Metropolitan Transit System

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December 18, 2017

Mr. Brian P. Kelly
Secretary
California State Transportation Agency
915 Capitol Mall, Suite 350B
Sacramento, CA 95814

Dear Secretary Kelly:

Please find attached the San Diego Metropolitan Transit System's application for 2018 Transit and Intercity Rail Capital Program (TIRCP) funding. The enclosed application is requesting a total of $62,896,000 for the Blue Line Rail Corridor Transit Enhancement project at MTS.

The Blue Line Rail Corridor Transit Enhancement includes capital investments that will accommodate increased rail service between Santa Fe Depot and Old Town; state of good repair and performance investments designed to improve efficiency and safety; and the addition of two new BRT Routes that would provide direction connections to the Blue Line. Combined, these project components would significantly increase ridership, reduce greenhouse gas emissions, enhance integration with other services, improve safety, and provide other benefits in the region.

As Chief Executive Officer, I approve this content of this application and authorize the submission of this application.

Thank you for this funding opportunity.

Sincerely,

Paul Jablonski
Chief Executive Officer

2018

Blue Line Rail Corridor Transit Enhancements

San Diego Metropolitan Transit System

Transit and Intercity Rail Capital Program

Contents

Project Narrative

A) Project Title Page

i. **Project Title:** Blue Line Rail Corridor Transit Enhancements

ii. **Applicant Name:** San Diego Metropolitan Transit System (MTS)

iii. **Project Priority:** MTS is submitting two applications for the 2018 TIRCP. The Blue Line Rail Corridor Transit Enhancements project is the first priority.

iv. **Project Purpose and Need:** The Blue Line Rail Corridor Transit Enhancements project includes a variety of capital investments designed to increase light rail service, improve safety and performance, and introduce new Rapid bus feeder service along the Blue Line Rail Corridor. The proposed project is necessary for the region because it would provide the operational flexibility necessary to eventually operate 15-minute headways between downtown San Diego and UC San Diego/University Town Center as part of the Mid-Coast Trolley Extension project that is currently underway. The project would also replace aging infrastructure for safety and performance improvements and implement two new Rapid bus feeder routes. The planned investments would increase ridership, reduce GHGs, and provide safer service along the Blue Line Corridor. Specific investments are listed in the table below.

Blue Line Rail Corridor Transit Enhancements
Project
Increased Light Rail Service
Beech Street Double Crossover Design/Construction
Middletown Double Crossover Construction
America Plaza Pedestrian Enhancements Design/Construction
Old Town Transit Center West Enhancements Construction
Operations: 15-minute Service from Santa Fe Depot to Old Town
State of Good Repair/Performance Improvements
Beyer Track and Slope Repair Construction
America Plaza Track Replacement Design/Construction
Green Line IMT Double Tracking Design/Construction
Blue Line Substation Replacement (6 locations) Design/Construction
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction
New Bus Rapid Transit Feeder Service
Blue Line Feeder Bus Service (23 Articulated Buses)
Blue Line Feeder Bus Service (Stop Improvements) Design/Construction
Rapid 725 Operations
Rapid 925 Operations

v. **Project Location:** The project is located in various locations in San Diego County, within the cities of San Diego, Chula Vista, Imperial Beach, and National City. Twenty SB 535 disadvantaged communities and 46 AB 1550 low-income communities are directly served by the project. Refer to Figure 22 in Section E.2.2 for a map and full discussion of SB 535 and AB 1550 communities served.

vi. **Project Mode(s):** Light Rail and Bus Rapid Transit

vii. **Multi-Agency Coordination:** MTS is the sole applicant for the project.

viii. **Green House Gas (GHG) Reductions:** The TIRCP portion of the project is estimated to reduce GHGs in the San Diego region by 56,568 MTCO2e over the project lifecycle. Please see the attached TIRCP Calculator tool and supporting documentation for further details.

ix. **Funding:** MTS is requesting $62,896,000 in 2018 TIRCP funds for the project. MTS is committing $15,132,000 in non-TIRCP matching funds in order to fully fund the project. The total cost of the project, excluding operations, is estimated at $78,028,000. Non-TIRCP funds represent a matching rate of approximately 20 percent.

x. **Point of contact:**

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B) Project Costs

i. Cost estimates should be escalated to the year of proposed delivery.

All cost estimates included are based upon anticipated pricing in the year of project delivery. Please see Section B of the Statement of Work document for detailed costs for each project component.

ii. Only cost estimates approved by the Chief Executive Officer or other authorized officer of the implementing agency should be used

The Chief Executive Officer (CEO) has reviewed and approved the cost estimates included in this application. Please see Attachment No. 1 in the supporting documentation which includes a signed statement by the CEO approving the cost estimates.

iii. The amount of funds committed to the project (including initial operating costs) and identification of specific sources of non-TIRCP funding.

1. *If applicable, describe the leveraging and coordination of funding from other GHG programs.*

MTS will not be leveraging funding from any other Greenhouse Gas Reduction Fund programs for this project.

2. *If applicable, describe the leveraging and coordination of funding from other federal, state, local or regional sours, with indication as to which of those sources are discretionary and which are non-discretionary.*

MTS will commit a combination of California Transportation Development Act (TDA), California Senate Bill (SB) 1 State of Good Repair (SGR) funding, and State Transit Assistance (STA) funding to the project, contingent upon a successful TIRCP award. Specifically, MTS plans to commit a total of $13,385,000 in TDA funding, a total of $1,747,000 in SB1 SGR funding, a total of $7,312,000 in STA funding (operations during five-year programming cycle), and a total of $6,550,000 in TransNet funding (operations during five-year programming cycle) to match the TIRCP request of $62,896,000. These funding sources are formula-based and do not require a competitive process for allocation. Each of the referenced funding sources is detailed below.

Senate Bill 1 State of Good Repair (SB1 SGR)

The Road Repair and Accountability Act of 2017, Senate Bill 1 (Chapter 5, Statues of 2017), signed by the Governor on April 28, 2017, includes a program that will provide additional revenues for transit infrastructure repair and service improvements. This investment in public transit is referred to as the State of Good Repair Program. This program provides funding of approximately $105 million annually to the State Transit Assistance (STA) Account. These funds are made available for eligible transit, maintenance, rehabilitation, and capital projects. The SGR program is funded by a portion of a new Transportation Improvement Fee on vehicle registrations due on or after January 1, 2018. The SGR program is formula-based and allocations are distributed by the State Controller's Office. MTS's allocation of SGR revenues in FY17/FY18 was $4,551,892 (Attachment No. 2). As long as SB1 is not repealed, MTS expects this figure to be relatively stable.

Senate Bill 1 Augmented State Transit Assistance (STA)

The Road Repair and Accountability Act of 2017 also includes an increase of approximately $250 million for conventional State Transit Assistance (STA) formula funds (non-SGR) per year. The additional STA apportionment is funded by an increase in the sales tax on diesel. MTS received a total STA formula allocation (excluding SGR) of $20,325,236 for the 2017/18 fiscal year (Attachment No. 3), of which approximately 36 percent was augmented by additional SB1 funds. Consequently, $7,317,085 of the apportionment was augmented by SB1. Furthermore, this portion of STA represents funding from only eight months of collecting increased diesel taxes rather than a full 12 months, as the tax became effective in November 2017. Hence, MTS projects an annual apportionment of approximately $11 million in fiscal years beyond 2017/18 when accounting for a full year of collecting the increased diesel sales tax revenues. This portion of funds can be used for capital projects and/or operations.

California Transportation Development Act (TDA)

TDA is a state fund derived from one-quarter of a percent of the eight percent sales tax assessed in the region. MTS spends approximately $60 million per year of TDA on operations and allocates approximately $35 million per year for capital projects. TDA apportionments are currently projected to increase by approximately four percent annually. Please see Attachment No. 4 which shows the most recent SANDAG (the administering agency) projections for TDA apportionments between FY 2019 and FY2022.

TransNet

In November of 2004, San Diego County voters approved a 40-year extension of the one-half cent sales tax ordinance that was set to expire in 2008 (TransNet II). The extension is expected to generate more than $14 billion for transportation improvements, with the funds allocated for transit expansion, highway projects, local roads, and other new programs. MTS is projected to receive an average of $33.3 million per year between FY 2018 and FY 2022, with an average annual growth rate of approximately four percent. Furthermore, MTS is projected to receive approximately $36.7 million in FY 2022, the first year in which MTS plans to utilize the funds for increased service on the Blue Line. Attachment No. 5 was provided by the San Diego Association of Governments (SANDAG) and includes the current TransNet revenue forecasts through FY 2022.

The planned revenues by project component are described in the figure below and discussed further in Section D of the Statement of Work.

Table 1: Project Funding Strategy

Project Component	Total	TIRCP	SB1 SGR	SB1 STA	TDA/Local	Transnet	Match
Beech Street Double Crossover Design/Construction	5,065	4,052	-	-	1,013	-	0.20
Middletown Double Crossover Construction	6,222	4,977	-	-	1,244	-	0.20
America Plaza Pedestrian Enhancements - Design/Construction	4,694	3,755	-	-	939	-	0.20
Old Town Transit Center West Enhancements - Construction	2,367	2,367	-	-	-	-	-
Beyer Track and Slope Repair - Construction	5,195	4,156	-	-	1,039	-	0.20
America Plaza Track Replacement - Design/Construction	1,425	1,140	-	-	285	-	0.20
Green Line IMT Double Tracking Design/Construction	8,736	6,989	1,747	-	-	-	0.20
Blue Line Substation Replacement (6 locations) - Design/Construction	13,098	10,478	-	-	2,620	-	0.20
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	2,459	1,967		-	492	-	0.20
Blue Line Feeder Bus Service (23 Articulated Buses & Stop Improvements)	24,903	19,922	-	-	4,981	-	0.20
Blue Line Feeder Bus Service (Stop Improvements)	3,865	3,092	-	-	773	-	0.20
Capital Total	78,028	62,896	1,747	-	13,385	-	0.19
Increased Frequency (Santa Fe Depot to Old Town)	6,550	-	-	-	-	6,550	1.00
Rapid 725 Operations	2,849	-	-	2,849	-	-	1.00
Rapid 925 Operations	4,463	-	-	4,463	-	-	1.00
Operating Total (during 5-year programming cycle)	13,862	-	-	7,312	-	6,550	1.00
Grand Total	91,890	62,896	1,747	7,312	13,385	6,550	0.32

iv. The Amount of TIRCP funds requested.

MTS is requesting a total of $62,896,000 in 2018 TIRCP funds for the project.

C) Applicant Eligibility

MTS is an eligible applicant as a public agency that provides bus and rail transit service. MTS provides bus and rail services directly and by contract with private operators. MTS coordinates all its services (including three light rail lines, a historic streetcar line, 95 bus routes, and ADA paratransit services) and determines the routing, stops, frequencies and hours of operation. Fixed-route bus service includes local, urban, express, premium express and rural routes. MTS also contracts with the San Diego & Imperial Valley (SDIY) Railroad and the Pacific Imperial Railroad, Inc. (PIR) to provide freight service to San Diego shippers over San Diego & Arizona Eastern (a subsidiary of MTS) right-of-way. SDIY shares certain tracks with the San Diego Trolley (light rail), operating during Trolley non-revenue service hours.

D) Project Benefits

D.1 Brief Project Summary

Operating between the international border with Mexico and downtown San Diego, the Blue Line is one of the most successful light rail lines in the nation, carrying nearly 300 passengers per hour and more than 17 million annually.

The region is investing $1 billion in the Mid-Coast Trolley extension from Old Town to the University Town Center/UC San Diego areas. The current plan is for the Blue Line to provide a one-seat ride between the international border and University Town Center (34 miles in length); however, required improvements for the segment between the current terminal in downtown San Diego and Old Town are unfunded. This grant will provide the infrastructure necessary to bridge that gap in service, with the additional operations funding provided by MTS.

Not only will the Blue Line Rail Corridor Transit Enhancements Project increase ridership by bridging this gap in service on the Blue Line (thereby reducing transfers and adding overlay service to an already busy corridor) but ridership gains will be expected with the addition of two feeder Rapid bus routes, enhanced pedestrian connections at Old Town and at the key Santa Fe Depot/America Plaza transfer point, and improved reliability due to infrastructure improvements that include additional crossovers, track replacement, substation replacement, and additional track at a key connection point.

It is anticipated that the project will add more than four million trips annually to the transit network, and reduce GHG emissions by 56,568 MTCO2e.

D.2 Detailed Project Description

D.2.1 MTS System

MTS is the local public transit provider for the central, southern, and eastern parts of San Diego County. It carries more than 285,000 passengers daily (and 88 million annually) on its three light rail (Trolley) lines, 95 bus routes, and paratransit services.

The three Trolley lines comprise the backbone of the system. Serving 53 stations on 50-plus miles of track, the system carries more than 115,000 passengers daily and 37 million annually.

The three Trolley lines include the following:

- **Blue Line –** Between downtown San Diego and the San Ysidro International Border crossing with Mexico
- **Orange Line –** Between downtown San Diego and the east county city of El Cajon, via the communities of southeastern San Diego
- **Green Line –** Between downtown San Diego and the east county city of Santee, via Old Town, Mission Valley, and San Diego State University

Of the 95 bus routes, five of them are Rapid services which include higher frequencies, dedicated guideway in some locations, freeway operation on certain segments, transit signal priority, and branded stations and buses. Most stations have an upgraded or unique Rapid shelter, visual message signs, information kiosks, and an enlarged waiting area. A sixth route will open in 2019, stretching the Rapid network from the Mexican border to Escondido, with two major east-west lines, two major north-south lines, and two community circulator routes.

D.2.2 Blue Line

The Blue Line currently serves 18 stations between the international border and downtown San Diego (ending at America Plaza). Spurred by activity at the border and South Bay communities, the Blue Line is one of the most successful light rail lines in the nation, with 297 passengers per hour and a farebox recovery rate of nearly 70%. It carries nearly half of all Trolley passengers.

The Blue Line currently operates 15-minute headways in the off-peaks and 7.5-minute headways in the morning and afternoon peaks.

D.2.2.1 Blue Line Rehabilitation Project

MTS recently completed the five-year $600 million Trolley Renewal Project. As part of this project, the Blue Line (which began operation in 1981 and still had much of its original infrastructure) was rebuilt from top-to-bottom.

Included in this project was the upgrade of rail, replacement of all catenary, improved signalling, new interlockings for operational flexibility, and replacement of the track bed.

In addition, all stations were rebuilt and transit centers were redesigned to improve bus-to-rail connections. The revamped stations have all new station amenities, including benches, shelters, next train signs, and advanced communications. Most importantly, all platforms were raised to eight inches to accommodate low-floor vehicle operation.

While this project brought numerous benefits to customers and enhanced the attractiveness of light rail transit as a means of travel, there was not enough funding to meet every need, including the replacement of some substations, the repair of slope issues, and the replacement of rail in some downtown locations. This grant will help with those needs and supplement the Trolley Renewal Project.

D.2.3 Mid-Coast Light Rail Expansion

The planned $2 billion Mid-Coast extension of the Trolley (half-funded locally) is expected to begin operations in FY 2022. The network will be expanded by 11 miles and nine stations north of Old Town Transit Center. Major destinations will include the VA Hospital, UC San Diego, and University Town Center (a major mall, transit center, and employment center). It is expected to add 20,000 daily riders to the system.

When the Mid-Coast extension begins operations, the current plan has the 15-minute Blue Line service continuing through downtown north to Old Town and beyond, while the 7.5-minute peak service will remain in operation between downtown (America Plaza) and San Ysidro.

This will result in a one-seat ride between the San Ysidro International Border Crossing, South Bay communities, downtown San Diego, UC San Diego, and University Town Center.

Figure 1: Current MTS Light Rail Network

Figure 2: Planned MTS Light Rail Network (2022)

However, the extension is being funded through the combination of local and federal funds, and funding was only identified for the segment north of Old Town. For the Blue Line to be extended from downtown San Diego – creating the one-seat ride – additional improvements are needed in the segment between downtown San Diego (America Plaza) and Old Town. This grant seeks funding for those improvements, with the additional operating funds provided by MTS.

D.2.4 MTS Efficiencies & Transit Funding in San Diego

The Mid-Coast extension will be the latest addition to one of the most efficient light rail networks in the country. Using the most recent National Transit Database figures (FY2016) for the largest transit

agencies in the nation, the Trolley's cost per operating hour, cost per operating mile, farebox recovery rate and subsidy per passenger ranked the best nationally of all light rail systems.[1]

Figure 3: Light Rail Operating Cost Per Hour

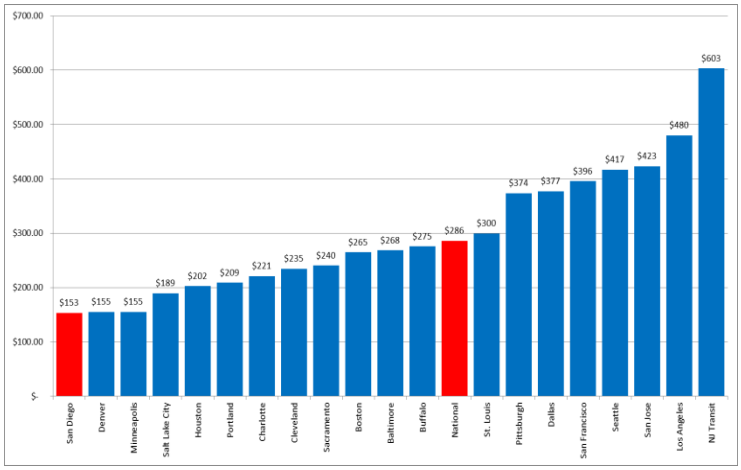


Figure 4: Light Rail Operating Cost Per Mile

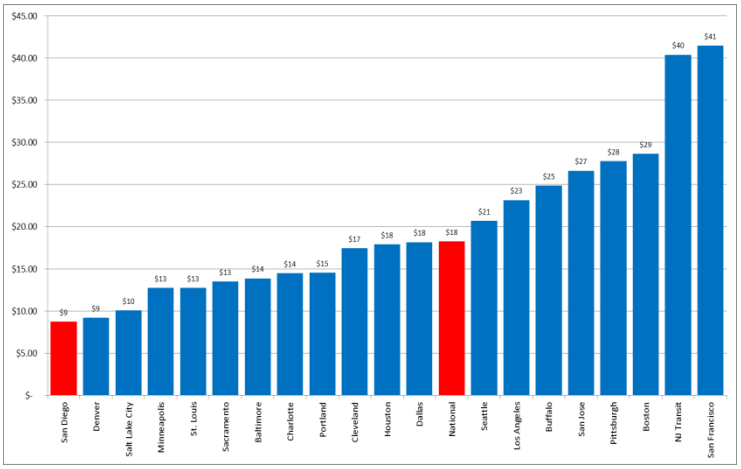


Figure 5: Light Rail Farebox Recovery Rate

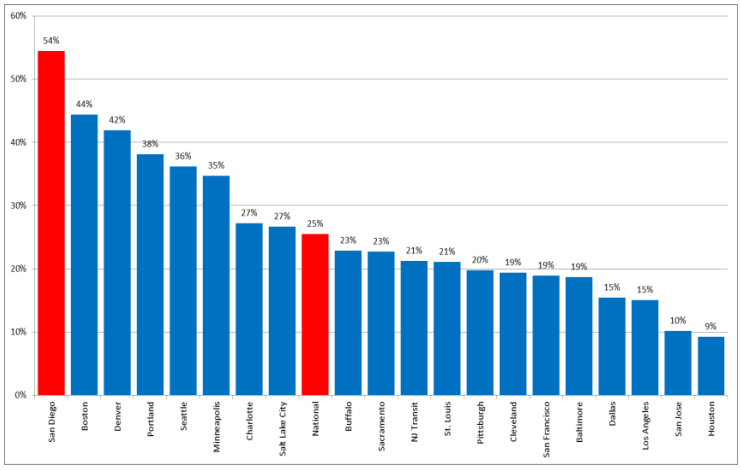
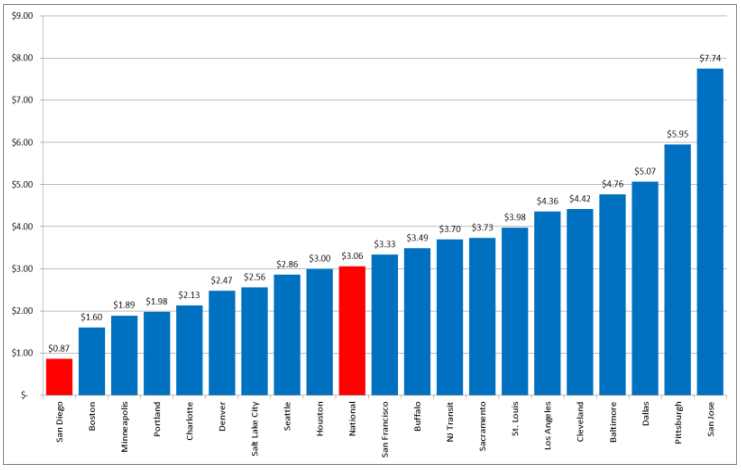


Figure 6: Light Rail Subsidy per Passenger



MTS's bus operating statistics also compare very favorably nationwide. Costs per mile and hour are roughly half of those of other large agencies, and the subsidy per passenger is $1.95; compared to more than $3 per passenger nationally.

Table 2: Bus Efficiency, MTS vs Large Transit Agencies Nationwide

	Operating Cost Per Mile	Operating Cost Per Hour	Farebox Recovery Rate	Subsidy Per Passenger
San Diego	$ 7.83	$ 85.33	34%	$ 1.95
Nationwide	$ 14.02	$ 153.49	27%	$ 3.04

[1] 2016 National Transit Database Profiles for Top 50 Transit Agencies (https://cms.fta.dot.gov/sites/fta.dot.gov/files/docs/ntd/66026/top-50-summary-and-complete-profile-set_1.pdf)

Consequently, it can be assured that any investment of TIRCP resources into the MTS system will be used efficiently.

D.2.5 Transportation Challenges Addressed by Grant Request (Purpose and Need)

There are three transportation challenges that this grant request will help address:

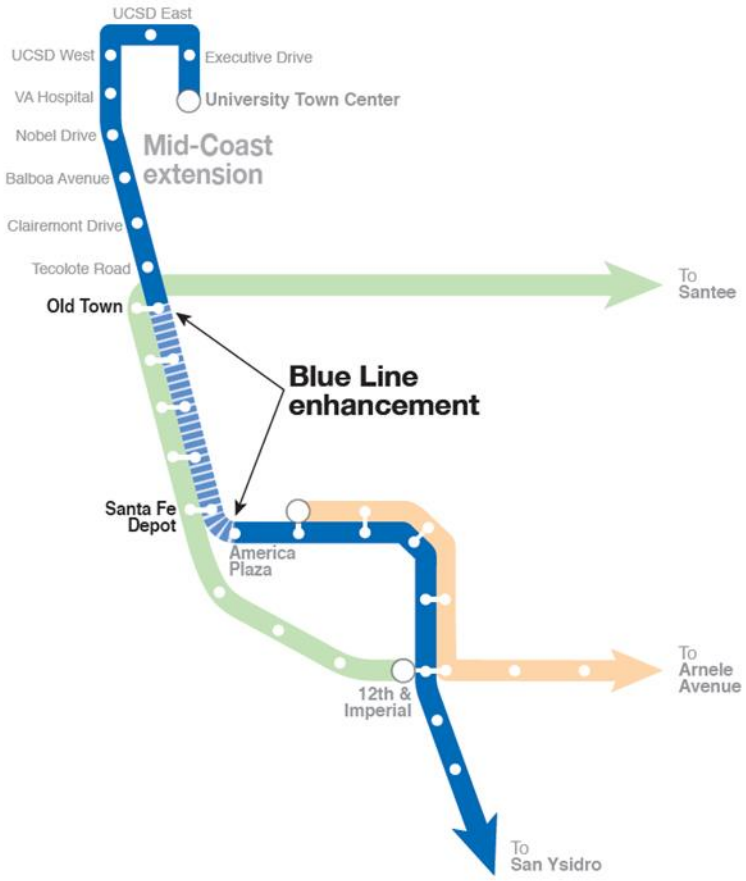
1) Gap in the transportation network
2) Growing the transit network
3) State of Good Repair

Gap in the Transportation Network

As mentioned previously, the $2 billion Mid-Coast extension of the Trolley network was funded through a mix of local and federal funds. However, those funds will only pay for the extension north of Old Town Transit Center.

As planned, the Blue Line would provide a one-seat ride from San Ysidro (international border) to UTC, the northern end of the Mid-Coast corridor. This grant will help bridge the gap of funding required to upgrade the segment between downtown San Diego and Old Town to extend the Blue Line and provide that one-seat ride.

Figure 7: Gap in Blue Line with Current Mid-Coast Funding



Based on SANDAG model outputs, it is estimated that this would eliminate transfers for nearly 12,000 passengers daily in the opening year. It would also improve service for another estimated 5,500 Blue Line passengers boarding in that corridor and an estimated 3,500 passengers on the Green Line who travel only within that corridor.

With this gap filled, the following areas will be connected via a one-seat ride:

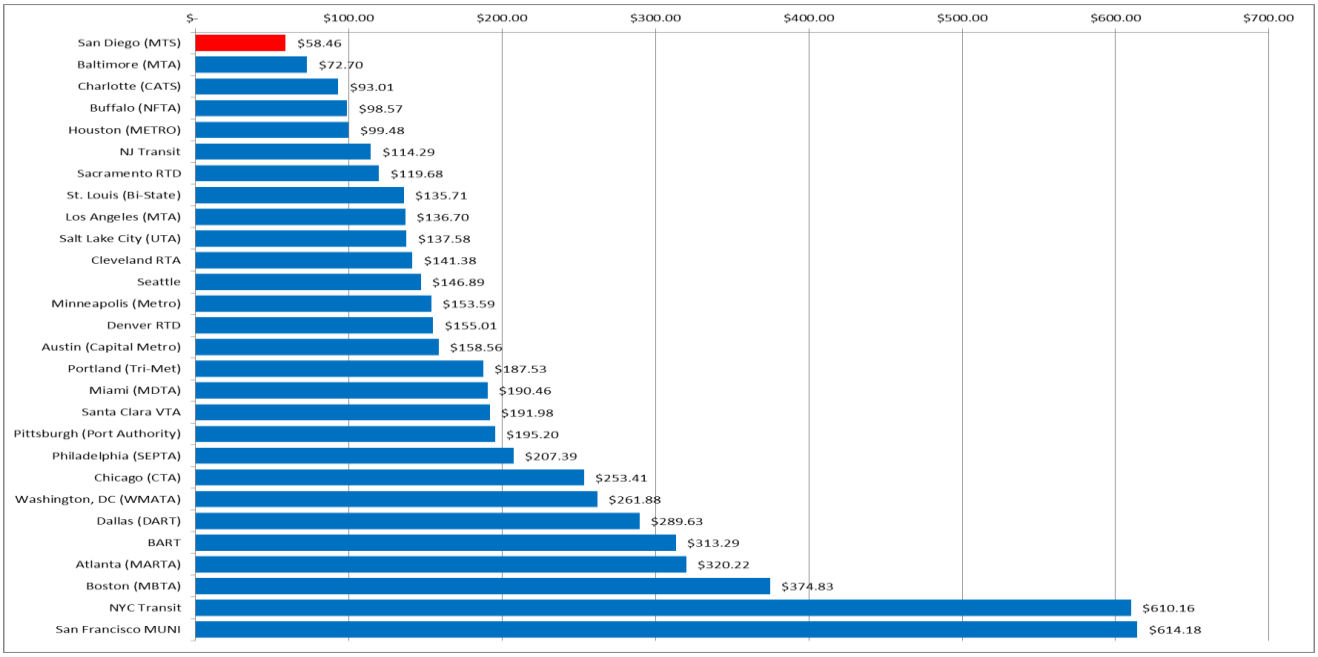
- San Ysidro International Border Crossing --
  - The largest land border in the world, with roughly 25,000 northbound pedestrians per day.
  - More than 10,000 passengers per day board the Trolley at this location, the busiest non-major transfer location in the system.

- South Bay Trolley Stations and Transit Centers –
  - 10 Blue Line stations with more than 23,000 combined boardings per day
  - Connections with 20 different bus routes serving most parts of the South Bay. Combined 13,000 bus boardings at these stations per day.
- Downtown San Diego –
  - Connection to Blue & Orange Line Trolleys, serving Mission Valley and east county.
  - Connection to 20 additional bus routes, serving all parts of the service area.
  - Major employment center (45,000 jobs)
  - Government and tourist destinations
- Old Town –
  - 11 bus routes, providing connections to the beach communities and northern parts of the city. Combined 6,400 bus boardings at Old Town daily.
- Mid-Coast Corridor –
  - Access to 36,000 jobs along the corridor[2]
  - University of California, San Diego
  - 15 bus routes, providing connections to the beach communities and northern parts of the city

Growing the Transit Network

A recent analysis of NTD shows that on a per person basis, the MTS service area receives significantly lower subsidies per person than other comparable metropolitan areas across the country. While this is not a perfect calculation (service area population divided by net subsidy), it shows the difficulty San Diego has attracting transit funding.

Figure 8: Transit Funding, Per Capita, FY2015 NTD



[2] Within SANDAG-defined Traffic Analysis Zones within ½ mile of proposed rail stations (2020)

While MTS has shown a propensity to get as much out of the available dollars as possible (see Section D.2.4), it does not receive the funding to grow its network.

This grant will provide the possibility to do so with the purchase of 23 new articulated buses to operate on two new Rapid bus lines. The proposed east-west Rapid 725 and 925 will fill out the network in the South Bay, where the Blue Line Trolley and South Bay Rapid will provide the complementary high-quality north-south service.

Additionally, improved pedestrian and/or transit center enhancements at Old Town and America Plaza/Santa Fe Depot will expand transit capacity and improve transit's attractiveness.

State of Good Repair

As mentioned in Section D.2.2.1, MTS recently completed the five-year $600 million Trolley Renewal Project. As part of this project, the Blue Line was rebuilt from top-to-bottom.

However, there was not enough funding to meet every need, including the replacement of some substations, the repair of slope issues, and the replacement of rail in some downtown locations. This grant will help with those needs.

D.2.6 Specific Components

This grant will serve three main functions:

1) Increased Light Rail Service (gaps in the transportation network)
2) New Bus Rapid Transit (BRT) Feeder Bus Service (growing the network)
3) State of Good Repair/Performance Improvements (state of good repair)

There are several aspects of the grant application, which fall into the one of the above categories. Further details of each project are included in the next section.

1) Increased Light Rail Service

- Extension of the Blue Line from America Plaza to Old Town Transit Center (roughly 3.5 miles) on 15-minute headways; bridging the gap between the current terminal to the Mid-Coast extension, resulting in one-seat ride between International Border and University Town Center.
- Beech Street and Middletown Double Crossovers
- America Plaza Pedestrian Enhancements
- Old Town Transit Center (West) Improvements

2) New Rapid Bus Feeder Service

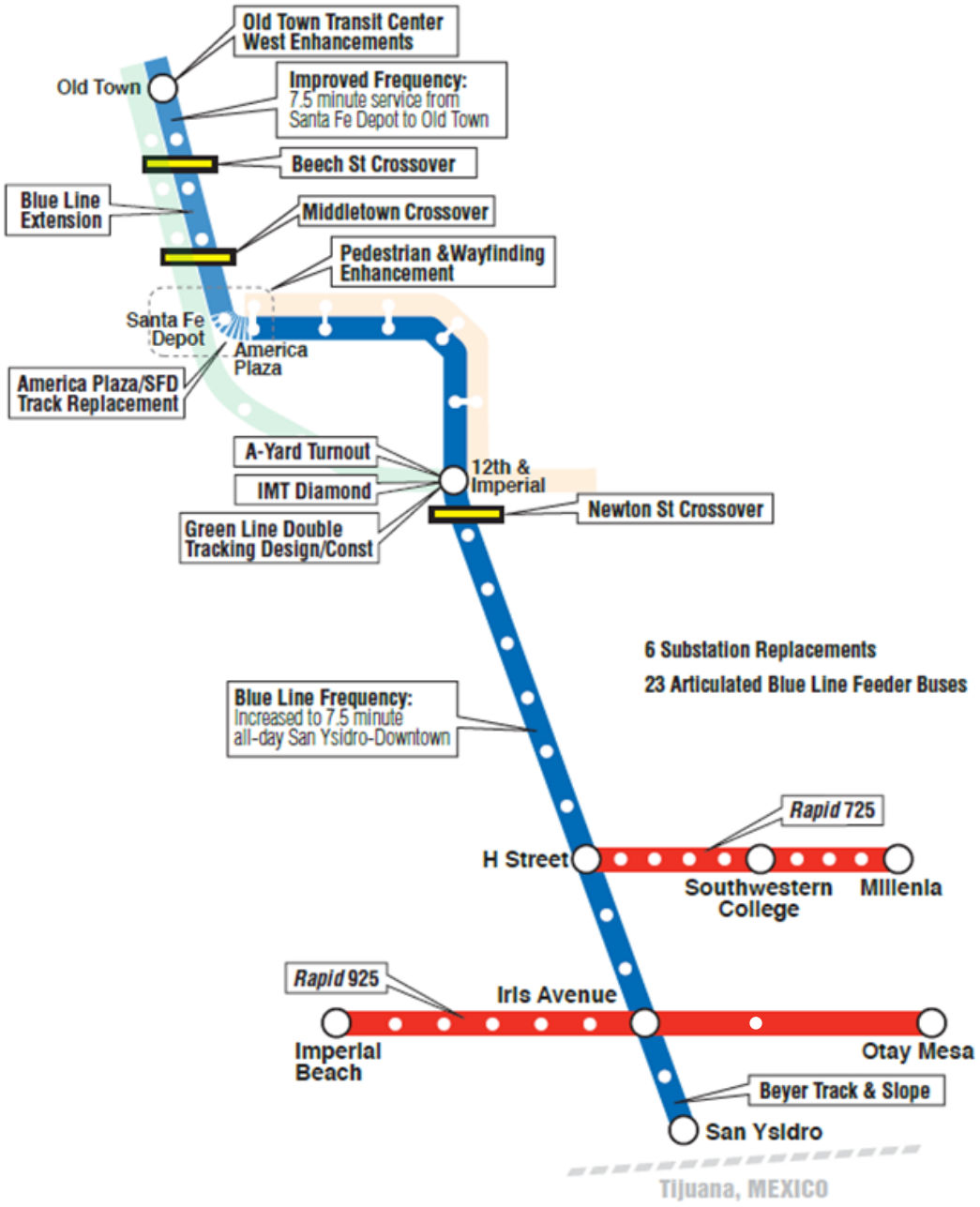
- Rapid Bus Route 725 connecting Blue Line with Southwestern College in eastern Chula Vista with 7.5-minute peak headways
- Rapid Bus Route 925 connecting Blue Line to Imperial Beach and Otay Mesa International Border crossing with 7.5-minute peak headways
- 23 new articulated branded buses

3) **State of Good Repair / Performance Improvements**

- Beyer Track and Slope Repair
- Yard Turnout, Newton Street Crossover, and Imperial diamond track replacement
- America Plaza Track Replacement
- Green Line Terminal Double Tracking
- Substation Replacement

Details for each of the project components are included on the following pages and a map is provided in Figure 9.

Figure 9: Blue Line Rail Corridor Enhancement, Specific Components



PROJECT COMPONENT #1: INCREASED LIGHT RAIL SERVICE

Extension of the Blue Line from America Plaza to Old Town Transit Center (roughly 3.5 miles) on 15-minute headways

The capital improvements in this grant would allow MTS to extend 15-minute service on the Blue Line to Old Town (a major transit center, which is served by the Green Line and 11 bus routes, commuter rail, and Amtrak) where it would continue as the Blue Line to University Town Center. Please refer to Figure 7.

The benefits would be:

1) A one-seat ride from the South Bay to communities north of downtown San Diego.

   Without the capital improvements, South Bay passengers would be forced to transfer to reach destinations north of downtown San Diego (which would include the Mid-Coast extension beginning in 2022). It is estimated that nearly 12,000 passengers daily or nearly 3.8 million passengers yearly would benefit from such an extension.

2) A one-seat ride from Old Town and four other stations to the heart of downtown San Diego and South Bay communities.

   Without the capital improvements, passengers boarding at Old Town, or along the corridor, would need to transfer between Santa Fe Depot and America Plaza to reach downtown destinations, or at 12th & Imperial to reach South Bay destinations.

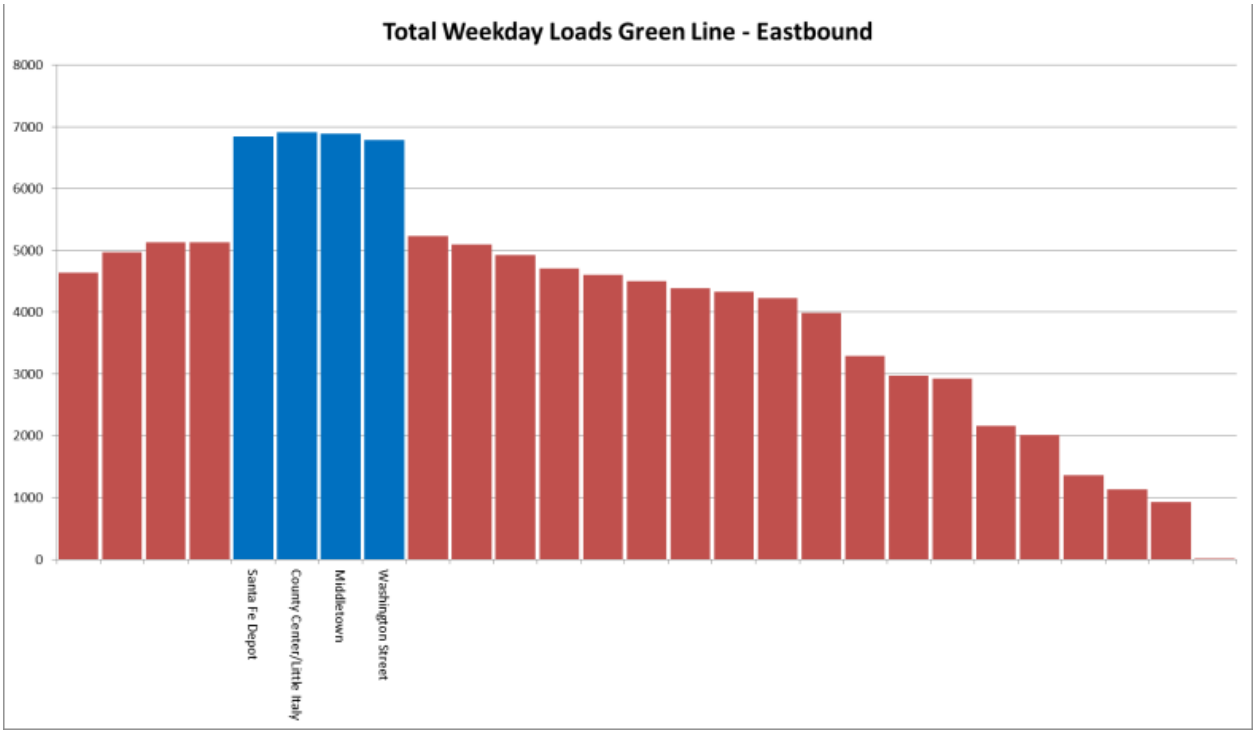
   In the most recent ridership counts, over 9,900 passengers per day either deboard at the affected stations northbound, or board southbound. These passengers would now have a one-seat ride to downtown San Diego or South Bay.

3) Doubling of service along the Old Town corridor (from Old Town to Santa Fe Depot). This corridor is currently served by the Green Line every 15 minutes. Adding the Blue Line to this segment would result in effective 7.5-minute service along this busy corridor.

   It is estimated that there are currently 3,500 passengers per day riding only between Old Town and Santa Fe Depot on the Green Line. These passengers would experience a doubling of the number of trips available to them.

   Along the Green Line, this segment is – by far – the most crowded, so it would also alleviate crowding conditions. Figure 10 shows the average daily load at all stations along the Green Line, with those stations that would experience a doubling of service, called out.

Figure 10: Green Line Weekday Loads; Eastbound



<u>Middletown & Beech Street Double Crossovers</u>

The segment of track between Santa Fe Depot and Washington Street is three miles long and was constructed in the early 1990s with limited operations flexibility provided.

This segment utilizes an automatic block relay based signaling system with only one powered double crossover, just south of Old Town. The signaling system was designed to enable trains operating on a 15-minute headway to travel to Old Town and turn back. Later, the line was extended and now operates as the Green Line from 12th & Imperial to Santee.

Both the Green Line and the Blue Line will operate on 15-minute headways through this corridor, creating an effective 7.5 minute headway. Access to the railroad corridor is very constrained and thus much of the maintenance of the line will be restricted to periods when tracks are taken out of service. However, these crossovers will allow MTS to run single-track operations in the event of needed work or a track blockage during revenue hours.

In order to provide the additional service on the line, a new double crossover needs to be installed (Middletown) and a current manual crossover (Beech Street) needs to be automated.

Improvements would include:

- Upgrade manual switches to power-operated switches at the existing double crossover between Beech Street and Ash Street
- Design and construct a new scissor double crossover near Middletown Station

- Extend automatic signaling system from Cedar Street to Santa Fe Depot (approximately 1,700 feet)
- Realign mainline track south of Sassafras Street to Middletown Station (approximately 1,120 feet)
- Extend the signal fiber from Broadway Wye to Cedar Street (approximately 2,250 feet)
- Modify OCS systems to facilitate single tracking in the event of maintenance or other service disrputions.

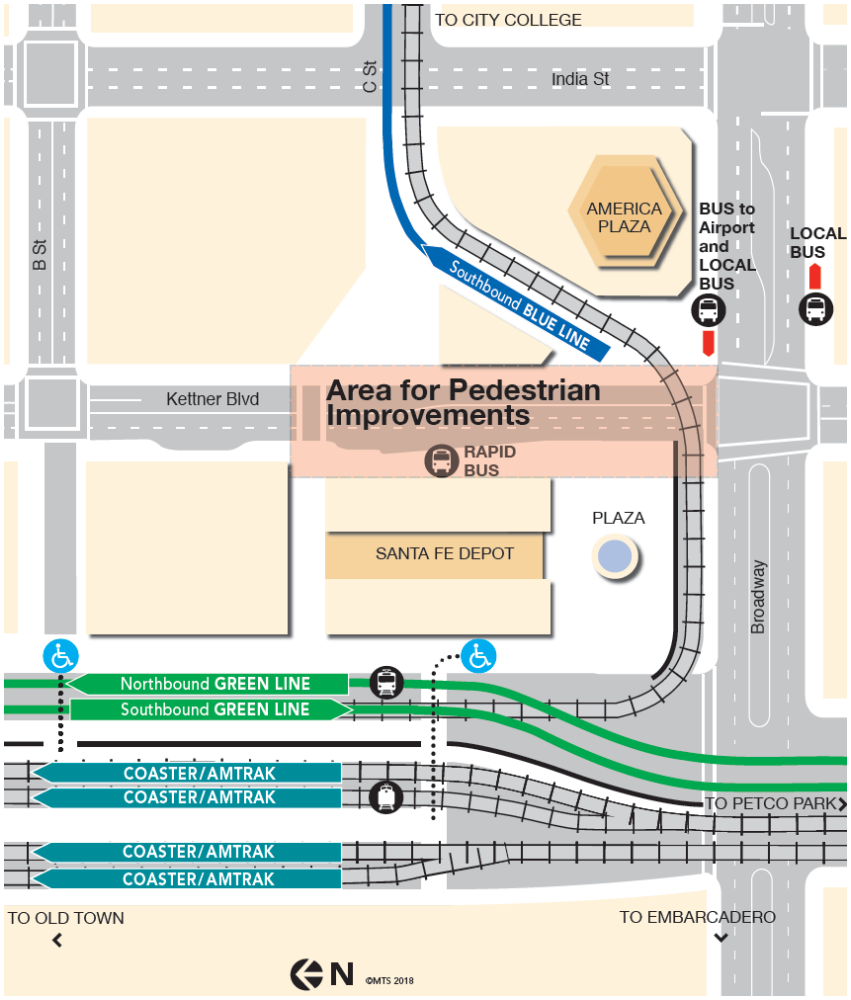
America Plaza/Santa Fe Depot Pedestrian Improvements

The purpose of this portion of the Blue Line Rail Corridor Transit Enhancements Project is to develop a conceptual plan, design development drawings, and construct a pedestrian improvement project.

Today, the west end of Broadway in downtown San Diego is served by two major transit centers: Santa Fe Depot and America Plaza.

Santa Fe Depot currently serves Amtrak's Pacific Surfliner, North County Transit District's COASTER commuter rail and the Green Line Trolley. Upon completion of Mid-Coast, and through funding from this grant, the Blue Line would stop at Santa Fe Depot. Currently, the Blue Line and several major bus routes (including Route 992 to the airport) stop at America Plaza.

Figure 11: America Plaza / Santa Fe Depot



Additionally, two MTS Rapid routes – Rapid 215 to the San Diego Zoo, El Cajon Boulevard, and San Diego State University, and Rapid 235 to Kearny Mesa, Miramar College and the I-15 corridor to Escondido – have a dedicated station on Kettner Boulevard, directly in front of the historical Santa Fe Depot train station.

Together, these stations serve as the gateway to downtown San Diego for many public transportation riders.

However, bifurcating these two transit centers is Kettner Boulevard. It is a major thoroughfare with two lanes of southbound traffic and one northbound lane. It serves as a drop off for Santa Fe Depot on the west side. There are taxi load zones on the east side.

The private development at America Plaza has removed structural elements that blocked the visual corridor from Santa Fe Depot up the C Street Corridor. Yet, there have been no pedestrian improvements on Kettner to better connect the two transit centers and Santa Fe Depot to downtown. Served by just one mid-block signalized crosswalk, natural pedestrian crossing patterns are not served and pedestrians often jaywalk to make connections.

Additionally, there is little-to-no wayfinding signage for pedestrians, many of whom are new to the San Diego area (see picture below).

Figure 12: America Plaza / Santa Fe Depot, Looking South on Kettner Blvd.

This part of the project would include the design and installation of new signage, enhanced crosswalks, and other amenities to be determined in order to enhance safety and wayfinding ability for patrons in this area.

This project, in essence, would synthesize the transit service operations between America Plaza and Santa Fe Depot into one mega-multimodal transportation hub; similar to Union Station in Los Angeles.

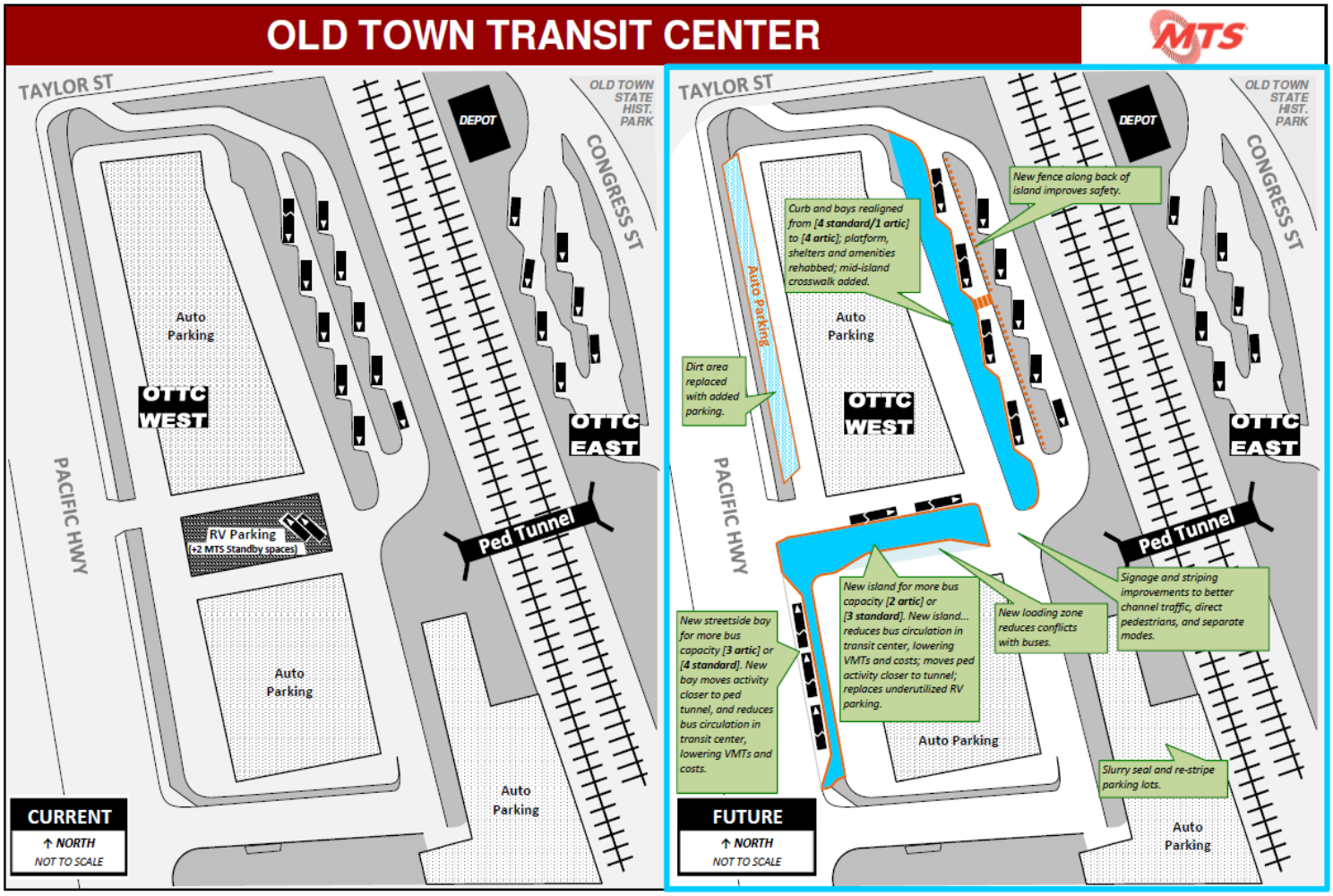
<u>Old Town Transit Center West Improvements</u>

The Old Town Transit Center is one of MTS's busiest facilities, providing a critical network link between the Green Line Trolley (and future Blue Line), 11 bus routes, COASTER commuter rail, and Amtrak intercity rail.

However, the current bus facility is at capacity, limiting MTS's ability to provide enhanced frequency and/or additional services. This project proposes to reconfigure one existing bus island to accommodate articulated buses at every bay, which are now limited to only one bay (which wasn't designed for, nor is ideal for, articulated buses). The project will also add additional bus stops at a new bus island, and a

long, new curbside pull-out along Pacific Highway. These new facilities will add capacity for a net of four to six addiitonal buses (depending on the mix of standards and articulated buses). Also, the locations of the new stops will allow some routes to serve the tranit center without circulating all the way through the property, saving travel time for passengers and operating costs for MTS, and reducing bus miles traveled, fuel consumption, and GHG emissions.

Figure 13: Old Town Transit Center Improvements



In addition, the Old Town Transit Center is more than 20 years old and has not been renovated since its original construction. The proposed project would replace aging pavement, sidewalks, curbs, lighting, electrical/communication systems, signage, etc. The useful life of the various components ranges from 15-30 years, and this project aims to replace the elements that have already exceeded their minimum useful life based on age or their current condition. In addition to replacing existing infrastructure, the proposed project will also include the addition of new assets including six shelters, two ticket vending machines, four variable message signs, 14 new benches, and other various components. The rehabilitation of some existing shelters (as well as new added shelters) is included as part of the reconfiguration design in the scope for this project.

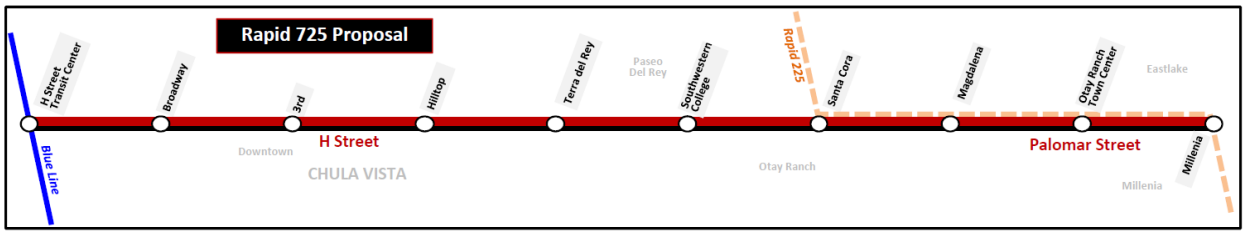
PROJECT COMPONENT #2: NEW BUS RAPID TRANSIT LINES

New Rapid 725: H Street/Southwestern College/Millenia

A new Rapid bus route would be provided between Millenia, Southwestern College, and the H Street Transit Center, where it would connect with the Blue Line. It would operate with peak headways of every 7.5 minutes during weekday service (every 15 minutes in the base period). This route is expected to carry more than 3,000 passengers per day and provide Blue Line passengers with access to significant employment, residential, and educational opportunities. Southwestern College is one of the largest single-trip generators in the entire South Bay region. Millenia is a rapidly developing community in the eastern part of the City of Chula Vista, with plans of being a significant regional employment and residential hub within the next few years.

The route would feature nine stations in each direction on its 19-mile round trip. Transit signal priority would be provided at a later date in coordination with the City of Chula Vista's own "Smart City" project. Between Southwestern College and Millenia, Rapid 725 would utilize the new transit guideway currently under construction for the South Bay Rapid project. The guideway is separated from general purpose lanes, and features transit signal priority and stations with Rapid shelters, visual message signs, and other amenities. Leveraging existing Rapid infrastructure on this segment will reduce costs and implementation time for Rapid 725.

Figure 14: Rapid Route 725



New Rapid 925: Imperial Beach/Iris Transit Center/Otay Mesa Transit Center

A new Rapid bus route would be provided between Imperial Beach and the Otay Mesa International Border crossing, via the Iris Avenue Transit Center, where it would connect with the Blue Line and seven other bus routes. The route would feature 9-10 stations in each direction on its 25-mile round trip. This route is already envisioned in the 2050 Regional Plan, San Diego Forward, but is currently unfunded.

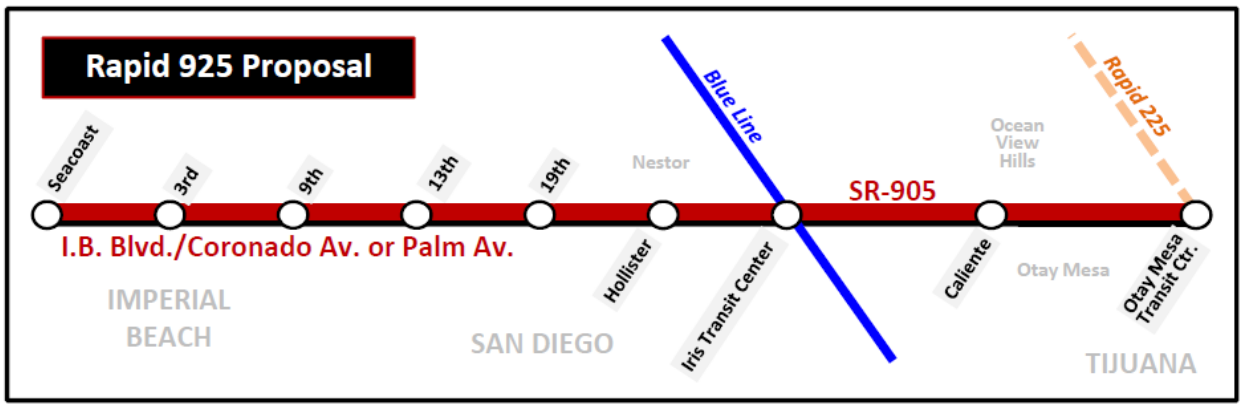
It would operate with peak headways of up to every 7.5 minutes during weekday service (every 15 minutes in the base and every 30 minutes on weekends). Frequencies on the eastern and western segments can be varied throughout the day and week according to demand. This route is expected to carry more than 5,000 passengers per day.

The eastern segment of the route between the Otay Mesa border crossing and the Iris Avenue Transit Center is largely on the State Route 905 freeway, serving off-ramp stops midway at Caliente Avenue. The eastern terminal would be the Otay Mesa Transit Center, which is being built as a full Rapid station

with the attendant amenities as part of the separate TransNet-funded South Bay Rapid project. The proposed Rapid 925 would further leverage the investment at the station to add more Rapid service and connect major east-west and north-south Rapid routes.

The western segment of Route 925 would complement local Route 933/934 in the Coronado Avenue/Imperial Beach Blvd. corridor, but provide a faster trip than the local service, which serves frequent bus stops and deviates off the main road to serve off-line destinations. Transit signal priority would be provided at a later date, in coordination with the cities of San Diego and Imperial Beach.

Figure 15: Rapid Route 925



<u>New Articulated/Branded Buses</u>

While the operations for the new routes would be funded by MTS (estimated at $7 million annually combined), this grant would provide for the capital required to operate the routes.

23 new articulated branded buses would be required to operate the service. The bus would be the same natural gas-powered New Flyer Xcelsior XN60 bus as shown below. MTS already has a contract with New Flyer of America, Inc. for these buses, with sufficient options to fulfill the requirements for the proposed Route 725 and 925 services. This will reduce the lead time required to implement the service, enabling MTS to achieve the project benefits as early as possible.

Figure 16: Example of New Flyer Xcelsior XN60 Bus

PROJECT COMPONENT #3: STATE OF GOOD REPAIR/PERFORMANCE IMPROVEMENTS

Beyer Track and Slope Repair

At the south end of the Blue Line, about one mile of track and slope is deteriorating. This project would result in 100% reconstruction of the trackway and correction of the slope issue.

This would result in reducing the of risk of derailments and preventing the right-of-way from slipping into nearby residents' properties.

Currently, the Blue Line has a slow order through that segment of track (25 mph). Reconstructing the track would increase the speed to 40 mph, improving reliability and attractiveness to passengers.

Improvements would include:

- Replacement of 4,600 feet of existing track and ballast with new track, ballast, and head-hardened rail.
- Line and surface 400 feet of existing track
- Adjustment of existing overhead catenary assemblies at 28 locations
- Construct new drainage structures, reinforced earthen swale, drainage pipes and downdrains, retaining walls, fencing, and hydroseeding

Figure 17: Examples of Infrastructure Replacement for Beyer Track and Slope Repair

A-Yard Turnout Replacement, Newton Street Crossover, and Imperial Diamond Track Replacement

This project would replace all of the track switches leading from the main line to the Yard and would bring all rail and crossties up to current standards. Ultimately, the project would:

- Procure and install six No. 6 turnouts, which would include removing the existing turnouts.
- Install 720 track feet of new track on concrete ties, which includes removing the existing track.
- Procure and install three diamonds, which would include removing the existing diamonds.

This project would result in improved ride quality through the Yard on the Blue Line.

Figure 18: Imperial Diamond

America Plaza Track Replacement

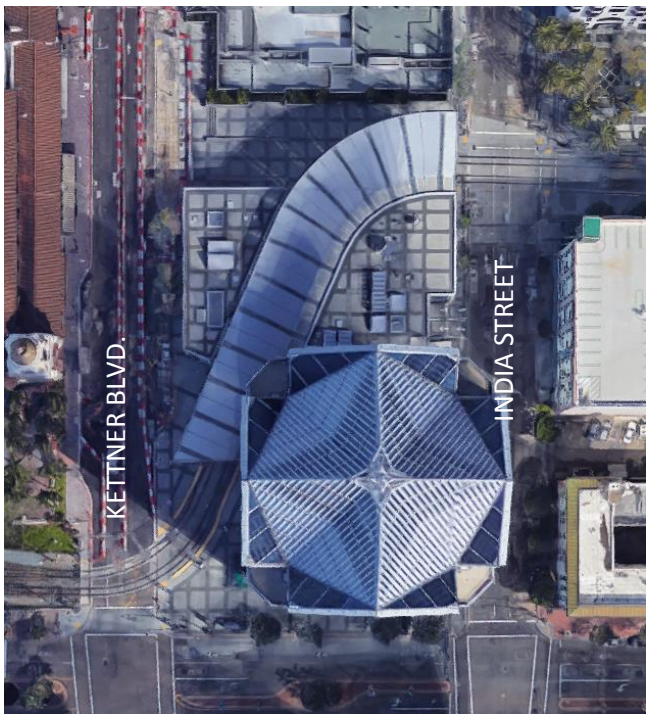
The rail in the curve between Santa Fe Depot and America Plaza is wearing down. This would replace all of the rail at America Plaza and through the adjacent grade crossings (Kettner Blvd. and India Street).

The project would include:

- Removal and disposal of existing rail at America Plaza.
- Procure and install curved rail, rail boot, and other required track material located at America Plaza.
- Removal and disposal of existing vehicular crossings, track, asphalt concrete, ballast and other track materials at Kettner Blvd. and India Street Grade Crossings.
- Procure and install new filter fabric, ballast, timber crossties, precast grade crossing panels, and other required incidentals.
- Construct new drainage structures, reinforced earthen swale, drainage pipes and downdrains, retaining walls, fencing, and hydroseeding.

Replacement of the rail would improve ride quality and reduce any risk of derailments.

Figure 19: America Plaza



This aspect of the project would augment and enhance benefits from the America Plaza / Santa Fe Depot Pedestrian Improvements (see Page 16).

Green Line Terminal Double Tracking

An estimated 4,500 passengers per day transfer between the Blue Line and the Green Line at 12th & Imperial Transit Center, where the Green Line terminates.

However, the effectiveness of the Green Line is limited due to a single-track terminal at 12th & Imperial.

Figure 20: Current Green Line Terminal at 12th & Imperial

This project would result in design and construction of a second track, including a double crossover, which would add flexibility in operations for the Green Line and provide the potential to provide better connection times with the Blue Line. The new track is shown in red below.

Figure 21: Proposed Green Line Terminal at 12th & Imperial

Substation Replacement

As part of the Blue Line Renewal Project, all substations were planned to be replaced. However, due to limited funding, six of them could not be replaced. These six substations have been in service for more than 30 years, and, as a result, these substations are surpassing their life expectancy.

The substations require constant maintenance and are very difficult to procure replacement parts as they have become either obsolete, hard to find for replacement, or very expensive to perform the reverse engineering. Also, the substation flooring is warping, and deteriorating structures are causing safety hazards for maintenance employees during maintenance calls.

The replacement of all of these substations will also allow MTS to increase service on the Blue Line in the future. With the existing substations, MTS can operate three-car Trolleys at 7.5-minute intervals (24 cars per hour per direction). With the implementation of the new substations, capacity on the line could increase to four-car trains every five minutes (48 cars per hour per direction).

D.2.7 Projected Increase in Ridership

MTS projects a net gain of 14,503 daily passengers for each weekday in the opening year, and a total passenger increase of 4,107,139 for the first full year of the project. Over the course of the 40-year useful life of the rail infrastructure, and 12-year useful life of the buses, it is expected that this project will generate more than 129 million additional transit trips.

With $62 million in TIRCP funds requested, it would result in an average TIRCP subsidy cost of 49 cents per passenger.

Table 3: Projected Ridership Increases, Opening Year (2022)

	Avg Wkdy	Avg Sat	Avg Sun	Annual
Trolley	6,311	4,354	3,320	2,026,290
Route 725	3,096	-	-	786,333
Route 925	5,097	2,490	1,430	1,294,517
TOTAL	14,503	6,844	4,750	4,107,139

The projected ridership increases are based only on the additional two Rapid bus routes and the extension of the Blue Line, which would double the amount of service in the downtown-to-Old Town corridor and eliminate transfers at America Plaza/Santa Fe Depot and Old Town.

Any ridership increases that would result from better reliability and ride quality from the other infrastructure improvements have not been included in this estimate, so it is likely that ridership increases would be even higher.

To determine projected demand, MTS used the following methodology:

Table 4: Projected Ridership Increases, Length of Project (40 years for Trolley; 12 years for Bus)

	Total Ridership
Trolley	102,862,426
Route 725	10,074,210
Route 925	16,584,882
TOTAL	129,521,518

<u>MTS Light Rail Ridership</u>:

1) Estimated current Green Line weekday ridership only using the segment between Santa Fe Depot and Old Town (3,521 passengers daily). Used a 0.3 elasticity factor for increased demand due to the doubling of service in that corridor.
2) Based on SANDAG stop-by-stop forecasting data, determined estimated number of thru weekday Blue Line passengers at Old Town southbound (5,002) and at America Plaza northbound (6,965) on Blue Line after Mid-Coast extension. Used a 0.3 elasticity factor to calculate number of passengers that would be lost with a forced transfer. The number is likely even higher due to some passengers having two forced transfers.
3) Based on SANDAG stop-by-stop forecasting data, determined number of weekday passengers on the Blue Line that would be boarding between Old Town and downtown (5,547). Applied a 0.3 elasticity factor for these passengers due to the frequency enhancement or reduction in transfer due to the thru routing of the Blue Line.
4) Determined current ratio of Saturday and Sunday passengers to weekday passengers on both the Green and Blue Lines and applied that number to the weekday total to project Saturday and Sunday ridership.
5) Multiplied Step 4 by the number of days in the year to project first-year increase in ridership.

6) Used SANDAG No Build 2020 and 2050 transit ridership forecasts to determine average percentage increase in transit ridership per year (1.18%) and projected that out over the course of the 40-year useful life of the project.

MTS Rapid 725 and 925 Ridership:

1) Determined passengers per hour for comparable routes (Route 709 for Rapid 725 and Routes 933/934/950 for Route 925).
2) Since roughly twice as much service will be provided on the new Rapid routes as the comparable routes, adjusted expected passengers per hour by half.
3) Due to improved frequencies and service quality, assumed a 0.3 elasticity factor and applied that to Step 2, resulting in an assumed passenger per revenue hour rate of 0.65 of the comparable routes.
4) Applied Step 3 to the planned hours of service of those routes to generate average weekday ridership.
5) Using existing data, applied percentage of Saturday and Sunday ridership to weekday ridership to generate expected Saturday and Sunday ridership and multiplied those numbers by number of days in the year.
6) Used SANDAG No Build 2020 and 2050 transit ridership forecasts to determine average percentage increase in transit ridership per year (1.18%) and projected that out over the course of the 12-year useful life of the new buses.

The complete breakdown of the ridership projections is presented in the "RidershipEstimates.xlsx" Excel file in the supporting documentation.

D.2.8 Beneficiaries of the Project

The Blue Line Rail Corridor Enhancements Project will benefit the current and future passengers of the MTS bus and rail network, as this project will result in increased service, better connections, and improved service reliability, comfort, and safety.

However, this project is particularly beneficial to SB535 disadvantaged communities and AB 1550 low-income communities.

Seven Blue Line stations, three Rapid 725 bus stops, and five Rapid 925 bus stops are located in SB 535 or AB 1550 communities. Forty-eight SB 535 / AB 1550 communities are within the project area (within ½-mile of Blue Line stations or ¼-mile of Rapid Routes 725 or 925). There are more than 227,000 residents in those census tracts, which represent more than 16 percent of all SB 535 / AB 1550 residents in San Diego County.

Of the 146,000 boardings that occur daily in the project area, 80 percent (116,000) of them occur within an SB 535 or AB 1550 community.[3]

[3] Ridecheck Plus reporting, 2017 spring service change

Table 5 shows the value of the project to DAC communities and Figure 22 (in Section E.2.2.2) shows a map of the project and the SB 535 / AB 1550 communities served.

Table 5: Boardings in Project Area in SB 535 / AB 1550 Communities

	Average Weekday Passenger Boardings						Percent of Passenger Boardings				
	Total	In SB 535 Disadvantaged Communities	In AB 1550 Low-Income Communities	In SB 535 **OR** AB 1550 Communities	In SB 535 **AND** AB 1550 Communities	In AB 1550 within 1/2 mile of SB 535 Communities	In SB 535 Disadvantaged Communities	In AB 1550 Low-Income Communities	In SB 535 **OR** AB 1550 Communities	In SB 535 **AND** AB 1550 Communities	In AB 1550 within 1/2 mile of SB 535 Communities
Within 1/2-Mile of Blue Line Station	140,958	76,793	98,978	114,271	61,500	7,166	54%	70%	81%	44%	5%
Within 1/4-Mile, Rapid 725 Corridor	8,801	4,986	6,641	6,641	4,986	679	57%	75%	75%	57%	8%
Within 1/4-Mile, Rapid 925 Corridor	10,478	0	10,093	10,093	0	18	0%	96%	96%	0%	0%
All Bus & Rail Boardings in Project Area	146,025	76,793	101,260	116,552	61,500	7,487	53%	69%	80%	42%	5%
Full MTS Service Area	290,118	98,238	184,888	200,243	82,883	23,028	34%	64%	69%	29%	8%

Beyond the SB 535 and AB 1550 designations, the primary beneficiaries of both the Blue Line improvements and implementation of the new Rapid buses will be low-income residents of San Diego County.

In the 2015 SANDAG On-Board Transit Passenger Survey, it is apparent that Blue Line passengers and passengers on comparable routes to the proposed Rapid 725 and 925 (Routes 709, 933, 934, and 950) have significantly lower incomes and significantly less access to automobiles than the general MTS service area population.[4]

Only 36 percent of the MTS service area has household incomes of under $45,000. However, almost 78 percent of Blue Line riders, and an even higher number of "comparable Rapid bus" passengers, have household incomes under $45,000.

Table 6: Household Income in MTS Service Area and in Project Areas

	< $15k	<$30k	<$45k
MTS Service Area	10.4%	23.3%	35.9%
Blue Line	15.5%	44.5%	77.5%
Route 709 (Route 725 comparable)	22.1%	54.0%	77.5%
Route 933 (Route 925 comparable)	12.4%	37.0%	78.9%
Route 934 (Route 925 comparable)	10.4%	28.9%	83.9%
Route 950 (Route 925 comparable)	6.4%	67.2%	91.2%

Nearly half of Blue Line passengers – and about half of the comparable bus passengers - have household incomes of less than $30,000.

Furthermore, almost 80 percent of Blue Line passengers do not have access to an automobile. About 85 percent of bus passengers also have no access to an automobile.

Table 7: Vehicle Availability in Project Area

	No Car in Household	Car in Household; But Not Available	Total
Blue Line	27.1%	52.8%	79.9%
Route 709 (Route 725 comparable)	10.1%	74.0%	84.1%
Route 933 (Route 925 comparable)	20.1%	68.1%	88.2%
Route 934 (Route 925 comparable)	15.2%	68.5%	83.7%
Route 950 (Route 925 comparable)	15.9%	61.8%	77.7%

[4] SANDAG 2015 On-Board Passenger Survey.
http://www.sandag.org/index.asp?classid=13&subclassid=9&projectid=494&fuseaction=projects.detail

This project will help improve transportation options for low-income residents throughout the region.

D.2.9 Useful Life

The useful life of the buses is 12 years.

The useful life of rail infrastructure is assumed to be 40 years.

Old Town Transit Center improvements will have a useful life of 30 years.

E) Project Impacts / Evaluation Criteria

E.1 Primary Evaluation Criteria

E.1.1 Reduce Greenhouse Gas Emissions

The TIRCP Greenhouse Gas Reduction Calculator Tool indicates that the Blue Line Rail Corridor Transit Enhancements project will have the following GHG reductions.

Table 8: GHG Reductions

	Quantified Co-Benefit Component 1	Quantified Co-Benefit Component 2	Total Project
Identifying Descriptor	**Increased Blue Line Light Rail Service Between Santa Fe Depot & Old Town and State of Good Repair Projects**	**BRT Rapid Routes 725 and 925**	
GHG Emission Reduction Start Date (Year)	2021	2021	
Total CCI			
Total GHG Emission Reductions (MTCO2e)	49,983	6,585	56,568
Total GGRF Funds Requested ($)	$ 39,882,000	$ 23,015,000	$ 62,897,000
Diesel PM Emission Reductions (lbs)	0.001253	0.000286	0.000899

Please see the attached TIRCP calculator Excel file in addition to Attachment No. 6 which explains each of the input selections for both quantifiable components in the calculation.

E.1.2 Increase Ridership through Expanded and Improved Rail and Transit Service

Table 9: Cost/Benefit Analysis

	Total
Ridership	129,521,518
TIRCP Funding	$ 62,896,166
Cost / Passenger	$ 0.49

As described in Section D.2.7, MTS projects a net gain of 14,503 daily passengers for each weekday in 2022, and a total passenger increase of 4.1 million for the first full year of the project. Over the course of the 40-year useful life of the rail infrastructure, it is expected that this project will generate more than 100 million additional rail trips. Over the course of the 12-year useful life of the buses, it is expected that this project will generate more than 26 million additional bus trips.

Consequently, the average TIRCP subsidy for the project is only 49 cents.

The complete breakdown of the ridership projections is presented in the "RidershipEstimates.xlsx" Excel file located in the supporting documentation.

E.1.3 Integration with the State's Rail and Transit Operations, Including the High-Speed Rail System

In the 2016 High-Speed Rail Business Plan, MTS's Blue Line Light Rail Improvements (Trolley Renewal) project was cited as a key connectivity and bookend project. Funding from this application would further leverage the state's investment in the project. Extension of the high-speed rail system to San Diego is anticipated in Phase 2, with its terminus in downtown. The Blue Line would serve the project directly.

Additionally, MTS has a seat on the Los Angeles-San Diego-San Luis Obispo (LOSSAN) Rail Corridor and has entered into an agreement with Amtrak to sell MTS day passes on board Pacific Surfliner trains.

The Trolley is part of a network that includes a 90-plus MTS bus route system. The bus and Trolley have an integrated fare structure, enabling passengers to enjoy a seamless transfer between modes. Similar to the Trolley, MTS bus services are supported through state gas tax funds.

Additionally, with the implementation of this project, the Blue Line will connect directly to NCTD's COASTER commuter rail and state-supported Amtrak service at Santa Fe Depot. The project will also have connections to future planned Metrolink service at Santa Fe Depot.

Two blocks from Santa Fe Depot, Trolley passengers can easily access the ferry to Coronado and the San Diego Cruise Ship Terminal on the Broadway Pier.

It is not expected that this project will result in significant impacts (positively or negatively) on any other operators. It is possible that additional transfers to high-speed rail would occur as a result of this project.

E.1.4 Improve Safety

This project will improve safety in a number of different ways:

Santa Fe Depot/America Pedestrian Improvements
Passengers connecting between the Trolley's Green Line and Blue Line peak service (or buses) are required to cross Kettner Blvd. There is simply a regular crosswalk with a traffic signal providing protection for the pedestrians. Pedestrian improvements will result in greater visibility for pedestrians and will reduce the likelihood of jaywalking.

Old Town Transit Center
The Old Town Transit Center enhancements will directly improve safety for MTS patrons through several ways. First, the new facility expansion will incorporate new lighting installed throughout the facility. The new lighting will incorporate current technology to provide brighter lighting and enhance visibility for pedestrians utilizing the center. In addition, the project will include the restoration of pavement

markings and the installation of improved wayfinding signage. In combination, these improvements are expected to significantly improve safety at Old Town by improving visibility and providing better navigation guidance around the facility.

Green Line Double-Tracking at 12th & Imperial

The double-tracking of the Green Line at 12th & Imperial (along with a new platform) will result in more platform space for passengers. Additionally it will reduce potential conflicts with the Silver Line, which currently shares the same single-track with the Green Line in opposing directions.

Beyer Track and Slope Repair

Rail defects will be removed due to improved drainage. This will reduce the risk of derailments due to the reduction of buildup of moisture and mud on the tracks. Additionally, the retaining wall will prevent the right-of-way slope from eroding into nearby residents' properties.

Substation Replacements

Replacement of the substations will bring them up to the latest local utility safety codes and will improve electrical worker safety through the use of state-of-the-art circuit breakers and protective relays.

Beech Street and Middletown Crossovers

These crossovers will add flexibility to rail operations and will reduce the need for bus bridges. This will result in fewer transfers between bus-and-rail.

The Middletown crossover will extend Automatic Block Signaling (ABS), which results in improved signal protection and better separation between trains.

Santa Fe Depot/America Plaza Rail Replacement

Track replacement will result in a lower risk of derailments on the sharp curve between the two stations.

E.2 Secondary Evaluation Criteria

E.2.1 Support of Sustainable Communities Strategies through the Following:

E.2.1a Reducing Vehicle Miles Traveled (VMT) and Automobile Trips through Transit Growth

The Blue Line Rail Corridor Transit Improvement Project will enhance the transit experience, increase transit ridership, and consequently decrease automobile trips.

The Greenhouse Gas Quantification Methodology for the TIRCP estimates an average annual reduction in vehicle miles travelled (VMT) of 14,432,927 during the useful life of the project.

E.2.1b Promoting Housing Development in the Vicinity of Rail Stations/Major Transit Centers

The improved service on the Blue Line will help promote housing development and employment near the combined 32 stations in the South Bay, downtown San Diego, and UTC/UC San Diego areas. Based on the 2020 SANDAG forecasts, there will be more than 391,000 residents living in a SANDAG-defined Traffic Analysis Zone (TAZ) within a half-mile of a Blue Line Trolley station or within a quarter-mile of a new Rapid bus route and more than 161,000 jobs.

MTS has a strong track record of promoting housing (and other) development at its transit station properties and other properties nearby. MTS Board Policy 18 states, "It is the intention of the MTS to extract the maximum benefits from and utilization of property owned and acquired by the Board consistent with transportation goals and community development goals." Criteria for development on MTS rights-of-way include:

1) Do not negatively impact present or future public transportation facilities
2) Consistency with regional and local community policies and plans
3) Increased accessibility to public transportation
4) Responsiveness to community needs for housing, employment, services, or recreational facilities

Recent developments at Trolley stations have included:

- Grossmont – 527 residential units built on a 7-acre parking lot; close to retail shopping, medical facilities, and office buildings.
- City College – 301 residential units and a 135,000 square-foot commercial building constructed on an entire city block, with Trolley station bifurcating the block.
- Morena/Linda Vista – 161 residential units and 20,000 square feet of retail constructed on a 5-acre surface lot adjacent to Trolley station.
- Encanto/62nd Street (under construction) – 67-unit affordable residential units constructed on 2-acre surface parking lot adjacent to station.

E.2.1c Increasing the Attractiveness of a Transit-Served Area for the Location of Additional Jobs and Housing

The improved service on the Blue Line will increase the attractiveness of transit in the areas served by the project. The improved reliability and enhanced connections will appeal more to those who currently do not ride the Trolley.

E.2.1d Expanding Existing Rail and Public Transit Systems

The 15-minute service on the Blue Line between downtown San Diego and Old Town will double the amount of service in that segment and eliminate transfers. This is expected to generate an additional 6,311 passengers per weekday (and more than two million per year).

Additionally, the infrastructure improvements along the Blue Line will further enhance the productivity and lifespan of the current infrastructure.

The two additional bus routes will provide service to additional 30-plus bus stops, and is expected to generate an additional 8,000 passengers per weekday (also more than two million per year).

E.2.1e Contribution of the Project to the Acceleration of Later Phases of the Project or to Other Rail and Transit Projects in the Region or Service Area

This project will be one of the final phases of the Blue Line Rehabilitation Project, a $600 million project funded through local, state, and federal funds. While that project replaced all stations, track, and

catenary wire along the Blue Line, there was not enough funding to make all of the improvements necessary. This grant will help make that possible.

The Blue Line is located on the same line as the future Mid-Coast Trolley extension and is identified in the regional plan as a target for improvements in service.

Blue Line and/or Mid-Coast service are cited in the following locations of the currently-adopted 2050 Regional Transportation Plan[5]:

- Increase in Existing Blue Line Trolley Service (Revenue Constrained Plan)
- Mid-Coast Trolley:
    - Construct and operate LRT (TransNet Early Action Project)
    - Mid-Coast LRT Extension Operations (Revenue Constrained Plan)
    - Mid-Coast LRT Extension Capital Improvements (Revenue Constrained Plan)

A very close version of Rapid 925 is also cited in the 2050 Regional Transportation Plan as a revenue-constrained project to be implemented in 2035. Consequently, Rapid Route 925 would provide many extra years of benefit for South Bay passengers.

E.2.1f Enhancing the Connectivity, Integration, and Coordination of the State's Various Transit Systems, Including, but not Limited to, Regional and Local Transit Systems and the High-Speed Rail System

As indicated in Section E.1.3, the Blue Line is cited as critical connection in the 2016 High-Speed Rail Business Plan.

The Blue Line is also a critical piece of MTS's network as it currently provides connections to 33 bus routes (and 50-plus if extended to UTC), the Orange and Green Line Trolley, and paratransit services. Currently, the Blue Line provides an across-the-street connection with NCTD's commuter rail and Amtrak's intercity rail at Santa Fe Depot. This grant will help improve that pedestrian connection as well as extend Blue Line service to serve Santa Fe Depot directly.

MTS and NCTD have an integrated fare structure, which enables passengers to enjoy a seamless transfer between modes. Amtrak also sells MTS fare media on its Pacific Surfliner trains.

The double-tracking of the Green Line terminal at 12th & Imperial will also improve transfers among Trolley lines.

E.2.1g Implementing Clean Vehicle Technology, Especially Zero Emission Technology

The Trolleys operate with electricity from an overhead contact wire system and this project is expected to reduce the total vehicle miles traveled by 14,432,927 (See Section E.2.1a).

The vehicles are also equipped with regenerative braking capabilities. In braking mode, energy is developed in the traction motors, which is then sent back up the overhead wires, reducing the amount of electricity otherwise needed to draw from the grid.

[5] http://www.sandag.org/uploads/2050RTP/F2050rtp_all.pdf

E.2.1h Promoting Active Transportation, by Increasing the Proportion of Trips Accomplished by Biking and Walking or Increasing the Safety and Mobility of Bicyclists and Pedestrians

More than 80 percent of Trolley passengers begin their transit trip as a pedestrian, according to the most recent origin-destination study.

Consequently, MTS is a strong supporter of active transportation efforts in the region. Bicycles are accommodated on all Trolley vehicles and buses and the vast majority of Trolley stations outside of the downtown area (including those on the Blue Line) have four-to-eight bicycle lockers and/or bicycle racks, encouraging bike-transit connections.

Additionally, all rail stations, rail vehicles, and buses are ADA accessible. Pedestrian improvements at America Plaza and Santa Fe Depot (see Page 16) will also enhance the safety and mobility of pedestrians.

Table 10: Mode of Access to Trolley

Mode	Pct
Walked	80.7%
Dropped Off (include TNC)	11.9%
Drove Alone	2.5%
Biked	2.2%
Carpooled	0.8%
Other	1.9%

Source: SANDAG Passenger Survey (MTS Rail), 2015

E.2.1i Improving Public Health, with Particular Emphasis on Elements Benefiting the Most Impacted and Disadvantaged Communities

Transit users, in general, are healthier than non-transit users.

The Federal Transit Administration estimates that the average transit user walks for 19 minutes per day, compared to six minutes per day for non-transit users.[6] The Center for Disease Control states, "Expanding the availability of, safety for, and access to a variety of transportation options and integrating health-enhancing choices into transportation policy has the potential to save lives by preventing chronic diseases, reducing and preventing motor-vehicle-related injury and deaths, improving environmental health, while stimulating economic development, and ensuring access for all people."[7]

This project will spur the use of transit, and hence improve public health, by encouraging people to take transit because of a better experience due to the increased service, better reliability and ride quality, and enhanced pedestrian access provided by this project.

G.2.1j Air Quality Impacts of the Project Not Included in the Reduction of Greenhouse Gas Emissions

According to the "Co-benefits Summary" tab in the TIRCP calculator tool, the Blue Line Rail Corridor Transit Enhancements project is also expected to provide the following air quality benefits. See Table 11.

[6] http://www.fta.dot.gov/14504.htm
[7] http://www.fta.dot.gov/documents/HEALTH_CDC_Recommendations.pdf

Table 11: Air Quality Impacts of Project

	Quantified Co-Benefit Component 1	Quantified Co-Benefit Component 2	Total Project
Identifying Descriptor	**Increased Blue Line Light Rail Service Between Santa Fe Depot & Old Town and State of Good Repair Projects**	**BRT Rapid Routes 725 and 925**	
Total CCI			
ROG Emission Reductions (lbs)	8,299	2,037	10,335
NOx Emission Reductions (lbs)	35,108	(10,114)	24,994
PM2.5 Emission Reductions (lbs)	691	176	867
Diesel PM Emission Reductions (lbs)	2,881	918	3,799

E.2.2 Benefit to Disadvantaged Communities (DACs), Low-Income Communities, and/or Low-Income Households

The project will have significant benefit to SB 535 disadvantaged communities and AB 1550 low-income communities.

Twenty SB 535 communities and 46 AB 1550 are directly served by the project (plus another three AB 1550 communities within ½-mile of SB 535 communities). This represents over half of all SB 535 tracts in San Diego County and 17 percent of the AB 1550 tracts in San Diego County.

All told, 227,000 people in SB 535 or AB 1550 census tracts will be directly served (within ½-mile of Blue Line station or within ¼-mile of new Rapid routes). This represents 16 percent of all San Diego County residents in such census tracts and nearly 50 percent of the population that is directly served. See Table 12 for the breakdown and Figure 22 for the map of affected communities.

Section F details how these communities will benefit from the project and how MTS will ensure the benefits are achieved. A list of all SB 535 and AB 1550 communities that benefit from this project is included as Attachment No. 7.

Table 12: SB 535 & AB 1550 Communities Served by Project

SB 535 Disadvantaged Communities	# Census Tracts	Applicable Tracts	% of SD County Impacted Tracts Served by Project	Total Population	Applicable Census Tract Population	% of SD County Impacted Tract Population Served by Project
San Diego County	626	38		3,250,867	175,432	
MTS Service Area	467	38		2,292,782	175,432	
Blue Line Rail Corridor Enhancements Project	89	20	52.6%	474,925	90,248	51.4%

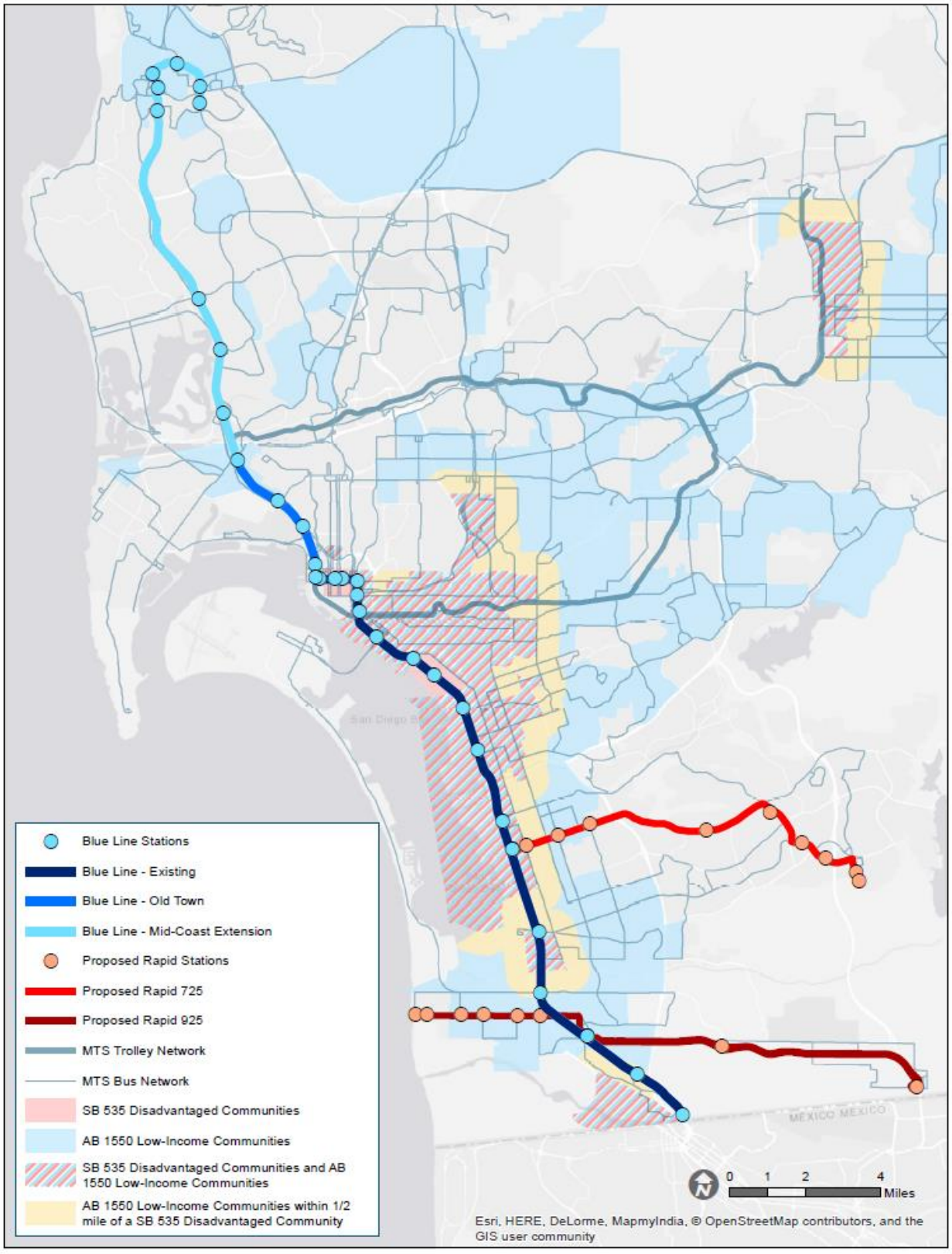
AB 1550 Low-Income Communities	# Census Tracts	Applicable Tracts	% of SD County Impacted Tracts Served by Project	Total Population	Applicable Census Tract Population	% of SD County Impacted Tract Population Served by Project
San Diego County	626	269		3,250,867	1,382,744	
MTS Service Area	467	198		2,292,782	958,882	
Blue Line Rail Corridor Enhancements Project	89	46	17.1%	474,925	215,081	15.6%

SB 535 Disadvantaged Communities OR AB 1550 Low-Income Communities	# Census Tracts	Applicable Tracts	% of SD County Impacted Tracts Served by Project	Total Population	Applicable Census Tract Population	% of SD County Impacted Tract Population Served by Project
San Diego County	626	271		3,250,867	1,394,845	
MTS Service Area	467	200		2,292,782	970,983	
Blue Line Rail Corridor Enhancements Project	89	48	17.7%	474,925	227,182	16.3%

SB 535 Disadvantaged AND AB 1550 Low-Income Communities	# Census Tracts	Applicable Tracts	% of SD County Impacted Tracts Served by Project	Total Population	Applicable Census Tract Population	% of SD County Impacted Tract Population Served by Project
San Diego County	626	36		3,250,867	163,331	
MTS Service Area	467	36		2,292,782	163,331	
Blue Line Rail Corridor Enhancements Project	89	18	50.0%	474,925	78,147	47.8%

AB 1550 Low-Income Communities Within 1/2 Mile of SB 535 Disadvantaged Communities	# Census Tracts	Applicable Tracts	% of SD County Impacted Tracts Served by Project	Total Population	Applicable Census Tract Population	% of SD County Impacted Tract Population Served by Project
San Diego County	626	52		3,250,867	259,072	
MTS Service Area	467	52		2,292,782	259,072	
Blue Line Rail Corridor Enhancements Project	89	14	26.9%	474,925	79,417	30.7%

Figure 22: Map of SB 535 Disadvantaged Communities and AB 1550 Low-Income Communities Served by Project



E.2.3 Project Priorities Developed through the Collaboration of Two or More Rail Operators

MTS has proven to be collaborative with other rail operators in the region.

For instance, MTS is a member of the LOSSAN Rail Corridor Joint Powers Authority and is supportive of the LOSSAN goal to increase commuter and intercity rail service to/from Santa Fe Depot.

MTS also has a joint-use agreement with Amtrak, NCTD, and BNSF to operate intercity, commuter, and freight rail on MTS-owned tracks free of charge and permits the NCTD COASTER to use tracks in the MTS Trolley yard for mid-day layovers. Additionally, MTS and NCTD have a joint fare policy and share in fare distributions, and have cooperated in the purchase of HASTUS scheduling software. MTS and Amtrak have cooperated on a joint marketing and a fare-sharing arrangement for special events and MTS day passes are sold on Pacific Surfliner trains.

E.2.4 Geographic Equity

This project will help improve transit for a significant part of the MTS service area. This project will directly benefit the citizens of four cities (San Diego, National City, Chula Vista, and Imperial Beach), and up to 48 SB535 or AB 1550 communities (discussed in Sections E.2.2 and F).

It is estimated that by 2020 there will be over 161,000 jobs and over 391,000 residents living in in the project area. In the census tracts served by the stations, it is estimated that 70 percent are minority and 37 percent are low-income, higher than the San Diego County rates of 53 percent and 13 percent respectively.[8]

Table 13: Population and Employment in Project Area

	EMPLOYMENT		POPULATION	
	2020	2050	2020	2050
Blue Line	127,948	154,443	306,740	376,417
Rapid 725	20,876	22,225	54,826	66,201
Rapid 925	21,244	26,782	57,318	66,868
Total Project Area*	161,112	192,716	391,589	473,223

*Totals do not add up due to overlap

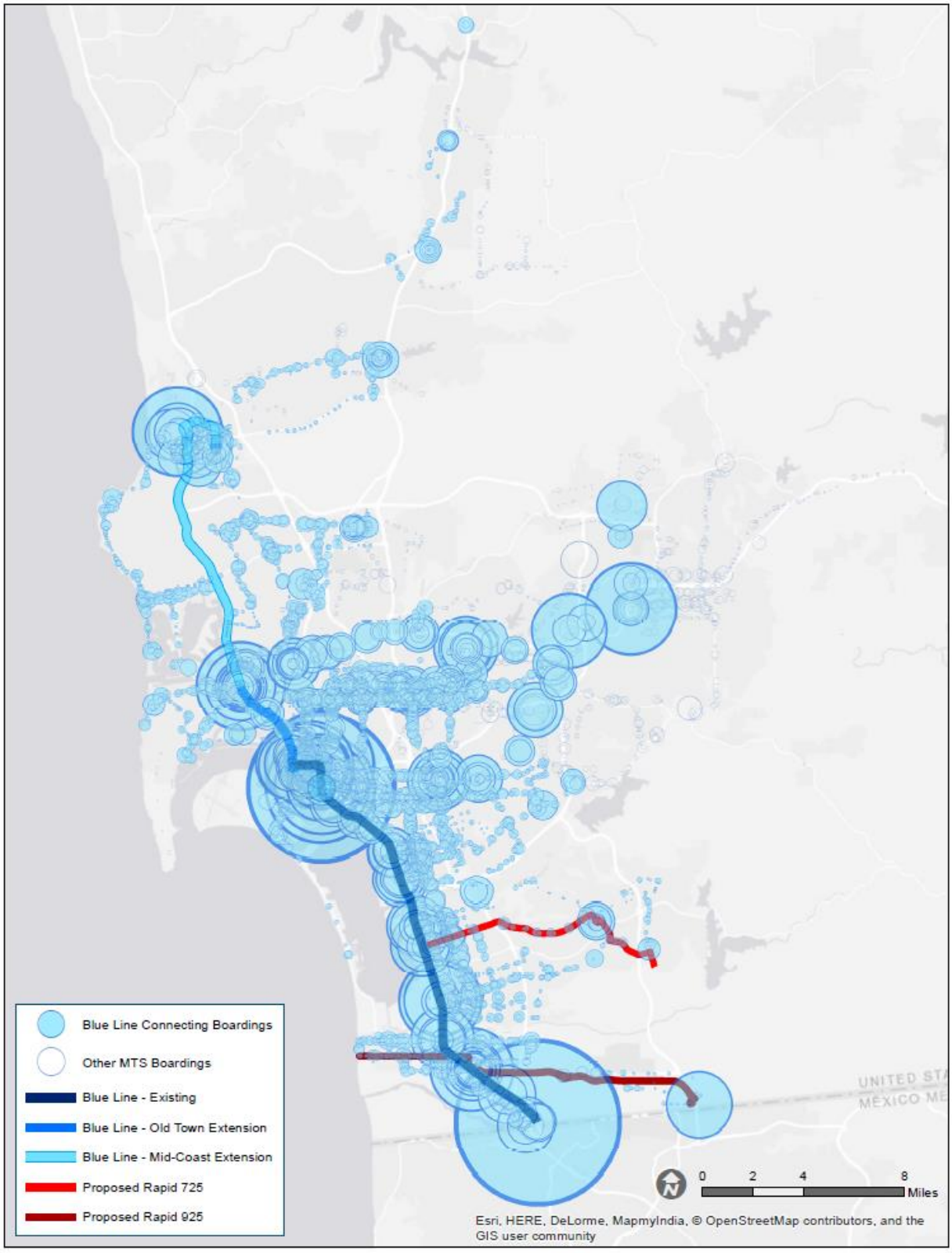
Additionally, while the project will directly benefit those passengers on the Blue Line and the new Rapid Routes 725 and 925, it will indirectly benefit a huge segment of the service area that is within one transfer of the Blue Line. Over 90 percent of all MTS passengers board on either the Blue Line or a route that connects directly to it. See Table 14 and Figure 23.

Table 14: MTS Passengers with Direct Connection to Project

	Annual Ridership		
	MTS System-Wide	Within Transfer of Project	% Within Transfer
Bus	50,048,942	42,879,882	86%
Trolley	37,607,470	37,607,470	100%
Total	87,656,412	80,487,352	92%

[8]California Office of Environmental Health Hazard Assessment

Figure 23: MTS Network within One Transfer of Project



E.2.5 Consistency with Sustainable Communities Strategy and Regional Plan

SANDAG, the metropolitan planning organization in the San Diego region, has reviewed the proposed Blue Line Rail Corridor Enhancement Project and determined that the project is consistent with the SANDAG Board-adopted 2050 Regional Transportation Plan and Sustainable Communities Strategy (2050 RTP/SCS). See Attachment No. 8 for a letter from SANDAG certifying the project's consistency with the 2050 RTP/SCS..

The 2050 RTP/SCS calls for investing in a transportation network that provides residents and workers with transportation options that reduce greenhouse gas emissions. The proposed project will support reducing greenhouse gas emissions by providing improved service on the Blue Line and two additional Rapid bus routes.

The 2050 RTP/SCS also calls for focusing the region's housing and job growth in urbanized areas where there exists and/or is planned public transit that provides residents and workers with transportation options that reduce greenhouse gas emissions. The SCS land use pattern is based upon the Regional Smart Growth Opportunity Area Map, which identifies areas within the region where growth is projected near existing and planned public transit.[9]

The following numbers of smart growth areas are served by the project:

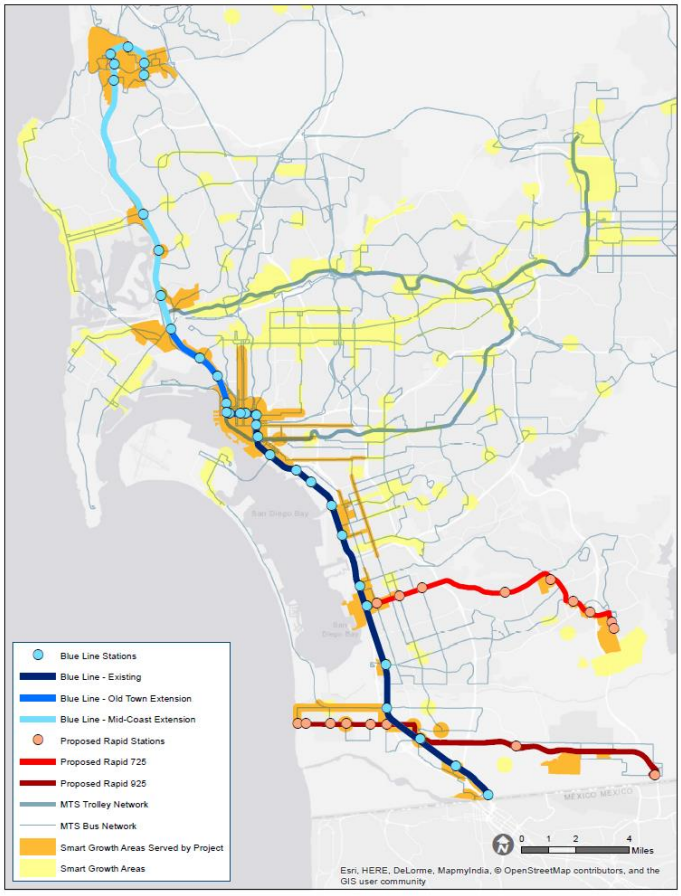
- Blue Line (Existing) – 12
- Blue Line (Old Town Corridor) – 3
- Blue Line (Mid-Coast Expansion) – 6
- Route 725 – 7 (two of which overlap with Blue Line)
- Route 925 – 6 (three of which overlap with Blue Line)

All told, 29 SCS areas will benefit from better service along the Blue Line and expanded Rapid bus routes as proposed.

Improved service will provide enhanced incentives for future housing and development growth in these areas in which future growth has already been encouraged. Please see the support documentation for a letter from SANDAG, confirming the proposed project's consistency with the adopted Sustainable Communities Strategy.

Figure 24 shows the SCS areas served by the project.

Figure 24: SCS Areas



[9] SANDAG Smart Growth Concept Map, May 2016 (http://www.sandag.org/uploads/projectid/projectid_296_13994.pdf)

E.2.6 Benefits to Freight Movement

There will be no direct benefit to freight movement as a result of this project. However, MTS has a long history of working cooperatively with freight railroads, as freight trains do use the Blue Line tracks nightly between downtown San Diego and Mexico.

Freight service benefitted from the Blue Line Rehabilitation Project through improved signaling and freight yard enhancements (see Section D.2.2.1). This project builds upon the Blue Line Rehabilitation Project.

E.2.7 Supplementary Funding

MTS is committing a total of $15,132,000 in non-TIRCP funds to match the TIRCP request of $62,896,000. This represents a non-TIRCP matching rate of 19 percent, exclusive of operating funds which MTS would commit to the project for running increased services. Specific funding sources are described in detail in Section B (Project Costs) of the Project Narrative. The overall budget plan is captured in the table below and the revenue plan by fiscal year is described in Section D.2 of the Statement of Work.

Table 15: Funding Strategy

Project Component	Total	TIRCP	SB1 SGR	TDA/Local	Match
Beech Street Double Crossover Design/Construction	5,065	4,052	-	1,013	0.20
Middletown Double Crossover Construction	6,222	4,977	-	1,244	0.20
America Plaza Pedestrian Enhancements - Design/Construction	4,694	3,755	-	939	0.20
Old Town Transit Center West Enhancements - Construction	2,367	2,367	-	-	-
Beyer Track and Slope Repair - Construction	5,195	4,156	-	1,039	0.20
America Plaza Track Replacement - Design/Construction	1,425	1,140	-	285	0.20
Green Line IMT Double Tracking Design/Construction	8,736	6,989	1,747	-	0.20
Blue Line Substation Replacement (6 locations) - Design/Construction	13,098	10,478	-	2,620	0.20
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	2,459	1,967		492	0.20
Blue Line Feeder Bus Service (23 Articulated Buses & Stop Improvements)	24,903	19,922	-	4,981	0.20
Blue Line Feeder Bus Service (Stop Improvements)	3,865	3,092	-	773	0.20
Capital Total	78,028	62,896	1,747	13,385	0.19
Increased Frequency (Santa Fe Depot to Old Town)	6,550	-	-	-	1.00
Rapid 725 Operations	2,849	-	-	-	1.00
Rapid 925 Operations	4,463	-	-	-	1.00
Operating Total (during 5-year programming cycle)	13,862	-	-	-	1.00
Grand Total	91,890	62,896	1,747	13,385	0.32

E.2.8 Integration across Other Modes of Transportation

The current Blue Line has direct connections to more than 30 MTS bus routes, including:

- Route 992, which serves the airport directly from America Plaza and City College
- Two MTS Rapid (BRT) bus lines, connecting downtown with the Mid-City/San Diego State University and Inland North County areas

The extended Blue Line will connect with another 11 bus routes at the Old Town Transit Center and another estimated 10 routes along the extended Mid-Coast corridor (plus UC San Diego's bus network).

Figure 23 from Section E.2.4 shows the extent of the service area that can be reached with one transfer from the Blue Line.

MTS has an integrated fare structure, providing easy transfers between Trolleys and these bus routes for all pass holders. MTS also provides paratransit service for disabled passengers within ¾-mile of any fixed route, including all stations on the Blue Line and proposed new bus services.

The improvements will also provide better access to modes offered by other agencies at Santa Fe Depot:

- Amtrak's Pacific Surfliner intercity rail
- NCTD's COASTER commuter rail
- Shuttle bus to the Tijuana Airport bus (historically)
- Taxi

Two blocks from Santa Fe Depot, Trolley passengers can easily access the ferry to Coronado and the San Diego Cruise Ship Terminal on the Broadway Pier. Additionally, DecoBike has established four bike sharing stations within one block of Blue Line stations downtown.

E.2.9 Financial Plan for On-Going Operations

The Blue Line Rail Corridor Transit Enhancements includes two operating components:

- Increased frequency of light rail service on the Blue Line between Santa Fe Depot and Old Town
- Operation of proposed Rapid 725 and Rapid 925 bus routes

Operating Funding Plan: Increased Blue Line Service

Based on the calculations summarized below, MTS projects that the increased service on the Blue Line between Santa Fe Depot and Old Town will have an annual net cost of $1,227,969.

Table 16: Operations Cost for Extended Light Rail Service

WEEKDAY 15 min	
Miles/Trip	3.426
Cars/Trip	3
Trips	147
Car Miles	1510.866
Cost / Mile	$ 4.70
Cost / Day	$ 7,101.07
Days	254
Cost / Year	$ 1,803,672

SUNDAY	
Miles/Trip	3.426
Cars/Trip	3
Trips	135
Car Miles	1387.53
Cost / Mile	$ 4.70
Cost / Day	$ 6,521.39
Days	58
Cost / Year	$ 378,241

SATURDAY	
Miles/Trip	3.426
Cars/Trip	3
Trips	147
Car Miles	1510.866
Cost / Mile	$ 4.70
Cost / Day	$ 7,101.07
Days	53
Cost / Year	$ 376,357

ANNUAL TOTAL COST	
Weekday 15-minute	1,803,671.83
Saturday	376,356.72
Sunday	378,240.68
TOTAL (15-minute Wkdy)	2,558,269.23
Avg. Rail Farebox Recovery	0.52
Less Estimated Farebox Recovery	(1,330,300.00)
Net Annual Operating Costs	**$ 1,227,969**

MTS plans to fund the operating costs with local TransNet funding. TransNet is a one-half cent sales tax ordinance that was extended by San Diego voters in 2004. The extension is expected to generate more than $14 billion for transportation improvements, with the funds allocated for transit expansion, highway projects, local roads, and other new programs. MTS is projected to receive an average of $33.3 million per year between FY 2018 and FY 2022 with an average annual growth rate of approximately four percent. Furthermore, MTS is projected to receive approximately $36.7 million in FY 2022, the first year in which MTS plans to utilize the funds for increased service on the Blue Line. Attachment No. 5 was provided by SANDAG and includes the current TransNet revenue forecasts through FY 2022. It is important to note that MTS will need to formally negotiate with SANDAG to finalize the commitment of TransNet funding to the project. In the unlikely event that TransNet funds were not allocated for this project, MTS would commit TDA or other available local funds to the project.

Operating Funding Plan: Rapid 725 and Rapid 925 Bus Routes

Based on the calculations summarized in the table below, MTS anticipates an annual net operating cost of 3,656,037 for operating both new proposed Rapid bus routes.

Table 17: Operations Costs for New Rapid Bus Routes

	WKDY	SAT	SUN	TOTAL		Annual	FY17	Annual	Net
ROUTE	**DAILY**	**DAILY**	**DAILY**	**Annual**	***RATE***	**Cost**	**FRR**	**Fare Rev**	**Op Cost**
Rapid 725									
709L (Discontinued)	(135)	0	0	(20,730)	$6.43	($133,294)	45.7%	($60,915)	($72,378)
Rapid 725	1,688	0	0	428,752	$6.43	$2,756,875	45.7%	$1,259,892	$1,496,983
Net Cost	**1,553**	**0**	**0**	**408,022**		**$2,623,582**		**$1,198,977**	**$1,424,605**
Rapid 925									
950 (Discontinued)	(355)	(127)	(127)	(104,359)	$6.43	($671,026)	36.8%	($246,938)	($424,089)
Rapid 925	2,242	810	708	653,464	$6.43	$4,201,774	36.8%	$1,546,253	$2,655,521
Net Cost	**1,887**	**683**	**582**	**549,105**		**$3,530,747**		**$1,299,315**	**$2,231,432**
Total Net Cost	**3,440**	**683**	**582**	**957,127**		**$6,154,329**		**$2,498,292**	**$3,656,037**

MTS plans to fund the Rapid operations with State Transit Assistance (STA) funds augmented by Senate Bill 1 (SB1) funding. The additional STA apportionment is funded with an increase in the sales tax on diesel. MTS received a total STA formula allocation (excluding SGR) of $20,325,236 for the 2017/18 fiscal year (Attachment No. 3), of which approximately 36 percent was augmented by additional SB1 funds. This means $7,317,085 of the apportionment was augmented by SB1. Furthermore, this portion of STA represents funding from only eight months of collecting increased diesel taxes rather than a full 12 months since the tax became effective in November 2017. Hence, MTS projects an annual apportionment of approximately $11 million in fiscal years beyond 2017/18 when accounting for a full year of collecting the increased diesel sales tax revenues.

This project is contingent upon SB1 not being repealed in November 2018. Neither the capital components nor the operations of the proposed Rapid bus routes are scheduled to begin prior to November 2018 when the fate of SB1 will be decided.

F) Disadvantaged Communities, Low Income Communities, and/or Low Income Households

The project will provide a direct, meaningful, and assured benefit to SB 535 and AB 1550 populations (both disadvantaged communities and low-income communities) consistent with the CARB funding guidelines.

For this application, Table 2.A-2 (Transit) in the CARB funding guidelines is being used.

STEP 1 – SB 535 and AB 1550 Populations

The project will benefit significant SB 535 and AB 1550 populations and satisfies Step 1 through the following:

(A) Is the project at least partially located within the boundaries of a disadvantaged community census tract? For projects that improve transit service or increase transit access along transit lines or corridors, is the project serving at least one stop located within the boundaries of a disadvantaged community census tract?

a. Thirteen stations on the Blue Line are located within a disadvantaged community census tract. Additionally, Rapid 725 serves one disadvantaged community.

(B) Is the project at least partially located within the boundaries of a low-income community census tract? For projects that improve transit service or increase transit access along transit lines or corridors, is the project serving at least one stop located within the boundaries of a low-income community census tract?

a. Sixteen stations on the Blue Line are located within a low-income community census tract. Additionally, Rapid 725 will serve three low-income communities and Route 925 will serve seven low-income communities.

(C) Is the project located outside of a disadvantaged community, but within ½-mile of a disadvantaged community and within a low-income community census tract? For projects that improve transit service or increase transit access along transit lines or corridors, is the project serving at least one stop located within ½-mile of a disadvantaged community and within a low-income community census tract?

a. In addition to directly serving disadvantaged and low-income communities, another 14 low-income communities that are within ½-mile of a disadvantaged community are served by the Blue Line.

STEP 2 – Addresses an Important Need for Community or Household

The project addresses common needs for disadvantaged communities according to CARB's Funding Guidelines Table 2-2 in the following manner:

- **Socioeconomic #7: Improve transit service levels and reliability on systems/routes that have high use by disadvantaged and/or low-income community residents or low-income riders.**
  - This project will benefit the Blue Line significantly through increased service, better connections, better pedestrian access, and new infrastructure that will improve service quality and reliability. Nineteen stations are located in disadvantaged or low-income communities, and according to the SANDAG passenger survey, more than 44 percent of current Blue Line passengers live in households earning $30,000 or less (and more than 15 percent earn $15,000 or less).
  - New Rapid bus routes 725 and 925 will also directly serve disadvantaged and low-income communities. While they are new routes and the percentage of low-income passengers is unknown, the most comparable current routes had between 30 and 54 percent of passengers living in households making $30,000 or less per year. These buses will increase service to these communities and provide connections to the entire MTS network.

STEP 3 – Project Benefits

The project will provide the following benefits.

(A) Project provides improved transit or passenger rail service for stations or stops within an AB 1550 community
- Through infrastructure improvements in the South Bay and in downtown, the Blue Line will have improved reliability and ride quality.
- Through infrastructure improvements between downtown and Old Town, a one-seat ride will be provided for South Bay passengers to Old Town (a major transit center), UC San Diego, and the major employment area of University Town Center.
- New Rapid buses 725 and 925 provide service for 10 SB 535/AB 1550 communities.

(B) Project improves transit connectivity for residents at stations or stops in an AB 1550 community
- The extension of the Blue Line will directly connect South Bay passengers to an additional 11 bus routes at Old Town and another 10 along the Mid-Coast corridor.
- Residents of 10 AB 1550 communities will have access to new Rapid buses 725 and 925, which will connect directly to the Blue Line.
- The Old Town Transit Center improvements are located within a low-income community. That project will increase the bus capacity of the Old Town Transit Center, thereby increasing the connections available there.

(D) Project improves connectivity between travel modes for vehicles or equipment that service stations or stops in an AB 1550 community (e.g., bicycle racks on transit vehicles, better links between transit and active transportation);
- While not located in an AB 1550 community, the Santa Fe Depot/America Plaza pedestrian improvements will benefit Blue Line passengers that are destined for

downtown San Diego. Ten SB 535 / AB 1550 communities will be within a one-seat ride of this location.

(H) Project improves transit stations or stops within an AB 1550 community to increase safety and comfort (e.g. lights, shelters, benches);

- The Old Town Transit Center project is located in an AB 1550 community. The proposed project would replace aging pavement, sidewalks, curbs, lighting, electrical/communication systems, signage and add additional shelters and benches.
- Rapid Routes 725 and 925 would create 14 new bus stops in AB 1550 communities. These stops would be well-lit and would include both shelters and benches.

A map of SB 535 / AB 1550 communities served is included in Section E.2.2 and a list of the communities served is included as Attachment No. 7.

MTS assures that these benefits will be achieved by committing to increased and improved service on the Blue Line, a one-seat ride from San Ysidro to UTC on the Blue Line, two new bus rapid routes, and the infrastructure improvements described above.

In 2012, MTS adopted MTS Board Policy 42. The policy ensures that services are developed according to the four-category vision adopted by the MTS Board: customer-focused, competitive, integrated, and sustainable. As such, performance criteria are defined to ensure that services are evaluated against this vision. Performance criteria include the following:

Customer Focused/Competitive	Integrated	Sustainable
• Total Passengers • Average Weekday Passengers • Passengers/Revenue Hour • Passengers/In Service Hour • Passenger Load Factor • On-Time Performance • Mean Distance between Failures • Accidents/100,000 Miles • Comments/100,000 Passengers	• Route Headway • Span of Service Consistency • Transfer Opportunities	• In-Service Miles • In-Service Hours • Peak Vehicle Requirement • In-Service Speeds • In-Service/Total Miles • In-Service/Total Hours • Farebox Recovery Ratio • Subsidy/Passenger

The data for the system as a whole is presented quarterly to the MTS Board of Directors. In addition, annual route monitoring reports will be created to provide detailed analysis of what is working, and what is not.

As with all MTS services, the Blue Line and the new Rapid bus routes will be consistently monitored to ensure that the appropriate levels of service are provided, taking into account changes in the urban infrastructure and ridership patterns that can affect performance.

MTS's efforts to track the effectiveness of service sometimes results in opportunities to improve performance and, in other cases, allows for quick resolution of issues reducing negative impacts on service.

In terms of outreach to AB 1550 / SB 535 communities, all service changes are carefully coordinated among MTS's Planning, Marketing, Customer Service, and Operations Departments. Communications can include: Take One flyers posted on buses and Trolleys; notices posted at individual bus stops or rail stations; bilingual ambassadors stationed at key transfer locations during transition times; special

notifications to social service agencies and organizations with clients that use MTS services; outreach events and staff at key transit centers throughout our service area's communities at various stages of the service change process from planning to implementation; communications in various languages in accordance with MTS's Language Assistance Plan; press releases to general news media and interested parties; media interviews and community speaking engagements; training materials for front-line staff on major changes and initiatives; and, advertising in community and minority media outlets.

For the most recent major service change (spring 2017), MTS staff hosted seven outreach events at Blue Line Stations within AB 1550 / SB 535 communities.

G) Project Implementation and Project Management Plan

MTS has a long history of successfully implementing complex projects, including the construction and implementation of more than 50 miles of light rail service in the San Diego region, procurements of buses and light rail vehicles, and rehabilitation of facilities and various maintenance and administrative centers. The staff that will comprise the project team has extensive experience implementing programs throughout the MTS system.

The Blue Line Rail Corridor Transit Enhancements project includes 11 distinct capital components that will be managed as individual projects in terms of project management, contract oversight, change-order management, and risk management. Each project has a project manager assigned per the table below.

Table 18: Project Managers

Project Component	Project Manager
Old Town Transit Center West Enhancements - Construction	Elias Belknap
Beyer Track and Slope Repair - Construction	Gabriel McKee
America Plaza Track Replacement - Design/Construction	Gabriel McKee
Green Line IMT Double Tracking Design/Construction	Gabriel McKee
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	Gabriel McKee
Blue Line Feeder Bus Service (23 Articulated Buses & Stop Improvements)	Michael Wygant
Blue Line Rapid Feeder Bus Service (Stop Improvements)	Denis Desmond
America Plaza Pedestrian Enhancements - Design/Construction	Rob Schupp
Beech Street Double Crossover Design/Construction	Thang Nguyen
Middletown Double Crossover Construction	Thang Nguyen
Blue Line Substation Replacement (6 locations) - Design/Construction	Thang Nguyen

Project Management

The project managers assigned to the individual project components will be responsible for initiating, planning, executing, monitoring, controlling, and closing the projects. Specifically, the project managers will manage scope, schedule, cost, quality, procurement, communication, risk, and stakeholders to successfully meet project goals and objectives. Furthermore, the project managers will be responsible for completing the tasks and deliverables detailed in Section A.1 of the Statement of Work. MTS project

management staff has an extensive history of completing similar projects. The qualifications of the key project management personnel are described below:

- **Elias Belknap, Manager of Capital Projects** – Mr. Belknap will be managing the construction phase of the Old Town Transit Center West Enhancements project (project is already designed). Mr. Belknap has a B.S. in Civil Engineering form San Diego State University and has managed construction projects for more than 11 years. Mr. Belknap has managed large-scale projects on behalf of MTS, including the recently completed construction of a new bus maintenance facility in El Cajon. This project cost more than $50 million and included the demolition of an existing maintenance facility and the construction of a new state-of-the-art facility. Mr. Belknap has also managed a variety of other facility-related capital projects, including CNG dispenser replacements, roofing and HVAC improvements, concrete replacement, and others at various MTS bus facilities.

- **Gabriel McKee, Project Engineer** – Mr. McKee will be managing the Beyer Track and Slope Repair; Santa Fe Depot/Kettner Blvd. Track Replacement; Green Line Terminal Double Tracking; and the A-Yard Turnouts, Newton Crossover, IMT Diamonds projects. Mr. McKee has a B.S. in Construction Management from Arizona State University and has been managing large-scale transportation-related projects for nearly 12 years. Mr. McKee has been with MTS for almost four years and has successfully managed a variety of rail infrastructure projects including grade crossing replacement, crossing diamond replacement, switch replacement, tie replacement, and track replacement. Mr. McKee's skills and experience are perfectly suited for the project components to which he has been assigned.

- **Michael Wygant, Director of Fleet & Facility Maintenance** – Mr. Wygant will be managing the procurement of 23 articulated buses for operation on the new Rapid 725 and 925 bus routes. Mr. Wygant recently joined MTS (in June 2017) but served as the Manager of Contract Operations and Maintenance for the North County Transit District (NCTD) for more than 26 years. Mr. Wygant will be responsible for providing the technical specifications, managing quality assurance, and managing the order and delivery of the vehicles.

- **Denis Desmond, Manager of Planning** – Mr. Desmond will be managing the purchase and installation of bus stop amenities and signage for the proposed Rapid 725 and 925 bus routes. Mr. Desmond has more than 27 years of experience working in the transit industry and has diverse background in scheduling, planning, and transportation management. Mr. Desmond designed the proposed routes and is the best-suited staff member for managing the successful implementation of the bust stop improvements along those routes.

- **Rob Schupp, Director of Marketing and Communications** – Mr. Schupp has served as the Director of Marketing and Communications at MTS for the past 12 years. Mr. Schupp has a long history of managing projects such as bus bench replacement, bus shelter replacement, signage projects, and other projects related to improving customer experience. Hence, Mr. Schupp will

be an ideal candidate for managing the America Plaza / Santa Fe Depot Pedestrian Enhancements project component. Mr. Schupp will draw on his marketing background and past project management experience to guide the design and construction of pedestrian enhancements that will make the station more attractive for both current and potential transit riders. Mr. Schupp will primarily guide the design phase of the project. Once design is complete, the construction will be assigned to an MTS project manager.

- **Thang Nguyen, Systems Engineer** – Mr. Nguyen has B.S. in Electrical Engineering from Santa Clara University and is a licensed Professional Engineer (PE). Mr. Nguyen has nearly 17 years of experience working as an engineer in the transportation industry. Mr. Nguyen has been with MTS for nearly seven years, during which he has managed a variety of projects such as the procurement and installation of 17 new traction power substations, track improvements on the Orange Line, replacement of the fire alarm system in the SDSU tunnel, substation DC feeder breaker replacement on the Green Line, system-wide CCTV infrastructure investments, and more. Mr. Nguyen's skills and experience make him well-suited for managing the Beech Street and Middletown Double Crossover project component as well as the Blue Line Substation Replacement project component.

Contract Oversight

Contract oversight will be provided by both the project manager and the MTS Procurement Department. The project manager will be responsible for ensuring the technical requirements of contracts are delivered according to plan. The Procurement Department will be responsible for administering contracts and monitoring contractor performance. Specifically, the Procurement Department will assign a contracting officer for any contract executed during the project. The contracting officer will be responsible for administering the contract, ensuring contract authority is not exceeded, monitoring performance, and administering change orders. Change orders will also be managed by the project manager and contracting officer along with ancillary oversight from the Finance department. In the event that a proposed change order amount is greater than the contingency budget for the project, the Finance Department will follow the appropriate approval process and allocate additional revenues to the project.

Risk Management

Risk management will be provided by the MTS Risk Management Department. The MTS Risk Management Department is staffed by four full-time employees, including a seasoned risk manager, Susan Lockwood, with more than 28 years of public entity risk management experience. The department reports to the Office of the General Counsel, boosting cohesiveness between legal and risk management issues with skilled claims handling and litigation management. The department would provide thorough analysis of risk-related issues and expert advice regarding claims and litigation throughout the course of project implementation.

H) Project Readiness and Reasonability of Project Implementation Schedule

i. Progress towards achieving environmental protection requirements

The Blue Rail Corridor Transit Enhancements Project is a mass transit project that is statutorily exempt from environmental review under CEQA pursuant to Public Resources Code section 21080, subdivisions (b)(10) and Title 14 of California Code of Regulations section 15275.

Public Resources Code section 21080, subdivision (b)(10) declares the following project types as categorically exempt from environmental review under CEQA:

> *A project for the institution or increase of passenger or commuter services on rail or highway rights-of-way already in use, including modernization of existing stations and parking facilities. For purposes of this paragraph, "highway" shall have the same meaning as defined in Section 360 of the Vehicle Code.*

Title 14 of California Code of Regulations section 15275 states that CEQA does not apply to the following mass transit projects:

> *(a) The institution or increase of passenger or commuter service on rail lines or high-occupancy vehicle lanes already in use, including the modernization of existing stations and parking facilities;*
>
> *(b) Facility extensions not to exceed four miles in length which are required for transfer of passengers from or to exclusive public mass transit guideway or busway public transit services.*

The Blue Line Rail Corridor Enhancements Project is comprised of rail replacement, crossover replacements, pedestrian enhancements (signage, wayfinding), facility improvements, slope repair, double tracking, and bus procurement. These activities will be performed in existing MTS right-of-way.

In the event of MTS receiving a 2018 TIRCP award, MTS will file a Notice of Exemption (NOE) with the Office of the County Clerk. Filing the NOE will trigger a 35-day statute of limitations for challenging the exemption. If the 35-day period is reached with no challenges, the environmental phase of the project will be considered complete. Assuming a notice of award in May 2018, MTS plans to have the Board of Directors approve a finding that the projects are exempt from CEQA at the May 11, 2018 meeting. After receiving Board approval, the complete NOE package would be filed by May 31, 2018 and the 35-day statute of limitations would begin. Hence, MTS plans on having environmental clearance by July 5, 2018; after which MTS could request a TIRCP allocation and begin work on the projects.

ii. The comprehensiveness and sufficiency of agreements with key partners (particularly infrastructure owning railroads) that will be involved with implementing the project.

MTS owns its own right-of-way and has the authority to do work within the right-of-way as it sees fit. It also has the ability to alter service levels for Trolley and bus operations and establish bus stops in the public right-of-way. In terms of the specific projects:

Extension of the Blue Line from America Plaza to Old Town Transit Center (roughly 3.5 miles) on 15-minute headways; bridging the cap between the current terminal to the Mid-Coast extension, resulting in one-seat ride between International Border and University Town Center.

- MTS has full authority to increase service.

Beech Street and Middletown Double Crossovers

- Work will be done in MTS right-of-way. No agreement with outside agencies is necessary.

America Plaza Pedestrian Enhancements

- MTS will work with city and adjacent property owners to develop an acceptable project for all parties.
- For work that will occur in city streets, MTS will work with City of San Diego for street/lane closures. This happens frequently on a variety of projects.

Old Town Transit Center (West) Improvements

- MTS has full authority necessary to make transit-related improvements at Old Town Transit Center. It is, however, adjacent to the Old Town State Historical Park, operated by California State Parks. MTS and California State Parks have collaborated on this design effort from the inception of both the facility as well as this project to accommodate park guests and ensure consistency with the design language of the park's facilities.

Rapid Bus (725) connecting Blue Line with Southwestern College in eastern Chula Vista with 7.5-minute peak headways

- MTS has full authority to increase service and establish bus stops on public rights-of-way.

Rapid Bus (925) connecting Blue Line to Imperial Beach and Otay Mesa International Border crossing with 7.5-minute peak headways

- MTS has full authority to increase service and establish bus stops on public rights-of-way.

23 New Articulated Branded Buses

- MTS has full authority to purchase buses and already has a contract with New Flyer of America, Inc. for these buses, with sufficient options to fulfill the requirements for the proposed Route 725 and 925 services.

Beyer Track and Slope Repair

- Work will be done in MTS right-of-way. No agreement with outside agencies is necessary.

Yard Turnout, Newton Street Crossover, and Imperial diamond track replacement

- Work will be done in MTS right-of-way. No agreement with outside agencies is necessary.

America Plaza Track Replacement

- Most work will be done in MTS right-of-way.
- For work that will occur in city streets, MTS will work with City of San Diego for street/lane closures. This happens frequently on a variety of projects.

Green Line Terminal Double Tracking

- Work will be done in MTS right-of-way. No agreement with outside agencies is necessary.

Substation Replacement

- Work will be done in MTS right-of-way. No agreement with outside agencies is necessary.

Statement of Work

Statement of Work Document

A) Project Scope

A.1 Detailed Description of Project Tasks, Deliverables, and Milestones

The Blue Line Rail Corridor Transit Enhancements project includes the following project components. Operations are included in the table below to demonstrate when the proposed services will start and to show all relevant project components during the five-year programming cycle.

Blue Line Rail Corridor Transit Enhancements						
Project	**Total**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**
Beech Street Double Crossover Design/Construction	5,065	450	4,614	-	-	-
Middletown Double Crossover Construction	6,222	-	6,222	-	-	-
America Plaza Pedestrian Enhancements Design/Construction	4,694	400	4,294	-	-	-
Old Town Transit Center West Enhancements Construction	2,367	2,367	-	-	-	-
Operations: 15-minute Service from Santa Fe Depot to Old Town	6,550	-	-	-	3,275	3,275
Blue Line - Increased Light Rail Service	24,897	3,217	15,130	-	3,275	3,275
Beyer Track and Slope Repair Construction	5,195	5,195	-	-	-	-
America Plaza Track Replacement Design/Construction	1,425	125	1,300	-	-	-
Green Line IMT Double Tracking Design/Construction	8,736	794	7,942	-	-	-
Blue Line Substation Replacement (6 locations) Design/Construction	13,098	600	12,498	-	-	-
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	2,459	350	2,109	-	-	-
Blue Line - State of Good Repair/Performance Improvements	30,913	7,064	23,849	-	-	-
Blue Line Feeder Bus Service (23 Articulated Buses)	24,903	-	-	-	24,903	-
Blue Line Feeder Bus Service (Stop Improvements) Design/Construction	3,865	460	-	3,405	-	-
Rapid 725 Operations	2,849	-	-	-	1,425	1,425
Rapid 925 Operations	4,463	-	-	-	2,231	2,231
Blue Line - New BRT Feeder Service	36,080	460	-	3,405	28,559	3,656
Total Cost	91,891	10,742	38,979	3,405	31,834	6,931

Project tasks, deliverable, and milestones are discussed for each project component in the following sections.

Beech Street Double Crossover

Summary

Currently the only operation flexibility between Santa Fe Depot and the Washington Street Trolley Station is provided by the manual switches at the double crossover between Beech Street and Ash Street.

The Old Town Line Extension project which was constructed in the early 1990's utilizes an automatic block relay based signaling system with only one powered double crossover just south of the Old Town Transit Center. The signaling system was designed to enable trains operating on a 15-minute headway to travel to Old Town and turn back. Later, the line was extended and now operates as the Green Line from 12th & Imperial to Santee.

The Mid-Coast Trolley extension being constructed by SANDAG will extend the Blue Line from Santa Fe Depot to University Town Center. Both the Green Line and Blue Line will operate on 15-minute headways through this corridor between Old Town and Santa Fe Depot, creating an effective 7.5-minute headway. Access to the railroad corridor is very constrained and thus much of the maintenance of the line will be restricted to periods when tracks are taken out of service.

This project includes the following improvements designed to increase operating flexibility, reduce service disruptions, and increase work windows for maintenance:

- Upgrade the manual switches to power operated switches at the existing 149 double crossover between Beech Street and Ash Street
- Extend centralized train control (CTC) signaling from Cedar Street south to Santa Fe Depot
- Extend signal fiber from Broadway Wye to Cedar Street.

Tasks

The project will require the following tasks for completion:

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Design Work Order to A&E Consultant	8/16/2018	10/15/2018	2019
2	Design Reviews - 30%, 60%, 90%, 100%	10/16/2018	4/17/2019	2019
3	Final Design Submittal	4/19/2019	5/18/2019	2019
4	Procurement - Contract Package	5/19/2019	7/16/2019	2019
5	Bids Review and Accept	7/17/2019	9/15/2019	2020
6	MTS Board Approval	9/16/2019	10/15/2019	2020
7	Begin Construction Phase	3/17/2020	4/16/2020	2020
8	End Construction Phase	3/18/2021	4/17/2021	2021
9	Field Acceptance Testing and Commissioning	4/18/2021	7/16/2021	2021
10	As-Built Drawings	7/17/2021	8/15/2021	2022
11	Project Close Out Phase	8/16/2021	10/15/2021	2022

Deliverables

Deliverables include the following:

Deliverables
Design Reviews - 30%, 60%, 90%, 100%
Power operated switches at existing 149 crossover
Extended CTC signaling from Cedar Street to Santa Fe Depot
Extended signal fiber from Broadway Wye to Cedar Street
As-Built Drawings

Milestones

Project milestones include the following:

Milestone:	Estimated Completion
Design Work Order to A&E Consultant	10/15/2018
Design Reviews - 30%, 60%, 90%, 100%	4/17/2019
Final Design Submittal	5/18/2019
Procurement - Contract Package	7/16/2019
Bids Review and Accept	9/15/2019
MTS Board Approval	10/15/2019
Begin Construction Phase	4/16/2020
End Construction Phase	4/17/2021
Field Acceptance Testing and Commissioning	7/16/2021
As-Built Drawings	8/15/2021
Project Close Out Phase	10/15/2021

Middletown Double Crossover

Summary

The Middletown Double Crossover project is directly related to the Beech Street Double Crossover project detailed in the above. The project would provide single-tracking capabilities between Middletown Station and the proposed Beech Street Crossover. Single-tracking capability would provide greater operating flexibility, reduce service disruptions, and increase work windows for maintenance activities between Santa Fe Depot and the Old Town Transit Center.

Specific improvements include the following:

- Design and construction of a new scissor double crossover near Middletown Station
- Realignment of main line track south of Sassafras Street to Middletown Station
- Modification of overhead catenary system (OCS) to facilitate single tracking

Tasks

Project tasks include the following:

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Design Work Order to A&E Consultant	8/16/2018	10/15/2018	2019
2	Design Reviews - 30%, 60%, 90%, 100%	10/16/2018	4/17/2019	2019
3	Final Design Submittal	4/19/2019	5/18/2019	2019
4	Procurement - Contract Package	5/19/2019	7/16/2019	2019
5	Bids Review and Accept	7/17/2019	9/15/2019	2020
6	MTS Board Approval	9/16/2019	10/15/2019	2020
7	Begin Construction Phase	3/17/2020	4/16/2020	2020
8	End Construction Phase	3/18/2021	4/17/2021	2021
9	Field Acceptance Testing and Commissioning	4/18/2021	7/16/2021	2021
10	As-Built Drawings	7/17/2021	8/15/2021	2022
11	Project Close Out Phase	8/16/2021	10/15/2021	2022

Deliverables

Project deliverables include the following:

Deliverables
Design Reviews - 30%, 60%, 90%, 100%
New Scissor Double Crossover North of Middletown Station
Overhead Catenary System Improvements to allow Single Tracking
Special track work - Realignment of mainline track between Sassafras Street and Middletown Station
As-Built Drawings

Milestones

Project milestones include the following:

Milestone:	Estimated Completion
Design Work Order to A&E Consultant	10/15/2018
Design Reviews - 30%, 60%, 90%, 100%	4/17/2019
Final Design Submittal	5/18/2019
Procurement - Contract Package	7/16/2019
Bids Review and Accept	9/15/2019
MTS Board Approval	10/15/2019
Begin Construction Phase	4/16/2020
End Construction Phase	4/17/2021
Field Acceptance Testing and Commissioning	7/16/2021
As-Built Drawings	8/15/2021
Project Close Out Phase	10/15/2021

America Plaza Pedestrian Enhancements

Summary

The west end of Broadway in downtown San Diego is currently served by two major transit centers: Santa Fe Depot and America Plaza. Santa Fe Depot serves Amtrak's Pacific Surfliner, North County Transit District's (NCTD) COASTER commuter rail and MTS's Green Line light rail service. In addition, two MTS Rapid Bus Routes (*Rapid 215* to the San Diego Zoo, El Cajon Boulevard and San Diego State University and *Rapid* 235 to Kearny Mesa, Miramar College, and Escondido) have a dedicated station directly in front of Santa Fe Depot.

These stations serve as the gateway to downtown San Diego and there is a need for pedestrian enhancements to better connect Santa Fe Depot and America Plaza. Served by just one mid-block signalized crosswalk, natural pedestrian crossing patterns often include jaywalking in the middle of the intersection. There is currently little-to-no wayfinding signage for pedestrians, many of whom are visitors to the area.

This project includes the following components:

- Develop conceptual plan and design for pedestrian safety enhancements on Kettner Boulevard, adjacent to Santa Fe Depot.
- Install new pedestrian safety enhancements based on final design

Tasks

The project includes the following tasks:

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Issue Design Work Order to A&E Consultant	8/16/2018	10/15/2018	2019
2	Kick-Off Meeting with A&E Consultant	10/16/2018	10/17/2018	2019
3	Schematic Design and Alternatives Analysis	10/18/2018	1/6/2019	2019
4	Conceptual Review	1/7/2019	3/28/2019	2019
5	Finalize Conceptual Design	3/29/2019	6/17/2019	2019
6	Finalize Plans and Specifications for Construction	6/18/2019	8/17/2019	2019
7	Develop RFP/IFB for construction	8/18/2019	10/17/2019	2020
8	Issue RFP/IFB	10/18/2019	12/17/2019	2020
9	Review Proposals	12/18/2019	2/16/2020	2020
10	Award Construction Contract	2/17/2020	3/18/2020	2020
11	Begin Construction	3/19/2020	4/18/2020	2020
12	End Construction	4/19/2020	10/18/2021	2020
13	Testing and Final Acceptance	10/19/2021	12/18/2021	2022
14	Begin Project Closeout	12/19/2021	1/18/2022	2022
15	End Project Closeout	1/19/2022	2/18/2022	2022

Deliverables

This project includes the following deliverables:

Deliverables
Final Plans & Specifications from A&E Consultant
Construction/Installation of pedestrian improvements (signage, sidewalk concrete work, pedestrian signals, etc.)

Milestones

Anticipated project milestones and estimated completion dates are below.

Milestone:	Estimated Completion
Begin Environmental (Draft NOE)	5/1/2018
Circulate Draft Environmental Document (NOE)	05/31/2018
End Environmental Phase	7/5/2018
Begin Design	8/16/2018
End Design	8/17/2019
Begin Construction Phase (Award Contract)	3/18/2020
End Construction Phase (Final Acceptance)	12/18/2021
Begin Closeout Phase	1/18/2022
End Closeout Phase	2/18/2022

Old Town Transit Center West Enhancements

Summary

The Old Town Transit Center (OTTC) has been a component of the MTS bus transit network since the early 1990s, with MTS Trolley service beginning in 1996. OTTC is one of MTS's busiest facilities, providing a critical network link between the MTS Green Line Trolley light rail, 11 bus routes, COASTER commuter rail, and Amtrak regional rail. OTTC will also serve as a future light rail transfer point with the introduction of the Mid-Coast Trolley extension north toward La Jolla, the VA Hospital, and the UC San Diego campus.

MTS would like to increase the service frequency on Route 10 to accommodate recent growth, but is unable to do so due to OTTC facility constraints. The San Diego Association of Governments' (SANDAG) 2050 Regional Transportation Plan (RTP) also includes new bus transit service that would operate out of or through OTTC, which would be unable to be accommodated under current conditions. This project proposes reconfiguring one existing bus island to accommodate articulated buses, which the facility has not been able to fully accommodate. The project will also add four additional bus bays between a new bus island and a new curbside location along Pacific Highway.

OTTC was constructed over 20 years ago, and the bus facility to the west of the rail right-of-way is currently operating at maximum capacity. In addition, the facility is becoming increasingly expensive to maintain as it ages. As this facility has become critical to the transportation network role, it is imperative that MTS expand the facility to increase capacity, to accommodate future growth and keep the facility in a state of good repair.

This project has already been designed. MTS is only requesting funding for the construction phase.

Tasks

The OTTC West Enhancement project includes the following tasks for completion:

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Issue RFP/IFB for Construction	5/1/2018	6/30/2018	2018
2	Review Proposals	7/1/2018	7/31/2018	2019
3	Award Contract for Construction	8/1/2018	9/11/2018	2019
3	Phase I (Under the underpass work) demo	9/12/2018	9/23/2018	2019
4	Phase I concrete	9/26/2018	10/7/2018	2019
5	Phase I asphalt	10/10/2018	10/14/2018	2019
6	Phase II (in the Pacific Coast Highway work) demo	10/31/2018	11/4/2018	2019
7	Phase II concrete	11/7/2018	11/25/2018	2019
8	Phase II asphalt	11/28/2018	12/7/2018	2019
9	Open PCH pull-in and island stops	12/19/2018	12/19/2018	2019
10	Phase III (west island) demo	12/26/2018	1/13/2019	2019
11	Phase III concrete	1/16/2019	1/27/2019	2019
12	Phase III asphalt	2/2/2019	2/17/2019	2019

Task No.	Task Description	Begin Date	End Date	Fiscal Year
13	Site amenities and CCTV	2/20/2019	3/30/2019	2019
14	Open west island stops	4/3/2019	4/3/2019	2019
15	Punch list and final clean	4/3/2019	5/2/2019	2019
16	Project acceptance	5/2/2019	5/2/2019	2019

Deliverables

The proposed project includes the following deliverables:

Deliverables
Demolition and Removals of Existing Concrete
Reconfiguration of 18 Existing Bus Bays to Add Four Additional Bays
Construct Electrical/Communications Systems
Installation of 11 Benches
Relocation of Eight Benches
Install Two New Shelters
Relocate Five Existing Shelters
Install Two New Trash Receptacles
Install Six VMS Signs
Install Two Ticket Vending Machines
Install Platform Signage
Traffic Striping, Signage, Wheel Stops
Drainage (Sidewalk underdrain)
Landscaping and Irrigation
Tree Maintenance
Pedestrian Railing
Fencing

Milestones

The OTTC West Enhancement project includes the following milestones and anticipated completion dates:

Milestone:	Estimated Completion
Begin Environmental (File NOE)	5/1/2018
Circulate Draft Environmental Document	5/31/2018
End Environmental Phase	7/5/2018
Begin Design	10/2/2015
End Design	3/5/2018
Begin Construction Phase (Award Contract)	9/11/2018
End Construction Phase (Final Acceptance)	5/2/2019
Begin Closeout Phase	6/1/2019
End Closeout Phase	7/1/2019

Operations: 15-Minute Blue Line Service Between Santa Fe Depot and Old Town

Summary

The capital projects detailed above would accommodate increased rail service on the Blue Line. Specifically, MTS would extend 15-minute Blue Line service from Santa Fe Depot (America Plaza) to the Old Town Transit Center, effectively doubling the service levels in this part of the corridor, starting in 2022. MTS is planning to implement the service during the January service change in FY 2022.

Deliverables

MTS anticipates the following:

Deliverables
Revised schedules to incorporate additional service
Begin operations

Tasks/Milestones

Milestone:	**Estimated Completion**
Board of Director's Approval of Service Change	10/11/2021
Publish new schedules	11/30/2021
Run Cut	12/31/2021
Begin Operations	1/31/2021

Beyer Track and Slope Repair

Summary

The Beyer Track and Slope Repair project involves the following:

- Replacement of 4,598 feet of existing track and ballast with new track, ballast, and head-hardened rail
- Lining and surfacing 400 feet of existing track
- Adjustment of existing overhead catenary system (OCS) assemblies at 28 locations
- Construction of new drainage structures, reinforced earthen swale, drainage pipes and down drains, retaining walls, fencing, and hydro seeding

There is currently a slow order of 25 miles per hour on this segment of track. This project would remove the slow order and improve the operating speed to 40 miles per hour. The project would also improve safety, enhance reliability, and improve ride quality. Design is already complete for this project. MTS is requesting funds solely for the construction phase of the project.

Tasks

Project tasks include the following:

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Procurement	7/1/2018	1/1/2019	2019
2	Board Approval/Contract Executed - Phase 1	1/1/2019	3/1/2019	2019
3	Construction Phase 1 (Beyer Slope Reconstruction)	3/1/2019	3/1/2020	2019
4	Board Approval/Contract Executed - Phase 2	3/1/2020	5/1/2020	2020
5	Construction Phase 2 (Track Reconstruction)	5/1/2020	5/1/2021	2020
6	Project Close Out	5/1/2021	6/1/2021	2021

Deliverables

Project deliverables include the following:

Deliverables
Replacement of 4,598 feet of existing track and ballast
Lining and Surfacing of 400 feet of existing track
Adjustment of OCS Assemblies at 28 Locations
Construction of New Drainage Structures
Reinforced Earthen Swale
Construction of New Retaining Walls
Construction of New Fencing
Hydro Seeding

Milestones

The proposed project includes the following milestones and anticipated completion dates:

Milestone:	**Estimated Completion**
Begin Environmental	5/1/2018
Circulate Draft Environmental Document	5/31/2018
End Environmental Phase	7/5/2018
Begin Procurement	7/1/2018
End Procurement	1/1/2019
Begin Construction Phase 1 (Award Contract)	3/1/2019
End Construction Phase 1 (Final Acceptance)	3/1/2020
Begin Construction Phase 2 (Award Contract)	5/1/2020
End Construction Phase 2 (Final Acceptance)	5/1/2021
Begin Closeout Phase	5/1/2021
End Closeout Phase	6/1/2021

America Plaza Track Replacement

Summary

This investment would replace the worn rail at America Plaza and the adjacent grade crossings located at Kettner Boulevard and India Street. Specifically, the project would include the following:

- Removal and disposal of existing rail, rail boot, and other track materials at America Plaza
- Procurement and installation of curved rail, rail boot, and other track materials located at America Plaza
- Removal and disposal of existing vehicular grade crossings, track, asphalt/concrete, ballast, and other track materials at Kettner Boulevard and India Street grade crossings
- Procurement and installation of new filter fabric, ballast, timber crossties, precast grade crossing panels, and other required incidentals

The proposed investment will improve safety on the line by eliminating flat spots and gauge issues that, if left unchecked, can cause derailment.

Tasks

The proposed investments will require the following tasks for completion:

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Project Design	9/1/2018	6/2/2019	2019
2	Procurement Process	6/2/2019	12/2/2019	2019
3	Board Approval/Contract Executed	12/2/2019	1/2/2020	2020
4	Begin Construction	1/2/2020	6/2/2020	2020
5	Final Closeout	6/2/2020	7/2/2020	2020

Deliverables

Project deliverables include the following:

Deliverables
Removal and disposal of existing rail, rail boot, and other track materials at America Plaza
Procurement and installation of curved rail, rail boot, and other track materials located at America Plaza
Removal and disposal of existing vehicular grade crossings, track, asphalt/concrete, ballast, and other track materials at Kettner Boulevard and India Street grade crossings
Procurement and installation of new filter fabric, ballast, timber crossties, precast grade crossing panels, and other required incidentals

Milestones

The project has the following milestones and estimated completion dates:

Milestone:	Estimated Completion	Estimated Completion
Begin Environmental	5/1/2018	5/1/2018
Circulate Draft Environmental Document	5/31/2018	5/31/2018
End Environmental Phase	7/5/2018	7/5/2018
Begin Design	7/1/2018	9/1/2018
End Design	4/1/2019	6/2/2019
Begin Procurement	4/1/2019	6/2/2019
End Procurement	10/1/2019	12/2/2019
Begin Construction Phase (Award Contract)	11/1/2019	1/2/2020
End Construction Phase (Final Acceptance)	4/1/2020	6/2/2020
Begin Closeout Phase	4/1/2020	6/2/2020
End Closeout Phase	5/1/2020	7/2/2020

Green Line Terminal Double Tracking

Summary

This investment includes double-tracking the Green Line at the terminal station located at 12th & Imperial Transit Center. The construction of a new track segment and double crossover at the terminus would provide greater operational flexibility, provide better connections, and allow for tighter headways during special events such as Comic-Con.

Tasks

The Green Line IMT Double Tracking project will involve completion of the following tasks:

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Project Design	9/1/2018	6/2/2019	2019
2	Procurement Process	6/2/2019	12/2/2019	2019
3	Board Approval/Contract Executed	12/2/2019	2/1/2020	2020
4	Begin Construction	2/1/2020	7/2/2021	2020
5	Final Closeout	7/2/2021	8/2/2021	2022

Deliverables

The proposed investment includes the following deliverables:

Deliverables
Final Engineering Plans and Specifications
Excavation of Existing Track
Landscaping and Grubbing
Traffic and Pedestrian Control Systems
Installation of New Track
Installation of New Double Crossover
Installation of Train Wayside Control Equipment
OCS Assemblies and Poles
Install New Signaling System
Station Signage

Milestones

The proposed milestones and estimated completion dates for the project are detailed below.

Milestone:	Estimated Completion
Begin Environmental	5/1/2017
Circulate Draft Environmental Document	5/31/2017
End Environmental Phase	7/5/2017
Begin Design	9/1/2018
End Design	6/2/2019
Begin Procurement	6/2/2019
End Procurement	12/2/2019
Begin Construction Phase (Award Contract)	2/1/2020
End Construction Phase (Final Acceptance)	7/2/2021
Begin Closeout Phase	7/2/2021
End Closeout Phase	8/2/2021

Blue Line Substation Replacement

Summary

The Blue Line Substation Replacement project includes the replacement of six traction power substations on the Blue Line. These six substations that would be replaced have been in service since the inception of the Blue Line in 1981. The six locations include the following:

- San Ysidro
- F Street
- Dairy Mart Road
- Schley Street
- Sweetwater Road
- MTS Trolley Yard

The aging substations require constant maintenance and replacement parts are obsolete. When parts are not available, expensive reverse engineering has to be performed in order to produce parts or determine substitutes.

The substation flooring at these locations is currently warping and the structures are deteriorating. The deterioration of these substations is causing safety hazards for maintenance employees during maintenance calls and replacing these substations would significantly reduce safety risks. Furthermore, the replacement substations would have state-of-the-art circuit breakers and protective relays which would improve safety for electrical workers.

The new substations would also provide greater power ratings for running shorter headways. Currently the maximum headway is 7.5 minutes with three car trains and the new substations would provide the capability for running five-minute headways with four-car trains.

Design has already been completed for two of the three locations (San Ysidro and F Street) so the design phase include engineering for four locations.

Tasks

The Blue Line Substation Replacement includes the following tasks:

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Design Work Order to A&E Consultant	7/3/2018	9/1/2018	2019
2	Design Reviews - 30%, 60%, 90%, 100%	9/2/2018	3/4/2019	2019
3	Final Design Submittal	3/4/2019	4/4/2019	2019
4	Procurement 2 Contract Packages – TPSS/Civil Installation	4/4/2019	6/2/2019	2019
5	Bids Review and Accept	6/3/2019	7/2/2019	2019
6	MTS Board Approval and Contracts Award	7/3/2019	8/2/2019	2020
7	Begin Construction Phase for TPSS Manufacturing	2/2/2020	3/3/2020	2020
8	End Construction Phase for TPSS Manufacturing	10/3/2020	11/2/2020	2021

Task No.	Task Description	Begin Date	End Date	Fiscal Year
9	Begin Construction Phase for Civil Installation	2/2/2020	3/3/2020	2020
10	End Construction Phase for Civil Installation	2/2/2021	3/3/2020	2021
11	Field Acceptance Testing and Commissioning	3/5/2021	4/4/2021	2021
12	As-Built Drawings	4/5/2021	5/2/2021	2021
13	Project Close Out Phase	5/3/2021	7/2/2021	2021

Deliverables

The proposed investment includes the following deliverables:

Deliverables
Design Reviews - 30%, 60%, 90%, 100%
Final Design Submittal
Procurement 2 Contract Packages - TPSS and Civil Installation
6 New Substations
As-Built Drawings

Milestones

The proposed investment includes the following milestones and estimated completion dates:

Milestone:	Estimated Completion
Design Work Order to A&E Consultant	9/1/2018
Design Reviews - 30%, 60%, 90%, 100%	3/3/2019
Final Design Submittal	4/3/2019
Procurement 2 Contract Packages - TPSS and Civil Installation	6/1/2019
Bids Review and Accept	7/2/2019
MTS Board Approval	8/1/2019
Award 2 Contract Packages - TPSS and Civil Installation	9/1/2019
Begin Construction Phase for TPSS Manufacturing	3/2/2020
End Construction Phase for TPSS Manufacturing	11/1/2020
Begin Construction Phase for Civil Installation	11/1/2019
End Construction Phase for Civil Installation	7/2/2020
Begin Installation of TPSS on Concrete Pad Foundations	11/1/2020
End Installation of the TPSS on Concrete Pad Foundations	3/3/2021
Field Acceptance Testing and Commissioning	4/3/2021
As-Built Drawings	5/4/2021
Project Close Out Phase	7/2/2021

A-Yard Turnouts, Newton Crossover, IMT Diamonds

Summary

The A-Yard ladder turnouts, Newton Crossover, and IMT Diamonds Project includes track work near the MTS Trolley yard. Specifically, the project includes the following components which will contribute toward maintaining a state of good repair at MTS and improve safety by bringing rail and crossties at up to current standard:

- Procure and install six No. 6 turnouts, which includes the removal of existing turnouts
- Install 720 track feet of new track on concrete ties, which includes removal of existing track
- Procure and install three diamonds, which includes removing the existing diamonds

Tasks

The proposed investment includes the following tasks necessary for completion:

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Project Design	9/1/2018	6/2/2019	2019
2	Procurement Process	6/2/2019	12/2/2019	2019
3	Board Approval/Contract Executed	12/2/2019	2/1/2020	2020
4	Begin Construction	2/1/2020	7/2/2021	2020
5	Final Closeout	7/2/2021	8/2/2021	2022

Deliverables

The proposed project includes the following deliverables:

Deliverables
Installation of six new No. 6 turnouts, including removal of existing turnouts
Installation of 720 track feet of new track on concrete ties, including removal of existing track
Installation of three diamonds, including removal of existing diamonds

Milestones

The proposed investment includes the following milestones and anticipated completion dates:

Milestone:	Estimated Completion
Begin Environmental	5/1/2018
Circulate Draft Environmental Document	5/31/2018
End Environmental Phase	7/5/2018
Begin Design	9/1/2018
End Design	6/2/2019
Begin Procurement	6/2/2019
End Procurement	12/2/2019
Begin Construction Phase (Award Contract)	2/1/2020
End Construction Phase (Final Acceptance)	7/2/2021
Begin Closeout Phase	7/2/2021
End Closeout Phase	8/2/2021

Blue Line Feeder Bus Procurement (23 Articulated Buses)

Summary

The Blue Line Feeder Bus Procurement includes purchasing 23 60-foot articulated buses to be operated on two proposed new Rapid routes: Rapid 725 and Rapid 925. These routes would provide direct connections to the Blue Line with the use of new articulated buses. 12 of the 23 buses would be operated on Rapid 725 and 11 would be operated on Rapid 925.

The 23 buses would be purchased off of an existing contract with New Flyer of America Inc. (MTS Contract No. B0661.0-17) which includes purchasing capacity for up to 50 buses ordered between prior to September 30, 2022.

Tasks

The proposed bus procurement includes the following tasks:

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Issue NTP on Contract B0661.0-17	12/1/2019	12/31/2019	2020
2	Take Delivery of First Vehicle	7/1/2021	7/8/2021	2022
3	Take Delivery of Final Vehicle	8/7/2021	8/14/2021	2022
4	QA Testing and Final Acceptance	7/8/2021	8/21/2021	2022
5	Project Closeout	8/22/2021	9/21/2021	2022

Deliverables

Project deliverables include the following:

Deliverables
23 60-foot Articulated Buses

Milestones

The proposed investment includes the following milestones:

Milestone:	Estimated Completion
Begin Environmental	5/1/2018
Circulate Draft Environmental Document	5/31/2018
End Environmental Phase	7/5/2018
Begin Construction Phase (Award Contract)	12/31/2019
End Construction Phase (Final Acceptance)	8/21/2021
Begin Closeout Phase	8/22/2021
End Closeout Phase	9/21/2021

Blue Line Feeder Bus Procurement (Stop Improvements)

Summary

MTS is proposing two new Rapid bus routes as part of the Blue Line Rail Corridor Transit Enhancements project: Rapid 725 and Rapid 925.

MTS Rapid stations have historically been designed to provide enhanced comfort and convenience. Existing Rapid stations, such as those on the I-15 corridor, feature lighted shelters with seating and electronic signage with real-time, next arrival information. In addition, some of these stations feature curb pop-outs to provide more room for waiting and boarding passengers.

This project component would include converting the existing stops along the proposed Rapid 725 and Rapid 925 to Rapid stops consistent with those in the existing MTS Rapid network. In order to accomplish this, MTS will hire a design consultant to develop the plans and specifications at 17 stops along the proposed Rapid 725 and 16 stops along the proposed Rapid 925. The preliminary plan for stop improvements are summarized in the table below, where "X" indicates that the specific item will be necessary at each stop.

Tasks

The following tasks have been identified for the proposed investment.

Task No.	Task Description	Begin Date	End Date	Fiscal Year
1	Issue Design Work Order to A&E Consultant	3/1/2019	4/30/2019	2019
2	Kick-Off Meeting with A&E Consultant	5/1/2019	5/2/2019	2019
3	Schematic Design and Alternatives Analysis	5/3/2019	7/22/2019	2019
4	Conceptual Review	7/23/2019	10/11/2019	2020
5	Finalize Conceptual Design	10/12/2019	12/31/2019	2020
6	Finalize Plans and Specifications for Construction	1/1/2020	3/21/2020	2020
7	Develop RFP/IFB for construction	3/22/2020	5/6/2020	2020
8	Issue RFP/IFB	5/7/2020	5/8/2020	2020
9	Review Proposals	5/9/2020	6/8/2020	2020
10	Award Construction Contract	6/9/2020	7/9/2020	2020
11	Begin Construction	7/10/2020	8/9/2020	2021
12	End Construction	8/10/2020	8/10/2021	2021
13	Testing and Final Acceptance	8/11/2021	10/10/2021	2022
14	Begin Project Closeout	10/11/2021	11/10/2021	2022
15	End Project Closeout	11/11/2021	12/11/2021	2022

Deliverables

This project component will include the following deliverables. Quantities are subject to minor changes dependent upon final design though none are anticipated at this time.

Deliverables
Final Plans & Specifications from A&E Consultant
Construction/Installation of bus stop improvements at 17 stops along proposed Rapid 725 bus route
Construction/Installation of bus stop improvements at 16 stops along proposed Rapid 925 bus route

Milestones

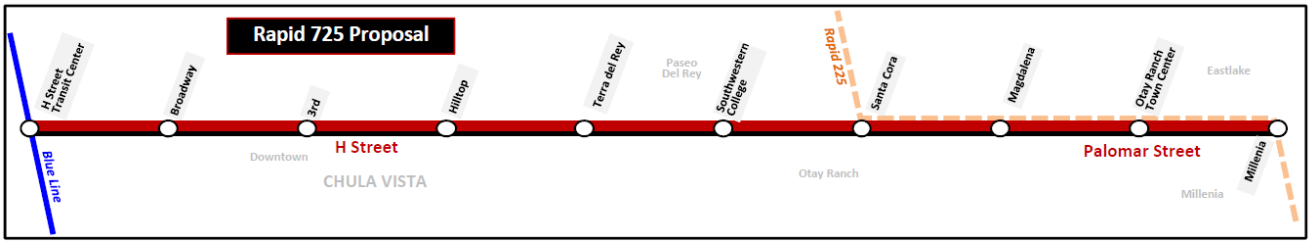
Milestone:	Estimated Completion
Begin Environmental	5/1/2018
Circulate Draft Environmental Document	7/5/2018
End Environmental Phase	7/5/2018
Begin Design	3/1/2019
End Design	3/21/2020
Begin Right of Way Phase (if Necessary)	n/a
End Right of Way Phase (if Necessary)	n/a
Begin Construction Phase (Award Contract)	7/9/2020
End Construction Phase (Final Acceptance)	10/10/2021
Begin Closeout Phase	11/10/2021
End Closeout Phase	12/11/2021

Operations: Implement New Rapid Bus Feeder Service: Route 725 and Route 925

Summary

The Blue Line Rail Corridor Transit Enhancements includes the addition of two additional Rapid bus routes to serve the growing need in the South Bay for access to the Blue Line rail service.

Rapid 725 in Chula Vista would connect the Blue Line (H Street Transit Center), Southwestern College, and Millenia in eastern Chula Vista (25.3 mile round trip). This route would have the added benefit of connecting to the South Bay Rapid, which is under construction and set to open in 2019. MTS would operate Route 725 on weekdays with 7.5-minute peak headways between H Street Transit Center and Southwestern College and 15-minute peak headway between Southwestern College and Millenia.



Rapid 925 would operate from the City of Imperial Beach to the Blue Line (Iris Transit Center), then from the Blue Line to the easternmost international border crossing at the Otay Mesa Transit Center. MTS would provide the service on weekdays with 7.5-minute peak headways between the Otay Mesa Transit Center and the Iris Avenue Transit Center and 15-minute headways between the Iris Avenue Transit Center and the Seacoast station. Weekend service would be provided with 30-minute headways.

Deliverables

Deliverables
Revised schedules to incorporate additional service
Begin operations

Tasks/Milestones

Milestone:	Estimated Completion
Board of Director's Approval of Service Change	10/11/2021
Publish new schedules	11/30/2021
Run Cut	12/31/2021
Begin Operations	1/31/2021

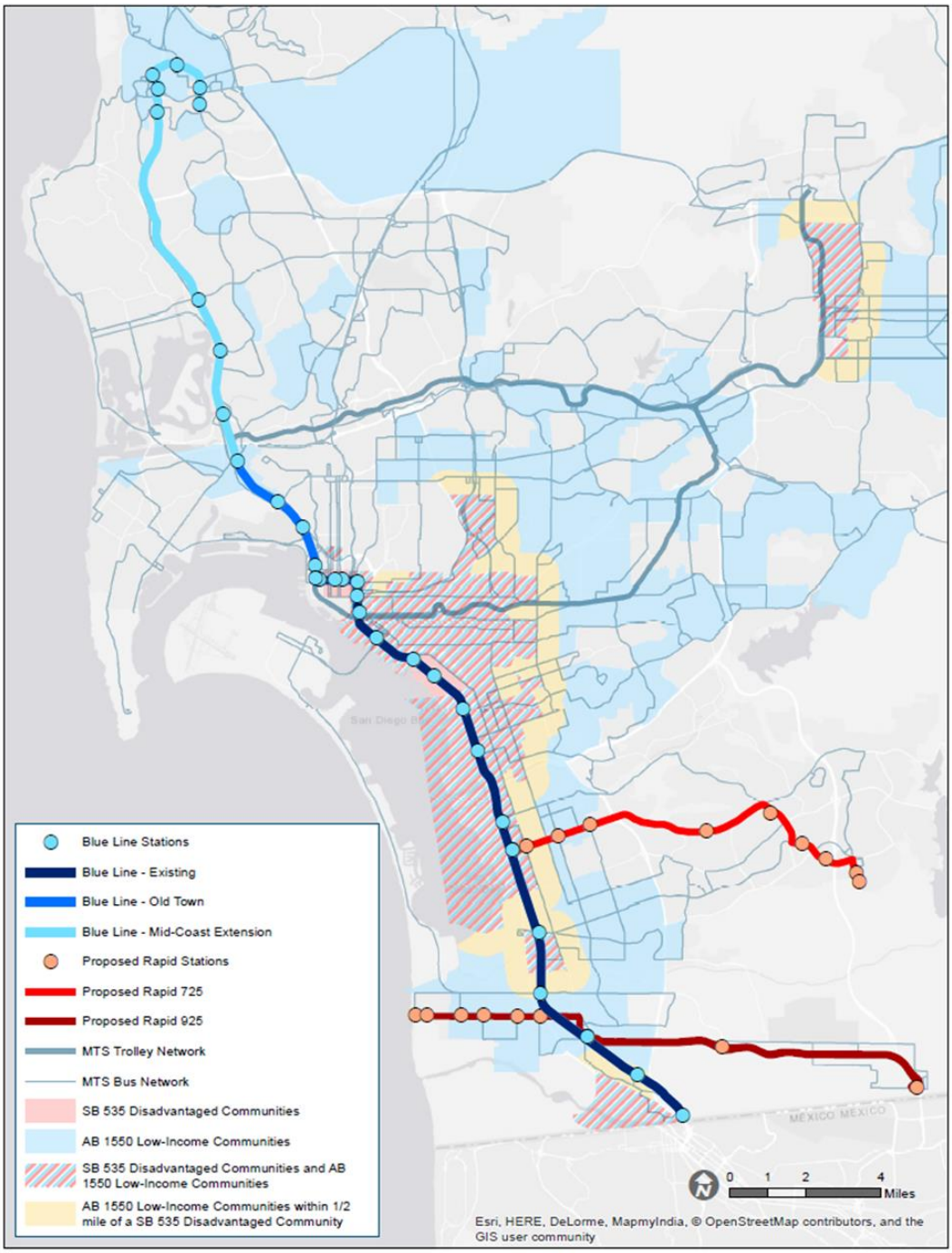
A.2 Project Location

The project is located in various locations in San Diego County, within the cities of San Diego, Chula Vista, Imperial Beach, and National City. Twenty SB 535 disadvantaged communities and 46 AB 1550 low-income communities are directly served by the project.

MTS has included a KML file (File Name: "MTS.Blue.Line.Project.Location.kmz") denoting the project location.

In addition, the map below shows the project location along with the disadvantaged communities and low-income communities that will benefit from the project.

Map of SB 535 Disadvantaged Communities and AB 1550 Low-Income Communities Served by Project



B) Project Costs

All project costs have been escalated to the year of proposed project delivery. Documentation of cost estimates is available upon request.

The costs for the Blue Line Rail Corridor Transit Enhancements are summarized below. The following sections include detailed costs for each project component. Funds were programmed based on when the project phases can be delivered. Funding for design and engineering were programmed in fiscal years prior to construction for each project component. The project component titles indicate whether the project includes design and construction or just construction.

Blue Line Rail Corridor Transit Enhancements						
Project	**Total**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**
Beech Street Double Crossover Design/Construction	5,065	450	4,614	-	-	-
Middletown Double Crossover Construction	6,222	-	6,222	-	-	-
America Plaza Pedestrian Enhancements Design/Construction	4,694	400	4,294	-	-	-
Old Town Transit Center West Enhancements Construction	2,367	2,367	-	-	-	-
Operations: 15-minute Service from Santa Fe Depot to Old Town	6,550	-	-	-	3,275	3,275
Blue Line - Increased Light Rail Service	24,897	3,217	15,130	-	3,275	3,275
Beyer Track and Slope Repair Construction	5,195	5,195	-	-	-	-
America Plaza Track Replacement Design/Construction	1,425	125	1,300	-	-	-
Green Line IMT Double Tracking Design/Construction	8,736	794	7,942	-	-	-
Blue Line Substation Replacement (6 locations) Design/Construction	13,098	600	12,498	-	-	-
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	2,459	350	2,109	-	-	-
Blue Line - State of Good Repair/Performance Improvements	30,913	7,064	23,849	-	-	-
Blue Line Feeder Bus Service (23 Articulated Buses)	24,903	-	-	-	24,903	-
Blue Line Feeder Bus Service (Stop Improvements) Design/Construction	3,865	460	-	3,405	-	-
Rapid 725 Operations	2,849	-	-	-	1,425	1,425
Rapid 925 Operations	4,463	-	-	-	2,231	2,231
Blue Line - New BRT Feeder Service	36,080	460	-	3,405	28,559	3,656
Total Cost	91,891	10,742	38,979	3,405	31,834	6,931

Detailed cost estimates for each of the project components are included in the following sections.

Beech Street Double Crossover

The Beech Street Double Crossover project component will include the following costs:

Item No.	Description	Unit Price	Summary
1	Beech Double Crossover Construction	LS	$ 3,453,193.55
2	Contingency (20%)	LS	$ 690,638.71
3	Admin, PM	LS	$ 100,000.00
4	CM	LS	$ 345,319.36
5	Flagging	LS	$ 25,000.00
6	Design	LS	$ 450,367.06
		TOTAL	**$ 5,064,518.68**

MTS plans to fund this investment with $4,052,000 in TIRCP funds and $1,013,000 in California Transportation Development Act (TDA) funding. The full funding plan by fiscal year and revenue source is included in Section D of the Statement of Work.

Middletown Double Crossover

The Middletown Double Crossover project has the following estimated costs. Design is already funded through the MTS Capital Improvement Program (CIP).

Item No.	Description	Unit Price	Summary	
1	Construction	LS	$	4,689,702.62
2	Contingency (20%)	LS	$	937,940.52
3	Admin, PM	LS	$	100,000.00
4	CM	LS	$	468,970.26
5	Flagging	LS	$	25,000.00
		TOTAL	**$**	**6,221,613.41**

MTS plans to fund this investment with $4,977,000 in TIRCP funds and $1,244,000 in TDA funding, representing a 20 percent match with local funds, excluding $465,000 in TDA funding already committed to the project during the FY 2017 CIP budgeting process.

America Plaza Pedestrian Enhancements

The following cost estimates are based off of similar construction projects at MTS and discussion with engineering firm.

Item No.	Description	Cost
1	Design	$ 400,000
	Subtotal - Design	**$ 400,000**
2	Hardscaping	$ 100,000
3	Landscaping	$ 25,000
4	Widening of Crossing Area	$ 400,000
4	Relocation of Utilities	$ 400,000
5	Traffic Signal Enhancements	$ 120,000
6	Wayfinding Signage (Poles, Signs)	$ 2,500,000
	Subtotal - Construction	**$ 3,545,000**
7	Project Contingency (10%)	$ 394,500
8	Construction Management (10%)	$ 354,500
	Total Cost	**$ 4,694,000**

Old Town Transit Center West Enhancements

The cost estimate for the proposed investment below is based on the 65 percent plans provided by the current design contractor.

Item No.	Description	Unit Price	Summary
1	Construction	LS	$ 2,658,572
2	Inspector	LS	$ 75,125
3	Geotechnical Engineer	LS	$ 153,340
4	Communication work	LS	$ 103,002
5	Design	LS	$ 288,445.00
		Total	$ 3,278,484
		20% Contingency	$ 598,008
		Total Cost	**$ 3,876,492**
		Already Funded	$ 1,510,000
		Total Need	**$ 2,366,492**

MTS has already committed $1,510,000 in TDA funding to the project for design and construction. Based on the total project cost of $3,876,492, MTS still needs $2,367,000 to complete the project. MTS is requesting $2,367,000 in TIRCP funding to complete the project, representing a matching rate of 39 percent.

Operations: 15-Minute Blue Line Service between Santa Fe Depot and Old Town

Operating 15-minute service on the Blue Line between Santa Fe Depot and Old Town is estimated to have a net operating cost of $1,228,000.

WEEKDAY 15 min	
Miles/Trip	3.426
Cars/Trip	3
Trips	147
Car Miles	1510.866
Cost / Mile	$ 4.70
Cost / Day	$ 7,101.07
Days	254
Cost / Year	$ 1,803,672

SUNDAY	
Miles/Trip	3.426
Cars/Trip	3
Trips	135
Car Miles	1387.53
Cost / Mile	$ 4.70
Cost / Day	$ 6,521.39
Days	58
Cost / Year	$ 378,241

SATURDAY	
Miles/Trip	3.426
Cars/Trip	3
Trips	147
Car Miles	1510.866
Cost / Mile	$ 4.70
Cost / Day	$ 7,101.07
Days	53
Cost / Year	$ 376,357

ANNUAL TOTAL COST	
Weekday 15-minute	1,803,671.83
Saturday	376,356.72
Sunday	378,240.68
TOTAL (15-minute Wkdy)	2,558,269.23
Avg. Rail Farebox Recovery	0.52
Less Estimated Farebox Recovery	(1,330,300.00)
Net Annual Operating Costs	**$ 1,227,969**

The FY 2017 annual operating budget for MTS rail operations was $63,140,245. An increase of $1,228,000 per year represents an increase of less than 2% per year of the annual rail operating costs. The current plan is to fund the operations with TransNet local funds administered by SANDAG. If TransNet will not fund the operations, MTS would fund with TDA or other local funds.

Beyer Track and Slope Repair

The cost estimate for this proposed project component is detailed below. Design is already complete for this project and the costs below represent construction costs only.

Item No.	Description	Cost
1	General	$178,000
2	Storm water	$396,680
3	Track work	$1,141,155
4	Earthwork	$570,253
5	Drainage	$71,405
6	Structures	$429,000
7	Access Road	$159,500
8	Hydro seeding	$29,040
9	Fencing	$99,125
	Sub Total	$3,074,200
	Construction Contingency (10)	$673,225
	Construction Management	$605,903
	Flagging/MOW	$200,000
	Bus Bridges	$250,000
	Inflation	$291,968
	Project Management	$100,000
	TOTAL COST(with 15% General Conditions)	**$5,195,296**

MTS plans to fund the proposed investment with $4,156,000 in TIRCP and $1,039,000 in TDA funds, representing a 20 percent non-TIRCP match.

America Plaza Track Replacement

The Santa Fe Depot Pedestrian Enhancements project is estimated to cost $1,425,000. Cost estimates are based on pricing from other rail replacement projects performed for MTS.

Item No.	Item	Cost
1	Design	$125,000
2	Construction	$1,300,000
	TOTAL	**$1,425,000**

MTS plans to fund this project component with $1,140,000 in TIRCP funds and $285,000 in TDA funds, representing a 20 percent non-TIRCP match.

Green Line IMT Double Tracking

The proposed investment is expected to have the following costs.

Item No.	Description	Cost
1	Engineering & Design	$ 822,210.40
Subtotal Design		**$ 822,210.40**
2	Mobilization	$ 808,500.00
3	Excavation, Clearing, and Grubbing	$ 255,339.00
4	Storm Water Mitigation	$ 36,750.00
5	Pavement	$ 283,085.25
6	Contaminated Soil	$ 14,376.60
7	Traffic and Pedestrian Control Systems, Signage	$ 426,300.00
8	Drainage	$ 117,423.60
9	Conduit	$ 147,802.62
10	Electrical	$ 204,862.14
11	Lighting	$ 130,212.60
12	Track work	$ 1,183,180.95
13	Traction Power	$ 312,983.58
14	Overhead Catenary System (OCS)	$ 1,266,108.06
15	OCS	$ 5,918.22
16	Signaling	$ 1,920,391.83
17	Station	$ 967,260.00
18	Landscaping	$ 141,609.51
Subtotal Construction		**$ 8,222,103.96**
	Construction Contingency (10%)	$ 822,210.40
	Total Costs (Design + Construction)	**$ 9,866,524.75**

MTS plans to fund this project component with $6,989,000 in TIRCP funds and $1,747,000 in Senate Bill 1 (SB1) State of Good Repair (SGR) funds, representing a non-TIRCP match of 20 percent.

Blue Line Substation Replacement

The Blue Line Substation Replacement project is estimated to cost a total of $13,098,000. Pricing is based on a current contract with Siemens for substation upgrades.

Item No.	Description	Quantity	Unit Price	Summary
1	Design	4	$ 150,000	$ 600,000
2	Installation	6	$ 740,093	$ 4,440,556.32
3	Procurement	6	$ 726,032	$ 4,356,193.38
			Subtotal	**$ 8,796,750**
			20% Contingency	$ 1,759,350
			CM Services	$ 1,500,000
			Admin	$ 300,000
			Flagging	$ 142,000
			Total	**$ 13,098,000**

MTS plans to fund the proposed investment with $10,478,000 in TIRCP funds and $2,620,000 in TDA funds, representing a 20 percent non-TIRCP match.

A-Yard Turnouts, Newton Crossover, IMT Diamonds

This investment is estimated to cost a total of $2,458,750 per the cost estimate below. Cost estimates are based on similar projects performed on the MTS rail system. Costs have been escalated until the time of delivery.

Item No.	Description	Cost	Subtotal
1	Design:		
2	Agency Design Admin (MTS)	$50,000	
3	Design (30%)	$75,000	
4	Design (60%)	$112,500	
5	Design (100%)	$112,500	
Design Total			**$350,000**
6	Construction:		
7	Track work	$400,000	
8	Special Track work	$1,300,000	
9	Signal Bonding and Testing	$50,000	
Base Construction Estimate (BCE)			**$1,750,000**
10	Contractor Mobilization (2% of BCE)	$35,000	
11	Contractor Demobilization (.05%) of BCE)	$8,750	
12	Contingency (10% of BCE)	$175,000	
Construction Contract Estimate			**$1,968,750**
13	Agency Construction (MTS Admin)	$100,000	
14	Design Support During Construction	$25,000	
15	Flagging Services	$15,000	
Construction Total			**$2,108,750**
Total Project Costs (Design + Construction)			**$2,458,750**

MTS plans to fund this project component with $1,967,000 in TIRCP and $492,000 in TDA, representing a 20 percent non-TIRCP match.

Blue Line Feeder Bus Service: 23 Articulated Buses

The cost estimates below are based off of the actual contract pricing with New Flyer Industries, Inc. (MTS Contract No. B0661.0-17) escalated to the proposed delivery date in FY2022 (based on FY 2021 pricing since they would be ordered in FY 2021).

Item No.	Description	Quantity	Unit Cost	Total Cost
1	New Flyer 60-foot CNG Articulated Buses	23	$ 1,082,742	$ 24,903,066
			Total	**$ 24,903,066**

Rapid 725: and Rapid 925: Bus Stop Improvements

The total cost for the bus stop improvements along the proposed Rapid 725 and Rapid 925 bus routes is estimated to be $3,865,280. Certain bus stops will not need full-scale improvements as indicated in the table below. These estimates were based on the anticipated needs per stop and historical pricing from similar MTS projects.

			ROW	Design, Eng. & Permits	Hard-scaping	Rapid Shelter	Benches (4)	Trash Can	Info Kiosk	VMS Pole & Sign	Conduit	Contingency	
				$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	20%	**TOTAL**
RAPID 725													
DIR	STREET	CROSS	*ROW*	*Des & Eng*	*Concrete*	*Shelter*	*Benches*	*Trash Can*	*Kiosk*	*VMS*	*Conduit*	*Conting.*	*TOTAL*
EB	H St	Broadway	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
EB	H St	3rd Ave	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
EB	H St	Hilltop Dr	n/a	n/a	n/a	n/a	$4,800	$1,000	n/a	n/a	n/a	n/a	**$5,800**
EB	East H St	Terra del Rey	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
Southwestern College Transit Center			n/a	$20,000	n/a	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$18,360	**$110,160**
EB	Santa Cora Rapid Station		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**$0**
EB	Magdalena Rapid Station		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**$0**
SB	Otay Ranch Town Center Rapid Station		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**$0**
WB	Millenia Rapid Station		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**$0**
NB	Otay Ranch Town Center Rapid Station		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**$0**
WB	Magdalena Rapid Station		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**$0**
WB	Santa Cora Rapid Station		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**$0**
WB	East H St	Terra del Rey	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
WB	H St	Hilltop Dr	n/a	n/a	n/a	n/a	$4,800	$1,000	n/a	n/a	n/a	n/a	**$5,800**
WB	H St	3rd Ave	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
WB	H St	Broadway	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
H Street Trolley Station			n/a	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
			$0	**$160,000**	**$350,000**	**$160,000**	**$48,000**	**$10,000**	**$20,000**	**$328,000**	**$20,000**	**$216,880**	**$1,312,880**

RAPID 925													
DIR	STREET	CROSS	*ROW*	*Des & Eng*	*Concrete*	*Shelter*	*Benches*	*Trash Can*	*Kiosk*	*VMS*	*Conduit*	*Conting.*	*TOTAL*
WB	SR-905 On-ram	Caliente Ave	n/a	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
WB	Iris Ave	30th St	n/a	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
WB	Coronado Ave	Hollister St	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
WB	Coronado Ave	Saturn Bl (19th St)	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
WB	Imperial Beach	13th St	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
WB	Imperial Beach	9th St (Park)	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
WB	Imperial Beach	3rd St	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
TBD	Seacoast Dr	TBD	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
EB	Imperial Beach	3rd St	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
EB	Imperial Beach	9th St	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
EB	Imperial Beach	13th St	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
EB	Coronado Ave	Saturn Bl (19th St)	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
EB	Coronado Ave	Hollister St	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
SB	30th St	Iris Ave	n/a	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
EB	SR-905 On-ram	Caliente Ave	TBD	$20,000	$50,000	$20,000	$4,800	$1,000	$2,500	$41,000	$2,500	$28,360	**$170,160**
Otay Mesa Transit Center			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**$0**
			$0	**$300,000**	**$750,000**	**$300,000**	**$72,000**	**$15,000**	**$37,500**	**$615,000**	**$37,500**	**$425,400**	**$2,552,400**

TOTAL COSTS			**$0**	**$460,000**	**$1,100,000**	**$460,000**	**$120,000**	**$25,000**	**$57,500**	**$943,000**	**$57,500**	**$642,280**	**$3,865,280**

MTS plans to fund this project component with $2,655,000 in TIRCP funds and $664,000 in TDA funds, a non-TIRCP match of 20 percent.

Rapid 725 and Rapid 925: Operations

The cost estimates below represent the net operating costs for the proposed services. Existing routes 709L and the 950 would be discontinued and replaced with the new Rapid bus services. Hence, the costs of these routes were subtracted from the net cost as detailed below.

	WKDY	SAT	SUN	TOTAL		Annual	FY17	Annual	Net
ROUTE	**DAILY**	**DAILY**	**DAILY**	**Annual**	***RATE***	**Cost**	**FRR**	**Fare Rev**	**Op Cost**
SBMF	I-S Mi	I-S Mi	I-S Mi						
709L (Discontinued)	(135)	0	0	(20,730)	$6.43	($133,294)	45.7%	($60,915)	($72,378)
Rapid 725	1,688	0	0	428,752	$6.43	$2,756,875	45.7%	$1,259,892	$1,496,983
Net Cost	**1,553**	**0**	**0**	**408,022**		**$2,623,582**		**$1,198,977**	**$1,424,605**
950 (Discontinued)	(355)	(127)	(127)	(104,359)	$6.43	($671,026)	36.8%	($246,938)	($424,089)
Rapid 925	2,242	810	708	653,464	$6.43	$4,201,774	36.8%	$1,546,253	$2,655,521
Net Cost	**1,887**	**683**	**582**	**549,105**		**$3,530,747**		**$1,299,315**	**$2,231,432**
Total Net Cost	**3,440**	**683**	**582**	**957,127**		**$6,154,329**		**$2,498,292**	**$3,656,037**

As detailed above, the Rapid 725 route would have a net cost of approximately $1,425,000 per year and the Rapid 925 would have a net cost of approximately $2,231,000 per year for a combined budgetary impact of $3,656,000 per year beginning in FY 2022. MTS plans to fund these services entirely with State Transit Assistance augmented by California Senate Bill 1.

C) Project Schedule

Schedules for each project component of the Blue Line Rail Corridor Transit Enhancement project are included in Section A.1 of the Statement of Work under the Milestones headings.

D) Funding Sources and Approach to Ongoing Operating Costs to Ensure Ongoing Operating and Maintenance Costs are Funded through Useful Life of Project

D.1 Funding Sources

MTS will commit a combination of California Transportation Development Act (TDA), California Senate Bill (SB) 1 State of Good Repair (SGR) funding, and State Transit Assistance (STA) funding to the project contingent upon a successful TIRCP award. Specifically, MTS plans to commit a total of $13,385,000 in TDA, a total of $1,747,000 in SB1 SGR funding, a total of $7,312,000 in STA funding (operations during five year programming cycle), and a total of $6,550,000 in TransNet funding (operations during five year programming cycle) to match the TIRCP request of $62,896,000. These funding sources are formula based and do not require a competitive process for allocation. Each of the referenced funding sources is detailed below.

Senate Bill 1 State of Good Repair (SB1 SGR)

The Road Repair and Accountability Act of 2017, Senate Bill 1 (Chapter 5, Statues of 2017), signed by the Governor on April 28, 2017, includes a program that will provide additional revenues for transit infrastructure repair and service improvements. This investment in public transit is referred to as the State of Good Repair program. This program provides funding of approximately $105 million annually to the State Transit Assistance (STA) Account. These funds are made available for eligible transit, maintenance, rehabilitation, and capital projects. The SGR program is funded by from a portion of a new Transportation Improvement Fee on vehicle registrations due on or after January 1, 2018. The SGR program is formula based and allocations are distributed by the State Controller's Office. MTS's allocation of SGR revenues in FY17-FY18 was $4,551,892 (Attachment No. 2). As long as SB1 is not repealed, MTS expects this figure to be relatively stable.

Senate Bill 1 Augmented State Transit Assistance (STA)

The Road Repair and Accountability Act of 2017 also includes an increase of approximately $250 million for conventional State Transit Assistance (STA) formula funds (non-SGR) per year. The additional STA apportionment is funded by an increase in the sales tax on diesel gas. MTS received a total STA formula allocation (excluding SGR) of $20,325,236 for the 2017-18 fiscal year (Attachment No. 3), of which approximately 36 percent was augmented by additional SB1 funds. This means $7,317,085 of the apportionment was augmented by SB1. Furthermore, this portion of STA represents funding from only eight months of collecting increased diesel taxes rather than a full 12 months since the tax was effective in November 2017. Hence, MTS projects an annual apportionment of approximately $11 million in fiscal years beyond 2017-18 when accounting a full year of collecting the increased diesel sales tax revenues. This portion of funds can be used for capital projects and/or operations.

California Transportation Development Act (TDA)

TDA is a state fund derived from one-quarter of a percent of the eight percent sales tax assessed in the region. MTS spends approximately $60 million per year of TDA on operations and allocates approximately $35 million per year for capital projects. TDA apportionments are currently projected to increase by approximately four percent annually. Please see Attachment No. 4 which shows the most recent SANDAG, the administering agency, projections for TDA apportionments between FY 2019 and FY2022.

TransNet

In November of 2004, area voters approved a 40-year extension of the one-half cent sales tax original ordinance that was set to expire in 2008 (TransNet II). The extension is expected to generate more than $14 billion for transportation improvements, with the funds allocated for transit expansion, highway projects, local roads, and other new programs. MTS is projected to receive an average of $33.3 million per year between FY 2018 and FY 2022 with an average annual growth rate of approximately 4 percent. Furthermore, MTS is projected to receive approximately $36.7 million in FY 2022, the first year in which MTS plans to utilize the funds for increased service on the Blue Line. Attachment No. 5 was provided by SANDAG and includes the current TransNet revenue forecasts through FY 2022.

Each of the project components will be funded according to the following breakdown.

Blue Line Rail Corridor Transit Enhancements: Funding Strategy							
Project Component	**Total**	**TIRCP**	**SB1 SGR**	**SB1 STA**	**TDA/Local**	**Transnet**	**Match**
Beech Street Double Crossover Design/Construction	5,065	4,052	-	-	1,013	-	0.20
Middletown Double Crossover Construction	6,222	4,977	-	-	1,244	-	0.20
America Plaza Pedestrian Enhancements - Design/Construction	4,694	3,755	-	-	939	-	0.20
Old Town Transit Center West Enhancements - Construction	2,367	2,367	-	-	-	-	-
Beyer Track and Slope Repair - Construction	5,195	4,156	-	-	1,039	-	0.20
America Plaza Track Replacement - Design/Construction	1,425	1,140	-	-	285	-	0.20
Green Line IMT Double Tracking Design/Construction	8,736	6,989	1,747	-	-	-	0.20
Blue Line Substation Replacement (6 locations) - Design/Construction	13,098	10,478	-	-	2,620	-	0.20
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	2,459	1,967		-	492	-	0.20
Blue Line Feeder Bus Service (23 Articulated Buses & Stop Improvements)	24,903	19,922	-	-	4,981	-	0.20
Blue Line Feeder Bus Service (Stop Improvements)	3,865	3,092	-	-	773	-	0.20
Capital Total	78,028	62,896	1,747	-	13,385	-	0.19
Increased Frequency (Santa Fe Depot to Old Town)	6,550	-	-	-	-	6,550	1.00
Rapid 725 Operations	2,849	-	-	2,849	-	-	1.00
Rapid 925 Operations	4,463	-	-	4,463	-	-	1.00
Operating Total (during 5-year programming cycle)	13,862	-	-	7,312	-	6,550	1.00
Grand Total	91,890	62,896	1,747	7,312	13,385	6,550	0.32

Please see Attachment No. 9 in the supporting documentation for a letter signed by the chief financial officer committing the non-TIRCP matching funds referenced above. MTS will supplement lower than expected revenues with additional local funds.

D.2 Revenue Programming by Fiscal Year

The tables below indicate the proposed funding strategy for the project broken out by fiscal year over the five-year programming cycle. All non-TIRCP revenues for this project are formula based and will not be contingent upon a discretionary award.

FY 2019:

Project Component	Total	TIRCP	LCTOP	SB1 SGR	SB1 STA	TDA/Local	Transnet	Match
Beech Street Double Crossover	450	360	-	-	-	90	-	20.00%
Middletown Double Crossover	-	-	-	-	-	-	-	0.00%
America Plaza Pedestrian Enhancements	400	320	-	-	-	80	-	20.00%
Old Town Transit Center West Enhancments	2,367	2,367	-	-	-	-	-	0.00%
Beyer Track and Slope Repair	5,195	4,156	-	-	-	1,039	-	20.00%
America Plaza Track Replacement	125	100	-	-	-	25	-	20.00%
Green Line IMT Double Tracking Design/Construction	794	635	-	159	-		-	20.00%
Blue Line Substation Replacement (6 locations)	600	480	-	-	-	120	-	20.00%
A Yard Turnouts, Newton Crossover, IMT Diamonds	350	280	-	-	-	70	-	20.00%
Blue Line Feeder Bus Service (23 Articulated Buses)	-	-	-	-	-	-	-	0.00%
Blue Line Feeder Bus Service (Stop Improvements)	460	368	-	-	-	92	-	20.00%
Capital Total	10,742	9,067	-	159	-	1,516	-	15.59%
Increased Frequency (Santa Fe Depot to Old Town)	-	-	-	-	-	-	-	0.00%
Rapid 725 Operations	-	-	-	-	-	-	-	0.00%
Rapid 925 Operations	-	-	-	-	-	-	-	0.00%
Operating Total	-	-	-	-	-	-	-	0.00%
Grand Total	10,742	9,067	-	159	-	1,516	-	15.59%

FY 2020:

Project Component	Total	TIRCP	LCTOP	SB1 SGR	SB1 STA	TDA	Transnet	Match
Beech Street Double Crossover	4,614	3,691	-	-	-	923	-	20.00%
Middletown Double Crossover	6,222	4,977	-	-	-	1,244	-	20.00%
America Plaza Pedestrian Enhancements	4,294	3,435	-	-	-	859	-	20.00%
Old Town Transit Center West Enhancments	-	-	-	-	-	-	-	0.00%
Beyer Track and Slope Repair	-	-	-	-	-	-	-	0.00%
America Plaza Track Replacement	1,300	1,040	-	-	-	260	-	20.00%
Green Line IMT Double Tracking Design/Construction	7,942	6,354	-	1,588	-	-	-	20.00%
Blue Line Substation Replacement (6 locations)	12,498	9,998	-	-	-	2,500	-	20.00%
A Yard Turnouts, Newton Crossover, IMT Diamonds	2,109	1,687			-	422	-	20.00%
Blue Line Feeder Bus Service (23 Articulated Buses)	-	-	-	-	-	-	-	0.00%
Blue Line Feeder Bus Service (Stop Improvements)	-	-	-	-	-	-	-	0.00%
Capital Total	38,979	31,183	-	1,588	-	6,207	-	20.00%
Increased Frequency (Santa Fe Depot to Old Town)	-	-	-	-	-	-	-	0.00%
Rapid 725 Operations	-	-	-	-	-	-	-	0.00%
Rapid 925 Operations	-	-	-	-	-	-	-	0.00%
Operating Total	-	-	-	-	-	-	-	0.00%
Grand Total	38,979	31,183	-	1,588	-	6,207	-	20.00%

FY 2021:

Project Component	Total	TIRCP	LCTOP	SB1 SGR	SB1 STA	TDA	Transnet	Match
Beech Street Double Crossover	-	-	-	-	-	-	-	0.00%
Middletown Double Crossover	-	-	-	-	-	-	-	0.00%
America Plaza Pedestrian Enhancements	-	-	-	-	-	-	-	0.00%
Old Town Transit Center West Enhancments	-	-	-	-	-	-	-	0.00%
Beyer Track and Slope Repair	-	-	-	-	-	-	-	0.00%
America Plaza Track Replacement	-	-	-	-	-	-	-	0.00%
Green Line IMT Double Tracking Design/Construction	-	-	-	-	-	-	-	0.00%
Blue Line Substation Replacement (6 locations)	-	-	-	-	-	-	-	0.00%
A Yard Turnouts, Newton Crossover, IMT Diamonds	-	-			-	-	-	0.00%
Blue Line Feeder Bus Service (23 Articulated Buses)	-	-	-	-	-	-	-	0.00%
Blue Line Feeder Bus Service (Stop Improvements)	3,405	2,724	-	-	-	681	-	20.00%
Capital Total	3,405	2,724	-	-	-	681	-	20.00%
Increased Frequency (Santa Fe Depot to Old Town)	-	-	-	-		-	-	0.00%
Rapid 725 Operations	-	-	-	-		-	-	0.00%
Rapid 925 Operations	-	-	-	-		-	-	0.00%
Operating Total	-	-	-	-		-	-	0.00%
Grand Total	3,405	2,724	-	-		681	-	20.00%

FY 2022:

Project Component	Total	TIRCP	LCTOP	SB1 SGR	SB1 STA	TDA	Transnet	Match
Beech Street Double Crossover	-	-	-	-	-	-	-	0.00%
Middletown Double Crossover	-	-	-	-	-	-	-	0.00%
America Plaza Pedestrian Enhancements	-	-	-	-	-	-	-	0.00%
Old Town Transit Center West Enhancments	-	-	-	-	-	-	-	0.00%
Beyer Track and Slope Repair	-	-	-	-	-	-	-	0.00%
America Plaza Track Replacement	-	-	-	-	-	-	-	0.00%
Green Line IMT Double Tracking Design/Construction	-	-	-	-	-	-	-	0.00%
Blue Line Substation Replacement (6 locations)	-	-	-	-	-	-	-	0.00%
A Yard Turnouts, Newton Crossover, IMT Diamonds	-	-			-	-	-	0.00%
Blue Line Feeder Bus Service (23 Articulated Buses)	24,903	19,922	-	-	-	4,981	-	20.00%
Blue Line Feeder Bus Service (Stop Improvements)	-	-	-	-	-	-	-	0.00%
Capital Total	24,903	19,922	-	-	-	4,981	-	20.00%
Increased Frequency (Santa Fe Depot to Old Town)	3,275	-	-	-	-	-	3,275	0.00%
Rapid 725 Operations	1,425	-	-	-	1,425	-	-	100.00%
Rapid 925 Operations	2,231	-	-	-	2,231	-	-	100.00%
Operating Total	6,931	-	-	-	3,656	-	3,275	52.75%
Grand Total	31,834	19,922	-	-	3,656	4,981	3,275	27.13%

FY 2023:

Project Component	Total	TIRCP	LCTOP	SB1 SGR	SB1 STA	TDA/Local	Transnet	Match
Beech Street Double Crossover	-	-	-	-	-	-	-	0.00%
Middletown Double Crossover	-	-	-	-	-	-	-	0.00%
America Plaza Pedestrian Enhancements	-	-	-	-	-	-	-	0.00%
Old Town Transit Center West Enhancments	-	-	-	-	-	-	-	0.00%
Beyer Track and Slope Repair	-	-	-	-	-	-	-	0.00%
America Plaza Track Replacement	-	-	-	-	-	-	-	0.00%
Green Line IMT Double Tracking Design/Construction	-	-	-	-	-	-	-	0.00%
Blue Line Substation Replacement (6 locations)	-	-	-	-	-	-	-	0.00%
A Yard Turnouts, Newton Crossover, IMT Diamonds	-	-			-	-	-	0.00%
Blue Line Feeder Bus Service (23 Articulated Buses)	-	-	-	-	-	-	-	0.00%
Blue Line Feeder Bus Service (Stop Improvements)	-	-	-	-	-	-	-	0.00%
Capital Total	-	-	-	-	-	-	-	0.00%
Increased Frequency (Santa Fe Depot to Old Town)	3,275	-	-	-	-	-	3,275	0.00%
Rapid 725 Operations	1,425	-	-	-	1,425	-	-	100.00%
Rapid 925 Operations	2,231	-	-	-	2,231	-	-	100.00%
Operating Total	6,931	-	-	-	3,656	-	3,275	52.75%
Grand Total	6,931	-	-	-	3,656	-	3,275	52.75%

E) Project Scalability

The Blue Line Rail Corridor Transit Enhancements project is scalable in a variety of ways. The table below will be used to discuss scalability.

Blue Line Rail Corridor Transit Enhancements	
Project	**Total**
Beech Street Double Crossover Design/Construction	5,065
Middletown Double Crossover Construction	6,222
America Plaza Pedestrian Enhancements Design/Construction	4,694
Old Town Transit Center West Enhancements Construction	2,367
Operations: 15-minute Service from Santa Fe Depot to Old Town	6,550
Blue Line - Increased Light Rail Service	24,897
Beyer Track and Slope Repair Construction	5,195
America Plaza Track Replacement Design/Construction	1,425
Green Line IMT Double Tracking Design/Construction	8,736
Blue Line Substation Replacement (6 locations) Design/Construction	13,098
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	2,459
Blue Line - State of Good Repair/Performance Improvements	30,913
Blue Line Feeder Bus Service (23 Articulated Buses)	24,903
Blue Line Feeder Bus Service (Stop Improvements) Design/Construction	3,865
Rapid 725 Operations	2,849
Rapid 925 Operations	4,463
Blue Line - New BRT Feeder Service	36,080
Total Cost	91,891

Of course MTS prefers a fully funded project that incorporates each of the project components included in above. However, if a partial award were offered as a result of funding constraints, MTS would prefer the following scaled funding options:

Scaled Funding – Option 1:

The highest priority sub-set of projects is the group of projects that are directly aimed at increasing service on the Blue Line and maintaining a state of good repair. Combined, these projects would provide the operational flexibility, customer attraction, improved safety, increased service reliability, and increased service levels necessary for growing ridership on the Blue Line.

Blue Line Rail Corridor Transit Enhancements		Revenue						
Project	**Total**	**TIRCP**	**LCTOP**	**SB1 SGR**	**SB1 STA**	**TDA/Local**	**Transnet**	**Match %**
Beech Street Double Crossover	5,065	4,052	-	-	-	1,013	-	20%
Middletown Double Crossover	6,222	4,977	-	-	-	1,244	-	20%
America Plaza Pedestrian Enhancements	4,694	3,755	-	-	-	939	-	20%
Old Town Transit Center West Enhancements	2,367	2,367	-	-	-	-	-	0%
Operations: 15-minute Service from Santa Fe Depot to Old Town	6,550	-	-	-	-	-	6,550	100%
Blue Line - Increased Light Rail Service	24,897	15,151	-	-	-	3,196	6,550	13%
Beyer Track and Slope Repair	5,195	4,156	-	-	-	1,039	-	20%
America Track Replacement	1,425	1,140	-	-	-	285	-	20%
Green Line IMT Double Tracking Design/Construction	8,736	6,989	-	1,747	-	-	-	20%
Blue Line Substation Replacement (6 locations)	13,098	10,478	-	-	-	2,620	-	20%
A Yard Turnouts, Newton Crossover, IMT Diamonds	2,459	1,967	-	-	-	492	-	20%
Blue Line - State of Good Repair/Performance Improvements	30,913	24,730	-	1,747	-	4,435	-	20%
TOTAL - Scaled Option No. 1	55,810	39,882	-	1,747	-	7,631	6,550	29%

Scaled Funding – Option 2:

The second priority scaled funding option would be to fund the "Increased Light Rail Service" projects in the table below. These projects provide the essential infrastructure necessary increasing operational flexibility and for operating the increased service on the Blue Line as well as some of the basic elements designed to attract more customers.

Blue Line Rail Corridor Transit Enhancements		Revenue						
Project	**Total**	**TIRCP**	**LCTOP**	**SB1 SGR**	**SB1 STA**	**TDA/Local**	**Transnet**	**Match %**
Beech Street Double Crossover	5,065	4,052	-	-	-	1,013	-	20%
Middletown Double Crossover	6,222	4,977	-	-	-	1,244	-	20%
America Plaza Pedestrian Enhancements	4,694	3,755	-	-	-	939	-	20%
Old Town Transit Center West Enhancements	2,367	2,367	-	-	-	-	-	0%
Operations: 15-minute Service from Santa Fe Depot to Old Town	6,550	-	-	-	-	-	6,550	100%
Blue Line - Increased Light Rail Service	24,897	15,151	-	-	-	3,196	6,550	13%

This core sub-set of projects could then be combined with any combination of the State of Good Repair centered projects from the table below or none at all if funding was insufficient. These State of Good Repair projects do not reduce greenhouse gas emissions as stand-alone projects; therefore, they would need to be combined with the service-increasing projects in the table above to be eligible.

Blue Line Rail Corridor Transit Enhancements		Revenue						
Project	**Total**	**TIRCP**	**LCTOP**	**SB1 SGR**	**SB1 STA**	**TDA/Local**	**Transnet**	**Match %**
Beyer Track and Slope Repair Construction	5,195	4,156	-	-	-	1,039	-	20%
America Plaza Track Replacement Design/Construction	1,425	1,140	-	-	-	285	-	20%
Green Line IMT Double Tracking Design/Construction	8,736	6,989	-	1,747	-	-	-	20%
Blue Line Substation Replacement (6 locations) Design/Construction	13,098	10,478	-	-	-	2,620	-	20%
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	2,459	1,967	-	-	-	492	-	20%
Blue Line - State of Good Repair/Performance Improvements	30,913	24,730	-	1,747	-	4,435	-	20%

Scaled Funding – Option 3:

The third priority scaled project option would include the Blue Line Feeder Rapid bus projects outlined below. The procurement of 23 buses would need to be awarded in full for MTS to justify implementing the proposed Rapid bus routes and incurring the additional operating costs.

Blue Line Rail Corridor Transit Enhancements		Revenue						
Project	Total	TIRCP	LCTOP	SB1 SGR	SB1 STA	TDA/Local	Transnet	Match %
Blue Line Feeder Bus Service (23 Articulated Buses)	24,903	19,922	-	-	-	4,981	-	20%
Blue Line Feeder Bus Service (Stop Improvements) Design/Construction	3,865	3,092	-	-	-	773	-	20%
Rapid 725 Operations	2,849	-	-	-	2,849	-	-	100%
Rapid 925 Operations	4,463	-	-	-	4,463	-	-	100%
Blue Line - New BRT Feeder Service	36,080	23,015	-	-	7,312	5,754	-	36%

Scaled Funding – Option 4:

MTS would consider an award for any combination of capital components described in the application that strayed from the central priorities above. MTS staff would be open to discuss any proposed departures from the options above with TIRCP staff to ensure that the project benefits could justify the significant operating costs going forward.

Attachment No. 1

Certification of Cost Estimates

Metropolitan Transit System

1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466

Certification of Cost Estimates

I, Paul Jablonski, Chief Executive Officer of the San Diego Metropolitan Transit System, approve the cost estimates included in the Blue Line Rail Corridor Transit Enhancements project application submitted for the 2018 Transit and Intercity Rail Capital Program.

Paul Jablonski, Chief Executive Officer

1/1/2018
Date

Attachment No. 2

2017-18 State Transit Assistance Augmented by Senate Bill 1 Allocation

BETTY T. YEE
California State Controller

November 3, 2017

County Auditors Responsible for State Transit Assistance funds
Transportation Planning Agencies
County Transportation Commissions
San Diego Metropolitan Transit System

SUBJECT: Reissuance of the 2017-18 State of Good Repair Program Allocation Estimate

We are reissuing the schedules of State of Good Repair (SGR) program funds estimate that was released on October 20, 2017. We were informed of an error in our previous estimate and have recalculated the estimate to include all STA-eligible operators.

Enclosed is the reissued summary schedule for State of Good Repair (SGR) program funds available to be allocated for fiscal year (FY) 2017-18 to each Transportation Planning Agency (TPA), county transportation commission, and the San Diego Metropolitan Transit System for the purposes of Public Utilities Code (PUC) section 99312.1(c). Allocations for the SGR program are calculated pursuant to the distribution formulas in PUC sections 99313 and 99314. Also enclosed is a schedule detailing the estimated available amount calculated pursuant to PUC section 99314 for each TPA by operator.

PUC section 99313 allocations are based on the certification of population from the California Department of Transportation (DOT) as required in PUC section 99313(a). PUC section 99314 allocations are based on the qualifying revenue amounts for each STA-eligible operator, determined from annual reports submitted to the Controller pursuant to PUC section 99243.

The estimated amount of SGR funds budgeted in the FY 2017-18 California Budget is $105,000,000. Prior to receiving an apportionment of SGR program funds in a fiscal year, an agency must submit a list of projects proposed to be funded to the DOT. The DOT reports to the Controller the eligible agencies that will receive an allocation quarterly pursuant to Sections 99313 and 99314. We anticipate that the first allocation to eligible agencies will be paid by May 31, 2018. Please refer to the schedule for the amounts that relate to your agency.

Local Government Programs and Services Division
MAILING ADDRESS P.O. Box 942850, Sacramento, CA 94250
3301 C Street, Suite 700, Sacramento, CA 95816

Please contact Mike Silvera by telephone at (916) 323-0704 or email at msilvera@sco.ca.gov with any questions, or for additional information about this schedule. Information for the SGR program can be found http://www.dot.ca.gov/drmt/spstasgr.html. We apologize for any inconvenience this may have caused.

Sincerely,

EVELYN CALDERON-YEE, Bureau Chief
Bureau of Payments

Enclosures

STATE CONTROLLER'S OFFICE
2017-18 STATE OF GOOD REPAIR PROGRAM
ESTIMATED AVAILABLE AMOUNT SUMMARY
NOVEMBER 3, 2017
REVISED

Regional Entity	Estimated Available 2017-18 Amount Based on PUC 99313 Allocation	Estimated Available 2017-18 Amount Based on PUC 99314 Allocation	Total Estimated Available 2017-18 Amount Allocation
	A	**B**	**C= (A + B)**
Metropolitan Transportation Commission	$ 10,247,507	$ 27,325,923	$ 37,573,430
Sacramento Area Council of Governments	2,530,714	942,273	3,472,987
San Diego Association of Governments	1,272,594	470,625	1,743,219
San Diego Metropolitan Transit System	3,132,370	1,419,522	4,551,892
Tahoe Regional Planning Agency	135,784	14,577	150,361
Alpine County Transportation Commission	1,529	92	1,621
Amador County Transportation Commission	50,984	2,715	53,699
Butte County Association of Governments	300,737	18,465	319,202
Calaveras County Local Transportation Commission	59,998	1,031	61,029
Colusa County Local Transportation Commission	29,280	1,067	30,347
Del Norte County Local Transportation Commission	36,029	2,086	38,115
El Dorado County Local Transportation Commission	218,762	16,922	235,684
Fresno County Council of Governments	1,322,973	194,722	1,517,695
Glenn County Local Transportation Commission	38,164	1,228	39,392
Humboldt County Association of Governments	181,917	29,527	211,444
Imperial County Transportation Commission	250,168	21,297	271,465
Inyo County Local Transportation Commission	24,732	0	24,732
Kern Council of Governments	1,188,995	79,494	1,268,489
Kings County Association of Governments	198,633	11,393	210,026
Lake County/City Council of Governments	86,268	5,180	91,448
Lassen County Local Transportation Commission	41,069	2,153	43,222
Los Angeles County Metropolitan Transportation Authority	13,603,692	18,085,788	31,689,480
Madera County Local Transportation Commission	207,871	2,688	210,559
Mariposa County Local Transportation Commission	24,106	69	24,175
Mendocino Council of Governments	118,398	10,597	128,995
Merced County Association of Governments	364,843	25,984	390,827
Modoc County Local Transportation Commission	12,725	1,432	14,157
Mono County Local Transportation Commission	18,215	28,679	46,894
Transportation Agency for Monterey County	587,602	184,661	772,263
Nevada County Local Transportation Commission	131,275	6,505	137,780
Orange County Transportation Authority	4,242,686	1,430,357	5,673,043
Placer County Transportation Planning Agency	399,806	59,305	459,111
Plumas County Local Transportation Commission	26,326	1,273	27,599
Riverside County Transportation Commission	3,167,755	529,175	3,696,930
Council of San Benito County Governments	75,520	1,665	77,185
San Bernardino County Transportation Authority	2,869,511	491,022	3,360,533
San Joaquin Council of Governments	992,080	253,423	1,245,503
San Luis Obispo Area Council of Governments	372,064	25,274	397,338
Santa Barbara County Association of Governments	598,625	153,925	752,550
Santa Cruz County Transportation Commission	367,417	303,662	671,079
Shasta Regional Transportation Agency	237,245	13,799	251,044
Sierra County Local Transportation Commission	4,260	226	4,486
Siskiyou County Local Transportation Commission	59,360	2,910	62,270
Stanislaus Council of Governments	727,995	44,301	772,296
Tehama County Transportation Commission	85,006	2,084	87,090
Trinity County Transportation Commission	18,102	1,060	19,162
Tulare County Association of Governments	626,757	83,175	709,932
Tuolumne County Transportation Council	72,668	4,316	76,984
Ventura County Transportation Commission	1,138,883	192,353	1,331,236
State Totals	$ 52,500,000	$ 52,500,000	$ 105,000,000

STATE CONTROLLER'S OFFICE
2017-18 STATE OF GOOD REPAIR PROGRAM ESTIMATED AVAILABLE AMOUNT
BASED ON PUC 99314 ALLOCATION DETAIL
NOVEMBER 3, 2017
REVISED

Regional Entity and Operator(s)	Revenue Basis	Estimated Available 2017-18 Amount Based on PUC 99314 Allocation
Altamont Corridor Express*		
Alameda County Congestion Management Agency	$ NA	$ 37,404
Santa Clara Valley Transportation Authority	NA	29,248
San Joaquin Regional Rail Commission	NA	132,308
Regional Entity Totals	0	198,960
	0	(198,960)
Metropolitan Transportation Commission		
Alameda-Contra Costa Transit District, San Francisco Bay Area Rapid Transit District, and the City of San Francisco**	1,810,504,529	18,750,799
Central Contra Costa Transit Authority	11,505,773	119,162
City of Dixon	100,278	1,039
Eastern Contra Costa Transit Authority	5,325,782	55,157
City of Fairfield	2,537,148	26,276
Golden Gate Bridge Highway and Transportation District	55,834,606	578,261
Livermore-Amador Valley Transit Authority	5,372,372	55,640
Marin County Transit District	19,804,877	205,113
Napa County Transportation and Planning Agency	1,298,593	13,449
Peninsula Corridor Joint Powers Board	120,238,982	1,245,276
City of Petaluma	633,199	6,558
City of Rio Vista	35,699	370
San Francisco Bay Area Water Emergency Transportation Authority (WETA)	26,770,662	277,255
San Mateo County Transit District	118,401,842	1,226,249
Santa Clara Valley Transportation Authority	418,133,467	4,330,471
City of Santa Rosa	2,779,985	28,791
Solano County Transit (SOLTRANS)	5,674,700	58,771
County of Sonoma	3,278,690	33,956
Sonoma-Marin Area Rail Transit District	14,844,615	153,741
City of Union City	1,652,571	17,115
City of Vacaville	426,700	4,419
Western Contra Costa Transit Authority	6,894,384	71,403
Regional Entity Subtotals	2,632,049,454	27,259,271
Alameda County Congestion Management Agency - Corresponding to ACE*	NA	37,404
Santa Clara Valley Transportation Authority - Corresponding to ACE*	NA	29,248
Regional Entity Totals	2,632,049,454	27,325,923
Sacramento Area Council of Governments		
City of Davis (Unitrans)	3,098,134	32,086
City of Elk Grove	1,767,786	18,308
City of Folsom	658,529	6,820
County of Sacramento	1,110,348	11,500
Sacramento Regional Transit System	78,534,612	813,358
Yolo County Transportation District	4,361,050	45,166
Yuba Sutter Transit Authority	1,451,725	15,035
Regional Entity Totals	90,982,184	942,273
San Diego Association of Governments		
North County Transit District	45,441,742	470,625

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* The estimated available amounts to the member agencies of Altamont Corridor Express are included with their corresponding transportation planning agency.

** The estimated available amounts for Alameda-Contra Costa Transit District, San Francisco Bay Area Rapid Transit District, and the City of San Francisco are combined.

STATE CONTROLLER'S OFFICE
2017-18 STATE OF GOOD REPAIR PROGRAM ESTIMATED AVAILABLE AMOUNT
BASED ON PUC 99314 ALLOCATION DETAIL
NOVEMBER 3, 2017
REVISED

Regional Entity and Operator(s)	Revenue Basis	Estimated Available 2017-18 Amount Based on PUC 99314 Allocation
San Diego Metropolitan Transit System		
San Diego MTS	34,387,800	356,143
San Diego Transit Corporation	55,863,866	578,564
San Diego Trolley, Inc.	46,811,865	484,815
Regional Entity Totals	137,063,531	1,419,522
Southern California Regional Rail Authority***		
Los Angeles County Metropolitan Transportation Authority	NA	1,144,657
Orange County Transportation Authority	NA	489,500
Riverside County Transportation Commission	NA	197,514
San Bernardino County Transportation Authority	NA	247,826
Ventura County Transportation Commission	NA	117,542
Regional Entity Totals	0	2,197,039
	0	(2,197,039)
Tahoe Regional Planning Agency		
Tahoe Transportation District	1,407,484	14,577
Alpine County Transportation Commission		
County of Alpine	8,911	92
Amador County Transportation Commission		
Amador Regional Transit System	262,123	2,715
Butte County Association of Governments		
Butte Regional Transit	1,764,509	18,274
City of Gridley - Specialized Service	18,424	191
Regional Entity Totals	1,782,933	18,465
Calaveras County Local Transportation Commission		
County of Calaveras	99,554	1,031
Colusa County Local Transportation Commission		
County of Colusa	103,042	1,067
Del Norte County Local Transportation Commission		
Redwood Coast Transit Authority	201,369	2,086
El Dorado County Local Transportation Commission		
El Dorado County Transit Authority	1,633,884	16,922

*** The estimated available amounts to the member agencies of Southern California Regional Rail Authority are included with their corresponding transportation planning agency.

STATE CONTROLLER'S OFFICE
2017-18 STATE OF GOOD REPAIR PROGRAM ESTIMATED AVAILABLE AMOUNT
BASED ON PUC 99314 ALLOCATION DETAIL
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Regional Entity and Operator(s)	Revenue Basis	Estimated Available 2017-18 Amount Based on PUC 99314 Allocation
Fresno County Council of Governments		
City of Clovis	1,608,396	16,658
City of Fresno	15,642,374	162,002
Fresno County Rural Transit Agency	1,550,864	16,062
Regional Entity Totals	18,801,634	194,722
Glenn County Local Transportation Commission		
County of Glenn	118,565	1,228
Humboldt County Association of Governments		
City of Arcata	252,847	2,619
City of Eureka	688,702	7,133
City of Fortuna - Specialized Service	13,266	137
Humboldt Transit Authority	1,896,163	19,638
Regional Entity Totals	2,850,978	29,527
Imperial County Transportation Commission		
Imperial County Transportation Commission (ICTC)	2,034,524	21,070
Quechan Indian Tribe	21,876	227
Regional Entity Totals	2,056,400	21,297
Inyo County Local Transportation Commission	None	None
Kern Council of Governments		
City of Arvin	607,140	6,288
City of California City	23,003	238
City of Delano	154,896	1,604
Golden Empire Transit District	5,036,106	52,157
County of Kern	1,066,343	11,044
City of McFarland	16,214	168
City of Ridgecrest	343,371	3,556
City of Shafter	56,758	588
City of Taft	345,695	3,580
City of Tehachapi	4,792	50
City of Wasco	21,304	221
Regional Entity Totals	7,675,622	79,494
Kings County Association of Governments		
City of Corcoran	97,289	1,008
Kings County Area Public Transit Agency	1,002,749	10,385
Regional Entity Totals	1,100,038	11,393
Lake County/City Council of Governments		
Lake Transit Authority	500,168	5,180
Lassen County Local Transportation Commission		
County of Lassen	207,838	2,153

STATE CONTROLLER'S OFFICE
2017-18 STATE OF GOOD REPAIR PROGRAM ESTIMATED AVAILABLE AMOUNT
BASED ON PUC 99314 ALLOCATION DETAIL
NOVEMBER 3, 2017
REVISED

Regional Entity and Operator(s)	Revenue Basis	Estimated Available 2017-18 Amount Based on PUC 99314 Allocation
Los Angeles County Metropolitan Transportation Authority		
Antelope Valley Transit Authority	17,690,973	183,220
City of Arcadia	1,367,514	14,163
City of Claremont	382,509	3,963
City of Commerce	4,304,495	44,580
City of Culver City	13,583,265	140,677
Foothill Transit Zone	51,538,874	533,771
City of Gardena	10,936,244	113,263
City of La Mirada	832,072	8,617
Long Beach Public Transportation Company	48,712,640	504,501
City of Los Angeles	78,773,386	815,830
County of Los Angeles	22,987,199	238,071
Los Angeles County Metropolitan Transportation Authority	1,270,744,236	13,160,680
City of Montebello	17,594,552	182,221
City of Norwalk	7,442,578	77,080
City of Redondo Beach	2,557,775	26,490
City of Santa Clarita	22,843,760	236,585
City of Santa Monica	45,305,142	469,210
Southern California Regional Rail Authority***	212,137,556	NA
City of Torrance	18,172,705	188,209
Regional Entity Subtotals	1,847,907,475	16,941,131
Los Angeles County Metropolitan Transportation Authority - Corresponding to SCRRA***	NA	1,144,657
Regional Entity Totals	1,847,907,475	18,085,788
Madera County Local Transportation Commission		
City of Chowchilla	134,286	1,391
City of Madera	125,218	1,297
Regional Entity Totals	259,504	2,688
Mariposa County Local Transportation Commission		
County of Mariposa	6,696	69
Mendocino Council of Governments		
Mendocino Transit Authority	1,023,207	10,597
Merced County Association of Governments		
Transit Joint Powers Authority of Merced County	1,389,374	14,389
Yosemite Area Regional Transportation System (YARTS)	1,119,543	11,595
Regional Entity Totals	2,508,917	25,984
Modoc County Local Transportation Commission		
Modoc Transportation Agency - Specialized Service	138,272	1,432
Mono County Local Transportation Commission		
Eastern Sierra Transit Authority	2,769,180	28,679
Transportation Agency for Monterey County		
Monterey-Salinas Transit	17,830,132	184,661

*** The estimated available amounts to the member agencies of Southern California Regional Rail Authority are included with their corresponding transportation planning agency.

STATE CONTROLLER'S OFFICE
2017-18 STATE OF GOOD REPAIR PROGRAM ESTIMATED AVAILABLE AMOUNT
BASED ON PUC 99314 ALLOCATION DETAIL
NOVEMBER 3, 2017
REVISED

Regional Entity and Operator(s)	Revenue Basis	Estimated Available 2017-18 Amount Based on PUC 99314 Allocation
Nevada County Local Transportation Commission		
County of Nevada	408,912	4,235
City of Truckee	219,231	2,270
Regional Entity Totals	628,143	6,505
Orange County Transportation Authority		
City of Laguna Beach	1,000,340	10,360
Orange County Transportation Authority	89,845,193	930,497
Regional Entity Subtotals	90,845,533	940,857
Orange County Transportation Authority - Corresponding to SCRRA***	NA	489,500
Regional Entity Totals	90,845,533	1,430,357
Placer County Transportation Planning Agency		
City of Auburn	27,057	281
County of Placer	4,358,254	45,137
City of Roseville	1,340,903	13,887
Regional Entity Totals	5,726,214	59,305
Plumas County Local Transportation Commission		
County of Plumas	122,951	1,273
Riverside County Transportation Commission		
City of Banning	224,460	2,325
City of Beaumont	1,843,529	19,093
City of Corona	467,404	4,841
Palo Verde Valley Transit Agency	116,428	1,206
City of Riverside - Specialized Service	385,206	3,989
Riverside Transit Agency	15,378,001	159,264
Sunline Transit Agency	13,608,902	140,943
Regional Entity Subtotals	32,023,930	331,661
Riverside County Transportation Commission - Corresponding to SCRRA***	NA	197,514
Regional Entity Totals	32,023,930	529,175
Council of San Benito County Governments		
San Benito County Local Transportation Authority	160,719	1,665
San Bernardino County Transportation Authority		
Morongo Basin Transit Authority	536,943	5,561
Mountain Area Regional Transit Authority	459,125	4,755
City of Needles	57,989	601
Omnitrans	15,718,035	162,786
Victor Valley Transit Authority	6,709,975	69,493
Regional Entity Subtotals	23,482,067	243,196
San Bernardino County Transportation Authority - Corresponding to SCRRA***	NA	247,826
Regional Entity Totals	23,482,067	491,022

*** The estimated available amounts to the member agencies of Southern California Regional Rail Authority are included with their corresponding transportation planning agenc

STATE CONTROLLER'S OFFICE
2017-18 STATE OF GOOD REPAIR PROGRAM ESTIMATED AVAILABLE AMOUNT
BASED ON PUC 99314 ALLOCATION DETAIL
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Regional Entity and Operator(s)	Revenue Basis	Estimated Available 2017-18 Amount Based on PUC 99314 Allocation
San Joaquin Council of Governments		
Altamont Corridor Express (ACE)*	19,210,812	NA
City of Escalon	24,026	249
City of Lodi	429,604	4,449
City of Manteca	111,427	1,154
City of Ripon	49,233	510
San Joaquin Joint Powers Authority	10,550	109
San Joaquin Regional Transit District	10,879,753	112,678
City of Tracy	189,840	1,966
Regional Entity Subtotals	30,905,245	121,115
San Joaquin Regional Rail Commission - Corresponding to ACE*	NA	132,308
Regional Entity Totals	30,905,245	253,423
San Luis Obispo Area Council of Governments		
City of Arroyo Grande	0	0
City of Atascadero	53,667	556
City of Morro Bay	52,135	540
City of Pismo Beach - Specialized Service	16	0
City of San Luis Obispo Transit	710,409	7,358
San Luis Obispo Regional Transit Authority	1,475,696	15,283
South County Area Transit	148,390	1,537
Regional Entity Totals	2,440,313	25,274
Santa Barbara County Association of Governments		
City of Guadalupe	83,911	869
City of Lompoc	1,332,646	13,802
County of Santa Barbara	350,487	3,630
Santa Barbara Metropolitan Transit District	11,956,488	123,829
City of Santa Maria	1,062,471	11,004
City of Solvang	76,389	791
Regional Entity Totals	14,862,392	153,925
Santa Cruz County Transportation Commission		
Santa Cruz Metropolitan Transit District	29,320,471	303,662
Shasta Regional Transportation Agency		
Redding Area Bus Authority	1,332,408	13,799
Sierra County Local Transportation Commission		
County of Sierra - Specialized Service	21,800	226
Siskiyou County Local Transportation Commission		
County of Siskiyou	280,988	2,910

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* The estimated available amounts to the member agencies of Altamont Corridor Express are included with their corresponding transportation planning agency.

STATE CONTROLLER'S OFFICE
2017-18 STATE OF GOOD REPAIR PROGRAM ESTIMATED AVAILABLE AMOUNT
BASED ON PUC 99314 ALLOCATION DETAIL
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Regional Entity and Operator(s)	Revenue Basis	Estimated Available 2017-18 Amount Based on PUC 99314 Allocation
Stanislaus Council of Governments		
City of Ceres	88,135	913
City of Modesto	3,373,876	34,942
County of Stanislaus	632,073	6,546
City of Turlock	183,429	1,900
Regional Entity Totals	4,277,513	44,301
Tehama County Transportation Commission		
County of Tehama	201,204	2,084
Trinity County Transportation Commission		
County of Trinity	102,386	1,060
Tulare County Association of Governments		
City of Dinuba	282,412	2,925
City of Exeter	8,097	85
City of Porterville	1,069,400	11,075
City of Tulare	623,969	6,462
County of Tulare	1,039,898	10,770
City of Visalia	4,993,037	51,711
City of Woodlake	14,207	147
Regional Entity Totals	8,031,020	83,175
Tuolumne County Transportation Council		
County of Tuolumne	416,764	4,316
Ventura County Transportation Commission		
City of Camarillo	999,459	10,351
Gold Coast Transit	4,807,480	49,790
City of Moorpark	0	0
City of Simi Valley	704,217	7,293
City of Thousand Oaks	712,289	7,377
Regional Entity Subtotals	7,223,445	74,811
Ventura County Transportation Commission - Corresponding to SCRRA***	NA	117,542
Regional Entity Totals	7,223,445	192,353
STATE TOTALS	$ 5,069,196,343	$ 52,500,000

*** The estimated available amounts to the member agencies of Southern California Regional Rail Authority are included with their corresponding transportation planning agency.

Attachment No. 3

2017-18 State Transit Assistance by Senate Bill 1 Allocation

BETTY T. YEE
California State Controller

November 3, 2017

County Auditors Responsible for State Transit Assistance funds
Transportation Planning Agencies
County Transportation Commissions
San Diego Metropolitan Transit System

SUBJECT: Reissuance of the 2017-18 State Transit Assistance Allocation Revised Estimate

We are reissuing the schedules of State Transit Assistance (STA) funds allocation estimate that was released on October 20, 2017. We were informed of an error in our previous estimate and have recalculated the estimate to include all STA-eligible operators.

Enclosed is a revised summary schedule of STA funds estimated to be allocated for fiscal year (FY) 2017-18 to each Transportation Planning Agency (TPA), county transportation commission, and the San Diego Metropolitan Transit System for the purposes of Public Utilities Code (PUC) sections 99313 and 99314. Also enclosed is a schedule detailing the amount of the PUC section 99314 allocation for each TPA by operator.

PUC section 99313 allocations are based on the latest available annual population estimates from the Department of Finance. PUC section 99314 allocations are based on the revenue amount for each STA-eligible operator, determined from annual reports submitted to the Controller pursuant to Section 99243. Pursuant to PUC section 99314.3, each TPA is required to allocate funds to the STA-eligible operators in the area of its jurisdiction.

The estimated amount of STA funds budgeted, according to the FY 2017-18 enacted California Budget, is $468,849,000. We anticipate that the first quarter's allocation will be paid in November 2017. Please refer to the schedule for the amounts that relate to your agency.

The revenue basis amounts are not comparable to the amounts in the prior year because of the change from Chapter 339, Statutes of 2016 to Chapter 86, Statutes of 2017. The prior year's calculation was pursuant to section 6722 of the California Code of Regulations, which included a sub-calculation that included all revenues and expenses from the annual reports submitted to the Controller. The sub-calculation included summations of qualifying revenue, non-qualifying revenue, and operating costs that were compared to determine the revenue basis amount. This year's calculation includes only "qualifying revenue," as defined in PUC section 99314(b), not to exceed operating costs.

Local Government Programs and Services Division
MAILING ADDRESS P.O. Box 942850, Sacramento, CA 94250
3301 C Street, Suite 700, Sacramento, CA 95816

Please contact Mike Silvera by telephone at (916) 323-0704 or email at msilvera@sco.ca.gov with any questions, or for additional information. We apologize for any inconvenience this may have caused.

Sincerely,

EVELYN CALDERON-YEE, Bureau Chief
Bureau of Payments

Enclosures

STATE CONTROLLER'S OFFICE
2017-18 STATE TRANSIT ASSISTANCE FUND ALLOCATION ESTIMATE
SUMMARY
NOVEMBER 3, 2017
REVISED

Regional Entity	PUC 99313 Fiscal Year 2017-18 Estimate	PUC 99314 Fiscal Year 2017-18 Estimate	Total Fiscal Year 2017-18 Estimate
	A	B	C= (A + B)
Metropolitan Transportation Commission	$ 45,757,460	$ 122,016,490	$ 167,773,950
Sacramento Area Council of Governments	11,300,215	4,207,462	15,507,677
San Diego Association of Governments	5,682,424	2,101,449	7,783,873
San Diego Metropolitan Transit System	13,986,746	6,338,490	20,325,236
Tahoe Regional Planning Agency	606,304	65,089	671,393
Alpine County Transportation Commission	6,828	413	7,241
Amador County Transportation Commission	227,653	12,122	239,775
Butte County Association of Governments	1,342,859	82,452	1,425,311
Calaveras County Local Transportation Commission	267,903	4,604	272,507
Colusa County Local Transportation Commission	130,743	4,765	135,508
Del Norte County Local Transportation Commission	160,879	9,312	170,191
El Dorado County Local Transportation Commission	976,824	75,559	1,052,383
Fresno County Council of Governments	5,907,378	869,480	6,776,858
Glenn County Local Transportation Commission	170,411	5,483	175,894
Humboldt County Association of Governments	812,303	131,843	944,146
Imperial County Transportation Commission	1,117,056	95,098	1,212,154
Inyo County Local Transportation Commission	110,434	0	110,434
Kern Council of Governments	5,309,135	354,958	5,664,093
Kings County Association of Governments	886,942	50,871	937,813
Lake County/City Council of Governments	385,205	23,130	408,335
Lassen County Local Transportation Commission	183,382	9,611	192,993
Los Angeles County Metropolitan Transportation Authority	60,743,598	80,757,179	141,500,777
Madera County Local Transportation Commission	928,193	12,001	940,194
Mariposa County Local Transportation Commission	107,640	311	107,951
Mendocino Council of Governments	528,676	47,318	575,994
Merced County Association of Governments	1,629,107	116,025	1,745,132
Modoc County Local Transportation Commission	56,822	6,394	63,216
Mono County Local Transportation Commission	81,335	128,060	209,395
Transportation Agency for Monterey County	2,623,778	824,553	3,448,331
Nevada County Local Transportation Commission	586,174	29,048	615,222
Orange County Transportation Authority	18,944,561	6,386,874	25,331,435
Placer County Transportation Planning Agency	1,785,224	264,808	2,050,032
Plumas County Local Transportation Commission	117,551	5,686	123,237
Riverside County Transportation Commission	14,144,748	2,362,888	16,507,636
Council of San Benito County Governments	337,215	7,432	344,647
San Bernardino County Transportation Authority	12,813,022	2,192,526	15,005,548
San Joaquin Council of Governments	4,429,862	1,131,595	5,561,457
San Luis Obispo Area Council of Governments	1,661,350	112,852	1,774,202
Santa Barbara County Association of Governments	2,672,996	687,310	3,360,306
Santa Cruz County Transportation Commission	1,640,602	1,355,922	2,996,524
Shasta Regional Transportation Agency	1,059,351	61,617	1,120,968
Sierra County Local Transportation Commission	19,023	1,008	20,031
Siskiyou County Local Transportation Commission	265,056	12,994	278,050
Stanislaus Council of Governments	3,250,664	197,813	3,448,477
Tehama County Transportation Commission	379,570	9,305	388,875
Trinity County Transportation Commission	80,831	4,735	85,566
Tulare County Association of Governments	2,798,614	371,394	3,170,008
Tuolumne County Transportation Council	324,481	19,273	343,754
Ventura County Transportation Commission	5,085,372	858,898	5,944,270
State Totals	$ 234,424,500	$ 234,424,500	$ 468,849,000

STATE CONTROLLER'S OFFICE
2017-18 STATE TRANSIT ASSISTANCE ALLOCATION ESTIMATE PUC 99314
ALLOCATION DETAIL
NOVEMBER 3, 2017
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Regional Entity and Operator(s)	Revenue Basis	PUC 99314 Fiscal Year 2017-18 Estimate
Altamont Corridor Express*		
Alameda County Congestion Management Agency	$ NA	$ 167,020
Santa Clara Valley Transportation Authority	NA	130,595
San Joaquin Regional Rail Commission	NA	590,787
Regional Entity Totals	0	888,402
	0	(888,402)
Metropolitan Transportation Commission		
Alameda-Contra Costa Transit District, San Francisco Bay Area Rapid Transit District, and the City of San Francisco**	1,810,504,529	83,726,608
Central Contra Costa Transit Authority	11,505,773	532,083
City of Dixon	100,278	4,637
Eastern Contra Costa Transit Authority	5,325,782	246,290
City of Fairfield	2,537,148	117,330
Golden Gate Bridge Highway and Transportation District	55,834,606	2,582,066
Livermore-Amador Valley Transit Authority	5,372,372	248,445
Marin County Transit District	19,804,877	915,875
Napa County Transportation and Planning Agency	1,298,593	60,053
Peninsula Corridor Joint Powers Board	120,238,982	5,560,440
City of Petaluma	633,199	29,282
City of Rio Vista	35,699	1,652
San Francisco Bay Area Water Emergency Transportation Authority (WETA)	26,770,662	1,238,007
San Mateo County Transit District	118,401,842	5,475,482
Santa Clara Valley Transportation Authority	418,133,467	19,336,542
City of Santa Rosa	2,779,985	128,560
Solano County Transit (SOLTRANS)	5,674,700	262,426
County of Sonoma	3,278,690	151,623
Sonoma-Marin Area Rail Transit District	14,844,615	686,488
City of Union City	1,652,571	76,423
City of Vacaville	426,700	19,733
Western Contra Costa Transit Authority	6,894,384	318,830
Regional Entity Subtotals	2,632,049,454	121,718,875
Alameda County Congestion Management Agency - Corresponding to ACE*	NA	167,020
Santa Clara Valley Transportation Authority - Corresponding to ACE*	NA	130,595
Regional Entity Totals	2,632,049,454	122,016,490
Sacramento Area Council of Governments		
City of Davis (Unitrans)	3,098,134	143,273
City of Elk Grove	1,767,786	81,751
City of Folsom	658,529	30,454
County of Sacramento	1,110,348	51,348
Sacramento Regional Transit System	78,534,612	3,631,825
Yolo County Transportation District	4,361,050	201,676
Yuba Sutter Transit Authority	1,451,725	67,135
Regional Entity Totals	90,982,184	4,207,462
San Diego Association of Governments		
North County Transit District	45,441,742	2,101,449

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* The amounts allocated to the member agencies of Altamont Corridor Express are included with their corresponding transportation planning agency.

** The amounts for Alameda-Contra Costa Transit District, San Francisco Bay Area Rapid Transit District, and the City of San Francisco are combined.

STATE CONTROLLER'S OFFICE
2017-18 STATE TRANSIT ASSISTANCE ALLOCATION ESTIMATE PUC 99314
ALLOCATION DETAIL
NOVEMBER 3, 2017
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Regional Entity and Operator(s)	Revenue Basis	PUC 99314 Fiscal Year 2017-18 Estimate
San Diego Metropolitan Transit System		
San Diego MTS	34,387,800	1,590,261
San Diego Transit Corporation	55,863,866	2,583,419
San Diego Trolley, Inc.	46,811,865	2,164,810
Regional Entity Totals	137,063,531	6,338,490
Southern California Regional Rail Authority***		
Los Angeles County Metropolitan Transportation Authority	NA	5,111,156
Orange County Transportation Authority	NA	2,185,731
Riverside County Transportation Commission	NA	881,944
San Bernardino County Transportation Authority	NA	1,106,600
Ventura County Transportation Commission	NA	524,850
Regional Entity Totals	0	9,810,281
	0	(9,810,281)
Tahoe Regional Planning Agency		
Tahoe Transportation District	1,407,484	65,089
Alpine County Transportation Commission		
County of Alpine	8,911	413
Amador County Transportation Commission		
Amador Regional Transit System	262,123	12,122
Butte County Association of Governments		
Butte Regional Transit	1,764,509	81,600
City of Gridley - Specialized Service	18,424	852
Regional Entity Totals	1,782,933	82,452
Calaveras County Local Transportation Commission		
County of Calaveras	99,554	4,604
Colusa County Local Transportation Commission		
County of Colusa	103,042	4,765
Del Norte County Local Transportation Commission		
Redwood Coast Transit Authority	201,369	9,312
El Dorado County Local Transportation Commission		
El Dorado County Transit Authority	1,633,884	75,559

*** The amounts allocated to the member agencies of Southern California Regional Rail Authority are included with their corresponding transportation planning agenc

STATE CONTROLLER'S OFFICE
2017-18 STATE TRANSIT ASSISTANCE ALLOCATION ESTIMATE PUC 99314
ALLOCATION DETAIL
NOVEMBER 3, 2017
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Regional Entity and Operator(s)	Revenue Basis	PUC 99314 Fiscal Year 2017-18 Estimate
Fresno County Council of Governments		
City of Clovis	1,608,396	74,380
City of Fresno	15,642,374	723,380
Fresno County Rural Transit Agency	1,550,864	71,720
Regional Entity Totals	18,801,634	869,480
Glenn County Local Transportation Commission		
County of Glenn	118,565	5,483
Humboldt County Association of Governments		
City of Arcata	252,847	11,693
City of Eureka	688,702	31,849
City of Fortuna - Specialized Service	13,266	613
Humboldt Transit Authority	1,896,163	87,688
Regional Entity Totals	2,850,978	131,843
Imperial County Transportation Commission		
Imperial County Transportation Commission (ICTC)	2,034,524	94,086
Quechan Indian Tribe	21,876	1,012
Regional Entity Totals	2,056,400	95,098
Inyo County Local Transportation Commission	None	None
Kern Council of Governments		
City of Arvin	607,140	28,077
City of California City	23,003	1,064
City of Delano	154,896	7,163
Golden Empire Transit District	5,036,106	232,893
County of Kern	1,066,343	49,313
City of McFarland	16,214	750
City of Ridgecrest	343,371	15,879
City of Shafter	56,758	2,625
City of Taft	345,695	15,987
City of Tehachapi	4,792	222
City of Wasco	21,304	985
Regional Entity Totals	7,675,622	354,958
Kings County Association of Governments		
City of Corcoran	97,289	4,499
Kings County Area Public Transit Agency	1,002,749	46,372
Regional Entity Totals	1,100,038	50,871
Lake County/City Council of Governments		
Lake Transit Authority	500,168	23,130
Lassen County Local Transportation Commission		
County of Lassen	207,838	9,611

STATE CONTROLLER'S OFFICE
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Regional Entity and Operator(s)	Revenue Basis	PUC 99314 Fiscal Year 2017-18 Estimate
Los Angeles County Metropolitan Transportation Authority		
Antelope Valley Transit Authority	17,690,973	818,117
City of Arcadia	1,367,514	63,241
City of Claremont	382,509	17,690
City of Commerce	4,304,495	199,061
City of Culver City	13,583,265	628,157
Foothill Transit Zone	51,538,874	2,383,410
City of Gardena	10,936,244	505,746
City of La Mirada	832,072	38,479
Long Beach Public Transportation Company	48,712,640	2,252,711
City of Los Angeles	78,773,386	3,642,868
County of Los Angeles	22,987,199	1,063,041
Los Angeles County Metropolitan Transportation Authority	1,270,744,236	58,765,445
City of Montebello	17,594,552	813,658
City of Norwalk	7,442,578	344,181
City of Redondo Beach	2,557,775	118,284
City of Santa Clarita	22,843,760	1,056,407
City of Santa Monica	45,305,142	2,095,132
Southern California Regional Rail Authority***	212,137,556	NA
City of Torrance	18,172,705	840,395
Regional Entity Subtotals	1,847,907,475	75,646,023
Los Angeles County Metropolitan Transportation Authority - Corresponding to SCRRA***	NA	5,111,156
Regional Entity Totals	1,847,907,475	80,757,179
Madera County Local Transportation Commission		
City of Chowchilla	134,286	6,210
City of Madera	125,218	5,791
Regional Entity Totals	259,504	12,001
Mariposa County Local Transportation Commission		
County of Mariposa	6,696	311
Mendocino Council of Governments		
Mendocino Transit Authority	1,023,207	47,318
Merced County Association of Governments		
Transit Joint Powers Authority of Merced County	1,389,374	64,252
Yosemite Area Regional Transportation System (YARTS)	1,119,543	51,773
Regional Entity Totals	2,508,917	116,025
Modoc County Local Transportation Commission		
Modoc Transportation Agency - Specialized Service	138,272	6,394
Mono County Local Transportation Commission		
Eastern Sierra Transit Authority	2,769,180	128,060
Transportation Agency for Monterey County		
Monterey-Salinas Transit	17,830,132	824,553

*** The amounts allocated to the member agencies of Southern California Regional Rail Authority are included with their corresponding transportation planning agenc

STATE CONTROLLER'S OFFICE
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Regional Entity and Operator(s)	Revenue Basis	PUC 99314 Fiscal Year 2017-18 Estimate
Nevada County Local Transportation Commission		
County of Nevada	408,912	18,910
City of Truckee	219,231	10,138
Regional Entity Totals	628,143	29,048
Orange County Transportation Authority		
City of Laguna Beach	1,000,340	46,261
Orange County Transportation Authority	89,845,193	4,154,882
Regional Entity Subtotals	90,845,533	4,201,143
Orange County Transportation Authority - Corresponding to SCRRA***	NA	2,185,731
Regional Entity Totals	90,845,533	6,386,874
Placer County Transportation Planning Agency		
City of Auburn	27,057	1,251
County of Placer	4,358,254	201,547
City of Roseville	1,340,903	62,010
Regional Entity Totals	5,726,214	264,808
Plumas County Local Transportation Commission		
County of Plumas	122,951	5,686
Riverside County Transportation Commission		
City of Banning	224,460	10,380
City of Beaumont	1,843,529	85,254
City of Corona	467,404	21,615
Palo Verde Valley Transit Agency	116,428	5,384
City of Riverside - Specialized Service	385,206	17,814
Riverside Transit Agency	15,378,001	711,154
Sunline Transit Agency	13,608,902	629,343
Regional Entity Subtotals	32,023,930	1,480,944
Riverside County Transportation Commission - Corresponding to SCRRA***	NA	881,944
Regional Entity Totals	32,023,930	2,362,888
Council of San Benito County Governments		
San Benito County Local Transportation Authority	160,719	7,432
San Bernardino County Transportation Authority		
Morongo Basin Transit Authority	536,943	24,831
Mountain Area Regional Transit Authority	459,125	21,232
City of Needles	57,989	2,682
Omnitrans	15,718,035	726,879
Victor Valley Transit Authority	6,709,975	310,302
Regional Entity Subtotals	23,482,067	1,085,926
San Bernardino County Transportation Authority - Corresponding to SCRRA***	NA	1,106,600
Regional Entity Totals	23,482,067	2,192,526

*** The amounts allocated to the member agencies of Southern California Regional Rail Authority are included with their corresponding transportation planning agenc

STATE CONTROLLER'S OFFICE
2017-18 STATE TRANSIT ASSISTANCE ALLOCATION ESTIMATE PUC 99314
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Regional Entity and Operator(s)	Revenue Basis	PUC 99314 Fiscal Year 2017-18 Estimate
San Joaquin Council of Governments		
Altamont Corridor Express (ACE)*	19,210,812	NA
City of Escalon	24,026	1,111
City of Lodi	429,604	19,867
City of Manteca	111,427	5,153
City of Ripon	49,233	2,277
San Joaquin Joint Powers Authority	10,550	488
San Joaquin Regional Transit District	10,879,753	503,133
City of Tracy	189,840	8,779
Regional Entity Subtotals	30,905,245	540,808
San Joaquin Regional Rail Commission - Corresponding to ACE*	NA	590,787
Regional Entity Totals	30,905,245	1,131,595
San Luis Obispo Area Council of Governments		
City of Arroyo Grande	0	0
City of Atascadero	53,667	2,482
City of Morro Bay	52,135	2,411
City of Pismo Beach - Specialized Service	16	1
City of San Luis Obispo Transit	710,409	32,853
San Luis Obispo Regional Transit Authority	1,475,696	68,243
South County Area Transit	148,390	6,862
Regional Entity Totals	2,440,313	112,852
Santa Barbara County Association of Governments		
City of Guadalupe	83,911	3,880
City of Lompoc	1,332,646	61,628
County of Santa Barbara	350,487	16,208
Santa Barbara Metropolitan Transit District	11,956,488	552,927
City of Santa Maria	1,062,471	49,134
City of Solvang	76,389	3,533
Regional Entity Totals	14,862,392	687,310
Santa Cruz County Transportation Commission		
Santa Cruz Metropolitan Transit District	29,320,471	1,355,922
Shasta Regional Transportation Agency		
Redding Area Bus Authority	1,332,408	61,617
Sierra County Local Transportation Commission		
County of Sierra - Specialized Service	21,800	1,008
Siskiyou County Local Transportation Commission		
County of Siskiyou	280,988	12,994

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* The amounts allocated to the member agencies of Altamont Corridor Express are included with their corresponding transportation planning agency.

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2017-18 STATE TRANSIT ASSISTANCE ALLOCATION ESTIMATE PUC 99314
ALLOCATION DETAIL
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Regional Entity and Operator(s)	Revenue Basis	PUC 99314 Fiscal Year 2017-18 Estimate
Stanislaus Council of Governments		
City of Ceres	88,135	4,076
City of Modesto	3,373,876	156,024
County of Stanislaus	632,073	29,230
City of Turlock	183,429	8,483
Regional Entity Totals	4,277,513	197,813
Tehama County Transportation Commission		
County of Tehama	201,204	9,305
Trinity County Transportation Commission		
County of Trinity	102,386	4,735
Tulare County Association of Governments		
City of Dinuba	282,412	13,060
City of Exeter	8,097	375
City of Porterville	1,069,400	49,454
City of Tulare	623,969	28,855
County of Tulare	1,039,898	48,090
City of Visalia	4,993,037	230,903
City of Woodlake	14,207	657
Regional Entity Totals	8,031,020	371,394
Tuolumne County Transportation Council		
County of Tuolumne	416,764	19,273
Ventura County Transportation Commission		
City of Camarillo	999,459	46,220
Gold Coast Transit	4,807,480	222,322
City of Moorpark	0	0
City of Simi Valley	704,217	32,566
City of Thousand Oaks	712,289	32,940
Regional Entity Subtotals	7,223,445	334,048
Ventura County Transportation Commission - Corresponding to SCRRA***	NA	524,850
Regional Entity Totals	7,223,445	858,898
STATE TOTALS	$ 5,069,196,343	$ 234,424,500

*** The amounts allocated to the member agencies of Southern California Regional Rail Authority are included with their corresponding transportation planning agenc

Attachment No. 4

TDA Apportionments

Transportation Development Act

FY 2018 Apportionment and FY 2019 to FY 2022 Estimates

	FY 2018	FY 2019 Estimate ($000s)	FY 2020 Estimate ($000s)	FY 2021 Estimate ($000s)	FY 2022 Estimate ($000s)
Total Apportionment[1,2]	**$144,655,804**	**$150,717**	**$156,715**	**$163,047**	**$169,585**
Less County Auditor Expenses (PUC 99233.1)	(50,000)	(51)	(52)	(53)	(54)
Less SANDAG Administration (PUC 99233.1)[3]	(485,606)	(677)	(526)	(543)	(753)
Less 3% Planning Funds (PUC 99233.2)	(4,323,606)	(4,500)	(4,684)	(4,874)	(5,063)
Less 2% Bicycle/Pedestrian Funds (PUC 99233.3)	(2,795,932)	(2,910)	(3,029)	(3,152)	(3,274)
Less 5% Community Transit Service (PUC 99233.7)	(6,852,533)	(7,132)	(7,424)	(7,724)	(8,025)
Subtotal	**$130,148,127**	**$135,447**	**$141,000**	**$146,701**	**$152,416**
Total Available for MTS	92,549,441	96,319	100,267	104,321	108,384
Less Regional Planning/Capital Projects[4]	(1,023,300)	(190)	(190)	(190)	(190)
Less Transferred Functions[5]	(1,863,771)	(1,940)	(2,019)	(2,101)	(2,183)
Total Community Transit Service	4,775,437	4,970	5,174	5,383	5,592
Total Available to Claim	**$94,437,807**	**$99,159**	**$103,232**	**$107,413**	**$111,603**
Total Available for NCTD	37,598,686	39,130	40,734	42,381	44,032
Less Regional Planning/Capital Projects[4]	(125,000)	0	0	0	0
Less Transferred Functions[5]	(629,778)	(655)	(682)	(710)	(738)
Total Community Transit Service	1,940,046	2,019	2,102	2,187	2,272
Total Available to Claim	**$38,783,954**	**$40,494**	**$42,154**	**$43,858**	**$45,566**
Total Available for SANDAG					
Regional Planning/Capital Projects	1,148,300	190	190	190	190
Transferred Functions	2,493,549	2,595	2,701	2,811	2,921
SANDAG Administrative Expenses[3]	485,606	677	526	543	753
3% Planning Funds	4,323,606	4,500	4,684	4,874	5,063
Prior Year Carryover	1,343,567				
Total Available to Claim	**$9,794,628**	**$7,962**	**$8,101**	**$8,418**	**$8,927**
Total Community Transit Service (CTSA)	**$137,051**	$143	$148	$154	$161
Prior Year Carryover	$0				
Total Available to Claim	**$137,051**	**$143**	**$148**	**$154**	**$161**

*Totals may not add up due to rounding

[1]The County Auditor provided the apportionment for FY 2018. The projected estimates for FY 2019 to FY 2022 are based on the growth rate in retail sales as forecasted by SANDAG and excludes interest and prior year excess funds.

[2]Apportionment distribution is based on the population estimates published by the California Department of Finance (DOF) estimates as of January 2016 - approximately 71% for MTS and 29% for NCTD.

[3]The SANDAG Administration cost rises in FY 2019 & FY 2022 disproportionately due to costs associated with the triennial performance audit. All other annual increases in SANDAG administrative share are consistent with the estimated growth in the TDA.

[4]Represents the local match for federally funded regional planning and transit capital development projects identified in the initial draft FY 2018 transit CIP as provided by MTS and NCTD. The projects funded are scheduled to be included as part of the FY 2018 Capital Improvement Program scheduled for Transportation Committee/Board action at their April meetings. As a result, this amount is subject to change.

[5]Based on Addendums No. 3 and No. 4 to the Master Memorandum of Understanding between MTS, NCTD, and SANDAG. For NCTD, 26.09% of this share is transferred back to NCTD to be used for TDA-eligible purposes.

Attachment No. 5

TransNet Apportionments

TransNet Revenue Forecast - Transit System Improvements Program

Revised FY 2017 Projection; Estimates for FY 2018 to FY 2022 (in $000s)

	Approved FY 2017	Revised FY 2017	FY 2018 Proposed	FY 2019 (Estimate)	FY 2020 (Estimate)	FY 2021 (Estimate)	FY 2022 (Estimate)
Total Available For Transit Purposes[1,2]:	$46,026	$45,249	$46,691	$48,646	$50,585	$52,632	$54,742
Less 2.5% for ADA-related Services	($1,151)	($1,131)	($1,167)	($1,216)	($1,265)	($1,316)	($1,369)
Less 3.25% for Senior Services	($1,496)	($1,471)	($1,517)	($1,581)	($1,644)	($1,711)	($1,779)
Subtotal*	***$43,379***	***$42,647***	***$44,007***	***$45,849***	***$47,676***	***$49,605***	***$51,594***
MTS Projects And Services:							
Transit Service Improvements (Operations and Supporting Capital)	$30,869	$30,348	$31,293	$32,603	$33,903	$35,275	$36,689
ADA Services	$819	$804	$830	$865	$899	$936	$973
NCTD Projects And Services:							
Transit Service Improvements (Operations and Supporting Capital)	$12,510	$12,299	$12,714	$13,246	$13,773	$14,330	$14,905
ADA Services	$332	$327	$337	$351	$366	$380	$396
Regional Discretionary Programs[3]:							
Competitive Grant Program for Senior Transportation Services	$1,496	$1,471	$1,517	$1,581	$1,644	$1,711	$1,779

*Totals may not add up due to rounding

[1] The Transit System Services Improvements share is 16.5% of net available revenues. After deducting for ADA and Senior Services, the balance is available for operations and miscellaneous capital projects by the transit agencies.

[2] Distribution between the two agencies for FY 2017 are based on Jan. 2015 population, for FY 2018 to FY 2022 are based on Jan. 2016 population.

[3] The funds are allocated via a Call for Projects process by SANDAG.

Other Notes:

A. The estimated revenues are based on growth rate in taxable sales as forecasted by SANDAG and excludes interest and prior year excess funds.

B. Distribution of revenue estimates are based on the 2004 Proposition A Extension: San Diego Transportation Improvement Program and Expenditure Plan.

Attachment No. 6

GHG Quantification Documentation

GHG QUANTIFICATION DOCUMENATION

This document was prepared in accordance with the California Air Resources Board (CARB) *Quantification Methodology for the California State Transportation Agency Transit and Intercity Rail Capital Program* for fiscal year 2018-19.

CONTACT INFORMATION

The primary point of contact for this grant is Gordon Meyer, Capital and Grants Analyst. Mr. Meyer will forward any questions regarding specific content matter to the appropriate members of the project team.

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PROJECT DESCRIPTION

The Blue Line Rail Corridor Transit Enhancements project includes a variety of capital investments designed to expand light rail service, improve safety and performance, and introduce new Bus Rapid Transit (BRT) feeder service along the Blue Line Rail Corridor in the San Diego region. Specific investments are listed in the table below.

Blue Line Rail Corridor Transit Enhancements
Project
Beech Street Double Crossover Design/Construction
Middletown Double Crossover Construction
America Plaza Pedestrian Enhancements Design/Construction
Old Town Transit Center West Enhancements Construction
Operations: 15-minute Service from Santa Fe Depot to Old Town
Blue Line - Increased Light Rail Service
Beyer Track and Slope Repair Construction
America Plaza Track Replacement Design/Construction
Green Line IMT Double Tracking Design/Construction
Blue Line Substation Replacement (6 locations) Design/Construction
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction
Blue Line - State of Good Repair/Performance Improvements
Blue Line Feeder Bus Service (23 Articulated Buses)
Blue Line Feeder Bus Service (Stop Improvements) Design/Construction
Rapid 725 Operations
Rapid 925 Operations
Blue Line - New BRT Feeder Service

The greenhouse gas reduction estimates calculated for this project are based on the projected ridership growth directly attributed to the project. The project was divided into two quantifiable components for the purpose of calculating GHG reductions.

Quantifiable Component 1:

The first quantifiable component includes the ridership growth attributed to the investments necessary for increasing light rail service to 15-minute headways on segment of the Blue Line between Santa Fe Depot and Old Town. These investments include the following:

Blue Line Rail Corridor Transit Enhancements
Project
Beech Street Double Crossover Design/Construction
Middletown Double Crossover Construction
America Plaza Pedestrian Enhancements Design/Construction
Old Town Transit Center West Enhancements Construction
Operations: 15-minute Service from Santa Fe Depot to Old Town
Blue Line - Increased Light Rail Service

Quantifiable Component 2:

The second quantifiable component includes the ridership growth attributed to the new/expanded Bus Rapid Transit service and accompanying capital investments detailed below. The proposed Rapid 725 and Rapid 925 routes would connect directly with the Blue Line, expecting to generate ridership for both bus and rail modes.

Blue Line Rail Corridor Transit Enhancements
Project
Blue Line Feeder Bus Service (23 Articulated Buses)
Blue Line Feeder Bus Service (Stop Improvements) Design/Construction
Rapid 725 Operations
Rapid 925 Operations
Blue Line - New BRT Feeder Service

Project Components Omitted from GHG Calculation:

It is important to note that the projects referred to as "state of good repair" projects outlined below do not independently provide ridership increases or GHG reductions. Hence, these projects were only included in the calculation for "TIRCP Funds Requested" to accurately reflect GHG reduction per total TIRCP funds requested.

Blue Line Rail Corridor Transit Enhancements
Project
Beyer Track and Slope Repair Construction
America Plaza Track Replacement Design/Construction
Green Line IMT Double Tracking Design/Construction
Blue Line Substation Replacement (6 locations) Design/Construction
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction
Blue Line - State of Good Repair/Performance Improvements

POPULATED TIRCP CALCULATOR TOOL

Please see the attached TIRCP calculator tool which has been populated with all necessary data. The methodology for determining specific inputs is described in the next section.

EXPLANATION OF TIRCP CALCULATOR TOOL INPUTS

The sections below explain each of the inputs used for each of the two quantifiable components included in the TIRCP calculator tool.

QUANTIFIABLE COMPONENT 1 INPUTS: INCREASED BLUE LINE SERVICE

TIRCP Funds Requested: $39,822,000

MTS is requesting a total of $39,822,000 in TIRCP funds for Quantifiable Component 1 based on the planned budget and revenues below. As mentioned prior, the state of good repair projects do not independently reduce GHGs but the total cost was included in quantifiable component 1 to accurately reflect GHG reductions per TIRCP funds requested for the overall project.

Blue Line Rail Corridor Transit Enhancements		Revenue				
Project	**Total**	**TIRCP**	**SB1 SGR**	**TDA/Local**	**Transnet**	**Match %**
Beech Street Double Crossover Design/Construction	5,065	4,052	-	1,013	-	20%
Middletown Double Crossover Construction	6,222	4,977	-	1,244	-	20%
America Plaza Pedestrian Enhancements Design/Construction	4,694	3,755	-	939	-	20%
Old Town Transit Center West Enhancements Construction	2,367	2,367	-	-	-	0%
Operations: 15-minute Service from Santa Fe Depot to Old Town	6,550	-	-	-	6,550	100%
Blue Line - Increased Light Rail Service	24,897	15,151	-	3,196	6,550	13%
Beyer Track and Slope Repair Construction	5,195	4,156	-	1,039	-	20%
America Plaza Track Replacement Design/Construction	1,425	1,140	-	285	-	20%
Green Line IMT Double Tracking Design/Construction	8,736	6,989	1,747	-	-	20%
Blue Line Substation Replacement (6 locations) Design/Construction	13,098	10,478	-	2,620	-	20%
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	2,459	1,967	-	492	-	20%
Blue Line - State of Good Repair/Performance Improvements	30,913	24,730	1,747	4,435	-	20.00%
Total - Quantifiable Component 1	55,810	39,882	1,747	7,631	6,550	32.84%

Multi-Year: Yes

This project is includes funding requests for design and construction for various project components. Design and construction are programmed in different fiscal years.

Blue Line Rail Corridor Transit Enhancements						
Project Component	**Total Cost**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**
Beech Street Double Crossover Design/Construction	5,065	450	4,614	-	-	-
Middletown Double Crossover Construction	6,222	-	6,222	-	-	-
America Plaza Pedestrian Enhancements - Design/Construction	4,694	400	4,294	-	-	-
Old Town Transit Center West Enhancements - Construction	2,367	2,367	-	-	-	-
Beyer Track and Slope Repair - Construction	5,195	5,195	-	-	-	-
America Plaza Track Replacement - Design/Construction	1,425	125	1,300	-	-	-
Green Line IMT Double Tracking Design/Construction	8,736	794	7,942	-	-	-
Blue Line Substation Replacement (6 locations) - Design/Construction	13,098	600	12,498	-	-	
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	2,459	350	2,109	-	-	-

Additional CCI Programs: Blank

MTS does not plan to allocate any other CCI program funding to this project.

Project Type: New/Expanded Service

The Blue Line Rail Corridor project is an "expansion of transit (e.g. rail (train), bus, ferry, shuttle and vanpool) service through new service or additional routes" as described in the quantification methodology guidelines.[1]

Service Type: Light Rail

Quantifiable component 1 includes light rail service on the Blue Line and the accompanying capital investments necessary to implement the new service.

Vehicle Type: Light Rail

MTS light rail vehicles will be operated on the Blue Line.

Region/County: County

MTS selected County as the input because MTS staff is more familiar with county geography than air basins

Sub-Region: San Diego

The proposed investments would all be implemented in the San Diego sub-region.

Year 1 (Yr1): 2021

The increased blue line service is expected to begin in year 2021. All of the capital investments supporting the expanded operations are also expected to be constructed by 2021 so that operations may begin.

Year F (YrF): 2060

MTS is using a 40-year useful life for the expanded light rail operations. The new double crossovers and facility improvements at Old Town Transit Center are expected to have a 40-year life. In addition, MTS plans to operate the service perpetually.

Yr1 Ridership: 2,026,290

The ridership calculations for quantifiable component 1 (light rail) were based on the following steps:

1) Estimated current Green Line weekday ridership only using the segment between Santa Fe Depot and Old Town (3,521 passengers daily). Used 0.3 elasticity for increased demand due to doubling of service in that corridor.

2) Based on SANDAG stop-by-stop forecasting data, determined estimated number of thru weekday Blue Line passengers at Old Town southbound (5,002) and at America Plaza northbound (6,965) on Blue Line. Used a 0.3 elasticity to calculate number of passengers that would be lost with a forced transfer. The number is likely even higher due to two forced transfers.

[1] California Air Resources Board, *Quantification Methodology for the California State Transportation Agency Transit and Intercity Rail Capital Program*, Pg. 7

3) Based on SANDAG stop-by-stop forecasting data, determined number of weekday passengers on Blue Line that would be boarding between Old Town and downtown (5,547). Applied a 0.3 elasticity figure for these passengers due to the frequency enhancement or reduction in transfer due to the thru routing of the Blue Line.

4) Determined current ratio of Saturday and Sunday passengers to weekday passengers on both the Green and Blue Lines and applied that number to the weekday total to project Saturday and Sunday ridership.

5) Multiplied Step 4 by the number of days in the year to project first-year increase in ridership.

6) Used SANDAG No Build 2020 and 2050 transit ridership forecasts to determine average percentage increase in transit ridership per year (1.18%) and projected that out over the course of the 40-year useful life of the project.

Please see the attached "Ridership Estimates" Excel file that has been included with the application submission.

YrF Ridership: 3,204,181

Final year ridership was determined using the same methodology described in the Yr1 Ridership input selection explanation above.

Adjustment Factor (A): 0.5

The default adjustment factor of 0.5 for local bus service was used. This is because the average light rail trip length at MTS of 5.56 miles (Table C-2 of quantification guidelines) is much closer to the average MTS motor-bus trip length of 3.85 (averaged MB-PT and MB-DO values in Table C-2 of guidelines) than the average MTS commuter bus trip length of 23.69 miles. Hence, it seemed more appropriate to use the default local bus default since MTS trolley service is more similar to MTS bus service than long-distance commuter bus.

Length of Average Trip (L): 5.56

The average MTS trolley trip length (LR-DO) is 5.56 miles per Table C-2 in the quantification methodology guidelines.

Hybrid Vehicle: No

MTS is not purchasing hybrid vehicles as part of this project.

Fuel Type: Electric

The light rail vehicles operated on the blue line are powered by electricity.

Project-Specific Emission Factor: Blank

MTS is not using project-specific emission factors.

Annual VMT: 181,438

Annual VMT for the light rail component was calculated with the following table:

	Weekday	Saturday	Sunday	Total
Miles/Trip	3.426	3.426	3.426	
No. of Trips/day	147	147	135	
Train Miles/day	503.622	503.622	462.51	
Days/year	254	53	58	
VMT	127,919.99	26,691.97	26,825.58	181,437.53

(Miles/Trip) X (No. of Trips/Day) = Train Miles/day

(Train Miles/day) X (Days/year) = VMT

Annual Fuel: Blank

This cell was restricted for editing. In addition, the guidelines indicate to use VMT or annual fuel as an input selection rather than both.

QUANTIFIABLE COMPONENT 2 INPUTS: BRT RAPID ROUTES 725 AND 925

TIRCP Funds Requested: $23,015,000

The TIRCP request for the second quantifiable component of $23,015,000 was based on the budget and revenue plan included below..

Blue Line Rail Corridor Transit Enhancements		Revenue			
Project	Total	TIRCP	SB1 STA	TDA/Local	Match %
Blue Line Feeder Bus Service (23 Articulated Buses)	24,903	19,922	-	4,981	20%
Blue Line Feeder Bus Service (Stop Improvements) Design/Construction	3,865	3,092	-	773	20%
Rapid 725 Operations	2,849	-	2,849	-	100%
Rapid 925 Operations	4,463	-	4,463	-	100%
Blue Line - New BRT Feeder Service	36,080	23,015	7,312	5,754	36%

Multi-Year: Yes

This project is includes funding requests for design and construction for various project components. Design and construction are programmed in different fiscal years.

Blue Line Rail Corridor Transit Enhancements						
Project Component	Total Cost	FY19	FY20	FY21	FY22	FY23
Blue Line Feeder Bus Service (23 Articulated Buses & Stop Improvements)	24,903	-	-	-	24,903	-
Blue Line Feeder Bus Service (Stop Improvements)	3,865	460	-	3,405	-	-

Additional CCI Programs: Blank

MTS does not plan to allocate any other CCI program funding to this project.

Project Type: New/Expanded Service

The Blue Line Rail Corridor project is an "expansion of transit (e.g. rail (train), bus, ferry, shuttle and vanpool) service through new service or additional routes" as described in the quantification methodology guidelines.[2]

[2] California Air Resources Board, *Quantification Methodology for the California State Transportation Agency Transit and Intercity Rail Capital Program*, Pg. 7

Service Type: Local/Intercity Bus (Short Distances)

The statewide average trip length for Bus Rapid Transit is 6.44 miles per Table C.1 of the quantification methodologies. This is considered "short distance" when comparing to the MTS commuter bus average trip length of 23.69 miles (Table C.2 of quantification guidelines).

Vehicle Type: Transit Bus

The proposed Rapid 725 and 925 would include transit bus service. In particular, the buses would be 60' New Flyer articulated buses.

Region/County: County

MTS selected County as the input because MTS staff is more familiar with county geography than air basins

Sub-Region: San Diego

The proposed investments would all be implemented in the San Diego sub-region.

Year 1 (Yr1): 2021

The proposed Rapid Routes would begin operations in late 2021 or early 2022 dependent upon completion of the capital components. 2021 was used for the calculations.

Year F (YrF): 2032

The 23 buses that would be purchased for the service have an estimated useful life of 12 years, meaning that the buses would be operated through 2032.

Yr1 Ridership: 2,080,849

The ridership projections for the second quantifiable component were calculated using the following calculation methodology:

1) Determined passengers per hour for comparable routes (Route 709 for Rapid 725 and Routes 905/933/934/950 for Route 925).
2) Since roughly twice as much will be provided on the new Rapid routes as the comparable routes, adjusted expected passengers per hour by half.
3) Due to improved frequencies and service quality, assumed a 0.3 elasticity and applied that to Step 2, resulting in an assumed passenger per revenue hour rate of 0.65 of the comparable routes.
4) Applied Step 3 to the planned hours of service of those routes to generate average weekday ridership.
5) Using existing data, applied percentage of Saturday and Sunday ridership to weekday ridership to generate expected Saturday and Sunday ridership and multiplied those numbers by number of days in the year.

6) Used SANDAG No Build 2020 and 2050 transit ridership forecasts to determine average percentage increase in transit ridership per year (1.18%) and projected that out over the course of the 12-year useful life of the new buses.

The calculations are included in the attached "Ridership Estimates" Excel file included with the application submission.

YrF Ridership: 2,367,954

Final year ridership was determined using the same methodology described in the Yr1 Ridership input selection explanation above

Adjustment Factor (A): 0.5

The adjustment factor of 0.5 for local bus service was applied to the project. The statewide average trip length for Bus Rapid Transit is 6.44 miles per Table C.1 of the quantification methodologies. This is considered "short distance" when comparing to the MTS commuter bus average trip length of 23.69 miles (Table C.2 of quantification guidelines).

Length of Average Trip (L): 6.44 miles

The statewide average trip length for Bus Rapid Transit is 6.44 miles per Table C.1 of the quantification methodologies.

Hybrid Vehicles: No

MTS is not purchasing hybrid vehicles as part of this project.

Fuel Type: CNG

MTS would operate 60' articulated CNG buses on the proposed routes.

Model Year: 2021

MTS plans to procure model year 2021 New Flyer CNG buses.

Annual VMT: 1,082,216

Annual VMT of 1,082,216 was calculated using the following table.

	WKDY	SAT	SUN	TOTAL
ROUTE	**DAILY**	**DAILY**	**DAILY**	**Annual**
725				
Miles	1,688	0	0	1,688
Days/year	254	53	58	n/a
VMT (725)	**428,752**	**0**	**0**	**428,752**
925				
Miles	2,242	810	708	3,760
Days/year	254	53	58	n/a
VMT (925)	**569,468**	**42,909**	**41,087**	**653,464**
Total VMT	**998,220**	**42,909**	**41,087**	**1,082,216**

(Miles) X (Days/year) = VMT

Miles were based on the planned route lengths and planned trips. Calculations are included in the Ridership Estimates Excel file included with the application.

Attachment No. 7

List of SB 535 and AB 1550 Communities Served by Project

SB 535 Disadvantaged Communities Served by Project

Census Tract ID	County	Blue Line	Rapid 725	Rapid 925
6073003601	San Diego	Within 1/2-Mile		
6073003800	San Diego	Contains Station		
6073003902	San Diego	Within 1/2-Mile		
6073004700	San Diego	Within 1/2-Mile		
6073004900	San Diego	Within 1/2-Mile		
6073005000	San Diego	Contains Station		
6073005100	San Diego	Contains Station		
6073005200	San Diego	Contains Station		
6073005300	San Diego	Contains Station		
6073005700	San Diego	Within 1/2-Mile		
6073010009	San Diego	Within 1/2-Mile		
6073011601	San Diego	Within 1/2-Mile		
6073011602	San Diego	Within 1/2-Mile		
6073011700	San Diego	Within 1/2-Mile		
6073011801	San Diego	Within 1/2-Mile		
6073012501	San Diego	Contains Station	Contains Route	
6073012502	San Diego	Contains Station		
6073012600	San Diego	Within 1/2-Mile	Contains Route	
6073013205	San Diego	Contains Station		
6073021900	San Diego	Contains Station		

AB 1550 Low-Income Communities Served by Project

Census Tract ID	County	Blue Line	Rapid 725	Rapid 925
6073003601	San Diego	Within 1/2-Mile		
6073003902	San Diego	Within 1/2-Mile		
6073004600	San Diego	Within 1/2-Mile		
6073004700	San Diego	Within 1/2-Mile		
6073004900	San Diego	Within 1/2-Mile		
6073005000	San Diego	Contains Station		
6073005100	San Diego	Contains Station		
6073005200	San Diego	Contains Station		
6073005700	San Diego	Within 1/2-Mile		
6073006500	San Diego	Contains Station		
6073008305	San Diego	Contains Station		
6073008339	San Diego	Contains Station		
6073008343	San Diego	Within 1/2-Mile		
6073008361	San Diego	Within 1/2-Mile		
6073010004	San Diego	Within 1/2-Mile		Contains Route
6073010005	San Diego	Within 1/2-Mile		Contains Route
6073010009	San Diego	Within 1/2-Mile		
6073010010	San Diego	Within 1/2-Mile		Within 1/4-Mile
6073010012	San Diego	Within 1/2-Mile		Contains Route
6073010013	San Diego	Contains Station		
6073010103	San Diego	Within 1/2-Mile		Contains Route
6073010104	San Diego			Contains Route
6073010106	San Diego	Contains Station		Contains Route
6073010107	San Diego	Contains Station		Contains Route
6073010110	San Diego	Within 1/2-Mile		Contains Route
6073010111	San Diego	Within 1/2-Mile		Contains Route
6073010112	San Diego			Contains Route
6073010300	San Diego			Contains Route
6073010401	San Diego			Contains Route
6073010402	San Diego			Contains Route
6073011601	San Diego	Within 1/2-Mile		
6073011602	San Diego	Within 1/2-Mile		
6073011700	San Diego	Within 1/2-Mile		
6073011801	San Diego	Within 1/2-Mile		
6073012402	San Diego	Within 1/2-Mile		
6073012501	San Diego	Contains Station	Contains Route	
6073012502	San Diego	Contains Station		
6073012600	San Diego	Within 1/2-Mile	Contains Route	
6073012700	San Diego	Within 1/2-Mile	Contains Route	
6073012800	San Diego		Contains Route	
6073013000	San Diego	Within 1/2-Mile	Contains Route	
6073013103	San Diego	Within 1/2-Mile		
6073013104	San Diego	Within 1/2-Mile		
6073013205	San Diego	Contains Station		
6073013206	San Diego	Within 1/2-Mile		
6073021900	San Diego	Contains Station		

Attachment No. 8

SCS Consistency Letter

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

January 2, 2018

The Honorable Brian P. Kelly, Secretary
California State Transportation Agency
915 Capital Mall, Suite 350B
Sacramento, CA 95814

Dear Secretary Kelly:

SUBJECT: Blue Line Rail Corridor Transit Enhancements – Consistency with Sustainable Communities Strategy

The San Diego Association of Governments (SANDAG) has reviewed the San Diego Metropolitan Transit System Blue Line Rail Corridor Transit Enhancements project and determined that it will implement San Diego Forward: The Regional Plan, which is the SANDAG Board-adopted Regional Transportation Plan and its Sustainable Communities Strategy (SCS).

San Diego Forward: The Regional Plan calls for investing in a transportation network that provides residents and workers with transportation options that reduce greenhouse gas emissions. The proposed project will support reducing greenhouse gas emissions by adding feeder bus service, increasing frequency, and improving infrastructure in the Blue Line rail corridor.

SANDAG is pleased to submit this letter of SCS consistency for the San Diego Metropolitan Transit Blue Line Rail Corridor Transit Enhancements project, which will assist in implementation of the Regional Plan.

Sincerely,

CHARLES "MUGGS" STOLL
Director of Land Use and Transportation Planning

Attachment No. 9

Matching Commitment Letter

Metropolitan Transit System

1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466

January 3, 2018

Honorable Brian P. Kelley
Secretary
California State Transportation Agency
915 Capital Mall, Suite 350B
Sacramento, CA 95814

RE: COMMITMENT OF MATCHING FUNDS FOR BLUE LINE RAIL CORRIDOR TRANSIT ENHANCEMENTS PROJECT

The San Diego Metropolitan Transit System (MTS) is dedicated to improving public transportation service and reducing greenhouse gas emissions in the San Diego region. To that end, MTS is applying for $62,896,000 in 2018 Transit and Intercity Rail Capital (TIRCP) funding for the Blue Line Rail Corridor Transit Enhancements project.

This letter confirms MTS's commitment of providing $15,132,000 in non-TIRCP matching funds to the project per the breakdown below.

Blue Line Rail Corridor Transit Enhancements: Funding Strategy

Project Component	Total	TIRCP	SB1 SGR	TDA/Local	Match
Beech Street Double Crossover Design/Construction	5,065	4,052	-	1,013	0.20
Middletown Double Crossover Construction	6,222	4,977	-	1,244	0.20
America Plaza Pedestrian Enhancements - Design/Construction	4,694	3,755	-	939	0.20
Old Town Transit Center West Enhancements - Construction	2,367	2,367	-	-	-
Beyer Track and Slope Repair - Construction	5,195	4,156	-	1,039	0.20
America Plaza Track Replacement - Design/Construction	1,425	1,140	-	285	0.20
Green Line IMT Double Tracking Design/Construction	8,736	6,989	1,747	-	0.20
Blue Line Substation Replacement (6 locations) - Design/Construction	13,098	10,478	-	2,620	0.20
A Yard Turnouts, Newton Crossover, IMT Diamonds - Design/Construction	2,459	1,967		492	0.20
Blue Line Feeder Bus Service (23 Articulated Buses & Stop Improvements)	24,903	19,922	-	4,981	0.20
Blue Line Feeder Bus Service (Stop Improvements)	3,865	3,092	-	773	0.20
Capital Total	78,028	62,896	1,747	13,385	0.19

In the event that actual formula apportionments are lower than projected, MTS will amend the MTS Capital Improvement Program and allocate additional local funds to fully fund the project.

Thank you for this funding opportunity.

Sincerely,

Larry Marinesi
Chief Financial Officer

Support Letters

RON ROBERTS
SUPERVISOR, FOURTH DISTRICT
SAN DIEGO COUNTY BOARD OF SUPERVISORS

January 9, 2018

The Honorable Brian Kelly, Secretary
California State Transportation Agency
915 Capitol Mall, Suite 350B
Sacramento, CA 95814

Re: Support for San Diego Metropolitan Transit System 2018 Transit and Intercity Rail Capital Program Applications

Dear Secretary Kelly:

As Supervisor for the Fourth District of the County of San Diego, I would like to express my support for the two applications submitted by the San Diego Metropolitan Transit System under the 2018 Transit and Intercity Rail Capital Program (TIRCP).

The Blue Line Rail Corridor Transit Enhancements project includes a variety of capital and operational investments designed to increase light rail service, improve safety and performance, and introduce new Bus Rapid Transit (BRT) feeder service along the Blue Line Rail Corridor. The proposed project includes the construction of double crossovers for operational flexibility, pedestrian enhancements, transit facility enhancements, track replacement, slope repairs, double tracking at the Green Line terminus, bus replacement, implementation of 15-minute service on the segment of the Blue Line between Santa Fe Depot and Old Town, and the implementation of two new Rapid BRT Routes that would provide direct connections to the Blue Line.

The Zero Emission Bus Deployment project includes implementing a pilot program and procuring a total of 38 zero emission buses to replace existing CNG buses. This project would provide significant benefits to the region by reducing greenhouse gas emissions and noise pollution in the communities which they would serve.

Together, these projects will increase transit ridership, reduce greenhouse gas emissions, improve safety, enhance integration of the system, and provide other regional benefits beyond those mentioned here.

Sincerely,

RON ROBERTS
Supervisor, Fourth District
San Diego County Board of Supervisors

COUNTY ADMINISTRATION CENTER • 1600 PACIFIC HIGHWAY, ROOM 335 • SAN DIEGO, CALIFORNIA 92101-2470
(619) 531-5544 • FAX (619) 531-6262 • E-MAIL: Ron.Roberts@sdcounty.ca.gov
www.ronroberts.com

OFFICE OF THE MAYOR
Mary Casillas Salas

January 11, 2018

The Honorable Brian P. Kelly, Secretary
California State Transportation Agency
915 Capital Mall, Suite 350B
Sacramento, CA 95814

Dear Secretary Kelly:

I would like to express my support for the two applications submitted by the San Diego Metropolitan Transit System under the 2018 Transit and Intercity Rail Capital Program (TIRCP).

The Blue Line Rail Corridor Transit Enhancements project includes a variety of capital and operational investments designed to increase light rail service, improve safety and performance, and introduce new Bus Rapid Transit (BRT) feeder service along the Blue Line Rail Corridor. The program of project includes the construction of double crossovers for operational flexibility, pedestrian enhancements, transit facility enhancements, track replacement, slope repairs, double tracking at the Green Line terminus, bus replacement, implementation of 15-minute service on the segment of the Blue Line between Santa Fe Depot and Old Town, and the implementation of two new *Rapid* BRT Routes that would provide direct connections to the Blue Line.

The Zero Emission Bus Deployment project includes implementing a pilot program and procuring a total of 38 zero emission buses to replace existing CNG buses. This project would provide significant benefits to the region by reducing greenhouse gas emissions and noise pollution in the communities which they would serve.

Together, these projects will increase ridership, reduce greenhouse gas emissions, improve safety, enhance integration of the system, and provide other regional benefits beyond those mentioned here.

Sincerely,

Mary Casillas Salas

MARY CASILLAS SALAS
Mayor
City of Chula Vista

276 Fourth Avenue • Chula Vista • California 91910 • (619) 691-5044 • Fax (619) 476-5379
msalas@chulavistaca.gov

Attached Files

Ridership Estimates *(RidershipEstimates.xls)*

KML Files of Project Routes
(MTS.Blue.Line.Project.Location.kmz)

Project Programming Request *(PPR.BlueLine.xls)*