

Implementation of FY 2018 *TransNet* Triennial Performance Audit Recommendations

Overview

The FY 2018 *TransNet* Triennial Performance Audit includes 26 recommendations to improve the efficiency, effectiveness, and accountability of the *TransNet* Program to the taxpayers of the San Diego region. Each recommendation is categorized into four rankings (critical, high, medium, and low priority) based on the impact to the *TransNet* Program, SANDAG responsibilities, and critical path activities.

Key Considerations

Attachment 1 includes an update on progress made in implementing audit recommendations, including the status of the three critical priority recommendations (Nos. 2, 5, and 24). Five of the 26 recommendations are completed, and one has been partially completed (Recommendation No. 1.c.). This status also includes completion of two critical priority recommendations (Nos. 2 and 24). Detailed progress for all 26 recommendations is provided in Attachment 1.

Next Steps

Staff will continue working to implement audit recommendations and will return to the Board of Directors to provide progress updates and request additional direction on implementation of specific audit recommendations as necessary.

Hasan Ikhata, Executive Director

Key Staff Contact: Ariana zur Nieden, (619) 699-6961, ariana.zurnieden@sandag.org

Attachment: 1. Update on Implementation of Recommendations

Action: **Information**

This report provides an update on implementation of the FY 2018 *TransNet* Triennial Performance Audit recommendations.

Fiscal Impact:

Efforts to implement the FY 2018 *TransNet* Triennial Performance Audit recommendations are funded through Overall Work Program Project No. 1500100 *TransNet* Financial Management in the FY 2019 Program Budget.

Schedule/Scope Impact:

In FY 2020, the Independent Taxpayer Oversight Committee will procure the services of an independent auditor for its next triennial performance audit, which will be conducted in FY 2021.

FY 2018 *TransNet* Triennial Performance Audit
Implementation Status as of March 2019

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Chapter 1: <i>TransNet</i> Financing					
1.	<p>Enhance the Plan of Finance (POF) process and information provided to decision makers by implementing the following:</p> <p>a. Leveraging historical data and previous POFs to provide additional information regarding estimates of future revenue sources, by comparing projections against historical data as well as comparing estimates from previous POFs against actual funding secured.</p>	21 – 24	High	<p>This process will be more formally incorporated as part of the <i>TransNet</i> Major Corridors Plan of Finance annual updates.</p> <p>Staff Lead - Dawn Vettese (<i>TransNet</i>) Team - Jim Miller ITOC Leads – Stewart Halpern, Dick Vortmann</p>	<p>A <i>TransNet</i> program update is scheduled for presentation to the Board of Directors and ITOC in February and March 2019, respectively, and includes a comparison of future revenue projections for the two most recent POFs. Staff continues working to incorporate additional historical data such as actual funding secured.</p>
	<p>b. Continuing efforts to increase the transparency of sales tax revenue forecasts by showing a range of possible values based on a true confidence interval. SANDAG staff should work with the Independent Taxpayer Oversight Committee (ITOC) and the SANDAG Board to select a confidence level or levels that best communicates the range of possible values projected by the forecast including best case, worse case, or reasonably expected scenarios.</p>	29 – 33	High	<p>SANDAG staff and economic consultants are working to create sales tax forecasts that incorporate ranges and scenarios and will present this work to ITOC for input.</p> <p>Staff Lead - Jim Miller (Technical Services) Team - Dawn Vettese ITOC Leads – Stewart Halpern, Dick Vortmann</p>	<p>Sales tax revenue forecasts continue to be updated regularly with the latest information. SANDAG staff are working on updates based on updated third party forecasts and Wayfair implementation guidance from the California Department of Tax and Fee Administration. The update is anticipated to be available for presentation in spring 2019.</p>

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	<p>c. Developing a process or policy for more frequent reporting—such as quarterly—to oversight committees on cost increases and include factors used to estimate costs, project stage or milestone used as basis for cost, and reasons for cost increase such as inflation, materials spike, or scope changes using Dashboard data and other reliable data sources.</p>	29 – 33	High	<p>Staff presented information on cost estimating practices and methods used to communicate cost changes to the ITOC, Transportation Committee and Board in April/May 2018 for input and these reports will continue going forward.</p> <p>Staff Lead - Jim Linthicum (MMPI) Team - Dawn Vettese ITOC Leads – Stewart Halpern, Dick Vortmann</p>	<p>Status reports on each major corridor are presented to the Transportation Committee on a quarterly basis. In addition, the <i>TransNet</i> Project Office presents a quarterly report to ITOC summarizing the completion of project milestone accomplishments, monthly/annual program expenditures, and trends in construction cost and number of bidders.</p> <p><input checked="" type="checkbox"/> Complete</p>
2.	<p>Ensure the “Plan of Excellence” and its 7-point Data Accuracy and Modeling Work Plan are implemented to reduce the potential for data errors and develop formal procedures covering version control, periodic archival of data and documents, data validation and accuracy, and release and reporting of data. The status of the implementation of the 7-point plan and new procedures for data authentication should be documented and reported back to decision makers.</p>	27 – 28	Critical	<p>Significant progress has been made on the 7-Point Data Accuracy and Modeling Work Plan and ongoing efforts have been incorporated into the agency’s Plan of Excellence with progress tracked there. As part of the 7-Point Plan, staff determined that errors were limited to income variables (Point 1), have conducted a dependency analysis to determine where the income variables were used and correct as needed (Point 2), developed a comprehensive flow diagram showing interactions between data and modeling components (Point 3), surveyed agency staff to understand and document how data are disseminated and used (Point 4), convened a nationwide expert panel for recommendations for regional forecasting (Point 5), developed processes and standards to communicate data, methods, and analysis in a clear and transparent manner (Point 6), and (Point 7) realigned people, processes, and technology to support adequate staffing and expertise.</p> <p>Staff Lead - Ray Major (Technical Services)</p>	<p>Over the past year, staff has successfully created, implemented, and formalized policies and procedures that ensure the accuracy, transparency, and reliability of the data SANDAG produces and the Board uses to make decisions regarding the future of the San Diego region. As part of these efforts, staff has completed a thorough review of the models, documented the impact of previous errors, and mapped process flow to improve future efforts. In addition, the Data, Analytics, and Modeling Department has been reorganized, creating teams that are now working more collaboratively than ever but have clearly delineated functions that include acquiring data, running the models, and data dissemination. At the same time, necessary skill sets have been added with a Data Base Administrator, the creation of an Office of Quality Assurance, and staff focused on project management. Closely related, two new processes have been</p>

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				ITOC Leads – Stewart Halpern, Dick Vortmann	<p>formalized, both of which improve the availability and accuracy of the data produced and used by SANDAG. First, staff have created an electronic data request system that enables tracking what data requests the Data, Analytics, and Modeling Department is being asked to fulfill. This documentation helps to ensure the needs of stakeholders are being met and track how data is being used. Since September 2017, the Department has received over 250 data requests, with about 4 in 5 of these from entities outside SANDAG. Second, a formalized Peer Review Process has been created to ensure that data, analyses, reports, and other information are valid, reliable, and easy to understand. Since the first Peer Review Process (PRP) was conducted in March 2017, a total of 48 different topics have been peer reviewed, with half initiated by departments other than Data, Analytics, and Modeling, demonstrating its usefulness to the agency as a whole. Finally, SANDAG has implemented the development of a standards-based data governance program to ensure that all of the agency’s data are managed properly according to best practice. This is an ongoing improvement process and SANDAG remains committed to undertaking enhancement initiatives that are responsive to the needs of the Board, agency stakeholders, and members of the public.</p> <p><input checked="" type="checkbox"/> Complete</p>

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3.	<p>Regularly track and report on the <i>TransNet</i> Program’s financial capacity to complete projects and programs by implementing the following:</p> <p>a. Establishing a formal structured protocol to review funding sources and uses occurring in the last 10 to 20 years of the <i>TransNet</i> Extension Program to identify potential capacity and revenue constraints that would impact the ability to complete the major corridor projects by 2048 and assess options such as delaying projects, eliminating projects, or reducing scope as warranted. This capacity assessment should be formally revisited on a regular basis, so that decision makers are aware of periods in which the agency may have to consider delaying projects or reducing project scope as needed.</p>	35 – 36	High	<p>This process will be more formally incorporated as part of the <i>TransNet</i> Major Corridors Plan of Finance, in coordination with the adopted Regional Plan.</p> <p>Staff Lead - Susan Huntington (<i>TransNet</i>) Team – Jim Linthicum ITOC Leads – Stewart Halpern, Dick Vortmann</p>	<p>Cost estimates for all remaining Major Corridors projects as well as revenue assumptions were updated in 2018 as part of the development of the Regional Plan. Using these updated cost and revenue assumptions, the Plan of Finance was updated to determine the financial feasibility of completing all the remaining projects by 2048.</p> <p>Staff provided the <i>TransNet</i> Program Update to the Board of Directors in February 2019 and is scheduled to present to ITOC in March 2019, noting the increase in the leveraging ratio required to complete all program projects by 2048. As part of the Board report, staff has consolidated remaining costs and estimated revenues onto one table, organized to clearly communicate ranges, the level of certainty of revenue estimates, and required leveraging ratio going forward. Staff will continue to provide regular/annual updates of this information, in this format, so that decision makers can assess program capacity. The next Plan of Finance update will occur in early 2020, or in alignment with updates to the Regional Plan.</p>
	<p>b. Monitoring <i>TransNet</i> revenues and debt service obligations against needed growth projections to better ensure that revenues are sufficient to meet debt service, as well as</p>	37 – 40	High	<p>SANDAG Finance and <i>TransNet</i> staff will continue to communicate information on a regular basis, including cash flow needs, changes to project timing, and sales tax projections; meet and discuss with the SANDAG financial advisor any potential</p>	<p>Staff issued a Request for Proposals (RFPs) for investment banking services and for bond and disclosure counsel for the Grant Anticipation Notes (GANS) financing based on the most recent POF and</p>

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	regularly reporting on results and options to oversight committees that could include restructuring, refinancing, or retiring existing debt or delaying the transition to a pay-as-you-go approach for financing capital projects.			changes to needs; meet with investment bankers to understand instruments currently on the market that could fit SANDAG needs; and include all relevant information at regular intervals or on an as-needed basis at ITOC meetings. Staff Lead - André Douzdjian (Finance) Team – Dawn Vettese ITOC Leads – Stewart Halpern, Dick Vortmann	updated review of cash flows, which demonstrated proceeds from the GANS issuance for the Mid-Coast Corridor project would be needed by Q1 FY 2020. Subsequently, based on RFP results, staff hired Wells Fargo as the senior lead banker, with JP Morgan, Citigroup and Goldman Sachs as co-managers for the GANS issuance. Staff also started negotiations on the renewal of the Standby Bond Purchase Agreement (SBPA) for the Series A&B of the 2008 Variable Rate Demand Bonds (VRDBs), with JP Morgan which was set to expire in Q3 FY 2019. Norton Fulbright was hired as bond counsel and Orrick as bond disclosure counsel. A kick-off meeting of the entire assembled GANS team was held at SANDAG offices in the early part of Q3 FY 2019. There were no other notable changes to the debt program.
	c. Identifying methods to assess options, if needed, to delay, eliminate, or reduce scope of projects and whether the method would follow the same priority process used in the San Diego Forward: The Regional Plan or a different process would be used.	40 – 41	High	As part of the 2019 Regional Plan update all projects, including <i>TransNet</i> projects, will be evaluated. Staff Lead - Phil Trom (Planning) Team – Tim DeWitt, Susan Huntington ITOC Leads – Stewart Halpern, Dick Vortmann	The SANDAG Board approved moving forward with a new vision for the San Diego Forward: The Regional Plan, which is anticipated to be completed in late 2021. As part of the 2021 Regional Plan update, all projects, including <i>TransNet</i> projects, will be evaluated.
	d. Monitoring and reporting on the impacts of changing transportation technologies on the transportation network and future <i>TransNet</i> projects as part of long-term planning	40 – 41	Medium	SANDAG will include technology assumptions in the development of revenue constrained transportation scenarios for the 2019 Regional Plan. Staff Lead - Phil Trom (Planning)	The topic of emerging technologies has continued to inform the development of the transportation network for the Regional Plan and will continue to do so based on SANDAG Board approval and direction to move forward with a new

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	to avoid building expensive infrastructure that could be rendered obsolete.			Team – Tim DeWitt ITOC Leads – Stewart Halpern, Dick Vortmann	vision for the San Diego Forward: The Regional Plan, which is anticipated to be completed in late 2021. SANDAG will include technology and innovation assumptions in the development of revenue constrained transportation scenarios for the 2021 Regional Plan.
4.	Continue to work closely with the Metropolitan Transportation System (MTS) and North County Transit District (NCTD) to monitor the Transit Operations Plan by comparing actual <i>TransNet</i> revenues and operating costs against the Transit Operations Plan projections as additional services begin operations to highlight and mitigate the impact to the local operators, how to absorb any discrepancies through other funding sources, or potential scenarios for reductions in service if warranted. Communicate status, recommended actions, and any mitigation activities.	41 – 43	High	SANDAG will work with MTS and NCTD to develop a new methodology to proactively monitor <i>TransNet</i> Transit Operations funding, focusing on existing data for costs and revenues and recognizing the limitations of estimating costs and revenues over such a long term. Once a new methodology has been established, staff will report annually to ITOC and Transportation Committee. Staff Lead - Muggs Stoll (Planning) Team – Brian Lane ITOC Leads – Stewart Halpern, Dick Vortmann	SANDAG presented a new methodology for monitoring <i>TransNet</i> Transit Operations funding to the Transportation Committee on July 20, 2018. Based on feedback from the Transportation Committee in July 2018, staff will continue to monitor the revenues and operating costs of existing services and will wait to revisit the proposed and actuals until both South Bay Rapid and Mid-Coast Trolley are operating for at least one year (likely in the fall of 2022). In the interim, staff will assess the program annually as well to assure that any unanticipated changes that may affect operations or the operations budget are addressed.
Chapter 2: Performance Framework					
5.	Establish a comprehensive performance framework by implementing the following: a. Setting targets to measure <i>TransNet</i> performance against the <i>TransNet</i> 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	46 – 50	Critical	SANDAG will be setting performance management goals related to the MAP-21/FAST Act timelines and requirements. Staff will evaluate federal performance management goals in order to align with <i>TransNet</i> funded projects. Staff Lead - Rachel Kennedy (Planning) Team – Michelle Smith ITOC Leads – Dustin Fuller, Stewart Halpern	SANDAG has set performance targets for the MAP-21/FAST Act performance measures. While these federal metrics are regional in nature (versus <i>TransNet</i> project specific) there is some overlap between Map-21/Fast Act performance management goals and goals established in the <i>TransNet</i> Ordinance. For example, <i>TransNet</i> goals of relieving congestion and improving safety could be aligned with the goals of delay and safety under MAP-21/FAST Act. <i>TransNet</i> goals of

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	results were favorable or unfavorable.				<p>maintaining roads could tie back to federal targets of bridge and pavement condition. Goals of improving transit and expanding bus service under <i>TransNet</i> could be aligned with use of alternative modes and reducing ozone pollution under the federal requirements.</p> <p>Data for the 2018 safety targets is anticipated to be available in December 2019. In addition, SANDAG continues moving forward to implement other performance-related recommendations provided by the ITOC <i>TransNet</i> Triennial Performance Audit and anticipates providing a progress update in FY 2020. Staff also is currently developing a draft scope of work for consultant to review best practices, opportunities, and costs associated with various degrees of levels of effort to address Recommendation Nos. 5.a. – 5.e.</p>
	<p>b. Capturing performance outcome data related to safety metrics, pavement condition, and bridge condition for highways, local roadways, and bicycle (bike) and pedestrian modes.</p> <ol style="list-style-type: none"> 1. Use the California Highway Patrols' Statewide Integrated Traffic Records System (SWITRS) to measure and monitor safety statistics—both for motorized and non-motorized fatalities 	51 – 53	Critical	<ol style="list-style-type: none"> 1. SANDAG staff is collaborating with Caltrans on target-setting for safety. Caltrans is helping to provide county level SWITRS data to MPOs for both motorized and non-motorized fatalities and serious injuries. SANDAG has supported the statewide 2018 safety targets and will be highlighting safety projects included in the 2018 RTIP and 2019 Regional Plan. Staff will continue to monitor and analyze SWITRS safety data as it becomes available. SANDAG and Caltrans will collaborate on establishing annual 	<ol style="list-style-type: none"> 1. Staff reviewed historic regional safety data for San Diego County. 2. In October 2018, the SANDAG Transportation Committee established targets for the metrics in PM 2 (pavement and bridge condition for NHS facilities) and PM 3 (delay, emissions, and travel reliability metrics). 3. See status for recommendation No. 5.a. 4. See status for recommendation No. 5.a.

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	<p>and serious injuries— especially against the new safety targets developed by Caltrans and adopted by SANDAG.</p> <p>2. Track and report highway pavement and bridge condition available from Caltrans on the SANDAG website or provide a hyperlink to where that information is available for taxpayers. Additionally, work with Caltrans to determine if bridge and pavement data can be isolated for San Diego County from the Imperial County data contained within the Caltrans District 11 reported data.</p> <p>3. Track and report on local jurisdiction pavement condition by requiring local jurisdictions to provide pavement condition index data as soon as pavement condition surveys are performed and results become available.</p> <p>4. Obtain and use private sector data to analyze congestion and delay on local streets and roads or evaluate status of Caltrans' Performance Measurement System</p>			<p>safety targets as per MAP-21/FAST Act requirements.</p> <p>2. SANDAG is collaborating with Caltrans on target setting for bridge and pavement condition. Caltrans will be providing county level data for these measures for facilities on the National Highway System (NHS). SANDAG will look for opportunities to share this information as it may relate to <i>TransNet</i> projects.</p> <p>3. For additional data collection efforts on Pavement Conditions, SANDAG staff will need to work with CTAC to determine an approach for reporting readily available pavement data. This may involve an amendment to the Ordinance to make such data collection a requirement.</p> <p>4. Currently, SANDAG uses PeMS data, and use of private sector data will be examined subject to existing third data sources (INRIX). Examination of other sources is subject to implementation and efforts under Recommendation 5e.</p> <p>Staff Lead - Rachel Kennedy (Planning) Team – Alex Estrella ITOC Leads – Dustin Fuller, Stewart Halpern</p>	

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	(PeMS) to capture road performance including level of coverage of detection.				
	c. Conducting more robust analysis of cause and effect for all performance metrics to provide meaning to results or help determine if different strategies or projects should be employed to get a better result. For instance, consider using heat maps to identify where the majority or significant severity accidents occur and work with Caltrans and local jurisdictions to inform solutions and future projects.	51 – 53	High	The recommended analysis likely will require the use of modeling/other analytical tools and additional resources. SANDAG staff will propose an approach to implement this recommendation based on the outcome of Recommendation 5e. Staff Lead - Rachel Kennedy (Planning) Team – Alex Estrella, Rick Curry ITOC Leads – Dustin Fuller, Stewart Halpern	See status for recommendation No. 5.a.
	d. Providing regular performance monitoring reports that consider past performance in relation to <i>TransNet</i> goals through quarterly updates to the SANDAG Board and committees, annual public reports on the status of <i>TransNet</i> , and website postings.	51 – 53	High	More regular reporting is feasible for highway system performance, as more robust data is available via Caltrans PeMS. Local street and road performance (in terms of average speed and travel time) is now available via a third-party vendor (INRIX). Transit data reporting (in terms of passengers per revenue hour, passengers per revenue mile, operating cost per passenger, operating cost per revenue hour, revenue hours per employee, and farebox recovery ratios) also is feasible and can be made available via reporting currently conducted under Transportation Development Act monitoring. Staff Lead - Ellison Alegre (Operations) Team – Michelle Smith ITOC Leads – Dustin Fuller, Stewart Halpern	Staff continues investigating the potential to incorporate highway system performance from Caltrans PeMS into existing quarterly reporting. Transit data are not available quarterly, but the potential to report on a semi-annual basis is being reviewed. Agency agreement with INRIX expired in December 2018, and staff continues to work on a new agreement for local street and road performance data. Staff anticipates integration of available quarterly data into recurring quarterly reports in FY 2020

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	e. Considering allocating funding for additional performance monitoring activities given that SANDAG will likely require more data sources, tools, and resources to track, validate, analyze, ensure quality, and report performance.	51 – 53	High	SANDAG staff will develop options to implement this recommendation, including any potential budget impacts, and bring to the Transportation Committee and Board for review and direction. Staff Leads - José Nuncio (<i>TransNet</i>), Ray Traynor (Operations) ITOC Leads – Dustin Fuller, Stewart Halpern	SANDAG continues moving forward to implement performance-related recommendations provided by the ITOC <i>TransNet</i> Triennial Performance Audit and anticipates providing a progress update in FY 2020. Staff also is currently developing a draft scope of work for consultant to review best practices, opportunities, and costs associated with various degrees of levels of effort to address Recommendation Nos. 5.a. – 5.e.
6.	Explore and study public-private partnerships with entities such as Google, Waze, Scoop, TomTom, or others to integrate and summarize performance results as well as provide information on a real-time basis to travelers identifying different commute times and options.	51 – 53	Medium	SANDAG staff in the Operations Department have been working on partnerships with transportation information providers such as Google and Waze. Our current 511 system uses Google traffic and transit data as well as utilizes the Google map. Future plans are to extend the regional Data Hub into a Transportation Mobility Cloud with the intent of utilizing third-party data as well as sharing public data with the private sector. Staff Lead - Alex Estrella (Operations) ITOC Leads – Dustin Fuller, Stewart Halpern	SANDAG staff continues to look for opportunities for partnering with third party vendors such as Google and Waze to explore ways to better integrate and summarize performance results and provide real-time information to travelers. This recommendation is anticipated to be addressed in conjunction with Recommendation Nos. 5.a. – 5.e.
7.	Enhance the Story Map tool, <i>TransNet</i> project status listing (shown in Appendix A), or develop a different tool to capture project output details and track <i>TransNet</i> accomplishments over time by implementing the following: a. Developing a comprehensive universe of <i>TransNet</i> projects completed, underway, and planned. Reconcile universe back to <i>TransNet</i> Extension	53 – 54	High	The implementation of this recommendation will require changes to existing tools and processes. SANDAG staff will propose an approach to implement this recommendation based on the outcome of Recommendation 5e. Staff Lead - Michelle Smith (<i>TransNet</i>) Team – Alex Estrella ITOC Leads – Dustin Fuller, Stewart Halpern	a. Story Map has been updated with the most recent set of completed projects for those jurisdictions that also provided photos. Staff is still working on reconciling prior <i>TransNet</i> projects and is looking into whether online reporting as part of the SANDAG website update may be feasible. b. The implementation of this recommendation will require changes to existing tools and processes. SANDAG staff will propose an

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	<p>Ordinance and what was expected to be delivered. Once universe is reconciled for historic projects, update universe as new projects are started and continue reconciliation of those new projects to the <i>TransNet</i> Extension Ordinance.</p> <p>b. Building upon planned output data currently captured through the Regional Transportation Improvement Program's automated ProjectTrak database and reported in the Annual Output and Outcome report by reconciling those planned outputs with actual accomplishments. Consider requiring local jurisdictions to provide a closeout report with updated, actual data as projects are completed.</p>				<p>approach to implement this recommendation based on the outcome of Recommendation 5e.</p>
Chapter 3: Major Corridor Capital Construction					
8.	<p>Update and refine the project listing started in the 10-Year Look-Back Review to ensure all major corridor projects are tracked back to those in the <i>TransNet</i> Extension Ordinance. Regularly report on project and financial status using the project listing developed in 10-Year Look-Back Review as a foundation or develop an alternate tool to accomplish the goal of tracking against the <i>TransNet</i> Extension Ordinance.</p>	58 – 64	Medium	<p>Project Office staff will utilize the project list crosswalk created with the 10-Year Look-Back Review and incorporate the data field into the dashboard webform as part of the 2019 upgrade.</p> <p>Staff Lead - Susan Huntington (<i>TransNet</i>)</p> <p>ITOC Leads – Kai Ramer, Brad Barnum</p>	<p>The new dashboard database, which includes the ordinance number field, is currently being developed and will be deployed in summer 2019.</p>

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9.	<p>Begin gathering data on whether the Construction Manager/General Contractor (CMGC) method used on the Mid-Coast Corridor Transit project is delivering on expectations for cost savings, efficiencies, better quality, or collaboration to solve problems rather than using a typical silo-approach between design, construction, contractors, and owners by implementing the following:</p> <ul style="list-style-type: none"> a. Comparing SANDAG’s proposed metrics for assessing Mid-Coast Corridor project performance to the performance metrics and practices used by Caltrans’ to determine whether there are any additional practices SANDAG may want to include or adopt, such as the Caltrans innovations log, to help formally track benefits, successes, and challenges. b. Addressing recent survey comments related to possible schedule impacts from project activities in addition to the perceived higher value of change orders. 	65 – 71	Medium	<p>Mid-Coast has procedures and tools in place to capture CM/GC savings and efficiencies including comment and review logs, risk matrix and RFI response process. To address the recommendation, an innovations log or other method of formally tracking will be developed. SANDAG will research industry standards for comparing construction contracting methods for application to CM/GC to Low Bid. Mid-Coast will be compared to Mission Valley East Light Rail Transit Extension as the closest side-by-side comparative example. Project, Construction, and CM/GC managers will continue to meet regularly to review change orders and schedule impacts identified in the survey.</p> <p>Staff Lead - John Haggerty (MMPI), Allan Kosup (Caltrans) ITOC Leads – Kai Ramer, Brad Barnum</p>	<ul style="list-style-type: none"> a. The Mid-Coast Project Team is focused on supporting construction efforts and continues to compile and update design and change review logs, risk matrix and Request for Information responses. Preparation of a CM/GC innovation log will begin as civil and structure construction nears completion. Comparison of scope, cost and schedule changes between Mid-Coast and Mission Valley East would start in 2020. b. The Mid-Coast schedule completion date has varied between 20 and 29 days behind. Staff and builder agree that future track and signal activities could be overlapped to meet schedule. Staff continues to negotiate change costs. The current construction environment is driving increases for sub-contractor costs. Project, Construction, and CM/GC managers will continue to meet regularly to review change orders and schedule impacts identified in the survey.
10.	<p>Gather and store documents to support “benefit” statistics tracked for the North Coast Corridor and the Mid-Coast Corridor whether using the innovations log utilized by Caltrans or another method used by SANDAG. Maintain supporting documentation, such as cost</p>	69 – 71	Medium	<p>Mid-Coast data are maintained on a project file sharing site and project record documents including logs and cost data will be permanently stored in a SANDAG SharePoint location.</p> <p>Staff Lead - John Haggerty (MMPI), Allan Kosup (Caltrans)</p>	<p><u>Mid-Coast Corridor</u></p> <p>The Project Team is updating the Document Management Plan in spring 2019. This is an update required by the FTA. With this update the Project Controls Team is making and documenting process</p>

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	comparisons, in a centralized repository that is linked or reconciled with the log or summary statistics.			ITOC Leads – Kai Ramer, Brad Barnum	<p>improvements. The Project Team continues document management including file sharing, maintaining as-builts and permanent storage on SharePoint. This activity will continue until project close-out in 2022. Cost data for CM/GC comparison will be available late 2021.</p> <p><u>North Coast Corridor</u></p> <p>The project team is gathering and storing documents to support the performance measures identified for the program. The project team designated the CM/GC coach to be the gatekeeper and store all data in a central repository.</p>
Chapter 4: Local Street and Road					
11.	Revisit the <i>TransNet</i> Extension Ordinance congestion relief and maintenance split to be more relevant with local needs as the <i>TransNet</i> lifecycle matures by considering elimination of the 70/30 split, change to the percentage limitations, or modification of the categorical definitions within the <i>TransNet</i> Extension Ordinance limitations.	75 – 76	Medium	<p>SANDAG staff is working with CTAC to determine an approach and possible implementation steps for examining the 70/30 split recommendation, and the CTAC has formed an ad-hoc work group to address this recommendation. Discussion outcomes will be reported to ITOC to determine possible next steps including Board Policy expenditure guidelines changes.</p> <p>Staff Lead - Alex Estrella (Operations) Team – Lisa Kondrat-Dauphin, Sue Alpert ITOC Leads – Jonathan Tibbitts, Brad Barnum</p>	Initial possible revisions were developed with input and feedback from CTAC in late 2018. Staff is continuing to work on examining proposed initial revisions and alignment with other audit report performance-related recommendations to determine potential implications to the Local Street and Road Program. The implementation of this recommendation will be examined in conjunction with Recommendation No. 5.e.

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12.	<p>Continue to monitor compliance with SANDAG Board Policy No. 031, Rule 21, until otherwise amended, by implementing the following:</p> <p>a. Following-up on the results from the SANDAG Board Policy No. 031, Rule 21 evaluation conducted by SANDAG in 2014:</p> <ol style="list-style-type: none"> 1. Use results from SANDAG Board Policy No. 031, local Rule 21 review to make identified changes to the Ordinance definitions and follow-up on areas of noncompliance noted during the review. 2. Work with locals to determine a method to demonstrate compliance with SANDAG Board Policy No. 031, Rule 21. 3. Amend or establish a SANDAG Board Policy to require local jurisdictions to track and report on the number of bike and pedestrian facilities implemented using <i>TransNet</i> funds. 	78 – 79	High	<p>Board Policy No. 031 Rule No. 21 addresses accommodation of bicyclists and pedestrians.</p> <p>SANDAG will conduct a compliance review using the existing processes of the Policy. Results will be reported to CTAC for discussion and determination of need to modify compliance guidelines and processes. SANDAG will amend applicable Board Policy to track development of bicycle and pedestrian projects built using <i>TransNet</i> funds.</p> <p>Staff Lead - Linda Culp (Planning) Team – Alex Estrella. Sue Alpert, Chris Kluth ITOC Leads – Jonathan Tibbitts, Brad Barnum</p>	<p>a. Staff developed a work plan for this effort and is currently providing informational updates and taking comments from the Active Transportation Working Group, Cities/County Transportation Advisory Committee, and Regional Planning Technical Working Group, and will be building upon that input to draft potential recommendations on additional monitoring and reporting and potential changes to board policy. Staff will continue to coordinate implementation of this recommendation with efforts to implement Recommendation No. 11.</p>
	<p>b. Conducting another review of local projects and considering whether any adjustments are warranted in light of SANDAG’s Complete Streets Policy.</p>	78 – 79	High	<p>SANDAG will conduct a compliance review using the existing processes of the Policy to determine if modifications are necessary to be more consistent with the SANDAG Complete Streets Policy.</p> <p>Staff Lead - Linda Culp (Planning) Team – Chris Kluth ITOC Leads –</p>	<p>To be coordinated with implementation of recommendation No. 12.a.</p>

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				Jonathan Tibbitts, Brad Barnum	
Chapter 5: Transit Services					
13.	Continue to analyze major transit commute routes and services and report on whether commute times have improved or should be improved.	87 – 88	Low	SANDAG staff will continue to report on this area via the annual State of the Commute Report. Staff Lead - Brian Lane (Planning) Team – Ellison Alegre ITOC Lead – Dick Vortmann	SANDAG staff will continue to report on this area via the annual State of the Commute Report.
14.	Regularly track and report on <i>TransNet</i> goals to increase services to seniors and persons with disabilities.	88 – 89	High	SANDAG staff will look at ways to report on this area via the annual State of the Commute Report beginning FY 2018. Staff Lead - Brian Lane (Planning) Team – Ellison Alegre ITOC Lead – Dick Vortmann	SANDAG staff continues looking into ways to report on this area via the annual State of the Commute Report. It is anticipated this will be incorporated into reporting scheduled to be presented in spring/summer 2019.
15.	Work together with the region's transit operators to analyze options offsetting the impact subsidy disparities have on available funds for expanding transit services, such as funding the pass subsidy disparity for seniors and persons with disabilities from other <i>TransNet</i> areas—as allowed by the <i>TransNet</i> Extension Ordinance—adjusting the discount offered for senior/disabled and youth riders, determining whether disparities can be funded through other sources, or maintaining existing funding and process.	89 – 91	Medium	SANDAG staff currently is working with the transit operators on a Regional Fare Study that may help offset the revenue impacts of the discount subsidies. Additionally, SANDAG staff will work with both transit operators' staff to study other options to increase ridership and revenues. Staff Lead - Brian Lane (Planning) ITOC Lead – Dick Vortmann	SANDAG staff worked with both transit operators' staff to implement this recommendation. Fare change proposals were presented to the Transportation Committee and ITOC. The Board of Directors approved the changes on February 8, 2019, with the planned implementation by the transit operators anticipated to occur in spring 2019.
16.	Collaborate with the operators to revisit the operating cost ceiling tied to changes in the Consumer Price Index as specified in the <i>TransNet</i> Extension Ordinance so	91 - 92	Medium	SANDAG Planning and Finance staff will meet with the operators to collaborate on possible solutions to address this recommendation. It is expected that these	Staff from SANDAG, MTS, and NCTD met in January 2019 to discuss options to present to the ITOC. Staff from the MTS, NCTD, and SANDAG will prepare proposed amendment language for

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	that operators have some flexibility with reasonable cost increases while still maintaining the intent of <i>TransNet</i> to provide some assurance of the reasonableness of those cost increases. This could include allowing for a wider variance in cost increases, setting a threshold for a not-to-exceed limit, expanding the target by a specified percent in years when changes to the Consumer Price Index decline, or allowing cost exclusions that can be supported, or modify <i>TransNet</i> Extension Ordinance language to apply the cost thresholds at the operator level rather than by individual mode.			solutions could be included in a future amendment to the Ordinance. Staff Lead - Brian Lane (Planning) Team – Lisa Kondrat-Dauphin ITOC Lead – Dick Vortmann	Section 4(C)(5) for consideration in spring 2019. Staff is scheduled to present options for implementation at the March 13, 2019, ITOC meeting. Pending ITOC input and final approval by the SANDAG Board of Directors, the amendments would be formalized in spring/summer 2019 for incorporation into the upcoming fiscal and compliance audit.
Chapter 6: Bike and Pedestrian Modes of Transportation					
17.	Continue efforts to establish baseline data for bike and pedestrian volume to identify trends and set targets.	95 – 96	Medium	SANDAG will continue to capture and maintain baseline data to identify trends and establish targets. Staff Lead - Linda Culp (Planning) Team - Chelsea Gonzalez ITOC Leads – Stewart Halpern, Gregg Sadowsky	SANDAG continues to capture and maintain baseline data to identify trends and establish targets. FY 2018 data were included in the FY 2018 Bikeway Program Annual Status Report, which was presented to ITOC on September 12, 2018. FY 2019 data will be presented in the next Bikeway Program Annual Status Report in fall 2019. Ridership and pedestrian counts also are provided in the Bikeway Quarterly Status report that was provided to the Transportation Committee in October 2018. The next quarterly status report is scheduled for ITOC and Transportation Committee presentation in spring 2019.
18.	Improve project management practices and project delivery for the Bike Early Action Program	96 – 98	Medium	SANDAG staff has completed the Program Management Plan. The SANDAG Active Transportation Team will have trainings	SANDAG staff completed the Program Management Plan in July 2018 and held related project manager training in

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	<p>projects by implementing the following:</p> <p>a. Finalizing and implementing the in-progress Regional Bikeway Program Management Plan.</p>			<p>with project managers to implement PMP practices.</p> <p>Staff Lead - Linda Culp (Planning)</p> <p>Team – Chris Kluth</p> <p>ITOC Leads –</p> <p>Stewart Halpern, Gregg Sadowsky</p>	<p>January 2019. An update will be presented to the ITOC in spring 2019.</p> <p><input checked="" type="checkbox"/> Complete</p>
	<p>b. Using Dashboard data that currently tracks frequent causes of delays during the design and environmental phases of bike projects, to summarize lessons learned, identify and mitigate future preventable occurrences, and improve scheduled delivery of the remaining projects.</p>	97 – 98	High	<p>Guidance on documenting lessons learned will be included in the Program Management Plan. SANDAG will work to develop procedures and tools to maintain lessons learned, identify and mitigate project risks, and improve schedule delivery.</p> <p>Staff Lead - Linda Culp (Planning)</p> <p>Team – Lamont Dowell, Chris Kluth</p> <p>ITOC Leads –</p> <p>Stewart Halpern, Gregg Sadowsky</p>	<p>A Lessons Learned section was included in the final Program Management Plan. As this is a living document, updates will be provided to this and other applicable sections. In January 2019, SANDAG staff held a Lessons Learned/Risk Training Session for all project managers to step through the preliminary design of one of the Bike Early Action Program projects.</p> <p><input checked="" type="checkbox"/> Complete</p>
Chapter 7: Environmental Mitigation Program					
19.	<p>Continue efforts to establish a new Memorandum of Agreement with Caltrans, California Department of Fish and Game, and the U.S. Fish and Wildlife Service to replace current one expiring before funding expires in June 2018.</p>	100	High	<p>The Memorandum of Agreement (MOA) has expired, but funding under the SANDAG CIP budget is available for FY 2019. SANDAG will be using the results of the Ten-Year Review Look-Back and the FY 2018 <i>TransNet</i> Triennial Performance Audit as the basis for a new MOA, which is currently under development and anticipated to be finalized by the end of calendar year 2018.</p> <p>Staff Lead – Keith Greer (Planning)</p> <p>Team – Kim Smith</p> <p>ITOC Lead – Dustin Fuller</p>	<p>The new MOA was presented for feedback to the EMP Working Group, policy advisory committees, and ITOC in January/February 2019. The SANDAG Board of Directors approved the MOA on February 22, 2019.</p> <p><input checked="" type="checkbox"/> Complete</p>
20.	<p>Enhance the financing and use of <i>TransNet</i> funding for the Environmental Mitigation Program</p>	102 – 103	High	<p>SANDAG is tracking the change in cost for the lagoon restoration efforts and comparing it to the cost savings</p>	<p>Staff is actively tracking the change in cost for San Elijo Lagoon. A CM/GC contract is anticipated to be executed in June 2019 for construction of the San Dieguito W-19 Restoration Project.</p>

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	(EMP) by implementing the following: a. Reviewing and updating EMP cost estimates in light of higher costs than anticipated associated with restoring coastal wetlands.			associated with lower than estimated land acquisition costs. Staff Lead – Kim Smith (Planning) ITOC Lead - Dustin Fuller	SANDAG anticipates an estimate in late 2019, and construction to begin in fall 2020.
	b. Considering the most efficient use of available funding and possible adjustments, as allowed by the <i>TransNet</i> Extension Ordinance, to focus on higher priority activities and projects such as restoring coastal wetlands, given updated revenue forecast information and cost estimates.	100 – 102	High	SANDAG has started discussing ways to address this issue which will be incorporated into the revised MOA identified in Recommendation 19 above. Staff Lead - Keith Greer (Planning) Team – Kim Smith, Susan Huntington ITOC Lead - Dustin Fuller	This recommendation is being addressed as part of the new MOA approved by the Board (Recommendation No. 19), which proposes to manage cash flow to address the highest priorities for the EMP.
	c. Revisiting the established economic benefit methodology to ensure the calculation accurately represents the cost savings that have been achieved.	103 – 104	High	Cost savings are being tracked, but true cost savings will not occur until a project has completed close-out. This has not happened yet, but over the next year SANDAG will evaluate and assign a value considering the overall costs of the program as described in Recommendation 20a above. Staff Lead - Keith Greer (Planning) Team – Jim Miller ITOC Lead - Dustin Fuller	This recommendation is being addressed as part of the new MOA approved by the Board (Recommendation No. 19). Additional funding for economic benefit would be considered after repayment of existing bond debt.
21.	Make changes, as appropriate, to marketing efforts for the local streets and road mitigation bank funding available for local projects, consider revising eligibility criteria for public entities, or consider whether those monies could be better utilized within other EMP	104	High	SANDAG has made several attempts to promote the availability of these credits. SANDAG will work with Communications staff to establish a systematic approach. Communications has met with the Planning EMP staff and has calendared upcoming milestones in order to plan public information releases on all communication platforms.	SANDAG is working with Communications staff to establish a systematic approach to promote the availability of these credits, which may include an EMP Local Streets and Road Mitigation fact sheet that would be ready for distribution in summer/fall 2019.

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	priority actions, as allowed under the <i>TransNet</i> Extension Ordinance.			Staff Lead - Keith Greer (Planning) Team – Susan Huntington, Irene McCormack ITOC Lead - Dustin Fuller	
22.	Measure progress in meeting specific and detailed EMP goals, objectives, and action items for regional monitoring and management under the Management Strategic Plan. Specifically, develop metrics using the abundance of data to holistically understand the status and trend of the overall health of the preserve against the baselines established in regional conservation plans and formalize a system to communicate complex performance results to the public.	105	Medium	SANDAG already has identified several similar efforts from around the country. SANDAG will develop a proposed approach to communicate these complex ideas to the public and report as a report card or similar evaluation system. Work will start in summer 2018 to develop a detailed work plan. Communications is involved in the planning effort and will work with the Planning department to produce informative pieces for distribution on multiple communication platforms. Staff Lead - Keith Greer (Planning) Team – Kim Smith, Jim Miller, Irene McCormack ITOC Lead - Dustin Fuller	SANDAG drafted a scope of work to contract with an outside entity to develop regional metrics to track the health of the preserve system. This effort was included in the <i>TransNet</i> EMP FY 2019-2020 Work Plan that was approved by the BOD in October 2018.
Chapter 8: Information and Transparency					
23.	Regularly report on implementation of <i>TransNet</i> Extension Ordinance goals by annually publishing progress on SANDAG’s website, annual report, or other easily visible reporting tool.	110	High	Communications is working on a proactive annual plan for publishing progress that will entail multiple forms of communication pieces on a variety of communication platforms. Staff Lead - Irene McCormack (Communications) Team – Ariana zur Nieden ITOC Leads – Brad Barnum, Kai Ramer, Gregg Sadowsky	Communications has incorporated the ITOC annual report into its overall yearly communication strategy that includes press releases, social media, the monthly Region publication and other regular email newsletters, as well as incorporation into speaking engagements and focused media attention on specific <i>TransNet</i> -funded projects. In addition, Communications routinely updates the KeepSanDiegoMoving.com web site to ensure that stakeholders have the best information on projects funded by <i>TransNet</i> .

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24.	Modify staff reports for SANDAG Board and other oversight committees to summarize elements related to public input, pros and cons on recommended actions, and implications or impacts of those recommended actions. Ensure that staff reports are summarized to one or two pages.	111 – 112	Critical	<p>A comprehensive review of the agenda production process, including report preparation, is being conducted based on the Board’s Plan of Excellence to ensure transparency and clear, concise, and easily understandable information in reports and presentations.</p> <p>Staff Lead - Victoria Stackwick (Government Relations) Team – Robyn Wapner ITOC Leads – Brad Barnum, Kai Ramer, Gregg Sadowsky</p>	<p>A new short-form report has been developed. Use of the new report format began in October 2018 for Board, Policy Advisory Committee, and ITOC meetings. Staff is developing internal guidelines to ensure consistent implementation of the new agenda production processes. Formal trainings are scheduled for spring 2019 to provide staff with additional resources and technical knowledge.</p> <p><input checked="" type="checkbox"/> Complete</p>
25.	<p>Better link <i>TransNet</i> funding to project and program activities for general public awareness by implementing the following:</p> <p>a. More prominently featuring the <i>TransNet</i> logo on SANDAG and <i>TransNet</i> partner websites as well as through other media such as Facebook and Twitter.</p>	113 – 114	Low	<p>SANDAG staff will review existing websites and make recommendations for additional <i>TransNet</i> logo and language placement to create stronger recognition of the <i>TransNet</i> Program. Staff also will begin review of partner agency websites to see where SANDAG and <i>TransNet</i> logos and corresponding language can be added/enhanced. SANDAG social media posts will reference the use of <i>TransNet</i> funding where appropriate, and #<i>TransNetSD</i> will continue to be used as a way of threading all <i>TransNet</i>-funded program and project posts together. Social media campaigns specific to <i>TransNet</i>-funded efforts and accomplishments will be more regularly pursued.</p> <p>Staff Lead - Joy DeKorte (Communications) Team – Ariana zur Nieden ITOC Leads – Brad Barnum, Kai Ramer, Gregg Sadowsky</p>	<p>Staff has reviewed and made improvements to sandag.org/TransNet, which included adding links to the <i>TransNet</i> Dashboard and <i>TransNet</i> grant program pages. On social media, #<i>TransNetSD</i> is being more consistently added to posts that referenced <i>TransNet</i>-funded projects. Social campaigns featuring <i>TransNet</i>-funded grant programs also were completed. In both press releases and social media, all funding source information is being consistently added where appropriate. SANDAG press releases continue to reference <i>TransNet</i> funding and social media campaigns specific to <i>TransNet</i>-funded efforts and accomplishments are being regularly pursued. The review of partner agency websites is expected to begin by spring 2019 and wrap-up by June 30, 2019.</p>

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	b. Revamping SANDAG website to capture documents pertinent to <i>TransNet</i> in a centralized area for each <i>TransNet</i> Extension Ordinance component. This includes linking Dashboard projects with those listed in the <i>TransNet</i> Extension Ordinance.	114 – 115	Low	<p>The sandag.org/<i>TransNet</i> web page will be reviewed and recommendations made will include each <i>TransNet</i> component, including the Dashboard. Staff has been pursuing a complete redesign of sandag.org, expected to begin in FY 2019, which is planned to include higher visibility of each <i>TransNet</i> component, including the Dashboard. Additionally, staff will begin a coordinated review of the Dashboard to determine the most effective way to link projects back to the Ordinance.</p> <p>Staff Lead - Joy DeKorte (Communications)</p> <p>Team – Ariana zur Nieden</p> <p>ITOC Leads – Brad Barnum, Kai Ramer, Gregg Sadowsky</p>	Staff reviewed sandag.org/TransNet and added additional links, including one to the Dashboard and others to its various grant programs. SANDAG issued the notice to proceed for the website redesign project in December 2018. The project is expected to closely align with the <i>TransNet</i> Dashboard redesign, so <i>TransNet</i> -funded project components can be shared between sites, allowing for greater transparency. The SANDAG website redesign project is anticipated to be completed in FY 2020.
26.	Ensure data on completed projects is maintained in the Dashboard—even if under an archived location still accessible to the public—and separate past and future expenditures between the original <i>TransNet</i> amounts and the <i>TransNet</i> Extension Ordinance amounts.	115 – 116	Medium	<p>SANDAG will ensure all completed projects are maintained in the Dashboard, and that all expenditures have been associated with the appropriate funding source.</p> <p>Staff Lead – Lamont Dowell (<i>TransNet</i>)</p> <p>ITOC Leads – Brad Barnum, Kai Ramer, Gregg Sadowsky</p>	<p>Completed projects and expenditures have been added to the Dashboard and are available for public viewing. Information available at www.transnettrip.com</p> <p><input checked="" type="checkbox"/> Complete</p>