	$147M
EAP	1205201: SR 52 2 ML I-15 to SR 125		-	✓	-	-	-	$192M	-	-	$7M	-	-
EAP	1205202: SR 52 Widening	74	2011	-	-	-	-	$18M	$21M	-	$36M	-$15M	Project Complete
	1205204: SR 52 Improvements	75	-	✓	-	-	-	-	-	$12M	$0.5M	-	-
33	**SR 52: SR 125 to SR 67**		✓	-	-	$240M	$309M	$288M	$331M	-	$456M	-$125M	**Project Complete**
EAP	1205203: SR 52 Extension	76	2011	-	-	-	-	$288M	$331M	-	$456M	-$125M	Project Complete
SR 94 / SR 125						$620M	-	$765M	-	-	$13M	-	$1,834M
34	**FWY Connector: SR 94 / SR 125 Interchange**		-	✓	-	$110M	-	-	-	-	$13M	-	-
	1212501: SR 94 / SR 125 South to East Connector	77	-	✓	-	-	-	-	-	$30M	$13M	-	-
35	**SR 94: SR 125 to Steele Canyon Rd**		-	-	✓	$90M	-	-	-	-	-	-	**$777M**
36	**SR 94 / SR 125: I-805 to I-8**		-	50%	50%	$350M	-	-	-	-	-	-	**$1,057M**
37	**Route 520 (Orange Line Trolley) Improvements**		✓	-	-	$70M	$95M	-	-	-	-	-	**Projects Complete**
	1210010: Orange and Blue Line PM		2015	-	-	-	-	-	-	-	$19M	-	
	1210020: Blue Line Crossovers and Signals		2013	-	-	-	-	-	-	-	$41M	-	
	1210040: Orange and Blue Line Traction Power Substations		2014	-	-	-	-	-	-	-	$30M	-	Projects Complete
	1210050: Orange and Blue Line Communications System		2015	-	-	-	-	-	-	-	$6M	-	
	1210070: Orange and Blue Line Platforms		2013	-	-	-	-	-	-	-	$69M	-	
	1210080: Low Floor LRT Vehicles		2014	-	-	-	-	-	-	-	$275M	-	
SR 54 / SR 125						$140M	-	$173M	-	-	-	-	$319M
38	**SR 54 / SR 125: I-805 to SR 94**		-	-	✓	$140M	-	-	-	-	-	-	**$319M**
SR 67						$240M	-	$296M	-	-	$1M	-	$1,248M
39	**SR 67: Mapleview St to Dye Rd**		-	50%	50%	$240M	-	-	-	-	$1M	-	**$994M**
	1206701: SR 67 Improvements	78	-	✓	-	-	-	-	-	$21M	$1M	-	-
I-8 Corridor						$30M	-	$37M	-	-	-	-	$94M
40	**I-8: Second St to Los Coches Rd**		-	-	✓	$30M	-	-	-	-	-	-	**$94M**

Ordinance Number	Project/Segment Name	Segment	Project Completed & Open-to-Traffic	In-Progress	Future Project	Ordinance Estimate (2002 Dollars)	Ordinance Escalated to Year Open	2005 POF Estimate (2005 Dollars)	2005 POF (Escalated to Year Open)	Project CIP Budget June 2020	Expenditures through June 2020 [4]	Variance (2005 POF Escalated minus Expenditures)	Estimated Cost to Complete (Escalated to YOE $)
SR 78						**$700M**	**-**	**$864M**	**-**	**-**	**$92M**	**-**	**$479M**
41	**SR 78: I-5 to I-15**		-	✓	-	**$500M**	**-**	**-**	**-**	**-**	**$27M**	**-**	**-**
	1207801: SR 78 HOV/Managed Lanes (Study Only)	-	-	-	-	-	-	-	-	$2M	$1M	-	-
	1207803: SR 78 / I-5 Express Lanes Connector	79	-	✓	-	-	-	-	-	$16M	$3M	-	-
	1207804: SR 78 HOV Lanes I-5 to I-15	80	-	✓	-	-	-	-	-	$39M	-	-	-
	1201510: SR 78 Nordahl Road Interchange	81	2012	-	-	-	-	-	-	-	$23M	-	Project Complete
42	**Route 399 (SPRINTER) / BRT Route 471 Improvements**		**25%**	**-**	**75%**	**$200M**	**$245M**	**-**	**-**	**-**	**$65M**	**-**	**$479M**
	1230001: SPRINTER: Single Track	82	2008	-	-	-	-	-	-	-	$65M	-	Project Complete
SR 76						**$180M**	**$258M**	**$342M**	**$416M**	**-**	**$307M**	**$110M**	**Project Complete**
43	**SR 76: Melrose Dr to I-15**		✓	-	-	**$180M**	**$258M**	**$342M**	**$416M**	**-**	**$307M**	**$110M**	**Project Complete**
EAP	1207602: SR 76 Middle	83	2012	-	-	-	-	$195M	$227M	-	$162M	$65M	Projects Complete
EAP	1207606: SR 76 East	84	2017	-	-	-	-	$147M	$189M	-	$145M	$44M	
SR 56						**$100M**	**-**	**$123M**	**-**	**-**	**$0.2M**	**-**	**$405M**
44	**SR 56: I-5 to I-15**		-	50%	50%	**$100M**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	1200513: SR 56 Auxiliary Lanes	85	-	✓	-	-	-	-	-	$5M	$0.2M	-	-
Mid-City to Downtown						**$90M**	**-**	**$111M**	**-**	**-**	**$103M**	**-**	**-**
45	**BRT Showcase Route 611: via El Cajon Blvd & Park Blvd (Now Mid-City *Rapid* Route 215)**		**75%**	**25%**	**-**	**$90M**	**-**	**-**	**-**	**-**	**$103M**	**-**	**-**
	1240001: Mid-City *Rapid* Bus [2]	86	2014	-	-	-	-	-	-	-	$41M	-	Projects Complete
EAP	1201507: SR 15 BRT – Mid-City Centerline Stations	87	2018	-	-	-	-	$63M	-	$64M	$62M	-	
Coronado Tunnel						**$25M**	**-**	**$25M**	**-**	**-**	**-**	**-**	**-**
46	**SR 75 / SR 282 (Coronado Tunnel): Glorietta Blvd to Alameda Blvd**		**-**	**-**	**✓**	**$25M**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Border Access Improvements						**$25M**	**-**	**$25M**	**-**	**-**	**$406M**	**-**	**-**
47	**Border Access Improvements**		**85%**	**15%**	**-**	**$25M**	**-**	**-**	**-**	**-**	**$406M**	**-**	**-**
	1201101: SR 11 and Otay Mesa East Port of Entry	88	-	✓	-	-	-	-	-	$589M	$142M	-	Projects Complete
	1300601: San Ysidro Intermodal Freight Facility	89	2016	-	-	-	-	-	-	-	$39M	-	
	1300602: South Line Rail Freight Capacity	90	2016	-	-	-	-	-	-	-	$46M	-	
	1390501: SR 905 – I-805 to Britannia Blvd	91	2012	-	-	-	-	-	-	-	$82M	-	
	1390502: I-805 / I-905 Connectors	92	2012	-	-	-	-	-	-	-	$18M	-	
	1390504: SR 905 / 125 / 11 Northbound Connectors	93	2016	-	-	-	-	-	-	-	$11M	-	

Ordinance Number	Project/Segment Name	Segment	Project Completed & Open-to-Traffic	In-Progress	Future Project	Ordinance Estimate (2002 Dollars)	Ordinance Escalated to Year Open	2005 POF Estimate (2005 Dollars)	2005 POF (Escalated to Year Open)	Project CIP Budget June 2020	Expenditures through June 2020 [4]	Variance (2005 POF Escalated minus Expenditures)	Estimated Cost to Complete (Escalated to YOE $)
	1390505: SR 905 / 125 / 11 Southbound Connectors (Design Only)	-	-	✓	-	-	-	-	-	-	$63M	-	-
	1201102: SR 11 and Otay Mesa East Port of Entry Segment 1 Construction	94	2019	-	-	-	-	-	-	-	-	-	Projects Complete
	1201103: SR 11 and Otay Mesa East Port of Entry Segment 2A and SR 905 / 125 / 11 Southbound Connectors Construction	95	-	✓	-	-	-	-	-	$132M	$63M	-	-
	1390506: SR 125 / 905 Southbound to Westbound Connector	96	-	✓	-					$38M	$5M		
SR 125						-	-	-	-	-	-	-	-
48	**SR 125: SR 905 to SR 54**		75%	25%		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	3312100: South Bay Expressway (Toll Road Purchase) [3]	97	2011	-	-	-	-	-	-	-	-	-	-
	16 Ordinance Corridor Grand Total		-	-	-	$9,623M	-	$12,328M	-	-	$7,744M	-	$24,445M
	Project Status at 48 Ordinance Level		35%	23%	42%	-	-	-	-	-	-	-	-

Notes:

[1] Total expenditures for the I-15 Express Middle Segment included expenditures incurred under the initial *TransNet* Extension Ordinance. The project budget reflected the portion of the project or project segment that was to be funded by the *TransNet* Extension Ordinance.

[2] The Mid-City Rapid Bus was open to the public, some traffic signal priority improvements were still underway.

[3] The SR 125 Toll Road was purchased for $342 million in 2011 using *TransNet* Extension Ordinance funds with the intent to recover the expense through toll revenues.

[4] "Expenditures through June 2020" were based on SANDAG's FY 2021 Overall Work Program, CIP Budget Chapter 9, which included expenditure estimates.

Appendix D: *TransNet* Extension Ordinance Bike EAP Project Universe

While SANDAG did not have a readily available comprehensive universe of the Bike Early Action Program (Bike EAP) projects that reported status against planned miles, project phase schedule, and budget in the original Bike EAP, we compiled this universe based on the best available data using the *TransNet* Dashboard data, quarterly Bike EAP reports, and staff-provided data. Unfortunately, we could not gather or validate data against project management files because of technology challenges due to remote work and COVID-19 onsite restrictions that prevented the transfer of those large data sets.

As shown in the "EAP # Column," the Bike EAP planned a total of 38 projects—31 projects with Capital Improvement Plan (CIP) budgets assigned and 7 projects without CIP budgets assigned yet. The 31 projects translated into 33 project segments as shown in the "CIP # Column." Combined with the 7 project segments not assigned a CIP budget, there were 40 Bike EAP project segments as of July 7, 2020.

Sources used for data in Columns shown in the Exhibit 30 are described in the bullets that follow—all budget, expenditure, and mile numbers shown are unaudited.

- **Project Info:** Crosswalk between Bike EAP project # and CIP provided by staff.

- **Miles/Original:** Planned number of miles and miles open to the public provided by SANDAG, as of June 30, 2020, based on Fiscal Year 2020 Budget.

- **Miles/Revised:** Project miles were revised during project design through minor scope changes and when a more efficient or direct route was found.

- **Dollars:** Approved budget and expenditure data from *TransNet* Dashboard, as of July 7, 2020.

- **Schedule/Delays:** Auditor-generated analysis of data from *TransNet* Dashboard as of July 7, 2020 and staff-provided updates and corrections.

- **Schedule/Promised EAP Stage:** Capital improvement stage that the Board funded the project through based on the 2013 Board approved Bike EAP. CON = construction; ENG = engineering; ROW = right of way; and NA = not applicable to capital construction.

- **Schedule/Estimated Completion:** Date based on *TransNet* Dashboard Current Planned Schedule Data through stage noted in Bike EAP. Done = project completed; TBD = to be determined since there was no date listed in the *TransNet* Dashboard.

EXHIBIT 30. TRANSNET EXTENSION ORDINANCE BIKE EAP PROJECT UNIVERSE, AS OF JULY 7, 2020

	Project Info				Miles			Dollars (in thousands)		Schedule		
Count	CIP #	Jurisdiction	EAP #	Project Segment Name	Original Planned Miles	Revised Miles	Miles Open to Public	Approved Budget	Expenses	Delayed 6 Months or More	Promised EAP Stage	Estimated Completion
Completed Projects = 6 Project Segments (CIP)												
1	1144300	Chula Vista Imperial Beach	36	Bayshore Bikeway: Segments 7 & 8A	1.8	1.8	1.8	$2,412	$2,412	N	CON	Done
2	1143700	San Diego National City	55	Bayshore Bikeway: Segments 4 & 5	2.8	2.8	2.8	$6,398	$6,368	Y	CON	Done
3	1144500	National City	53	Sweetwater Bikeway: Plaza Bonita Segment	0.5	0.5	0.5	$1,464	$1,464	Y	CON	Done
4	1223014	San Diego (1)	54	SR 15 Commuter Bike Facility	1.0	1.0	1.0	$15,670	$14,256	Y	CON	Done
5	1223018	Encinitas (2)	39D	Coastal Rail Trail Encinitas: Chesterfield Drive to Solana Beach	1.3	1.3	1.3	$5	$5	NA	ENG CON	Done
6	1223024	Oceanside	52	Coastal Rail Trail: Phase 2B - Oceanside	0.4	0.4	0.4	$2,471	$2,471	Y	CON	Done
In-Progress Projects Estimated by SANDAG to be Done by 2024 = 11 Project Segments (CIP)												
7	1223016	San Diego	33	Coastal Rail Trail San Diego: Rose Creek	2.1	2.1		$27,036	$21,345	Y	CON	2023
8	1223017	Encinitas (3)	39C	Coastal Rail Trail Encinitas: E Street to Chesterfield Drive	0.4	0.4		$9,608	$8,918	Y	CON	2023
9	1223022	San Diego	1	Uptown Bikeways: Fourth and Fifth Avenue Bikeways	4.5	4.5		$24,681	$7,232	Y	CON	2023
10	1223053	Santee	31B	San Diego River Trail: Carlton Oaks Segment	2.0	2.0		$1,830	$1,025	Y	ROW	2020
11	1223054	San Diego	18	Central Avenue Bikeway	1.2	1.0		$3,174	$1,022	Y	CON	2024
12	1223055	San Diego	50	Bayshore Bikeway: Barrio Logan	2.3	2.1		$24,667	$4,627	Y	ROW	2018
13	1223056	Imperial Beach San Diego	13, 21	Border to Bayshore Bikeway	8.5	6.5		$13,309	$2,911	Y	ROW	2019
14	1223057	San Diego	6A	Pershing Bikeway	3.0	3.0		$20,314	$2,380	Unknown	CON	2023
15	1223058	San Diego	8, 9, 10	Downtown to Imperial Avenue Bikeway	8.0	3.8		$12,454	$2,884	Y	ROW	2019
16	1223078	San Diego (4)	5, 6	North Park/Mid-City Bikeways: Landis Bikeway	0	0		$1,414	$1,408	Y	CON	2023
17	1223082	San Diego	2, 7	North Park/Mid-City Bikeways: Georgia-Meade Bikeway	6.5	6.5		$24,918	$6,273	Y	CON	2023
In-Progress Projects Not Fully Funded or Scheduled for Completion After 2024 = 12 Project Segments (CIP)												
18	1129900	Chula Vista Imperial Beach	36	Bayshore Bikeway: 8B Main Street to Palomar	0.4	0.4		$1,586	$1,144	Y	CON	TBD
19	1223020	San Diego	6	North Park/Mid-City Bikeways: Robinson Bikeway	0.2	0.2		$4,440	$3,423	Y	CON	TBD
20	1223023	San Marcos, Vista, County (5)	51 (A-C)	Inland Rail Trail	7.0	7.0	1	$67,064	$41,015	Y	CON	2027
21	1223052	San Diego	31A	San Diego River Trail: Stadium Segment	1.0	1.0		$839	$729	Y	CON	TBD
22	1223079	San Diego	4	North Park/Mid-City Bikeways: Howard Bikeway	1.2	1.2		$1,374	$1,293	Y	CON	TBD
23	1223080	San Diego	2	North Park/Mid-City Bikeways: Monroe Bikeway	1.3	1.3		$276	$195	Unknown	CON	TBD
24	1223081	San Diego	14	North Park/Mid-City Bikeways: University Bikeway	2.9	2.8		$17,160	$1,946	Y	CON	2025
25	1223083	San Diego	6	Uptown Bikeways: Eastern Hillcrest Bikeways	1.1	1.3		$4,844	$1,956	Y	CON	TBD

Count	CIP #	Jurisdiction	EAP #	Project Segment Name	Original Planned Miles	Revised Miles	Miles Open to Public	Approved Budget	Expenses	Delayed 6 Months or More	Promised EAP Stage	Estimated Completion
				Project Info		**Miles**		**Dollars** (in thousands)			**Schedule**	
26	1223084	San Diego	1, 3	Uptown Bikeways: Washington St & Mission Valley Bikeways	3.3	3.3		$2,058	$1,678	N	CON	TBD
27	1223085	San Diego	3	Uptown Bikeways: Mission Hills & Old Town Bikeways	1.8	1.8		$358	$87	N	CON	TBD
28	1223086	San Diego	7	Uptown Bikeways: Park Boulevard Bikeway	1.0	0.4		$563	$161	Y	CON	TBD
29	1223087	San Diego	4	North Park/Mid-City Bikeways: Orange Bikeway	2.1	2.5		$1,111	$299	Unknown	CON	TBD
Administrative Project or Not-applicable = 4 Project Segments (CIP)												
30	1223200	San Diego [6]	48D, 48E	Pacific Coast Highway/ Central Mobility Bikeway	TBD			$17,000	$0	NA	NA	TBD
31	1223021	NA [7]	NA	Bicycle Facilities- Normal Heights to Balboa Park	NA			$9	$9	NA	NA	NA
32	1223025	NA	NA	Regional Bikeway Program PE	NA			$348	$348	NA	NA	NA
33	1223093	NA	NA	GOByBIKE San Diego: Construction Outreach Program	NA			$1,967	$7	NA	NA	NA
				Subtotal	69.6	62.9 [8]	8.8					
Projects Not Yet Started or Funded = 7 Projects												
	TBD	San Diego	7A	Pershing and El Prado				Future Project – Not Yet Started			CON	TBD
	TBD	San Diego	31C	San Diego River Trail - I 805 to Fenton				TBD	TBD	TBD	CON	TBD
	TBD	San Diego	31D	San Diego River Trail - Short gap connections				TBD	TBD	TBD	CON	TBD
	TBD	Encinitas	39B	San Diego River Trail - Short gap connections	7.3		(9)	TBD	TBD	TBD	CON	TBD
	TBD	San Diego	45	Coastal Rail Trail San Diego - UTC				TBD	TBD	TBD	ROW	TBD
	TBD	San Diego	46	Coastal Rail Trail San Diego - Rose Canyon				TBD	TBD	TBD	ROW	TBD
	TBD	San Diego	48C	Coastal Rail Trail San Diego - Pac Hwy (Taylor Street to W. Washington Street)				TBD	TBD	TBD	CON	TBD
				Total	76.9	70.2	8.8	$312,822	$141,291			

Notes:

[1] Current plan end date was April 2021, but SANDAG reported that construction was complete with only administrative close-out remaining. As such, auditors consider the project completed.

[2] Project transferred and 1.3 miles were completed by City of Encinitas.

[3] Thus far, 1.3 miles were open to the public—although, 0.4 miles were still in final design.

[4] The scope of construction (3.0 miles) was moved to CIP 1223082 in the FY 2020 budget.

[5] Project had four phases. Phase 1 completed 1 mile, Phase 2 was in construction, Phase 3 was in design, and Phase 4 was unfunded.

[6] This was a future project, but SANDAG assigned a CIP number because of timing of a funding opportunity.

[7] CIP was dissolved and split into CIP 1223030 and 1223022.

[8] As of February 2021, plans were reduced by 6.7 miles by minor scope changes or when a more efficient or direct route was found.

[9] For the 7.3 miles associated with the seven projects not yet started, actual miles related to and ultimately constructed may vary from this number and modify the overall Bike EAP miles completed.

SANDAG

March 2, 2021   Number 1500200

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

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

Dear Ms. Brady:

Subject: Transmittal of Responses to FY 2021 *TransNet* Triennial
             Performance Audit Report and Recommendations

We thank you for the opportunity to respond to the FY 2021 *TransNet* Triennial Performance Audit report and recommendations as conducted by Sjoberg Evashenk Consulting, Inc., on behalf of the *TransNet* Independent Taxpayer Oversight Committee (ITOC). The San Diego Association of Governments (SANDAG) appreciates your firm's dedication to the comprehensive review of the *TransNet* Program. The recommendations received will assist SANDAG 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 (Ordinance).

The Fiscal Year 2021 *TransNet* Triennial Performance Audit is the fifth performance audit conducted by the ITOC. The audit includes a review of the three-year period between FY 2018 and FY 2020, focusing on project delivery, program management, compliance, fiscal responsibility, transparency and accountability, AB 805 implementation, safety, *TransNet* Regional Bikeway Early Action Program, and the ITOC. Key audit results reveal that SANDAG and its partner agencies are generally compliant with *TransNet* Extension Ordinance provisions and have made significant progress toward implementing many planned Major Corridor projects. The audit also shows that SANDAG has strengthened its financial models and controls and notes improved bicycle and pedestrian safety in the region. In addition, the audit notes areas for improvement including better tracking and reporting against *TransNet* Ordinance goals, more enhanced quality control documentation, and the need for Board of Directors collaboration on permitting issues for the Regional Bikeway Early Action Program.

In general, SANDAG agrees with the recommendations set forth in the audit report and is committed to working with the ITOC, Board, and partner agencies to address recommendations and continue implementing best practices for the *TransNet* Program. SANDAG appreciates that the audit also recognizes the many challenges the agency has faced in the past three years, including Board governance modifications, the hiring of a new Executive Director, changes at the management level, strategic planning and reorganization, and significant work to create a new vision for the 2021 Regional Plan update.

SANDAG also would like to take this opportunity to make note of the additional staff time and resources involved in addressing recommendations. While we appreciate the importance of implementing continuous improvements to the *TransNet* Program, we also recognize the challenges involved in implementing audit recommendations in a constrained funding environment with limited staff resources. However, we are committed to doing our part and will work closely with the ITOC and Board to set priorities to address recommendations with an eye toward balancing best use of limited resources with requirements to fulfill Ordinance mandates.

To reiterate, SANDAG is committed to working toward implementation of recommendations and our responses to audit recommendations are attached.

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,

HASAN IKHRATA
Executive Director

Attachments

cc: Michael Kenney, ITOC Chair
        Sunnie House, ITOC Vice Chair

HIK/azu/ais

Audit Recommendation		Report Page	Priority	SANDAG Initial Response
Chapter 1: Many *TransNet* Extension Ordinance Major Corridor Projects were Implemented or In-Progress as Intended, Although Delivery of Remaining Portfolio is Uncertain				
1.	Clearly identify whether the remaining *TransNet* Extension Ordinance projects will be part of the 2021 Regional Transportation Plan, before the SANDAG Board approves the 2021 plan, and provide a similar identification for any key changes in future Regional Transportation Plans.	15-19	**Critical**	SANDAG intends to comply with this recommendation. Staff lead: Phil Trom
2.	Develop regular crosswalks to summarize and compare planned major corridor projects outlined in the *TransNet* Extension Ordinance with current improvement implementation status by identifying project progress in terms of "complete", "in-progress", "cancelled", or "moved beyond 2048 and outside the *TransNet* Extension Ordinance period". SANDAG should complete this reconciliation annually, at the minimum when it revises its Capital Improvement Program Budget, or when SANDAG makes a major update to the Regional Transportation Plan and explain deviations from the *TransNet* Extension Ordinance including scope expansions, reductions, or mergers with other project segments through a log that captures all explanations. When performing this reconciliation, SANDAG should utilize a consistent numbering format or key identifier for each project to facilitate the tracking of changes over time.	12-15	High	Staff has already developed a crosswalk to all *TransNet* funded projects and this list will be available through the recent updates to the *TransNet* Dashboard. Staff will also continue to review all CIPs during the annual budget process to identify those projects that are complete, in-progress or cancelled. Staff lead: Michelle Smith
Chapter 2: Improved Financial Models and Controls were in Place, but Plans are Needed to Address Insufficient Funds for Remaining Major Corridor Projects				
3.	Develop and adopt a formal process to address issues identified during annual Plan of Finance updates that discusses short-term and long-term funding scenarios and how options specifically impact the scope and schedule of remaining *TransNet* Extension Ordinance projects. The plan should include clear methodology, criteria, and triggers for making decisions on *TransNet* Extension Ordinance projects if funding does not materialize as expected and how to make choices to reduce scope, delay, or eliminate projects from the *TransNet* Extension Ordinance portfolio.	24-25	**Critical**	Staff looks to the approved Regional Plan for project prioritization, scope, and phasing and will document current processes and procedures to inform decisionmakers of potential risks to project delivery discovered through the annual Plan of Finance exercise. Staff lead: Susan Huntington and Dawn Vettese
4.	Develop a risk-based approach for Quality Assurance/Quality Control testing and indication of review to strengthen documentation of Quality Assurance/Quality Control activities employed and results to better demonstrate data verifications.	28-29	Medium	Staff will develop a risk-based approach for review of QA/QC candidates, and complete documentation changes currently underway to better demonstrate data verifications Staff lead: Cindy Burke

	Audit Recommendation	Report Page	Priority	SANDAG Initial Response
5.	Enhance organization of Peer Review Process supporting documents by providing a corresponding table to capture topics discussed, reference items to checklists, and close out memos to better link what was planned, what was done, and how issues were addressed.	28-29	Medium	Staff will implement this recommendation to improve Peer Review Process documentation. Staff lead: Cindy Burke
6.	Clearly describe to the Board the Quality Assurance/Quality Control sampling methodology employed, any limitations of the data, and associated cost-benefits or risks of the approach.	30	Low	Staff will implement this recommendation on Board communication of QA/QC results and methods. Staff lead: Cindy Burke
7.	Continue valuable efforts to formalize and pursue a mature system of Quality Assurance/Quality Control policies and procedures as well as consistent implementation of the policies and procedures.	28-29	Low	Staff will continue development and implementation of QA/QC policies and procedures. Staff lead: Cindy Burke
Chapter 3: SANDAG Focused on *TransNet* Extension Ordinance Compliance and Transparency, but it could Better Demonstrate Accountability				
8.	Clearly and comprehensively report on actual progress and accomplishments (or lack thereof) against the *TransNet* Extension Ordinance on a regular, periodic basis—such as quarterly or annually— for project scope, costs, schedule, accomplishments, and outcomes against promises.	35-36	**Critical**	Staff already provides this information via *TransNet* Report Cards and the ITOC Annual report. Going forward, staff will review projects and compare against *TransNet* Ordinance to provide a comparison against the original list of projects and costs. Staff lead: Michelle Smith
9.	Demonstrate compliance with the *TransNet* Extension Ordinance by identifying, tracking, and reporting on various requirements and provisions to the Board and ITOC on a regular, periodic basis—such as quarterly or annually.	36-37	High	Staff will continue working with ITOC members to provide regular reporting on compliance with the Ordinance. Staff lead: Ariana zur Nieden
10.	Implement shorter-term steps to report on performance, while waiting on the longer-term Transportation Performance Management Framework, including continued development of SANDAG's proposed "Goals and Provisions" document to distribute to the Board and ITOC.	38-40	High	Staff has already started with this process and will continue to improve on reporting performance on a regular basis. Staff lead: Grace Mino
11.	Create summarized graphics to quickly indicate *TransNet* Extension Ordinance status based on data in the revised quarterly reports for reporting to the Board and ITOC.	34-40	Medium	Staff has already started with process and will continue to improve on data presentation. Staff lead: Michelle Smith
Chapter 4: AB 805 Weighted Voting Did not Significantly Change Delivery of *TransNet* Extension Ordinance Programs and Projects – No recommendations in this Chapter				
Chapter 5: Enhancements could be made to SANDAG's Regional Safety Planning Efforts, although Bicycle & Pedestrian Safety Improved				
12.	Consider the benefits of identifying a regional safety planning coordinator to synchronize safety efforts of	46-48	Medium	Staff will consult with peer agencies to learn about best practices in the establishment of

	Audit Recommendation	Report Page	Priority	SANDAG Initial Response
	the region and regularly communicate progress on safety goals to the Board and ITOC.			a safety coordinator position to understand the benefits to the San Diego Region. Staff lead: Phil Trom
13.	Consider and prepare a regional safety plan that complements Caltrans' Statewide Plan and details SANDAG's vision, goals, objectives, and strategies to address regional trends, road conditions, and driving behaviors.	46-48	Medium	Pending adoption of the 2021 Regional Plan, staff will implement strategy to develop Regional Vision Zero Plan/ Regional Safety Plan. Staff lead: Phil Trom
14.	Consider ways to encourage state and local emergency, planning, and response entities to include SANDAG in discussions and local plans related to emergency capacity so that regional planners stay informed and collaborate on emergency and resilience issues.	48-51	Medium	Staff will consult with peer agencies to learn about best practices to engage with relevant agencies on emergency and resilience issues beyond current practices. This recommendation also would be examined as a responsibility of the Safety Coordinator Position, if established (#12). Staff lead: Phil Trom
Chapter 6: Bike EAP will likely not be Completed when Expected, and Improvements are Needed to Communicate Challenges				
15.	Estimate and communicate to the Board and ITOC the quantifiable impact of permit delays on individual Bike Early Action Program projects and the overall Regional Bikeway Program.	57-59	**Critical**	SANDAG staff will develop a rough order of magnitude estimate of these impacts within available staffing resources. Staff lead: Linda Culp
16.	Work with the Board to have leadership collaborate with its representatives from the City of San Diego to rectify critical Bike Early Action Program project permit issues.	57-59	**Critical**	Recently, the City of San Diego has proposed a more streamlined review process and SANDAG staff will continue working on these details with city staff. SANDAG staff will also work with Board leadership on these issues. Staff lead: Linda Culp
17.	Revise existing quarterly status reports to compare progress against initial Bike Early Action Program plans for costs, schedules, and miles expected and clearly communicate whether the 10-year Bike Early Action Program completion goals or other future project goals are realistic or in jeopardy—in addition to proposing action steps to remedy any identified issues.	63-64	**Critical**	SANDAG staff will revise the existing quarterly status reports as recommended. Staff lead: Linda Culp
18.	Develop a crosswalk that summarizes and compares planned Bike Early Action Program projects outlined in the Regional Bikeway Program with current project segment implementation status by budget, schedule, phase, and miles. SANDAG should complete this reconciliation annually, at a minimum when it revises its Capital Improvement Program Budget, and explain any deviations from Bike Early Action Program plans including scope expansions, reductions, or mergers	63-64	High	SANDAG has developed an initial crosswalk as part of this audit process and will continue to make updates annually. Staff lead: Linda Culp

	Audit Recommendation	Report Page	Priority	SANDAG Initial Response
	with other project segments through a log that captures all explanations.			
19.	Modify *TransNet* Dashboard data or Board reports to compare actual individual project data against original baseline budgets and schedule by project phase to more clearly show progress against initial plans and provide explanatory context in addition to aligning *TransNet* Dashboard project phase categories with those used in individual project management tools.	59-61	Medium	SANDAG staff will consider adding this additional detail to Board reports in addition to the modifications already being made through Recommendation Nos. 17 and 18. Staff lead: Linda Culp
20.	Track and analyze more granular internal project milestones within Bike Early Action Program project phases—such as planned and actual schematic design, detailed design, right-of-way, utility coordination, and construction documents, to better identify where possible impediments and delays occur and may need to be addressed.	59-61	Medium	SANDAG tracks internal milestones such as permitting schedules and can consider adding other internal milestone to this tracking. Staff lead: Linda Culp
21.	Provide extra scrutiny on less certain Regional Bikeway Program assumed funding from less certain sources, including the state's Active Transportation Program competitive grant source, during subsequent updates to the Regional Bikeway Program Plan of Finance to identify potential capacity and revenue constraints or opportunities and have annual processes in place to evaluate and modify the mix of projects if funding does not occur as expected.	61-63	Medium	Finance staff will continue working closely with Regional Bikeway Program staff, within available staffing resources, to identify potential capacity and revenue constraint and opportunities to evaluate/modify bikeway program projects and funding as needed. Staff lead: Dawn Vettese
22.	Ensure *TransNet* Dashboard Bike Early Action Program schedule and budget fields are complete and include explanatory notes on why particular data may not be applicable to a project stage in addition to consider splitting certain projects and their related cost and schedule data into phases on the *TransNet* Dashboard when SANDAG plans for a staggered delivery.	63-64	Low	The Dashboard will be updated to include explanatory notes for missing data that is not applicable to certain projects. Staff will consider options to more clearly display project status information for projects delivered in multiple phases. Staff lead: Chelsea Gonzales
Chapter 7: ITOC Practices Aligned with Other Entities Reviewed				
23.	Incorporate existing conflict-of-interest policy clarifications from ITOC new member on-boarding resources into recruitment materials, emphasize in recruitment efforts that a potential conflict does not automatically disqualify prospective applicants, and clarify when members should recuse themselves from certain decisions because of potential perceived conflicts.	68	High	Recruitment materials will be updated to incorporate conflict of interest provisions. Staff lead: Ariana zur Nieden
24.	Modify the *TransNet* Extension Ordinance language to be consistent with the service limits for all members regardless of whether a member joins the committee to fill a full-term position or mid-term vacancy.	66-67	Medium	Staff will propose an amendment to the Ordinance to modify service limit language. Staff lead: Ariana zur Nieden
25.	Consider expanding the ITOC qualifications to include knowledge of emerging topics SANDAG presents before the committee such as multi-modal planning, active transportation, transportation system	68	Low	Staff will work with ITOC and Board members to consider expansion of ITOC qualifications.

Audit Recommendation	Report Page	Priority	SANDAG Initial Response
management and operations, transportation planning, performance measures, and legal issues.			Staff lead: Ariana zur Nieden
26. Explore options and feasibility of moving ITOC candidate screening and selection process outside of the SANDAG Board to maximize appointment transparency and minimize any perceived selection bias.	68-69	Low	Staff will work with ITOC and Board members to consider moving selection process for members outside of the Board. Staff lead: Ariana zur Nieden