



**BOARD OF DIRECTORS
DECEMBER 16, 2016**

ACTION REQUESTED – INFORMATION

***TransNet* PROGRAM AND REVENUE
FORECAST UPDATE**

File Number 1500100

Introduction

At its November 18, 2016, meeting, the Board of Directors discussed the latest developments in the financial markets, the economy, and sales tax revenues and capacity to complete all projects included in the *TransNet* Extension Ordinance. The Board inquired as to how SANDAG would move forward with implementing capital projects included in the *TransNet* Extension following the defeat of Measure A on November 8, 2016. This report provides an update on the *TransNet* Major Corridors Program, which includes the major highway, rail, and transit capital project improvements listed in the *TransNet* Extension Ordinance, and a subset of the *TransNet* program called the Early Action Program (EAP).

This report outlines what projects have been completed to date, what projects remain to be completed between now and when the *TransNet* Extension program expires in 2048, the estimated cost to complete those projects, and the *TransNet* revenue expected to be available over the life of the program.

As part of this analysis, two significant adjustments have been made to the financial outlook for completing the *TransNet* Major Corridors program. The estimated costs of the projects have been updated using the latest information. The more current cost estimates are derived from figures included in San Diego Forward: The Regional Plan (Regional Plan), adopted by the Board in 2015. Previous cost estimates were derived from estimates developed as part of the *TransNet* Extension approved by voters in 2004. In addition to the updated costs, expected revenue has been revised after a review of the *TransNet* revenue forecasting methodology. Staff has conducted a new revenue forecast. It is independent of the agency's current forecasting model and uses nationally recognized sources of data.

As a result of these updates, the total amount of revenue needed to complete the Major Corridors Program is estimated to be about \$27.8 billion (in year of expenditure dollars), including debt service. To date, approximately \$10.3 billion in revenue has been identified: \$6.3 billion is anticipated to come from *TransNet*, and \$4 billion from existing grants, debt financing proceeds, and state and federal formula revenue streams anticipated and programmed in the Regional Transportation Improvement Program (RTIP). Moving forward, \$17.5 billion in new funds will have to be identified to complete the Program. These new funds could include future state and federal formula funds; and funds from new state, federal, and other initiatives. What this means is that going forward SANDAG would need to maintain an approximate 3:1 ratio; for every *TransNet* dollar

raised, approximately three dollars in outside funds would have to be identified as matching funds to complete the remaining projects. This kind of leverage ratio is in the realm of what the agency has achieved in the past 30 years. With the original *TransNet* and the *TransNet* Extension to date, SANDAG has leveraged three dollars in outside funds for every dollar raised from *TransNet*.

In the months to come, staff will further refine the revenue forecast and cost estimates to provide a clear picture of the funding needed to complete all projects, as well as potential strategies to identify these funds, as part of the *TransNet* Plan of Finance.

This update is a preliminary step in a multi-step process to update the *TransNet* Plan of Finance, which is anticipated to be brought to the Board in early 2017 for review and approval. The Plan of Finance update approach will include sensitivity analyses in the estimates of the potential costs and revenues needed to complete the program, with the range of results reflecting the uncertainty associated with long-term, large capital programs, and fluctuating revenue streams. For example, the analysis could include what would happen if *TransNet* revenues were to drop or if capital costs were to rise by certain percentages.

Background

TransNet Major Corridors Program and Early Action Program

In 2005, the SANDAG Board of Directors created the *TransNet* EAP. The *TransNet* EAP identified projects within the *TransNet* Major Corridors Program to advance for early delivery based upon Board direction.

When the Board began implementing the *TransNet* Major Corridors Program, it also established a financial strategy for implementing the *TransNet* EAP. As part of this effort, on at least an annual basis, the Board considers major policy issues, including whether to issue sales tax bonds to accelerate project completion and maximize construction cost savings, program funds for projects that are ready for construction, and start environmental and design work to remain competitive for future funding opportunities as they arise. Also considered are risk factors, including significant cost increases, sales tax revenues falling below projection, and state and federal fund match rates.

Eight years into the *TransNet* Extension Ordinance (2008-2048) – with about 20 percent of the 40-year measure having elapsed – the EAP has completed or started construction on approximately 40 percent of the projects listed in the ballot measure.

Completed projects include the Interstate 15 Managed Lanes, the State Route 52 Extension in Santee, Interstate 805 North carpool lanes and Direct Access Ramps at Carroll Canyon Road, Mid-City *Rapid*, Downtown *Rapid* Stations, and Trolley Renewal. Projects underway include: State Route 76 re-alignment and lane additions, Mid-Coast Trolley Extension, I-5/Genesee Avenue Interchange, double tracking and bridge replacements along the Los Angeles-San Diego-San Luis Obispo (LOSSAN) coastal rail corridor, Phase 1 of the North Coast Corridor Program, the South Bay *Rapid*, and regional bikeway program projects, such as the Bayshore Bikeway and Inland Rail Trail. Additionally, as part of the Environmental Mitigation Program and in support of EAP project mitigation and completion, 39 parcels of open space totaling approximately 8,600 acres have been acquired with a total value of about \$157 million, in part by leveraging \$27 million from

conservation partners. More than 200 acres currently are under restoration. All of these efforts help to provide additional transportation choices for residents in the region.

During the first eight years of the *TransNet* Extension measure, the Board has delivered a large number of projects in a prudent and cost effective manner by taking advantage of historically low interest rates; sustained low construction costs resulting from the effects of the Great Recession; and one-time injections of funds, including Proposition 1B approved by the voters in 2006, the American Recovery and Reinvestment Act of 2009, and annual opportunities through TIGER and other discretionary programs. Attachment 1 outlines the current status of Major Corridors Program projects.

Projects Remaining in the Major Corridors Program

In the near term, as construction begins in several major corridors including the Mid-Coast Trolley and the initial phase of the North Coast Corridor, the size of the SANDAG capital program is anticipated to grow. Funds already programmed in the RTIP, including anticipated state and federal formula funds, remaining allocations from the Mid-Coast Full Funding Grant Agreement, and planned debt financing through the TIFIA program, will cause the size of the capital program to grow over the next four years from an average of about \$400 million annually over the past few years to approximately \$570 million annually. Projects with environmental clearances already approved, including additional rail double tracking and High Occupancy Vehicle lane phases of the North Coast Corridor and the missing connector at the State Route 94/State Route 125 interchange, could take advantage of potential new funds, including state legislation recently introduced (Senate Bill 1 [Beall] and Assembly Bill 1 [Frazier]).

Looking further ahead, staff will continue to search for opportunities to leverage existing sales tax and formula funds to position projects for competitive funding opportunities. This could include potential opportunities at the federal level from a new administration and a renewed focus on infrastructure investment.

Over the next four to five years (after completion of the Mid-Coast Project and the initial phase of the North Coast Corridor), the *TransNet* Major Corridors Program will be transitioning to a pay-as-you-go approach from the EAP format of advancing future sales tax funds through issuance of bonds. This strategy means the agency will save up money for projects, rather than borrow money against future *TransNet* revenue to deliver projects.

Estimated Costs of the Remaining Projects in the Major Corridors Program

The capital cost to complete the remaining projects in the *TransNet* Major Corridors Program is estimated to be approximately \$22.6 billion (in year of expenditure dollars). The total comes to \$27.8 billion when debt service is included.

The latest capital cost estimate represents an increase of approximately \$8.4 billion from the last cost estimate for completing the program. Previous estimates were taken from calculations made when the *TransNet* Extension Ordinance was developed in the early 2000s. The current estimates are derived from estimates included in the Regional Plan, adopted by the Board in 2015. The estimates in the Regional Plan are updated every four years and include the cost of delivering the original project envisioned in the Ordinance, as well as potential additional costs – such as added

project elements (auxiliary lanes or wider local interchange bridges, etc.), ancillary elements near the project (improvements to local intersections near freeway interchanges that would help make operations more efficient, etc.), or new technology (the latest Intelligent Transportation Systems, etc.).

Because the Regional Plan includes broader improvements – infrastructure enhancements that are above and beyond what is included in the *TransNet* Extension Ordinance – the *TransNet* Major Corridors Program cost estimates included in this report are set at approximately 90 percent of the cost estimates outlined in the Regional Plan. The 10 percent that was excluded is an attempt to factor out the cost of some of those potential improvements that may not be needed to complete the specific projects as described in the *TransNet* Extension Ordinance.

As time goes by, these cost estimates and appropriate scope will continue to be assessed and updated, particularly when the feasibility and environmental studies are initiated for various projects, and more generally when the long-range transportation plan is updated every four years.

In addition to the capital cost of the projects outlined above, there is about \$5.2 billion in debt service payments associated with EAP bonds issued in the past eight years, and anticipated over the next five years, for a total program cost of \$27.8 billion.

Revenue Expected to be Available to Complete the Major Corridors Program

The revised sales tax revenue forecast prepared for this report indicates that SANDAG will receive approximately \$17.3 billion (in year of expenditure dollars) between now and 2048. Of this amount, the Ordinance sets aside 38 percent of net revenues, or approximately \$6.3 billion, to support the Major Corridors Program.

In addition to those *TransNet* funds, approximately \$21.5 billion in other funds (federal, state, bonds, grants, etc.) for the Major Corridors Program would be needed between now and 2048 to complete all projects. Of this amount, \$4 billion are anticipated or programmed state and federal formula funds, grants such as the Mid-Coast Full Funding Grant Agreement, state Cap-and-Trade Funds, and debt financing proceeds such as those from a TIFIA loan.

An additional \$17.5 billion would be needed to complete the Major Corridors Program. These funds could include allocations from long-standing state and federal formula programs such as Regional Surface Transportation Program (RSTP), Congestion Mitigation and Air Quality (CMAQ), or State Transportation Improvement Program (STIP); funds from new state and federal legislation similar to the state's Traffic Congestion Relief Program in the early 2000s or the federal American Recovery and Reinvestment Act in 2009; and funds from state or local voter-approved initiatives, similar to Proposition 1B in 2006.

The agency will continue its long-standing strategy of using local *TransNet* dollars to secure outside matching funds. In order to raise the \$17.5 billion needed, it is estimated that for every *TransNet* dollar raised, approximately three dollars in outside funds would have to be secured.

This is comparable to what the region has experienced on completed projects since 1988 when *TransNet* began. (Table 1 below shows a summary of these figures). Attachment 2 includes a memo from Public Financial Management (PFM), SANDAG's financial advisor, and provides additional details about revenues, costs, and the status of the *TransNet* Major Corridors Program.

Table 1
Summary of Costs and Revenues Needed to Complete Remaining *TransNet* Projects

Description	Amount (Year of Expenditure \$billions)
COSTS	
Capital Costs for Remaining Projects (2017-2048)	\$22.6
Anticipated Debt Service	\$5.2
Total	\$27.8
REVENUES	
<i>TransNet</i> Funds for Major Corridors Program (2017-2048)	\$6.3
Programmed Grants, and State and Federal Formula Funds, Anticipated Debt Financing Proceeds (e.g., TIFIA loan)	\$4.0
Additional Revenues <ul style="list-style-type: none"> - Anticipated funds from long-standing sources such as RSTP, CMAQ, STIP - Funds from future legislation similar to the American Recovery and Reinvestment Act in 2009 and initiatives, such as the statewide Proposition 1B in 2006 	\$17.5
Total Revenues	\$27.8

Sales Tax Revenue Forecasting

Historically, SANDAG has used certain economic inputs derived from its Demographics and Economic Forecasting Model (DEFM) for its *TransNet* revenue forecast for the Plan of Finance. Because the DEFM revenue forecasting methodology currently is under review by staff and is going to be updated (as part of the FY 2017 budgeted work effort), a new forecasting methodology independent of DEFM has been developed for the revenue forecast included in this report.

This forecast is based on nationally recognized sources of data, including IHS Global Insight, Moody's, and Woods & Poole.

The short-term (or first two years through FY 2018) of this forecast uses the California State Board of Equalization sales tax revenue allocation formula, as well as quarterly factors such as year-to-date sales tax collections, expected job growth, new unemployment claims, and the financial condition of consumers.

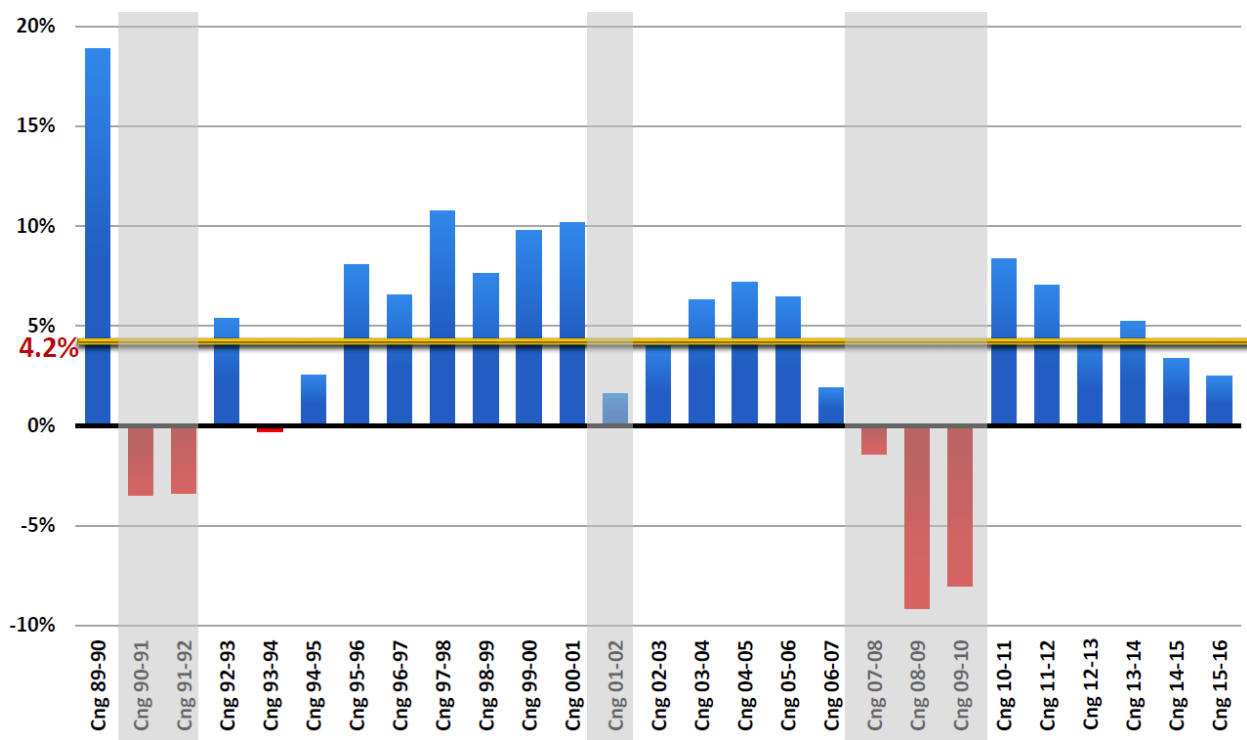
Beyond FY 2018, this forecast of *TransNet* revenues is based on the growth rate in taxable retail sales. The growth rate included here was arrived at using three variables: 1) the population

forecasts from the SANDAG DEFM; 2) a consensus of independent national forecasts of real rates of growth in per capita retail sales; and 3) nationally projected inflation rates. These variables are used to calibrate the forecast and produce the long-term estimates.

To mitigate against the risk of overestimating revenues, the revenue forecast presented in this report is based on an average of the retail sales growth rates reflected in the three aforementioned national data sources.

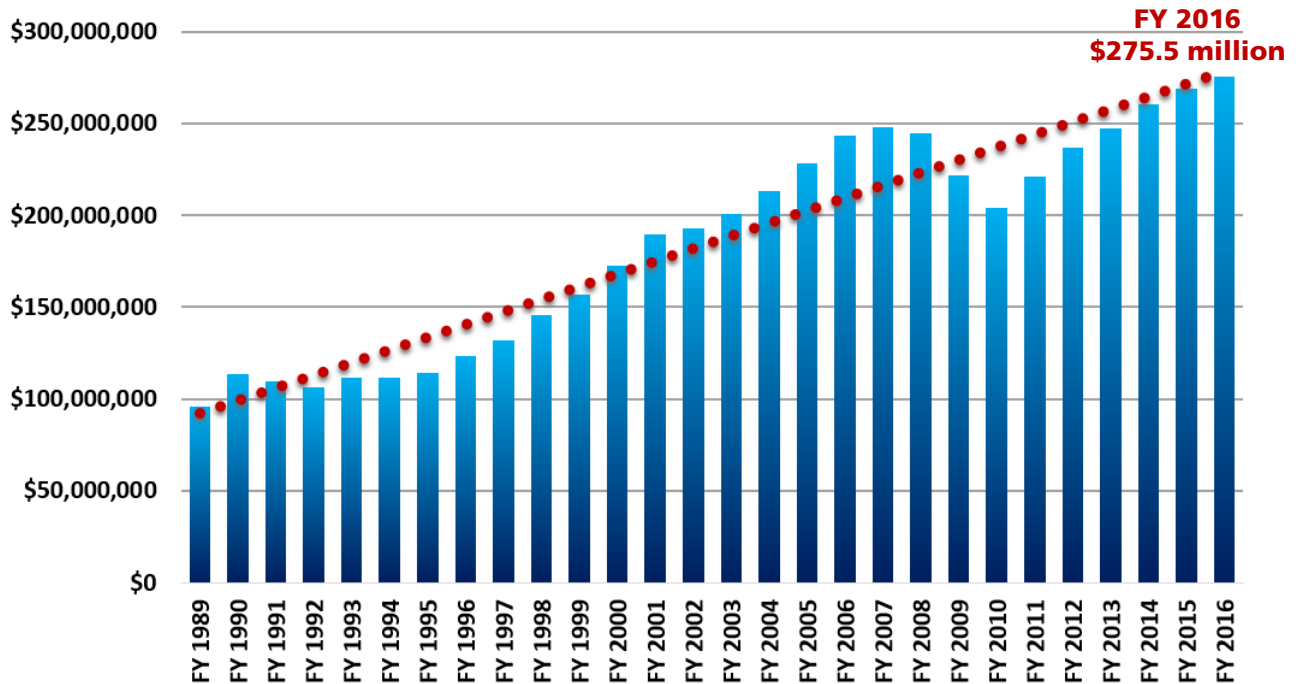
It is extremely challenging to forecast *TransNet* revenues over long periods of time as taxable retail sales are by nature volatile and are correlated with economic cycles. Since 1990 the region has experienced tax collection changes in rate of collection between -9.2 percent and +18.8 percent, with an average growth rate of 4.3 percent per year. Overall, *TransNet* revenues fell 17.6 percent during FY 2007 – FY 2010. Graph 1 shows the percent change in revenue for the period FY 1989 through FY 2016.

Graph 1
Change in *TransNet* Revenue Collection (FY 1989 - FY 2016)



TransNet revenues have now experienced six years of revenue growth, increasing 35 percent from \$204.1 million in FY 2010 to an all-time high of \$275.5 million in FY 2016. This represents an average growth rate of 5.1 percent per year. Graph 2 shows the amount of revenue collected annually from FY 1989 through FY 2016.

**Graph 2
TransNet Revenue Collection (FY 1989 - FY 2016)**



As a matter of standard practice, SANDAG staff looks at the current economic conditions and calibrates the forecast. A number of changes have occurred in the economy that have caused the region to experience slower than anticipated growth during FY 2017.

Some of these factors include:

- Slower than expected economic growth at the national and regional levels.
- Continued lower than expected inflation rates temper increases in retail prices. This in turn moderates the increase in retail sales tax collections.
- Revenue collected from gasoline sales between April through May 2015 and April through May 2016 fell by 15.5 percent.
- Increased proportion of retail sales moving to the internet.
- Continued strengthening of the U.S. dollar compared to the Mexican peso.

For the purposes of the *TransNet* Plan of Finance, SANDAG is estimating that *TransNet* sales tax collection in FY 2017 will amount to \$282 million, an increase of 2.6 percent over the FY 2016 revenue collection amount of \$275.5 million.

It is important to note that revenue is only one part of the equation when it comes to delivering *TransNet* projects. The other part of the equation is costs. During an up economic cycle, as is the case currently, construction costs also tend to go up, offsetting revenue gains. During a down economic cycle, construction costs tend to go down, off-setting the effect of lower revenue

collection. In other words, the agency gains purchasing power during a recession, even though it has less revenue.

After the Great Recession, the Caltrans Construction Cost Index, for example, dropped by about 26 percent between 2006 and 2010, and stayed low for the subsequent three years. Although *TransNet* revenue collections also dropped during this period, the revenue decline was less than the decline in construction costs. This, coupled with a significant infusion of outside dollars (Proposition 1B and federal stimulus), enabled the agency to get a number of projects done.

Next Steps

The annual *TransNet* Plan of Finance update is scheduled for presentation to the Independent Taxpayer Oversight Committee, Transportation Committee, and Board of Directors early next calendar year. The next *TransNet* revenue estimates report is scheduled for presentation in February 2017. The next update on the Regional Growth Forecast methodology would be presented for Board consideration in mid-2017.

GARY L. GALLEGOS
Executive Director

Attachments: 1. *TransNet* Extension Major Corridor Improvement Program Project Status Table as of FY 2017
2. PFM Memorandum Dated December 13, 2016

Key Staff Contacts: Kim Kawada, (619) 699-6994, kim.kawada@sandag.org
Ray Major, (619) 595-5668, ray.major@sandag.org

TransNet Extension Major Corridor Improvement Program Project Status Table as of FY 2017

Ordinance Project No.	Route/Facility	From	To	Existing	Improvement	Completed/Under Construction	In Development	Future Project
1	I-15	SR 163	SR 56	8F	8F+4ML/MB			
2	I-15	Centre City Parkway	SR 78	8F	8F+4ML			
3	I-15	SR 94	SR 163	6F/8F	8F+2HOV			
4	HOV 2 HOV	I-15	SR 78	--	East to South, North to West		Project Study Report Complete	
5	HOV 2 HOV	I-15	SR 94	--	South to West, East to North		Alternatives Analysis and DED in Progress	
6	SR 94	I-5	I-15	8F	8F+2HOV		Alternatives Analysis and DED in Progress	
7	<i>Rapid 235</i>	Escondido Transit Center	Downtown San Diego	--	<i>Rapid</i> service from Escondido to Downtown San Diego			
8	<i>Rapid 237</i>	Rancho Bernardo	UC San Diego	--	<i>Rapid</i> service from Rancho Bernardo area to UC San Diego area via Mira Mesa			
9*	I-805	SR 905	SR 54	8F	8F+2HOV	2HOV from Palomar Street to SR 54 Complete		2HOV, Palomar Street to SR 905

Ordinance Project No.	Route/Facility	From	To	Existing	Improvement	Completed/Under Construction	In Development	Future Project
10	I-805	SR 54	I-8	8F	8F+4ML	2HOV from SR 54 to SR 94 Complete		2ML, SR 54 to SR 94 4ML, SR 94 to I-8
11	I-805	Mission Valley Viaduct		8F	8F+4ML			
12	I-805	I-8	I-5	8F	8F+4ML	2HOV from SR 52 to I-5 Complete		2ML, SR 52 to I-5 4ML, I-8 to SR 52
13	I-805/SR 54 Interchange improvements				East to South			
14	South Bay <i>Rapid</i>	Otay Mesa	Downtown San Diego	--	<i>Rapid</i> service from Otay Mesa to Downtown, using I-805/SR 94 HOV/managed lane facilities, including new stations and direct access ramps			
15	SR 94	I-805	I-15	8F	8F+2HOV		Alternatives Analysis and DED in Progress	
16	<i>Rapid</i> 680 via I-805/I-15/SR 52	San Ysidro	Sorrento Mesa	--	Builds one new station; uses DARs and stations built by routes <i>Rapid</i> 235 and South Bay <i>Rapid</i>			

Ordinance Project No.	Route/Facility	From	To	Existing	Improvement	Completed/Under Construction	In Development	Future Project
17	SR 52	I-15	I-805	6F	6F+2HOV			
18	HOV 2 HOV	I-805	SR 52	--	West to North, South to East			
19	I-5	SR 905	SR 54	8F	8F+2HOV			
20	I-5	SR 54	I-8	8F	8F+2HOV			
21	I-5	I-8	I-805	8F	8F+2HOV (including environmental and preliminary engineering for I-5/I-8 interchange improvements)	I-5/I-8 IC improvements Complete; I-5/Genesee IC Under Construction; I-5/Gilman Drive Bridge Under Construction	I-5/Voigt IC In Design	2 HOVs, I-8 to I-805
22	Blue Line Trolley Improvements				Conversion to low-floor vehicles, enhanced stations, signal upgrades, extended platforms, grade separations in Chula Vista	Conversion to low-floor vehicles, enhanced stations, signal upgrades, platforms extensions Complete		Grade Separations
23	Mid-Coast	Old Town	UC San Diego/UTC	--	Extension of light rail transit from Old Town Transit Center to UTC via I-5 and UC San Diego			

Ordinance Project No.	Route/Facility	From	To	Existing	Improvement	Completed/Under Construction	In Development	Future Project
24	SuperLoop	UTC	UC San Diego	--	Signal priority, queue jumper lanes, other arterial improvements, vehicles, stations			
25	I-5/I-805	Merge		16F	16F+4ML			
26	I-5	SR 56	Leucadia Boulevard	8F	8F+4ML	2HOV from SR 56 to Manchester Avenue Complete	2HOV Manchester Avenue to Leucadia Boulevard In Design	2ML, SR 56 to Leucadia Boulevard
27	I-5	Leucadia Boulevard	Vandegrift Boulevard	8F	8F+4ML	San Elijo Lagoon Bridge Under Construction	2HOV from Leucadia Blvd to SR 78 In Design	2ML, Leucadia to SR 78 4ML, SR 78 to Vandegrift Boulevard
28	HOV 2 HOV	I-5	I-805	--	North to North, South to South			
29	FWY 2 FWY	I-5	SR 56	--	West to North, South to East		FED Complete	
30	FWY 2 FWY	I-5	SR 78	--	West to South, South to East		Technical Studies in Progress	

Ordinance Project No.	Route/Facility	From	To	Existing	Improvement	Completed/Under Construction	In Development	Future Project
31	COASTER/ <i>Rapid</i>	Improvements		--	Corridor transit improvements that would include some combination of projects from the following: COASTER: vehicles, station improvements including parking, double tracking and other improvements, Del Mar tunnel; and <i>Rapid</i> (El Camino Real/I-5): vehicles, stations, signal priority and other arterial improvements along El Camino Real, DARs on I-5 south from Encinitas	67% double tracked	Various locations in design	
32	SR 52	I-15	SR 125	4F	6F+2ML (Reversible)	3rd lane added from I-15 to Mast Boulevard		2ML, I-15 to SR 125
33	SR 52	SR 125	SR 67	--	4F			
34	SR 94/SR 125 Interchange				West to North, South to East		FED for South to East Connector Complete	West to North Connector

Ordinance Project No.	Route/Facility	From	To	Existing	Improvement	Completed/Under Construction	In Development	Future Project
35	SR 94	SR 125	Steele Canyon	4F/4C-2C	Widen to six-lane freeway from SR 125 to Avocado Boulevard and provide four-lane conventional highway from Avocado Boulevard to Steele Canyon			
36	SR 94/SR 125	I-805	I-8	8F	8F+2HOV			
37	Orange Line Trolley Improvements			--	Conversion to low-floor vehicles, enhanced stations, signal upgrades, extended platforms			
38	SR 54/SR 125	I-805	SR 94	4F+2/6F	Widen to provide a continuous 6F+2HOV Facility			
39	SR 67	Mapleview Street	Dye Road	2C	4C - to be constructed with environmental enhancements			
40	I-8	Second Street	Los Coches	4F	6F			
41	SR 78	I-5	I-15	6F	6F+2HOV	SR 78/ Nordahl Road IC Improvement Complete	Project Study Report Complete	

Ordinance Project No.	Route/Facility	From	To	Existing	Improvement	Completed/Under Construction	In Development	Future Project
42	SPRINTER/ <i>Rapid</i>	Improvements		--	Corridor transit improvements that would include some combination of projects from the following: SPRINTER - double tracking, North County Fair extension, some grade separations; and <i>Rapid</i> (Palomar Airport Road) - vehicles, signal priority and other arterial improvements; builds 18 stations	SPRINTER Complete		Double-tracking, North County Fair Extension
43	SR 76	Melrose Drive	I-15	2C	4C - Mission Road to I-15 segment to be constructed with environmental enhancements			
44	SR 56	I-5	I-15	4F	6F			
45	Mid-City <i>Rapid</i> 215	SDSU	Downtown San Diego	--	<i>Rapid</i> 215 Service from SDSU to Downtown San Diego, including signal priority, queue jumper lanes and stations			
46	SR 75/SR 282	Glorietta Boulevard	Alameda Boulevard	--	Tunnel Construction Match Only			
47	Border Access Improvements	Miscellaneous improvements to enhance access in the border area		--	Construction Match			
48**	SR 125	SR 905	SR 54	--	4-lane toll road from SR 905 to SR 54			

Ordinance Project No.	Route/Facility	From	To	Existing	Improvement	Completed/Under Construction	In Development	Future Project
TOTAL						19		
TOTAL						40%	60%	
LEGEND C - Conventional Highway Lane DAR - Direct Access Ramp DED – Draft Environmental Document F - General Purpose Freeway Lane FED – Final Environmental Document FWY - Freeway HOV - High Occupancy Vehicle Lane I - Interstate Highway IC - Interchange ML - Managed Lane SDSU – San Diego State University SR - State Route UC San Diego – University of California, San Diego UTC – Westfield University Towne Centre Projects in development means project development work, including technical studies, project study reports, environmental document or design has begun or been implemented								
NOTES * Regional Transportation Commission Ordinance CO-12-01 removed two reversible HOV lane improvements on I-805 from SR 54 to SR 905 ** Regional Transportation Commission Ordinance CO-12-01 added Project No. 48								

December 13, 2016

MEMORANDUM

To: SANDAG Board of Directors
From: *Public Financial Management, Inc.*
Re: *TransNet* Program Update

INTRODUCTION

Public Financial Management (“PFM”) has worked with SANDAG staff on this *TransNet* Program Update in an effort to optimize SANDAG’s funding and financing strategy to best deliver the *TransNet* capital program through 2048 under revised revenue forecasts and cost estimates.

There are two salient points of change to this *TransNet* Program Update that are worth specific mention. First, SANDAG staff has taken a fresh look at the sales tax revenue forecast and has revised downward the revenue forecast through 2048. Current year revenues for FY 2017 are estimated to be \$282 million; a 2.6 percent increase over FY 2016 revenues. Thereafter, sales tax revenues are forecast to grow at an average annual growth rate of 3.9% through 2048. As a point of comparison, SANDAG’s sales tax revenue grew at an average annual growth rate of 4.3% between 1990 and 2008, prior to the Great Recession.

Second, staff has estimated that the cost to complete the remaining Major Corridor projects included in the Ordinance is approximately \$22.6 billion (in year of expenditure dollars). This cost estimate represents an increase of approximately \$8.4 billion over the last cost estimate. These project costs increased when they were most recently updated to conform to the latest Regional Transportation Plan (RTP), which includes the latest unit-cost assumptions.

This memorandum provides additional detail behind program capital costs and the financing strategies used to support project delivery.

CAPITAL COST ESTIMATES AND PROGRAM FUNDING NEEDS

This *TransNet* Program Update accounts for total costs for all *TransNet* Extension programs. The Major Corridors program is the most capital intensive program and is a primary focus of SANDAG staff and PFM in evaluating program needs.

The size of SANDAG’s Capital Improvement Program going from FY 2017 through FY 2048 for the Major Corridors program is currently estimated at \$22.6 billion – this is an increase of approximately \$8.4 billion compared to earlier cost estimates. These significant funding needs are both near-term and long-term. In the near-term, over the next five years – with the majority of costs supporting the Mid-Coast Project and the I-5 Corridor – federal, state and local funding have been identified and financing strategies are being developed. Beginning in 2023, the additional \$8.4 billion in project costs begin to be realized. In order to meet these project needs, appropriate federal, state and local funding sources will need to be identified. The actual timing of the additional costs based upon newly identified funding sources. Prior to identifying any new



funding source, no additional financing strategies beyond 2021 are incorporated into this *TransNet* Program Update at this time.

FINANCING STRATEGIES AND CONSIDERATIONS

With near-term funding identified, SANDAG and PFM have evaluated financing strategies through 2021 to support project delivery. The majority of SANDAG's borrowing is supported by the local sales tax revenue. So while there is uncertainty regarding future federal and state funding (as well as a potential new funding source), the feasibility of any new borrowing may be considered within the revised (conservatively downward) forecast of sales tax revenues that are currently in place and being collected.

All strategies that are included in this Program Update are consistent with the San Diego RTC's current Debt Policy (i.e., Policy No. 36). The broad objectives for financing strategies are the following:

- Identify low costs of borrowing
- Increase program flexibility
- Increase borrowing capacity under senior lien sales tax indenture

Three financing strategies, in addition to traditional sales tax revenue bonds, are included in this Program Update. The first strategy is to pursue a loan from the federal Transportation Infrastructure Finance and Innovation Act (TIFIA) loan program. A TIFIA loan is a direct federal loan for eligible transportation projects that carries the benefit of a comparatively low interest rate, flexible repayment terms, and the ability for the loan recipient to lock in an interest rate without drawing on the loan for several years. A TIFIA loan may be paid on a subordinate basis, after SANDAG's sales tax revenue bonds, thereby supporting higher bond debt service coverage, higher bond ratings and lower sales tax bond borrowing rates. A TIFIA loan may be repaid at any time with no penalty or premium.

The *TransNet* Program Update includes a TIFIA loan in the amount of \$570 million to be closed in 2017 and drawn in 2021 to help fund the Mid-Coast Project. TIFIA loans are an increasingly common financing tool used by sales tax supported transportation and transit agencies in the US and have been recently used at Los Angeles County MTA, Seattle Sound Transit, Chicago CTA, Riverside CTC and elsewhere.

SANDAG has submitted its application for a TIFIA loan to fund a portion of the Mid-Coast project and is currently negotiating loan terms with TIFIA.

In addition to the TIFIA loan program, the *TransNet* Program Update also uses Bond Anticipation Notes (BANs) to provide cost effective financing for the Mid-Coast Project. The BAN financing strategy includes three issuances of BANs between 2017 and 2019 totaling approximately \$620 million. The BANs are a short-term financing tool with a three to five year maturity that is repaid by proceeds from the TIFIA loan. The BANs create further program flexibility by cost-effectively delaying the initial draw on and repayment of the TIFIA loan. BANs will be issued in anticipation of draws on the TIFIA loan only if the BANs have a lower interest rate compared to the TIFIA loan (which is expected to be set by February 2017). Currently, BANs carry a very attractive rate below 2.0%; lower than the current cost of a TIFIA loan of approximately 3.1%. These rates are subject to change and the use of BANs will be a decision made based upon market conditions in 2017



through 2019, with each specific issuance brought before SANDAG’s Board for discussion and approval at that time.

The third financing strategy is the use of Grant Anticipation Notes (GANs). The GANs would be supported and repaid by federal grant funds anticipated for the Mid-Coast Project. As such, they reduce the use of sales tax bonds and preserve the strength of the sales tax credit. The issuance of approximately \$230 million in GANs in 2019 and 2020 accelerates use of the federal grant funds expected to be received post-construction, thereby reducing the need for sales tax revenue bonds by a similar amount, and helping to maintain the strength of the sales tax credit. The GAN financing included in the *TransNet* Program Update is a medium-term 8-year note that provides bridge financing for the Mid-Coast Project.

The *TransNet* Program Update anticipates SANDAG issuing approximately \$280 million in senior lien sales tax bonds between FY 2018 and FY 2021. This is a relatively modest amount of additional sales tax bonds, indicating a transition from a debt financed program to more of a pay-as-you-go program.

Additionally, SANDAG is expected to draw upon the existing commercial paper program as a short-term, interim financing strategy to fund construction costs that are expected to be reimbursed with *TransNet* sales tax revenues. This is reflected in the current *TransNet* Program Update with a draw upon commercial paper of \$40 million in FY 2021, which is repaid as *TransNet* revenues become available in FY 2022 and FY 2023.

FINANCING RESULTS

There are two forms of long-term borrowing in the financing strategy above: the federal TIFIA loan and the estimated \$280 million of additional sales tax revenue bonds. Both are directly supported by sales tax revenues (albeit, bonds on the senior lien and TIFIA loan repayment on the third, subordinate lien). Accounting for bonds outstanding in the amount of \$1.78 billion and this future anticipated borrowing, debt service coverage stays above 2.0x in every year. In other words, for every one dollar of debt service, SANDAG is receiving in excess of two dollars of sales tax revenue in that given year. Debt service coverage over 2.0x, which is the minimum requirement under SANDAG’s legal documents, is considered strong by the rating agencies.

CONCLUSION AND UPDATE SUMMARY

SANDAG’s near-term capacity to deliver projects appears to be reasonable with identified funding. With respect to near-term financing strategies, we anticipate closing on the federal TIFIA loan in the next two to three months. Additionally, we recommend preparing for an upcoming BAN issuance in calendar-year 2017 to continue funding Mid-Coast project costs. Each of the near-term financing recommendations will be brought back to ITOC, the Transportation Committee and the Board for further consideration and approval prior execution.

Following the increase in long-term estimated costs, SANDAG will need to identify appropriate federal, state and local funding sources to meet these increased costs. No debt strategies for long-term costs are currently contemplated until new funding is identified.