



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

9:00 a.m.

James R. Mills Building
Board Meeting Room, 10th Floor
1255 Imperial Avenue, San Diego

To request an agenda in an alternative format or to request accommodations to facilitate meeting participation, please call the Clerk of the Board at least two working days prior to the meeting. Assistive Listening Devices (ALDs) are available from the Clerk of the Board/Assistant Clerk of the Board prior to the meeting and are to be returned at the end of the meeting.

ACTION RECOMMENDED

1. Roll Call
2. Approval of Minutes – December 13, 2018 Approve
3. Public Comments - Limited to five speakers with three minutes per speaker. Others will be heard after Board Discussion items. If you have a report to present, please give your copies to the Clerk of the Board.
4. Elect Vice Chair, Chair Pro Tem, and Committee Appointments (Sharon Cooney) Elect
Action would: (1) elect a Vice Chair and Chair Pro Tem for 2019; and (2) consider the nominating slate proposed by the Ad Hoc Nominating Committee for the appointment of representatives to MTS committees for 2019 and vote to appoint representatives to those committees.

Please SILENCE electronics
during the meeting

1255 Imperial Avenue, Suite 1000, San Diego, CA 92101-7490 • (619) 231-1466 • www.sdmts.com

Metropolitan Transit System (MTS) is a California public agency comprised of San Diego Transit Corp., San Diego Trolley, Inc. and San Diego and Arizona Eastern Railway Company (nonprofit public benefit corporations). MTS is the taxicab administrator for seven cities.

MTS member agencies include the cities of Chula Vista, Coronado, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, San Diego, Santee, and the County of San Diego.



CONSENT ITEMS

6. [Security for South Bay Bus Rapid Transit](#) Approve
Action would authorize the Chief Executive Officer (CEO) to execute Amendment Number 5 to MTS Doc. No G1828.0-15 with Allied/Universal dba Transit Systems Security, to provide additional security services for coverage of the new South Bay Rapid (Route 225) through June 30, 2021.
7. [Lease Agreement with Brick by Brick, LLC at 675 West G Street, San Diego](#) Approve
Action would authorize the Chief Executive Officer (CEO) to execute a Lease Agreement with Brick By Brick, LLC for a lease at 675 West G Street, San Diego.
8. [Mills Building Retail Lease: Extension of A-Mart Lease](#) Approve
Action would authorize the Chief Executive Officer (CEO) to execute an amended and restated Lease Agreement with Ramzi and Anwar Murad dba A-Mart, MTS Doc. No. G0202.2-93, including an extension of up to ten (10) years.
9. [Imperial Avenue Division \(IAD\) Maintenance Floor Project – Award Work Order Under a Job Order Contract \(JOC\)](#) Approve
Action would authorize the Chief Executive Officer (CEO) to execute Work Order No. MTSJOC7503-13 to MTS Doc. No. PWL234.0-17 with ABC Construction Company, Inc. (ABC) for the epoxy floor installation in the maintenance building at IAD.
10. [Fashion Valley Stair Repair – Award Work Order Under a Job Order Contract \(JOC\)](#) Approve
Action would authorize the Chief Executive Officer (CEO) to execute Work Order MTSJOC7504-24 for MTS Doc. No. PWL204.0-16 with ABC Construction Company, Inc. (ABC) for the Fashion Valley Stair Repair located at Fashion Valley Transit Center.
11. [Design Services for Zero Emission Bus \(ZEB\) Pilot Program, Chargers Phase II – Work Order](#) Approve
Action would authorize the Chief Executive Officer (CEO) to execute Work Order WOA1947-AE-34 for MTS Doc. No. G1947.1-17 with HDR Engineering, Inc. (HDR) in the amount of \$245,460.38 for design services for ZEB Chargers Phase II.
12. [Kearny Mesa Division \(KMD\) Concrete Replacement – Award Work Order Under a Job Order Contract \(JOC\)](#) Approve
Action would authorize the Chief Executive Officer (CEO) to execute Work Order No. MTSJOC7504-50 for MTS Doc. No. PWL204.0-16 with ABC Construction Company, Inc. (ABC) for the partial replacement of concrete at KMD.
13. [Paint Booth Blower Upgrades and Repair – Award Work Order Under a Job Order Contract \(JOC\)](#) Approve
Action would authorize the Chief Executive Officer (CEO) to execute Work Order MTSJOC7503-47 for MTS Doc. No. PWL234.0-17 with ABC Construction Company, Inc. (ABC) for Paint Booth Blower upgrades and repair at the Trolley Paint Booth.
14. [South Bay Maintenance Facility Flooring – Contract Award](#) Approve
Action would authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. PWB265.0-19 with Stoncor Group, Inc. dba Stonhard (Stonhard) for the

installation of a multi component epoxy mortar floor system (flooring) in the maintenance bays at the South Bay Bus Maintenance Facility.

CLOSED SESSION

- | | | |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 24. | a. CLOSED SESSION – CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION Pursuant to California Government Code Section 54956.9(d)(1) San Diego Metropolitan Transit System v. Grand Central West LLC and related cross-complaints (San Diego Superior Court Case No. 37-2014-00044014-CU-OR-CTL | Possible Action |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|

NOTICED PUBLIC HEARINGS

25. None.

DISCUSSION ITEMS

- | | | |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 30. | <u>San Diego Transit Corporation (SDTC) Pension Investment Status (Jeremy Miller, Representative from RVK and Larry Marinesi)</u> | Informational |
| 31. | <u>San Diego Transit Corporation (SDTC) Employee Retirement Plan's Actuarial Valuation as of July 1, 2018 (Anne Harper of Cheiron Inc. and Larry Marinesi)</u>
Action would receive the SDTC Employee Retirement Plan's (Plan) actuarial valuation as of July 1, 2018, and adopt the pension contribution amount of \$15,919,058 for fiscal year 2020. | Adopt |

REPORT ITEMS

- | | | |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 45. | <u>E Street Trolley Station Joint Development and Reimbursement Agreement with the City of Chula Vista (Tim Allison)</u> | Informational |
| 46. | <u>Update on Innovative Clean Transit Regulation (Paul Jablonski)</u> | Informational |
| 47. | <u>Operations Budget Status Report for November 2018 (Mike Thompson)</u> | Informational |
| 59. | <u>Ad Hoc Ballot Measure Committee Report</u> | Informational |
| 60. | <u>Chair Report</u> | Informational |
| 61. | <u>Chief Executive Officer's Report</u> | Informational |
| 62. | <u>Board Member Communications</u> | Informational |
| 63. | <u>Additional Public Comments Not on the Agenda</u>
If the limit of 5 speakers is exceeded under No. 3 (Public Comments) on this agenda, additional speakers will be taken at this time. If you have a report to present, please furnish a copy to the Clerk of the Board. Subjects of previous hearings or agenda items may not again be addressed under Public Comments. | |
| 64. | <u>Next Meeting Date</u> : February 14, 2019 | |
| 65. | <u>Adjournment</u> | |

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101

DRAFT MINUTES

December 13, 2018

[Clerk's note: Except where noted, public, staff and board member comments are paraphrased].

1. Roll Call

Chair Gomez called the Board meeting to order at 9:05 a.m. A roll call sheet listing Board member attendance is attached.

2. Approval of Minutes

Mr. Arambula moved to approve the minutes of the November 8, 2018, MTS Board of Directors meeting. Mr. Diaz seconded the motion, and the vote was 12 to 0 in favor with Mr. Arapostathis, Mr. Faulconer and Mr. Roberts absent.

3. Public Comments

Patrick Liva – Mr. Liva commented on his concerns of the health and safety of passengers due to the increased presence of homeless riders on the system. He commented that due to the recent storm, there is an increased chance of the spread of Hepatitis due to the flooding and overturned porta johns at the homeless shelter tent adjacent to MTS buildings. Mr. Liva stated that he asked multiple MTS employees whether the proper steps were taken to clean and sanitize the area and the buses and he stated that he was not given an answer. He commented that the homeless issue is affecting the public and stated that MTS needs to take responsibility for the public and its riders to ensure there is health and safety guarantees.

Edna Nerio – This speaker gave their speaking time to Patrick Liva.

Valerie Hightower – Ms. Hightower commented that she has been asking to have bus benches installed at 47th & Market, 47th & Imperial and City College. She recommended establishing an animal transit pass for service animals. She asked when the restrooms will be unlocked and available for the transit riders to access. Ms. Hightower asked who is cleaning the bus stops and benches.

Mickey Bachrach – This speaker gave their speaking time to Patrick Liva.

Jack Shu – Mr. Shu commented on the potential future MTS ballot measure. He asked a series of questions about the proposed measure. He asked if there will be a review to look at the bond measure to see if it will accomplish the necessary transit goals for the region. Mr. Shu inquired if the bond measure will address new projects as well as building off of previous transit projects in the region. He asked if the bond measure will help to reach the greenhouse gas reduction goals for the region. Lastly, Mr. Shu asked if this measure will supplant or supplement the funds we have available for transportation development. He stated that economic justice needs to be considered related to the potential measure.

Clive Richard – Mr. Richard commented on the improvement of the transit system network to ensure that missed connections do not occur. He stated that the system network needs to be improved and believes that was the purpose of the Transit Optimization Plan (TOP).

CONSENT ITEMS

6. Unallocated Transportation Development Act (TDA) Funds for Transit-Related Projects – City of Santee
Action would approve the use of \$76,706 in unallocated TDA funds currently held by the County of San Diego for transit-related capital project for the City of Santee.
7. Unallocated Transportation Development Act (TDA) Funds for Transit-Related Projects – City of El Cajon
Action would approve the use of \$92,196 in unallocated TDA funds currently held by the County of San Diego for transit-related expenses for the City of El Cajon.
8. HVAC Maintenance and Repair Services – Contract Award
Action would authorize the Chief Executive Officer (CEO) to: (1) Execute MTS Doc. No. PWG256.0-18, with Paradigm Mechanical Corp., for HVAC maintenance and repair services for a three (3) year base period, with two (2) one-year options (total of five years); and (2) Exercise option years at CEO's discretion.
9. Federal Transit Administration (FTA) Section 5310 Grant Application
Action would adopt Resolution No. 18-15 certifying that there are no private, nonprofit organizations readily available to provide the same complementary paratransit service in MTS's service area, a prerequisite to receiving FTA Section 5310 funding.
10. Mid-Coast Corridor Transit Project – Projected Staffing
Action would approve the addition of 85 positions in preparation for the Mid-Coast Corridor Trolley Project (Mid-Coast Trolley Project).
11. Job Order Contract (JOC) On-Call General Building and Facilities Construction – Contract Amendment
Action would authorize the Chief Executive Officer (CEO) to execute Amendment No. 1 to MTS Doc. No. PWL234.1-17 (SANDAG Doc. No. 5007503) with ABC Construction Company, Inc. (ABC), for an increase to the contract value.
12. Bus Operator Uniforms – Contract Award
Action would authorize the Chief Executive Officer (CEO) to: (1) Execute MTS Doc. No. B0692.0-18 with Ace Uniforms and Accessories, Inc. (Ace) for the provision of bus operator uniforms for a three (3) year base period with two (2) one-year optional terms (for a total of 5 years); and (2) Exercise each option year at the CEO's discretion.
13. Nextfare Compass Card System Maintenance Extension
Action would authorize the Chief Executive Officer (CEO) to execute Amendment No.3 to MTS Doc No. G1695.0-14 with Cubic Transportation Systems Inc. for the extension of the current maintenance agreement for an additional three-year period.

14. Master Concessionaire Services – Contract Amendment
Action would authorize the Chief Executive Officer (CEO) to execute Amendment No. 5 to MTS Doc. No. L0901.0-10, with BriceHouse Station, LLC (“BriceHouse”), extending the contract to April 30, 2023.
15. Variable Message Sign (VMS) Display Assembly for South Bay Bus Rapid Transit (BRT) Stations – Contract Award
Action would authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. L1468.0-19, with My Electrician Inc., for the supply of the South Bay BRT VMS sign assemblies.
16. Light Rail Vehicles (LRVs) On-Board Video Surveillance System (OBVSS) Preventative Maintenance, Emergency Services, New Installations and Upgrades as Required – Sole Source Contract Award
Action would authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. L1469.0-19, a Sole Source contract, with Seon Design USA (Seon), for the provision of OBVSS preventative maintenance, emergency services, new installations and upgrades as required on LRVs for three (3) years beginning February 1, 2019.
17. Trolley Station Network Communication Equipment Replacement – Contract Award
Action would authorize the Chief Executive Officer (CEO) to execute MTS Doc No. G2226.0-19 with AT&T Corp. to replace the trolley station network communications equipment.
18. Ultrasonic Rail Testing Services – Contract Award
Action would authorize the Chief Executive Officer (CEO) to authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. L1473.0-19 with Herzog Services, Inc. (Herzog), for the provision of ultrasonic rail testing services for three years beginning on January 1, 2019, and ending on December 31, 2021, subject to the MTS General Counsel approving a modified indemnification clause.
19. The ARC of San Diego Interior Bus Cleaning – Sole Source Contract Award
Action would authorize the Chief Executive Officer (CEO) to: (1) Execute MTS Doc. No. B0693.0-19 with the ARC of San Diego (ARC) for deep cleaning the interiors of San Diego Transit Corporation (SDTC) buses for a five (5) year base period with two (2) 1-year options for a total of seven (7) years; and (2) Exercise each option year at the CEO’s discretion.

PUBLIC COMMENT – CONSENT ITEM NUMBER 19

Gina Turner – Ms. Turner commented on behalf of The Arc of San Diego. She stated that they have been in partnership with MTS for many years to help provide jobs to people with disabilities. Ms. Turner thanked MTS for the ongoing relationship and looks forward to the renewal of their contract.

Action on Recommended Consent Items

Mr. Ward moved to approve Consent Agenda Item Nos. 6 – 19. Mr. Sandke seconded the motion, and the vote was 12 to 0 in favor with Mr. Arapostathis, Mr. Faulconer and Mr. Roberts absent.

CLOSED SESSION

24. Closed Session Items

The Board convened to Closed Session at 9:21 a.m.

- a. CLOSED SESSION - CONFERENCE WITH REAL PROPERTY NEGOTIATORS Pursuant to California Government Code Section 54956.8
Property: Mills Building Parking Garage (1255 Imperial Avenue, San Diego, CA; APN 538-010-33)
Agency Negotiators: Paul Jablonski, Karen Landers
Negotiating Parties: Padres L.P., San Diego Ballpark Funding LLC
Under Negotiation: Price and Terms of Payment under Lease Agreement for Parking Spaces dated January 30, 2007
CLOSED SESSION - CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION Pursuant to California Government Code Section 54956.9(d)(4) (One potential case)
- b. CLOSED SESSION – CONFERENCE WITH LABOR NEGOTIATORS PURSUANT TO CALIFORNIA GOVERNMENT CODE SECTION 54957.6
Agency: San Diego Transit Corporation (SDTC)
Employee Organization: Amalgamated Transit Union, Local 1309 (Representing Bus Operators and Clerical Employees at SDTC)
Agency-Designated Representative: Jeff Stumbo
- c. CLOSED SESSION – CONFERENCE WITH LABOR NEGOTIATORS PURSUANT TO CALIFORNIA GOVERNMENT CODE SECTION 54957.6
Agency: San Diego Trolley, Inc. (SDTI)
Employee Organization: International Association of Sheet Metal, Air, Rail and Transportation Workers (Representing SDTI Train Operators, Electromechanics, Servicepersons and Clerical Staff)
Agency-Designated Representative: Jeff Stumbo

The Board reconvened to Open Session at 9:43 a.m.

Oral Report of Final Actions Taken in Closed Session

Karen Landers, General Counsel, reported the following:

- a. The Board received a report and gave instructions to staff and counsel.
- b. The Board approved a collective bargaining agreement with the ATU Local 1309 on a vote of 12 saying aye and 3 members absent.
- c. The Board received a report regarding conference with labor negotiators and gave instructions to staff.

NOTICED PUBLIC HEARINGS

25. None.

DISCUSSION ITEMS

30. MTS Transit Service Fixed-Route and Bus Rapid Transit (BRT) Agreement – Contract Amendment (Bill Spraul and Larry Marinesi)

Mr. Jablonski provided a brief introduction for this item. He stated that Transdev is our contractor in South Bay and East County. He commented that they operate about 50% of all of our fixed route bus services. Mr. Jablonski stated that we awarded a contract to Transdev about three years ago, which was done prior to the local and state ordinances regarding the minimum wage increase. He commented that due to the minimum wage impacts, the costs have risen to sustain the contract. Mr. Jablonski noted that we have been in negotiations with Transdev to address the minimum wage impacts and potential changes to the contract. He stated that staff will provide an update on those numbers and potential contract changes.

Bill Spraul, Chief Operating Officer – Transit Services, continued the presentation. He discussed the details of the Transdev contract. He reviewed the minimum wage changes for the City of San Diego and the State of California. Mr. Spraul discussed the response to the minimum wage increase in relation to the Transdev contract. He reviewed the proposed contract revisions for the Transdev contract. Mr. Spraul stated that there would be an \$8.5 million increase in MTS expenses from January 2019 to June 2021, and a \$1.0 million in Bus Rapid Transit (BRT) costs, which are fully funded by SANDAG (*TransNet*) for service beginning January 2019. He also noted that the MTS Security contract was previously affected by the minimum wage increase. Mr. Spraul reviewed the staff recommendation and asked for comments and questions.

Action Taken

Mr. Hall moved to authorize the Chief Executive Officer (CEO) to execute Amendment No. 1 to MTS Doc. No. B0614.1-14 to amend the contract rates with Transdev Services, Inc. (Transdev). Mr. Sandke seconded the motion, and the vote was 12 to 0 in favor with Mr. Arapostathis, Mr. Faulconer and Mr. Roberts absent.

31. Account Based Fare Collection System – Contract Award (Sharon Cooney and Israel Maldonado)

Sharon Cooney, Chief of Staff, provided an overview about the details of the fare collection system upgrade. She reviewed the need for this project and provided details about the early process of the project and procurement. Ms. Cooney discussed the details of the fare system working group and the development of specific objectives for the next generation fare system. She discussed the details of the concept of operations documents and reviewed the components of the next generation fare system. Ms. Cooney provided details on the procurement process including the Request for Proposals (RFP) process; evaluation criteria; timeline; site visits; selection of vendor to enter negotiations and vendor selection. Ms. Cooney discussed the items and features that will be included with the new system. She noted that the proposed system has been launched and in service in Portland since the summer of 2017.

Lastly, Ms. Cooney reviewed the breakdown of costs for the capital and 10 years operation and maintenance costs.

PUBLIC COMMENTS

Michael Horgan – Mr. Horgan commented that he is looking forward to using the new fare system. He stated that the fare capping feature looks great and the ability to have multiple cards on one account will be useful too. Mr. Horgan asked how the disabled riders would be managed on the new fare system. He also asked how North County Transit District (NCTD) would be involved in the new fare system.

Matthew Sanford – Mr. Sanford commented on behalf of the San Diego Regional Economic Development Council (EDC). He made comments about Cubic, which was not selected for this contract. Mr. Sanford stated that Cubic is a homegrown and local San Diego company that provides jobs to 1,500 local residents. He commented that Cubic is a binational company and embraces binational principals. He stated that it is unfortunate there is not an economic development consideration for this procurement process. Mr. Sanford commented that he understands there are restrictions related to funding, but would like to see the discussion of innovation realized instead of only discussed.

BOARD COMMENTS

Mr. McClellan asked if riders will be able to use a compass card or a mobile application for this new system. Ms. Cooney responded that riders will be able to use either the card or the mobile application. Mr. Jablonski commented that we will also be able to expand our card availability at third party outlets. He said that the MTS compass cards will be more widely available at stores and in a format similar to purchasing gift cards for restaurants or department stores. Mr. Jablonski also noted that by utilizing fare capping, it will be more affordable for riders instead of having to pay the full monthly pass rate all at one time.

Mr. Hall inquired about the reasons why Cubic was not selected. Ms. Cooney replied that Cubic has always been a great partner to MTS. She stated that their product is not fully developed or tested and their pricing was the highest by a significant amount. Mr. Hall asked if we will have flexibility with fare prices within the new system. Israel Maldonado, Fare Systems Administrator, replied that the new system allows us the capability to be flexible with our fare pricing. Mr. Hall asked about the complaints reported to the Portland system with their fare collection system. He asked if staff reviewed all of those complaints. Kelly Hines, with CH2M, replied that not all of the comments Portland received were complaints, but rather a mix of commendations, comments and complaints. She stated that staff did not review those comments. Mr. Hall recommended that staff look through all of the comments and complaints that Portland received to prepare for our system implementation.

Ms. Salas commented that it would have been great to award the contract to Cubic, but she understands that their cost was substantially higher. She asked if staff did their due diligence in terms of researching INIT's history of change orders and unforeseen costs. Mr. Maldonado replied that during their research of INIT's previous contracts they found that many change orders are due to requests made by the transit agencies more so than the vendor. Ms. Hines commented that all vendors were asked about their history of change orders and what prompted previous change orders. Ms. Salas asked if we need to include maximum cost standards for this

contract. Sam Elmer, Manager of Procurement, replied that the contract is written to include maximum costs, but if change orders do occur and meet the Board threshold, those approval requests will be brought to the Board first. Ms. Salas asked about the timeline for this project. Ms. Cooney replied that the new system with INIT will be tested and implemented before Mid-Coast opens.

Mr. Ward thanked staff for the presentation and their work on this project. He stated that he is excited for this project and for the fare capping feature of this new system. Mr. Ward stated that he was also concerned about the change order matter that Ms. Salas raised. He asked if staff reviewed past contracts with this vendor to ensure that there were not substantial change orders with other contracts. Mr. Maldonado stated that they did not find any substantial or unnecessary change orders. Mr. Ward asked if staff spoke with actual customers of this system to understand their opinions. Mr. Maldonado responded that they primarily spoke with the vendor and the transit agency, but not the customers. Mr. Ward suggested that staff speak with customers about their real experience with the system. Mr. Ward inquired about the contract details and whether there are key performance indicators to measure the quality of the vendor during the 10-year period. Mr. Maldonado replied that we do have key performance indicators included in the contract that INIT must achieve. Mr. Ward commented that he is excited about the outcomes of the work and looks forward to implementation of the project.

Mr. Jablonski stated that he wanted to clarify that this contract decision did not come easy. He commented that MTS has worked with Cubic for many years and they have done a great job, however MTS is not able to award a contract based on local preference due to federal funding regulations. He stated that it is also important to award the contract that has the best value to the public.

Mr. Sandke commented that he has confidence in this contract. He asked for details in relation to how NCTD would be involved in this process. Ms. Cooney replied that NCTD decided to not continue the procurement process with MTS, however staff did leave the option open for NCTD to easily integrate into the system. She noted that staff is meeting with NCTD next week to begin discussions on integration.

Chair Gomez stated that she is excited for the new fare collection system. She thanked staff for their hard work during this process and their due diligence. Chair Gomez commented that this project has been a long time coming and she is looking forward to modernizing the system.

Mr. Diaz stated that he is excited for this new fare collection system. He asked if Portland or other systems have been using APIs or rideshares. Ms. Hines stated that they are not aware of any at this time, but she knows that other agencies have been in discussions related to those features and uses. Mr. Diaz inquired if the MTS network has the capacity for these new technological capabilities. Mr. Maldonado replied that we have decided to cloud host the new system and we will also utilize PCI compliance consultants with the new technology.

Mr. Jablonski recognized Scott Donnell, Revenue Manager. He stated that Mr. Donnell was an integral part of this procurement process and an asset to MTS. He noted that Mr. Donnell is retiring after having worked for MTS for over 20 years. Mr. Jablonski congratulated Mr. Donnell on his retirement and thanked him for his great work over the years.

Action Taken

Mr. Sandke moved to authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. G2091.0-18, with INIT Innovations in Transportation, Inc., (INIT) to provide an Account Based Fare Collection System, and operations, maintenance and hosting services for ten (10) years. Ms. Salas seconded the motion, and the vote was 12 to 0 in favor with Mr. Arapostathis, Mr. Faulconer and Mr. Roberts absent.

32. Support for Regional Comprehensive Fare Ordinance Changes (Sharon Cooney and Israel Maldonado)

Mr. Jablonski introduced this item and stated that today's discussion will be about changing and simplifying fares. He noted that it has been over 10 years since fares were increased. He reviewed the details as to why the San Diego region is looking to update the fare ordinance. Mr. Jablonski noted that the MTS Board is not approving a fare increase, and he clarified that the authorization to change the fare ordinance stands with SANDAG. Today's action would make recommendations to the SANDAG Board.

Mr. Maldonado continued the presentation and reviewed the direct goals of the fare study. He reviewed details of the fare study including the current fare catalog; indirect goals; methodology; proposed fare catalog before public outreach; simplification and policy changes; public outreach; changes proposed after public outreach; proposed fare catalog after public outreach and impacts of implementation of the fare study recommended proposal. Lastly, Mr. Maldonado reviewed the timeline and schedule going forward to implement the fare ordinance changes.

Mr. Jablonski reminded the Board that MTS does have a budget deficit and these proposed fare changes will help with that issue, but it will not solve the entire problem. He noted that shortly after the new year, the Budget Development Committee will meet to discuss options going forward.

PUBLIC COMMENTS

Richard McNamee – Mr. McNamee commented that he would like to advocate for free youth passes. He also recommended that the Board not raise fares for seniors or disabled riders.

Lorraine Leighton – Ms. Leighton commented that she is agreeing with the recommendation. She inquired about coaster fares and asked about the mobile applications and the risk of technology breaches. She also commented that buses were out of service during the recent storm.

Martha Welch – This speaker was not present.

Ramon Florez – Mr. Florez commented that it is not fair to raise the fares for elderly and the disabled population. He stated that there should be equity in the fare increases for all categories.

Joseph Marchese – Mr. Marchese commented about the MTS fare box recovery ratio in comparison to other agencies in the country. He stated that MTS should reconsider raising its

fares on the most vulnerable citizens of the community. Mr. Marchese included a written statement which is included in the final Board meeting packet.

Vianney Ruvalcaba – Ms. Ruvalcaba commented on behalf of the City Heights Community Development Corporation. She commented that they are pleased to see the cost reduction for youth riders. Ms. Ruvalcaba stated they do have other issues with some of the changes that will affect low-income communities. She said that the verbatim comments provided by the public should be summarized by staff so it is easier for the public to read and understand the public outreach responses. Ms. Ruvalcaba noted that the majority of the public comments received were not in favor of the fare increases. She asked how MTS takes into account the public's comments and input. She stated that they believe a Title VI Analysis would help inform this important decision.

Emily Costanzo – Ms. Costanzo commented that she is a teacher at the TRACE School. She noted that the fare increase will negatively impact her students who are disabled. Ms. Costanzo stated that this change will have an impact on their school budget and will likely affect similar schools in the same manner.

Jo Ann Hood – Ms. Hood commented that the increase will have a large impact on her as she is on a fixed income. She stated that she is a senior and disabled and having a fare increase will affect her negatively. She asked if the increase to the senior and disabled population could be less.

Sophie Wolfram – This speaker was not present.

Stacy Williams – Ms. Williams commented that she is a teacher at the TRACE School. She stated that they are concerned about the increase as this will be a large impact to the disabled community. Ms. Williams stated that it is expensive to live in San Diego and their students are on fixed incomes. She urged the Board to not increase the fares on seniors and disabled riders.

Lionel LePage – Mr. LePage commented that this fare increase is discriminatory against seniors and disabled riders, who are the most vulnerable population.

Jean Columbus – Ms. Columbus commented that she is a veteran and has worked her entire life. She stated that she is a senior and is disabled. Ms. Columbus commented that the senior and disabled fares should not be increased while the youth fares are decreased.

Francisca Salcedo – Ms. Salcedo commented that she has been using public transportation for 36 years. She stated that she is in support of the fare simplification, but she is not in favor of the fare increase. She stated that the cost of living is too high in San Diego and many people are on fixed incomes.

Mr. Brooks – This speaker was not present.

Clive Richard – Mr. Richard commented that he understands the reasons why there needs to be a fare increase. He asked what about the percentage of riders that will be lost due to the fare increase. Mr. Richard stated that he views this proposal more as a fare simplification to make it less confusing for the public. He stated a system that is more easily understood is a system that is more likely to be used.

Michelle Krug – This speaker was not present.

Rob Steppke – Mr. Steppke commented that he does not understand as to why the youth and senior fares need to be the same price. He stated that he is against the senior and disabled fare increases. He recommended having a gap between the senior and the youth fares.

BOARD COMMENTS

Chair Gomez stated that this is not an easy conversation and the conversation of cutting service is not an easy conversation either. She stated that we are committed to making our service more accessible to the public. Chair Gomez noted that the other adjustment option is to cut service if we do not raise fares due to the budget deficit. She stated that it is her goal to get the system to a point where we do not need to charge for fares, but that will take a lot of work, time and investment in this system. Chair Gomez commented that in order to maintain the system that we currently have, we need to make adjustments. She stated that it is also important to simplify the system to make it easier for the public to understand.

Mr. Hall recommended adjusting the fares to a tiered system and bring down the youth rates to \$25 and raise the senior rates to \$20, and then incrementally adjust those fares over time to lessen the impact.

Mr. McClellan asked about the amount of money that will be received over the next year from SB 1. Mr. Jablonski replied that we will receive approximately \$12 million in operating funds and \$5 million in capital funds. Mr. McClellan asked if we could use these funds to help with the senior and disabled fares. Mr. Jablonski replied that the Budget Development Committee has not had that discussion yet, but they will be meeting right after the New Year to do so. He commented that the staff recommendation will likely be to offset the deficit by using \$4 million from the fare changes and using \$6 million of SB 1 funds to offset the remaining deficit. Mr. Jablonski noted that we would like to utilize the remaining SB 1 funds for new and expanded services. Mr. McClellan asked about possibly phasing in fare increases to lessen the impact to the public. Mr. Jablonski replied that this proposal was primarily guided by fare simplification, so that there would be one type of full fare pass for adults and one discounted fare pass for youth, seniors and disabled riders.

Mr. Diaz commented that he was looking at all the written public comments and said he was having a hard time with accepting these proposed fare increases. He asked to consider utilizing Mr. Hall's recommendation. He said that he would recommend sending this back to staff to reconsider.

Mr. Ward stated that he appreciates the different sides of this proposal, but also understands the difficulties related to the proposal. He asked if raising the adult monthly pass cost was considered. Ms. Cooney replied that staff looked at raising the adult monthly pass to \$78 and \$84. Mr. Ward said that he is not satisfied with the potential ridership loss. He said that he would like to see alternative analyses done regarding the ridership loss issue. Mr. Ward asked if staff and the Chair would entertain waiting a month or two to refine this process and proposal.

Mr. Jablonski commented on the estimated ridership loss. He stated that there are generally ridership dips after any fare increase, but those numbers will then begin to build back up. He

also commented that we try to maintain a system that is reasonable for all to access. Mr. Jablonski noted that borrowing money from the capital budget to fill the deficit is not sustainable.

Chair Gomez commented that there is no question that if we do not increase fares that the other alternative will be to cut service, which would certainly result in a much larger ridership loss. She stated that we want to invest in new and expanded service.

Mr. Arambula asked staff to explain fare capping and how that will affect senior and disabled riders. He also asked if seniors and disabled riders are required to only purchase monthly passes right now. Ms. Cooney replied that we currently do not have a day pass for senior and disabled riders, but we are proposing a \$3 day pass with these changes. Mr. Arambula commented that fare capping will be a good option for the senior and disabled riders who only ride a few times per month since they will not have to pay for a full monthly pass.

Ms. Rios commented about low income community riders. She asked if a Title VI analysis was done and how this change will impact low income communities. Brian Lane, with SANDAG, replied that SANDAG did a preliminary analysis about six months ago looking at past survey data and looked at the different fare types to determine the amount of minority and low income riders. He stated that they presented those results to the Civil Right Office at the FTA and their analysis of the data showed that none of the fares were deemed inequitable. Mr. Lane stated that their consultant is currently doing a final analysis with the updated numbers and will bring those results to the SANDAG Transportation Committee in a few weeks. Ms. Rios asked how the public was updated on the next steps of this fare study. Mr. Lane stated that once the fares are changed they will go back out to the public and provide information on every bus and trolley car, and they will also have public hearings at the SANDAG meetings. Ms. Rios inquired how the potential ballot measure will impact fares. Ms. Cooney replied that fares will be included in the polling process for the potential ballot measure.

Mr. Hall asked if we could put this off for a while instead of making a decision today and asked for staff to look at implementing a tiered fare increase.

Mr. Sandke asked if NCTD will have to reapprove this proposal if additional changes are made. Ms. Cooney replied that would be a decision made by SANDAG. She noted that SANDAG could still move forward without any recommendation or action taken by the MTS Board. Mr. Jablonski commented that this fare study has been a long process and has been going on for about two and half years. He stated that NCTD is in a financial situation where they need the revenue increase.

Ms. Salas commented that we have had multiple opportunities to weigh in on this proposal. She stated that no matter the outcome, there would be downfalls for every group. Ms. Salas said that our job is to make these hard decisions, but it is a necessity given the circumstances.

Mr. Cate asked if fares would be reevaluated on an ongoing basis. Ms. Cooney replied that the next evaluation of fares will be when the new fare collection system is implemented. Mr. Cate asked if we could decrease fares in the future. Ms. Cooney replied that MTS could recommend lowering fares to SANDAG. She noted that only SANDAG can change the regional fare ordinance.

Action Taken - #1

Mr. Hall moved to postpone the decision today and have staff relook at the proposal and bring back alternative options to the Board. Mr. Diaz seconded the motion, and the vote was 9 to 3 in opposition with Ms. Aguirre, Mr. Arambula, Mr. Cate, Chair Gomez, Mr. Mullin, Ms. Rios, Ms. Salas, Mr. Sandke, and Mr. Ward voting no, and Mr. Diaz, Mr. Hall, and Mr. McClellan voting yes, with Mr. Arapostathis, Mr. Faulconer, and Mr. Roberts absent. Motion did not pass.

Action Taken - #2

Chair Gomez moved to recommend the SANDAG adopt the Regional Comprehensive Fare Ordinance revisions generated by the Fare Study. Ms. Salas seconded the motion, and the vote was 9 to 3 in favor with Ms. Aguirre, Mr. Arambula, Mr. Cate, Chair Gomez, Mr. Mullin, Ms. Rios, Ms. Salas, Mr. Sandke, and Mr. Ward voting yes, and Mr. Diaz, Mr. Hall, and Mr. McClellan voting no, with Mr. Arapostathis, Mr. Faulconer, and Mr. Roberts absent. Motion passed.

33. Revenue Operating Agreement with UC San Diego for Added Service on Rapid Route 201/202 (Denis Desmond)

The Board waived the staff report for this item.

Action Taken

Mr. Hall moved to approve a six-and-a-half year agreement with the University of California, San Diego (UCSD) for the operation of additional service on Rapid 201/202 to replace capacity currently provided by the UCSD City Shuttle. Ms. Rios seconded the motion, and the vote was 12 to 0 in favor, with Mr. Arapostathis, Mr. Faulconer, and Mr. Roberts absent.

REPORT ITEMS

45. Operations Budget Status Report for October 2018 (Mike Thompson)

The Board waived the staff report for this item.

Action Taken

No action taken. Informational item only.

59. Ad Hoc Ballot Measure Committee Report

Chair Gomez noted that the Committee is working diligently and will have another report once the new Committee is appointed for next year.

60. Chair Report

There was no Chair report.

61. Chief Executive Officer's Report

There was no Chief Executive Officer's report.

62. Board Member Communications

Ms. Salas noted that there is going to be a conference in Palo Alto in January that will discuss the impact of autonomous vehicles on public transportation. She stated that she will be attending that conference.

63. Additional Public Comments on Items Not on the Agenda

Michelle Krug – Ms. Krug commented that she would like to see new and creative ideas about communication. She stated that many people had incorrect information about the proposed fare changes. Ms. Krug recommended that the information, which is provided to the public, be clear so there is less confusion. She also recommended for the bus announcements to include additional important announcements to help those that are sight impaired.

64. Next Meeting Date

The next regularly scheduled Board meeting is January 17, 2019.

65. Adjournment

Chair Gomez adjourned the meeting at 12:09 p.m.

Chairperson
San Diego Metropolitan Transit System

Filed by:

Approved as to form:

Clerk of the Board
San Diego Metropolitan Transit System

General Counsel
San Diego Metropolitan Transit System

Attachment: Roll Call Sheet

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS
ROLL CALL

MEETING OF (DATE): December 13, 2018

CALL TO ORDER (TIME): 9:05 a.m.

RECESS: _____

RECONVENE: _____

CLOSED SESSION: 9:21 a.m.

RECONVENE: 9:43 a.m.

PUBLIC HEARING: _____

RECONVENE: _____

ORDINANCES ADOPTED: _____

ADJOURN: 12:09 p.m.

BOARD MEMBER	(Alternate)	PRESENT (TIME ARRIVED)	ABSENT (TIME LEFT)
ALVAREZ	<input type="checkbox"/> (Cate) <input checked="" type="checkbox"/>	9:00 a.m.	12:09 p.m.
AGUIRRE	<input checked="" type="checkbox"/> (Spriggs) <input type="checkbox"/>	9:00 a.m.	12:05 p.m.
ARAMBULA	<input checked="" type="checkbox"/> (Mendoza) <input type="checkbox"/>	9:00 a.m.	12:09 p.m.
COLE	<input type="checkbox"/> (Ward) <input checked="" type="checkbox"/>	9:00 a.m.	12:05 p.m.
DIAZ	<input checked="" type="checkbox"/> (Aguilar) <input type="checkbox"/>	9:00 a.m.	12:09 p.m.
FAULCONER	<input type="checkbox"/> (Zapf) <input type="checkbox"/>		
GOMEZ	<input checked="" type="checkbox"/> (Bry) <input type="checkbox"/>	9:00 a.m.	12:09 p.m.
HALL	<input checked="" type="checkbox"/> (Jones) <input type="checkbox"/>	9:00 a.m.	12:09 p.m.
MCCLELLAN	<input checked="" type="checkbox"/> (Goble) <input type="checkbox"/>	9:00 a.m.	12:09 p.m.
MCWHIRTER	<input type="checkbox"/> (Arapostathis) <input type="checkbox"/>		
MULLIN	<input checked="" type="checkbox"/> (TBD) <input type="checkbox"/>	9:00 a.m.	12:09 p.m.
RIOS	<input checked="" type="checkbox"/> (Sotelo-Solis) <input type="checkbox"/>	9:00 a.m.	12:09 p.m.
ROBERTS	<input type="checkbox"/> (Cox) <input type="checkbox"/>		
SALAS	<input checked="" type="checkbox"/> (Aguilar) <input type="checkbox"/>	9:00 a.m.	12:09 p.m.
SANDKE	<input checked="" type="checkbox"/> (Donovan) <input type="checkbox"/>	9:00 a.m.	12:09 p.m.

SIGNED BY THE CLERK OF THE BOARD:

Julia Tuer

CONFIRMED BY THE GENERAL COUNSEL:

John Core



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 4

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

ELECT VICE CHAIR, CHAIR PRO TEM, AND COMMITTEE APPOINTMENTS
(SHARON COONEY)

RECOMMENDATION:

That the Board of Directors:

- 1) elect a Vice Chair and a Chair Pro Tem for 2019; and
- 2) consider the nominating slate (Attachment A) proposed by the Ad Hoc Nominating Committee for the appointment of representatives to MTS committees for 2019 and vote to appoint representatives to those committees.

Budget Impact

None.

DISCUSSION:

Public Utilities Code Section 120100 requires the Board of Directors, annually at its first meeting in January, to elect a Vice Chair who shall preside in the absence of the Chair. Policies and Procedures No. 22, "Rules of Procedure," also provides for the election of a Chair Pro Tem to serve in the absence of the Chair and Vice Chair. In 2018, Board Member Mona Rios served as Vice Chair, and Board Member Lorie Bragg served as Chair Pro Tem.

The Vice Chair and Chair Pro Tem nomination and election procedures are pursuant to Robert's Rules of Order as follows:

1. The Chair of the Board opens the agenda item.



2. The Chair requests nominations from the floor. Nominations do not require a second.
3. The Chair closes the nominations.
4. The Chair invites the candidate(s) to address the Board for 3 minutes.
5. The Chair asks for any Board discussion.
6. The Chair calls for the vote on each motion for each candidate.
7. The vote is taken on the motion(s) for each candidate based upon the order in which they were nominated. The vote continues until a candidate is elected.

In addition, each year the Board makes appointments to the various committees, including the Accessible Services Advisory Committee (ASAC), the Ad Hoc Ballot Measure Committee, the Airport Authority Advisory Committee, the Audit Oversight Committee, the Budget Development Committee, the Executive Committee, the Los Angeles-San Diego Rail Corridor Agency (LOSSAN), the Public Security Committee, the SANDAG Board and SANDAG committees, the San Diego Regional Building Authority, and the Taxicab Advisory Committee. Membership of the Executive Committee is dictated by Board Policy 22. Similarly, membership on the Audit Oversight Committee is dictated by Board Policy 22, which designates all members of the Executive Committee as members of the Audit Oversight Committee but allows the appointment of other Board members to that Committee at the Board's discretion.

/s/ Sharon Cooney for
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. Proposed MTS Nominating Slate for 2019

2019 SLATE OF MTS COMMITTEES AND OUTSIDE AGENCY APPOINTMENTS

Chair Vice Chair Chair Pro Tem	Georgette Gómez – Chair Mona Rios – Vice Chair Bill Sandke – Chair Pro Tem
Accessible Services Advisory Committee (ASAC)	Mona Rios – Chair
Ad Hoc Ballot Measure Committee	Georgette Gómez – Chair Paloma Aguirre – Committee Representative David Arambula – Committee Representative Nathan Fletcher – Committee Representative Mona Rios – Committee Representative Bill Sandke – Committee Representative Chris Ward – Committee Representative
Airport Authority Advisory Committee	Bill Sandke – Committee Representative Ronn Hall – Alternate
Audit Oversight Committee	Georgette Gómez – Chair Plus Executive Committee (listed below)
Budget Development Committee	Paloma Aguirre – Committee Representative David Arambula – Committee Representative Nathan Fletcher – Committee Representative Georgette Gómez – Committee Representative Mary Salas – Committee Representative
Executive Committee	Georgette Gómez – Chair Mona Rios – Vice Chair Mark Arapostathis – East County Representative (<i>Alternate: David Arambula</i>) Nathan Fletcher – County Representative (<i>Alternate: Greg Cox</i>) Monica Montgomery – City of San Diego Representative (<i>Alternate: Chris Ward</i>) Mary Salas – South Bay Representative (<i>Alternate: Bill Sandke</i>)
Los Angeles - San Diego Rail Corridor Agency (LOSSAN)	Caylin Frank – Committee Representative Bill Sandke – Alternate
Public Security Committee	David Arambula – Committee Representative Nathan Fletcher – Committee Representative Jill Galvez – Committee Representative Ronn Hall – Committee Representative Monica Montgomery – Committee Representative Bill Sandke – Committee Representative
SANDAG Board	Nathan Fletcher – Advisory Representative Mona Rios – Alternate
SANDAG Regional Planning Committee	Jill Galvez – Committee Representative Paloma Aguirre – Alternate
SANDAG Transportation Committee	Nathan Fletcher – Committee Representative Paloma Aguirre – Alternate
San Diego Regional Building Authority (SDRBA)	Bob McClellan – Committee Representative
Taxicab Advisory Committee	Chris Ward – Chair



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 6

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

SECURITY FOR SOUTH BAY BUS RAPID TRANSIT

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute Amendment Number 5 to MTS Doc. No. G1828.0-15 (in substantially the same format as Attachment A) with Allied/Universal dba Transit Systems Security, to provide additional security services for coverage of the new South Bay Rapid (Route 225) through June 30, 2021.

Budget Impact

The total estimated cost of this amendment would not exceed \$903,800. All costs for the South Bay Rapid will be reimbursed by SANDAG through TransNet. The estimated cost allocation is as follows:

FY 2019	\$148,424
FY 2020	\$365,885
FY 2021	\$389,491

This amendment will bring the total contract cost to \$39,169,699.

DISCUSSION:

MTS in partnership with the San Diego Association of Governments (SANDAG) will launch the South Bay Rapid on January 27, 2019. This new Rapid route will operate between the Otay Mesa border crossing and Downtown San Diego, via Eastern Chula Vista. The new route will serve six new stations and one major transit center. MTS will operate and maintain the stations and facilities along this route and will receive reimbursement for costs associated with the stations through TransNet II.



To maintain consistency of security services, staff is proposing to provide security at the Otay Mesa Transit Center and along the new route through MTS's current security contractor, Allied/Universal dba Transit Systems Security (TSS). Under Amendment No. 5, TSS will provide armed security officers to provide service coverage for full time security presence at the Otay Mesa Transit Center and one roving guard for all other stations, requiring eight full time officers. Staffing would include relief officers for breaks and lunches.

/s/ Sharon Cooney for
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. Draft MTS Doc. No. G1828.5-15

January 17, 2019

MTS Doc. No. G1828.5-15

Steve Claton, President, Southwest Region
Allied Universal dba Transit System Security
1551 N. Tustin Avenue, Suite 650
Santa Ana, CA 92705

Dear Mr. Claton:

Subject: AMENDMENT NO. 5 TO MTS DOC. NO. G1828.0-15; SECURITY SERVICES

This shall serve as Amendment No. 5 to our agreement for security services as further described below.

SCOPE

The San Diego Metropolitan Transit System (MTS) and the San Diego Association of Governments (SANDAG), collectively "the Agencies", are jointly issuing this request for the current security contractor (Allied/Universal dba Transit Systems Security) to provide additional security services consisting of eight (8) armed Security Officers for coverage of the new South Bay Rapid System. See attached Exhibit A Scope of Work for details.

SCHEDULE

The Contractor shall provide a full-time security presence that consists of one guard during all hours that the transit center is open for service, and one roving guard for all other stations. This will require eight full time equivalent security positions and one vehicle. Staffing shall include relief officers for breaks and lunches.

Contractor shall provide services in accordance with the schedule approved by MTS based on operating conditions, hours of service, and special circumstances. MTS reserves the right to change assignment duties, schedules, locations or number of officers assigned to each post, and Contractor agrees that such changes will not result in penalties to MTS.

PAYMENT

Under this Amendment, both parties agree that the payment provision shall be revised as follows:

1. Add 8 new Armed Security Officers for South Bay BRT
 - Exhibit B shows the Pay Rate for remainder of FY2019 through 6/30/21, FY2021.

Allied Universal dba Transit System Security
Mr. Steve Claton
January 17, 2019
Page 2

Att. A, AI 6, 1/17/19

Please sign and return the copy marked "Original" to the Contracts Specialist at MTS. All other terms and conditions shall remain the same and in effect. Retain the other copy for your records.

Sincerely,

Agreed:

Paul C. Jablonski
Chief Executive Officer

Steve Claton, President
Allied Universal dba Transit System Security

CL-G1828.5-15.ALLIED.JRIDER.11719

Date: _____

Cc: M. Guaderrama
Procurement File

Exhibit A

SCOPE OF WORK

I. Introduction

The San Diego Metropolitan Transit System (MTS) and the San Diego Association of Governments (SANDAG), collectively "the Agencies", are jointly issuing this request for the current security contractor (Allied/Universal dba Transit Systems Security) to provide additional security services consisting of eight (8) armed Security Officers for coverage of the new South Bay Rapid System. This system includes the Heritage Rapid Station located at 1368 E. Palomar Street in Chula Vista, The Otay Mesa Transit Center and stations in between. The Agencies are requesting services for the remainder of FY 2019, FY 2020, and FY 2021. SANDAG will be responsible for providing financial compensation for this coverage. MTS is the lead agency for this solicitation. Under direction of the MTS Chief of Police, the Security Department will perform the services shown in the scope of work. The Officers are employees of the Contractor, not employees of the Agencies. Under no circumstances shall the Agencies be held responsible for handling any tax obligations, unemployment compensation, or workers compensation insurance responsibilities. In addition, the Agencies shall not be responsible for any employee benefits, including but not limited to health/dental/medical coverage, sick leave, holiday pay, vacation pay or pension service credit. Contractor shall provide its officers any and all benefits required by law, and shall comply with all applicable federal, state, local laws and regulations.

I. Times of Service

General: The Contractor shall provide a full-time security presence that consists of one guard during all hours that the transit center is open for service, and one roving guard for all other stations. This will require eight full time equivalent security positions and one vehicle. Staffing shall include relief officers for breaks and lunches.

Contractor shall provide services in accordance with the schedule approved by MTS based on operating conditions, hours of service, and special circumstances. MTS reserves the right to change assignment duties, schedules, locations or number of officers assigned to each post, and Contractor agrees that such changes will not result in penalties to MTS.

III. General Contractor Responsibilities

Contractor shall provide a security force consisting of eight (8) armed, full-time security officers for this supplementary coverage. Armed officers must possess valid state firearms permits issued by the Bureau of Security and Investigative Services. Firearm certification is the responsibility of Contractor. Permission to carry concealed weapons is considered on a case by case basis. A letter of request from Contractor will be presented to the MTS Chief of Police Security and if approved the Director will issue an authorization letter for submittal to the County Sheriff.

Exhibit B
Security Services
G1828.5-15
Cost of 8 Additional Armed Officers for South Bay BRT

Armed Security Officers

Remainder of FY 2019						
1/1-6/30/19						
Employee						
Paid Rate						
1/1-6/30/19						
Projected #	Hours Per	Total Hours	Min Wage	* Overhead	Billable	Extended
FTE's	FTE		1/1/19 \$12.00	Rate Adj.	Rate	Cost
8	872	6,975	15.00	41.9%	21.279	148,424

Armed Security Officers

FY 2020								
7/1-12/31/19								
Employee								
Paid Rate								
1/1-6/30/20								
Employee								
Paid Rate								
7/1-12/31/19								
1/1-6/30/20								
Projected #	Hours Per	Total Hours	Min Wage	* Overhead	Billable	Billable	Extended	
FTE's	FTE		1/1/20 \$13.00	Rate Adj.	Rate	Rate	Cost	
8	2,080	16,640	15.00	16.00	41.9%	21.279	22.698	365,885

Armed Security Officers

FY 2021								
7/1-12/31/20								
Employee								
Paid Rate								
1/1-6/30/21								
Employee								
Paid Rate								
7/1-12/31/20								
1/1-6/30/21								
Projected #	Hours Per	Total Hours	Min Wage	* Overhead	Billable	Billable	Extended	
FTE's	FTE		1/1/21 \$14.00	Rate Adj.	Rate	Rate	Cost	
8	2,080	16,640	16.000	17.000	41.9%	22.698	24.116	389,491



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 7

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

LEASE AGREEMENT WITH BRICK BY BRICK, LLC AT 675 WEST G STREET, SAN DIEGO

RECOMMENDATION:

That the Board of Directors authorize the Chief Executive Officer (CEO) to execute a Lease Agreement with Brick By Brick, LLC for a lease at 675 West G Street, San Diego.

Budget Impact

The total rent revenue for the initial 10-year lease term covered by the proposed lease agreement (January 2019 through December 2028) amounts to \$255,453 credited to the Land Management budget.

DISCUSSION:

Brick By Brick, LLC (Lessee), seeks approval of a proposed lease agreement to lease approximately 4,426 square feet at the Seaport Village Trolley Station. The Lessee currently leases 1,347 square feet of land that supports their outdoor eating space for the adjoining coffee shop restaurant. The Lessee wants to expand its operation over a landscaped area to the east of the outbound platform. By leasing this area, the Lessee would take over its maintenance.

The Lessee's use for the additional space and revised lease terms is to expand their operation along the length of the current outbound trolley platform from its building to India Street. The Lessee will expand its food service and seating space and rebrand the business to Brickyard Place.

The new lease would have an initial term of ten (10) years with the option to extend the lease for five (5) ten year extensions. The lease can be terminated by either party for



any reason giving one hundred and eighty (180) days' notice. The lease area is broken into 3 spaces, each having a different lease rate. Since this space is raw dirt and not typical restaurant space, the rental rate is discounted. Restaurant space in this area can be around \$2 to \$3 per square foot. Currently the Lessee pays \$0.41 per square foot. The new rental rates will be \$0.75 per square foot for the primary space of 1,347 square feet, the secondary space rate will be \$0.50 per square foot for an additional 1,347 square feet, and the entry space will be \$0.25 per square foot for 1,732 square feet to be used as hard scape. After each 5 year period, the lease rates would increase by a flat 10 percent.

The proposed lease agreement uses MTS's current standard form lease agreement (see Attachment A). With the expectation that the proposed lease agreement will be approved, the Lessee is required to obtain a Right of Entry Permit from MTS to make some tenant improvements for their expansion. The lease Exhibit C shows the Lessee's proposed expansion concepts.

/s/ Paul C. Jablonski

Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. Proposed Lease Agreement

LEASE AGREEMENT

THIS LEASE AGREEMENT ("Lease") is made and entered into, effective as of _____, 2018 ("Commencement Date"), by and between the SAN DIEGO METROPOLITAN TRANSIT SYSTEM, a California public agency ("MTS") and BRICK BY BRICK, LLC (dba: Brickyard Coffee & Tea, Inc.) ("Lessee"). This Lease supersedes previous Lease Agreement, MTDB Doc. No. G0313.0-96, dated December 1, 1995.

IN CONSIDERATION OF THE RENTS AND COVENANTS hereinafter set forth, MTS hereby leases to Lessee, and Lessee hereby leases from MTS, the premises described below upon the following terms and conditions:

ARTICLE 1 LEASE OF PREMISES

MTS hereby leases to Lessee and Lessee hereby leases from MTS, for the rent and upon the covenants and conditions hereinafter set forth, the premises ("Premises") consisting of that certain real property described as follows:

A portion of the property located at the southeast corner of Kettner Boulevard and G Street, adjacent to the property commonly known as 675 West G Street, abutting the Seaport Village Trolley Station, consisting of approximately 4,426 square feet.

All of said leased real property, including the land and all improvements therein, and is outlined on the exhibit marked Exhibit "A" attached hereto.

ARTICLE 2 TERM

The term of this Lease shall be for TEN (10) YEARS commencing on the Commencement Date, ("Initial Term"), and Lessee shall have five ten-year options to extend ("Option to Extend") for a total term of sixty (60) years. This lease agreement shall remain in force, terminating one hundred and eighty (180) days following delivery of written notice of termination by either party to the other, for reason or no reason.

Lessee shall exercise each Option to Extend ("Option") by providing MTS with written notice ninety (90) days prior to the expiration date of Lease. If Lessee exercises Option to Extend, MTS' and Lessee's respective rights, duties and obligations shall be governed by the terms and conditions of this Lease.

ARTICLE 3 RENT

3.1 Base Rent. The Base Rent, prorated from the Commencement Date until December 31, 2018, shall be \$0.75 per square foot per month for the original 1,347 square footage "Existing Brickyard Patio" area shown on Exhibit "C". This area is hereinafter referred to as Area "A". The prorated rent for Area "A" from the Commencement Date through December 31, 2018 shall be due on the Commencement Date. Thereafter, semi-annual rent

payments shall be due every January 1st and July 1st, beginning in the year 2019. Every January 1st, there will be an annual cost of living adjustment as described in in Section 3.2.

On said Exhibit "C", the additional area referred to as the "Expanded Brickyard Patio With Primary Pavilion" of 1347 square feet, hereinafter referred to as Area "B", will be at the rate of \$0.50 per square foot per month which calculates to a Base Annual rent of \$8,082.00. Said rent for Area "B" shall commence on the first (1st) of the month following nine (9) months after the Commencement Date of this Lease. and the first rent that is due at that time will be pro-rated. Thereafter, semi-annual rent payments shall be due every January 1st and July 1st. Every January 1st, there will be an annual cost of living adjustment as described in in Section 3.2.

The additional "Brickyard Place South Access With Secondary Pavilion" area on Exhibit "C" of 1732 square footage, hereinafter referred to as Area "C", will be at the rate of \$0.25 per square foot per month which calculates to a Base Annual rent to be \$5,196.00. Said rent for Area C shall commence on the first (1st) of the month following the twelfth (12th) month after the Commencement Date of this Lease Agreement and the first rent that is due at that time will be pro-rated. Thereafter, semi-annual rent payments shall be due every January 1st and July 1st. Every fifth (5th) January 1st, there will be an increase to the Base Rent as described in in Section 3.2.

Should the Commencement Date be a day other than the first day of a calendar month, then the rent for such first fractional month shall be computed on a daily basis for the period from the Commencement Date to the end of such calendar month and at an amount equal to one thirtieth (1/30th) of the said rent for each such day, and thereafter shall be computed and paid as aforesaid.

3.2 Increases to the Base Rent. The Base Rent provided for in Section 3.1 shall be adjusted as set forth below on January 1st after the Commencement Date. The Base Rent will increase in the sixth year of the Initial Term by ten percent (10%), over the Base Rent paid the previous year, and remain at that level for the balance of the Initial Term

At the time of the exercise of each of the Ten-Year Options, the Base Rent in the first year of each Option shall increase by ten percent (10%) over the previous year's Base Rent and then remain at that level for the first five (5) years of the Option. The Base Rent will increase in the sixth year of the Option by ten percent (10%) over the Base Rent paid the previous year, and remain at that level for the remaining five (5) years of the Option. The increase to the Base Rent on January 1st following an extension of a Ten-Year Option period shall be prorated for the remaining portion of the calendar year a Ten-Year Option is extended.

3.3 Delivery of Rent Payments. All rent due under this Lease shall be made payable to MTS, and shall be considered paid when delivered to:

MTS
Attn: Finance Department
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101

MTS may, at any time, by written notice to Lessee, designate a different address to which

Lessee shall deliver the rent payments. MTS may, but is not obligated to, send rent invoices to Lessee.

3.4 Failure to Pay Base Rent or Additional Rent; Late Charge.

a. If any such rental is not received by MTS within fifteen (15) calendar days following the due date, Lessee shall immediately pay to MTS a late charge equal to five percent (5%) of such overdue amount. Should Lessee pay said late charge but fail to pay contemporaneously therewith all unpaid amounts of rent due hereunder, MTS' acceptance of this late charge shall not constitute a waiver of Lessee's default with respect to such nonpayment by Lessee nor prevent MTS from exercising all other rights and remedies available to MTS under this Lease or under law.

b. In the event of a dispute between the parties as to the correct amount of Base Rent or Additional Rent owed by Lessee, MTS may accept any sum tendered by Lessee in payment thereof, without prejudice to MTS' claim as to the proper amount of rent owing. If it is later determined that Lessee has not paid the full amount of rent owing, the late charge specified herein shall apply only to that portion of the rent still due and payable from Lessee. Notwithstanding any provision of this Section to the contrary, however, MTS may waive any delinquency payment or late charge upon written application of Lessee.

ARTICLE 4 POSSESSION AND USE

4.1 Permitted Uses. Lessee shall use the Premises in a manner consistent with the Concept Design Plan, a copy of which is attached hereto as Exhibit "C" and by this reference incorporated herein and as long as Lessee complies with the aforementioned sentence, will be entitled to use the Premises for any commercial use, but subject to Paragraph 4.2 below. Lessee may sell alcoholic beverages upon receipt of a valid liquor license, and may utilize portable propane heaters if allowed by local ordinance and regulations. At no time shall any use of portable heaters be a hazard to MTS operations. If determined to be a hazard by MTS, Lessee will be notified in writing to cease use of the portable heaters.

No one other than Lessee, its agents, volunteers and employees, or any sublessee of Lessee approved by MTS as provided in Article 12, "Assignment and Subletting," below, is permitted to use the Premises for the purposes described herein, and Lessee shall be fully responsible for the activities of its agents, volunteers and employees and sublessees, if any, on the Premises.

4.2 Duties and Prohibited Conduct. Where Lessee is reasonably in doubt as to the suitability of any particular use, Lessee may request the written determination of MTS that such use is or is not permitted, and Lessee will not be in breach or default under this Lease if Lessee abides by such determination. Notwithstanding the foregoing, however, Lessee shall not use nor permit the use of the Premises in any manner that will tend to create a nuisance. Lessee shall, at Lessee's expense, comply promptly with all applicable statutes, laws, ordinances, rules, regulations, orders, covenants and restrictions of record, and requirements in effect during the term, regulating the use by Lessee of the Premises. Lessee shall not use, or permit any person or persons to use, the Premises for the sale or display of any goods and/or services, which, in the sole discretion of MTS, are inconsistent with the permitted uses of the Premises pursuant to this

Lease. Lessee shall keep the Premises, and every part thereof, in a safe and sanitary condition, free from any objectionable noises or odors, except as may be typically present for the permitted uses specified above.

4.3 Compliance With Stormwater Laws. Lessee's use of the Premises is subject to federal, state and local laws regarding the discharge into the stormwater conveyance system of pollutants. Compliance with these laws may require Lessee to develop, install, implement and maintain pollution prevention measures, source control measures and Best Management Practices ("BMPs"). BMPs can include operational practices; water or pollutant management practices; physical site features; or devices to remove pollutants from stormwater, to affect the flow of stormwater or to infiltrate stormwater to the ground. BMPs applicable to Lessee's use of the Premises may include a requirement that all materials, wastes or equipment with the potential to pollute urban runoff be stored in a manner that either prevents contact with rainfall and stormwater, or contains contaminated runoff for treatment and disposal. Lessee is required and agrees to use, operate, maintain, develop, redevelop and retrofit the Premises, as necessary, in accordance with all applicable federal, state and local laws restricting the discharge of non-stormwater at or from the Premises; and all such laws, regulations, or local guidance requiring pollution prevention measures, source control measures, or the installation or use of BMPs. Lessee further agrees to develop, install, implement and/or maintain at Lessee's sole cost and expense, any BMPs or similar pollution control devices required by federal, state and/or local law and any implementing regulations or guidance.

Lessee understands and acknowledges that the stormwater and non-stormwater requirements applicable to Lessee's use of the Premises may be changed from time to time by federal, state and/or local authorities, and that additional requirements may become applicable based on changes in Lessee's activities or development or redevelopment by Lessee or MTS. Lessee shall perform and record annual stormwater training, perform and record regular stormwater self-inspections, and maintain and provide all necessary stormwater documentation to stormwater auditors.

Lessee shall develop, install, implement, and maintain such additional BMPs and/or other pollution control practices at the Premises at Lessee's sole cost and expense. To the extent there is a conflict between any federal, state or local law, Lessee shall comply with the more restrictive provision. If MTS receives any fine or fines from any regulatory agency as a result of Lessee's failure to comply with applicable stormwater laws as set forth in this Article, Lessee shall reimburse MTS for the entire fine amount issued by the applicable public agency.

ARTICLE 5 UTILITIES

5.1 Utility Services: Lessee agrees to provide and pay for all of the utilities and services necessary for the occupancy and use of the Premises, including, but not limited to, gas, water, electricity, trash, sewage charges or septic service, and telephone. MTS shall have no responsibility either to provide or pay for such services.

Lessee shall be granted access and control to any and all existing utilities, including but not limited to water, electricity, gas, telephone and sewage, as applicable, on Areas A, B and C. Such utilities shall be metered separately, prior to the Commencement Date of this Lease. Once

severed, MTS shall have no responsibility to pay for said utilities in connection with Areas A, B or C.

Lessee may relocate the three (3) above-ground utility boxes located on the south end of Area C in a manner mutually agreed upon by MTS and Lessee, at the sole cost of Lessee.

Lessee may remove and relocate the two (2) beverage vending machines positioned on Area C, in a manner consistent with MTS' discretion, at the sole cost of Lessee.

5.2 Energy Conservation by Lessee: Lessee shall be responsible for promoting energy conservation measures in the operation of all activities at the Lease premises. Lessee shall cooperate with MTS in all forms of energy conservation including energy-efficient lighting, heating and air-conditioning systems, and fixtures and equipment. Lessee shall comply with all existing and newly-enacted laws, by-laws, regulations, etc., relating to the conservation of energy. Lessee shall comply with all reasonable requests and demands of the Lessor pertaining to the installation and maintenance of energy conservation systems, fixtures, and equipment.

ARTICLE 6 MECHANICS' LIENS

Lessee shall pay, or cause to be paid, all costs for work done by it, or caused to be done by it, on the Premises, and for all materials furnished for or in connection with any such work. If any lien is filed against the Premises, Lessee shall cause the lien to be discharged of record within ten (10) days after it is filed. Lessee shall indemnify, defend and hold MTS harmless from any and all liability, loss, damage, costs, attorneys' fees and all other expenses on account of claims of lien of laborers or materialmen or others for work performed or materials or supplies furnished for Lessee or persons claiming under Lessee, its agents, and/or subcontractors.

ARTICLE 7 SECURITY

Lessee shall be responsible for and shall provide for the security of Area A, Area B, and Area C, and MTS shall have no responsibility therefore.

ARTICLE 8 TAXES, ASSESSMENTS AND FEES

8.1 Responsibility for Payment of Taxes and Assessments. MTS shall not be obligated to pay any taxes or assessments accruing against Lessee on the Premises or any interest of Lessee therein before, during or after the Term, or any extension thereof; all such payments shall be the sole responsibility of Lessee. In addition, Lessee shall be solely responsible for payment of any taxes or assessments levied upon any Improvements, Fixtures or Personal Property located on the Premises, to the extent that such taxes or assessments result from the business or other activities of Lessee upon, or in connection with, the Premises.

8.2 Definition of "Taxes". As used herein, the term "taxes" means all taxes, governmental bonds, special assessments, Mello-Roos assessments, charges, rent income or transfer taxes, license and transaction fees, including, but not limited to, (i) any state, local,

federal, personal or corporate income tax, or any real or personal property tax, (ii) any estate inheritance taxes, (iii) any franchise, succession or transfer taxes, (iv) interest on taxes or penalties resulting from Lessee's failure to pay taxes, (v) any increases in taxes attributable to the sale of Lessee's leasehold interest in the Premises, or (vi) any taxes which are essentially payments to a governmental agency for the right to make improvements to the Premises.

8.3 Creation of Possessory Interest. Pursuant to the provisions of Revenue and Taxation Code section 107.6, Lessee is hereby advised that the terms of this Lease may result in the creation of a possessory interest. If such a possessory interest is vested in Lessee, Lessee may be subjected to the payment of real property taxes levied on such interest. Lessee shall be solely responsible for the payment of any such real property taxes. Lessee shall pay all such taxes when due, and shall not allow any such taxes, assessments or fees to become a lien against the Premises or any improvement thereon; provided, however, that nothing herein shall be deemed to prevent or prohibit Lessee from contesting the validity of any such tax, assessment or fee in a manner authorized by law.

ARTICLE 9 REPAIRS; MAINTENANCE

9.1 Acceptance of Premises. Lessee acknowledges that Lessee has made a thorough inspection of the Premises prior to the Commencement Date of this Lease, and that it accepts the Premises as of the Commencement Date in their condition at that time. Lessee further acknowledges that MTS has made no oral or written representations or warranties to Lessee regarding the condition of the Premises, and that Lessee is relying solely on its inspection of the Premises with respect thereto.

9.2 Lessee's Repair and Maintenance Obligations. Lessee shall at all times from and after the Commencement Date, at its own cost and expense, repair, maintain in good and tenantable condition and replace, as necessary, the Premises and every part thereof, including, without limitation, the following as applicable: the roof; the heating, ventilation and air conditioning system; mechanical and electrical systems; all meters, pipes, conduits, equipment, components and facilities (whether or not within the Premises) that supply the Premises exclusively with utilities (except to the extent the appropriate utility company has assumed these duties); all Fixtures and other equipment installed in the Premises; all exterior and interior glass installed in the Premises; all signs, lock and closing devices; all interior window sashes, casements and frames; doors and door frames (except for the painting of the exterior surfaces thereof); floor coverings; and all such items of repair, maintenance, alteration, improvement or reconstruction as may be required at any time or from time to time by a governmental agency having jurisdiction thereof. Lessee's obligations hereunder shall apply regardless of whether the repairs, restorations and replacements are ordinary or extraordinary, foreseeable or unforeseeable, capital or noncapital, or the fault or not the fault of Lessee, its agents, employees, invitees, visitors, sublessees or contractors. All replacements made by Lessee in accordance with this Section shall be of like size, kind and quality to the items replaced and shall be subject to MTS' approval. Upon surrender of the Premises, Lessee shall deliver the Premises to MTS in good order, condition and state of repair, but shall not be responsible for damages resulting from ordinary wear and tear. Lessee shall provide for trash removal, at its expense, and shall maintain all trash receptacles and trash areas in a clean, orderly and first-class condition.

Lessee shall not, without MTS' prior written consent (which shall not be unreasonably withheld, conditioned, or delayed), make any alterations, install or remove any landscaping, including trees, improvements or additions to the Premises, whether structural or non-structural. Any such improvements, excepting movable furniture and trade fixtures, shall become part of the realty and belong to MTS; provided, however, that MTS may require the removal of any such alterations, improvements or additions as a condition to granting MTS' consent. All alterations, improvements or additions shall be accomplished by Lessee in a good and workmanlike manner, in conformity with all applicable laws and regulations.

The exercise of any and all rights provided by this Lease is subject to the requirement that Lessee's contractors and agents first obtain a Right of Entry Permit ("ROE Permit") from MTS prior to entry onto the Premises for the construction any tenant improvements or maintenance of the Premises. The ROE Permit requires that Lessee's contractors and agents procure and maintain in force at all times during the construction contract, the insurance described in the ROE Permit. MTS shall timely process any applications required to obtain the ROE Permit, and shall not unreasonably deny or delay the issuance of such ROE Permit. Lessee's contractors and agents will comply with all MTS policies, rules and regulations as stated in the ROE Permit, and the instructions of MTS' representatives.

9.3 Lessee's Failure to Maintain. If Lessee refuses or neglects to repair, replace, or maintain the Premises, or any part thereof, in a manner reasonably satisfactory to MTS, MTS may, upon giving Lessee reasonable written notice of its election to do so, make such repairs or perform such maintenance on behalf of and for the account of Lessee. If MTS makes or causes any such repairs to be made or performed, as provided for herein, Lessee shall pay the cost thereof to MTS, as additional rent, promptly upon receipt of an invoice therefore.

9.4 Right to Enter. Lessee shall permit MTS, or its authorized representatives, to enter the Premises at all times during usual business hours to inspect the same, and to perform any work therein that (a) may be necessary to comply with any laws, ordinances, rules or regulations of any public authority, (b) MTS may deem necessary to prevent deterioration in connection with the Premises if Lessee does not make, or cause to be made, such repairs or perform, or cause to be performed, such work promptly after receipt of written demand from MTS, and (c) MTS may deem necessary in connection with the expansion, reduction, remodeling, protection or renovation of any MTS constructed or owned facilities on or off of the Premises. Nothing herein shall imply any duty on the part of MTS to do any such work which, under any provision of this Lease, Lessee may be required to do, nor shall MTS' performance of any repairs on behalf of Lessee constitute a waiver of Lessee's default in failing to do the same. If MTS exercises any of its rights under this Section, Lessee shall not be entitled to any compensation, damages or abatement of rent from MTS for any injury or inconvenience occasioned thereby.

9.5 MTS Not Obligated to Repair or Maintain; Lessee's Waiver of California Civil Code Section 1942. To the extent that any remedies specified in this Lease conflict or are inconsistent with any provisions of California Civil Code section 1942, or any successor statute thereto ("CC §1942"), the provisions of this Lease shall control. Lessee specifically waives any right it may have pursuant to CC §1942 to effect maintenance or repairs to the Premises and to abate the costs thereof from rent due to the MTS under this Lease.

ARTICLE 10 INDEMNITY AND INSURANCE

10.1 Lessee's Indemnity. MTS shall not be liable for, and Lessee shall defend and indemnify MTS and the employees and agents of MTS (collectively "MTS Parties"), against any and all claims, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs (hereinafter collectively referred to as "Claims"), related to this Lease and arising either directly or indirectly from any act, error, omission or negligence of Lessee or its contractors, licensees, agents, volunteers, servants or employees, including, without limitation, Claims caused by the concurrent negligent act, error or omission, whether active or passive, of MTS Parties. Lessee shall have no obligation, however, to defend or indemnify MTS Parties from a Claim if it is determined by a court of competent jurisdiction that such Claim was caused by the sole negligence or willful misconduct of MTS Parties.

10.2 MTS' Indemnity. MTS shall defend and indemnify Lessee and hold it harmless from and against any Claims related to this Lease that arise solely from any act, omission or negligence of MTS Parties.

10.3 Covered Claims. The obligations of Lessee and MTS hereunder to indemnify, defend and hold each other harmless shall not apply to the extent that insurance carried by Lessee or MTS, other than any program of self-insurance covers any Claim.

10.4 Lessee's Insurance Obligations. Without limiting Lessee's indemnification obligations to MTS under this Lease, Lessee shall provide and maintain, during the Term and for such other period as may be required herein, at its sole expense, insurance in the amounts and form specified in Exhibit "B," attached hereto.

10.5 MTS' Insurance Obligations. MTS maintains a policy of All-Risk Insurance covering the MTS' personal property in the Premises, including any fixtures or equipment in the Premises owned by MTS. The MTS utilizes a program of self-funding with regard to any liability it may incur for personal injury or property damage arising out its use or occupancy of the Premises.

ARTICLE 11 HAZARDOUS MATERIALS

11.1 Hazardous Materials Laws-Definition. As used in this section, the term "Hazardous Materials' Laws" means any and all federal, state or local laws or ordinances, rules, decrees, orders, regulations or court decisions (including the so-called "common law"), including without limitation the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C., § 9601 et seq.), the Hazardous Materials Transportation Act, as amended (49 U.S.C., § 1801 et seq.), the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C., § 6901 et seq.), and the California Environmental Quality Act of 1970, relating to hazardous substances, hazardous materials, hazardous waste, toxic substances, environmental conditions on, under or about the Premises, soil and ground water conditions or other similar substances or conditions.

11.2 Hazardous Materials - Definition. As used in this section the term "Hazardous Materials" means any chemical, compound, material, substance or other matter that:

- a. Is a flammable, explosive, asbestos, radioactive nuclear medicine, vaccine, bacteria, virus, hazardous waste, toxic, overtly injurious or potentially injurious material, whether injurious or potentially injurious by itself or in combination with other materials;
- b. Is controlled, referred to, designated in or governed by any Hazardous Materials Laws;
- c. Gives rise to any reporting, notice or publication requirements under any Hazardous Materials Laws; or
- d. Is any other material or substance giving rise to any liability, responsibility or duty upon the MTS or Lessee with respect to any third person under any Hazardous Materials Law.

11.3 Lessee's Representations and Warranties. Lessee represents and warrants that, during the Term or any extension thereof, or for such longer period as may be specified herein, Lessee shall comply with the following provisions unless otherwise specifically approved in writing by MTS:

- a. Lessee shall not cause or permit any Hazardous Materials to be brought, kept or used in or about the Premises by Lessee, its agents, employees, sublessees, assigns, contractors or invitees, except as required by Lessee's permitted use of the Premises, as described in Section 4.1, "Permitted Uses."
- b. Any handling, transportation, storage, treatment or usage by Lessee of Hazardous Materials that is to occur on the Premises following the Commencement Date shall be in compliance with all applicable Hazardous Materials Laws.
- c. Any leaks, spills, release, discharge, emission or disposal of Hazardous Materials which may occur on the Premises following the Commencement Date shall be promptly and thoroughly cleaned and removed from the Premises by Lessee at its sole expense, and any such discharge shall be promptly reported in writing to MTS, and to any other appropriate governmental regulatory authorities.
- d. No friable asbestos shall be constructed, placed on, deposited, stored, disposed of, or located by Lessee in the Premises.
- e. No underground improvements, including but not limited to treatment or storage tanks, or water, gas or oil wells shall be located by Lessee on the Premises without MTS' prior written consent.
- f. Lessee shall conduct and complete all investigations, studies, sampling, and testing procedures and all remedial, removal, and other actions necessary to clean up and remove all Hazardous Materials on, from, or affecting the Premises in accordance with all applicable Hazardous Materials' Laws and to the satisfaction of MTS.

g. Activities proposed by Lessee that involve disturbing asbestos materials on site shall only be conducted in accordance with all federal, state and local asbestos rules and regulations including, but not limited to, the California Occupational Safety and Health Administration (Cal/OSHA), Environmental Protection Agency (EPA) and Air Pollution Control District (APCD), with prior written consent of MTS.

Any asbestos related activities shall be performed by a contractor that is registered with Cal/OSHA and certified by the California Contractors State Licensing Board to perform asbestos work. Any asbestos related activities shall be overseen by a California Certified Asbestos Consultant (CAC), or a Certified Site Surveillance Technician under the direction of a CAC.

Replacement products used in tenant improvements or other construction activities shall not contain asbestos. Any replacement products used by Lessee shall be verified as non-asbestos products by using Material Safety Data Sheets (MSDS) and/or having the architect or project engineer verify that ACMs were not used.

h. Lessee shall promptly supply MTS with copies of all notices, reports, correspondence, and submissions made by Lessee to the United States Environmental Protection Agency, the United Occupational Safety and Health Administration, and any other local, state or federal authority which requires submission of any information concerning environmental matters or hazardous wastes or substances pursuant to applicable Hazardous Materials' Laws.

i. Lessee shall promptly notify MTS of any liens threatened or attached against the Premises pursuant to any Hazardous Materials' Law. If such a lien is filed against the Premises, then within twenty (20) days following such filing or before any governmental authority commences proceedings to sell the Premises pursuant to the lien, whichever occurs first, Lessee shall either: (a) pay the claim and remove the lien from the Premises; or (b) furnish either (1) a bond or cash deposit reasonably satisfactory to MTS in an amount not less than the claim from which the lien arises, or (2) other security satisfactory to MTS in an amount not less than that which is sufficient to discharge the claim from which the lien arises. At the end of this lease, Lessee shall surrender the Premises to MTS free of any and all Hazardous Materials and in compliance with all Hazardous Materials' Laws affecting the Premises.

11.4 Indemnification by Lessee. Lessee (and, if applicable, each of its general partners) and its successors, assigns, and guarantors, if any, jointly and severally agree to protect, indemnify, defend (with counsel selected by MTS), reimburse and hold MTS and its officers, employees and agents harmless from any claims, judgments, damages, penalties, fines, costs or expenses (known or unknown, contingent or otherwise), liabilities (including sums paid in settlement of claims), personal injury (including wrongful death), property damage (real or personal) or loss, including attorneys' fees, consultants' fees, and experts' fees (consultants and experts to be selected by MTS) which arise during or after the Term from or in connection with the presence or suspected presence of Hazardous Materials, including the soil, ground water or soil vapor on or under the Premises. Without limiting the generality of the foregoing, the indemnification provided by this section shall specifically cover costs incurred in connection with investigation of site conditions or any cleanup, remedial, removal or restoration work required by any Hazardous Materials Laws because of the presence of Hazardous Materials in

the soil, ground water or soil vapor on the Premises, and the release or discharge of Hazardous Materials by Lessee during the course of Lessee's alteration or improvement of the Premises.

11.5 Remedies Cumulative; Survival. The provisions of this Article shall be in addition to any and all common law obligations and liabilities Lessee may have to MTS, and any remedies and the environmental indemnities provided for herein shall survive the expiration or termination of this Lease and/or any transfer of all or any portion of the Premises, or of any interest in this Lease, and shall be governed by the laws of the State of California.

11.6 Inspection. MTS and MTS' agents, servants, and employees including, without limitation, legal counsel and environmental consultants and engineers retained by MTS, may (but without the obligation or duty so to do), at any time and from time to time, on not less than ten (10) business days' notice to Lessee (except in the event of an emergency in which case no notice shall be required), inspect the Premises to determine whether Lessee is complying with Lessee's obligations set forth in this Article, and to perform environmental inspections and samplings, during regular business hours (except in the event of an emergency) or during such other hours as MTS and Lessee may agree. If Lessee is not in compliance, MTS shall have the right, in addition to MTS' other remedies available at law and in equity, to enter upon the Premises immediately and take such action as MTS in its sole judgment deems appropriate to remediate any actual or threatened contamination caused by Lessee's failure to comply. MTS will use reasonable efforts to minimize interference with Lessee's use of Premises but shall not be liable for any interference caused by MTS' entry and remediation efforts. Upon completion of any sampling or testing MTS will (at Lessee's expense if MTS' actions are a result of Lessee's default under this section) restore the affected area of the Premises from any damage caused by MTS' sampling and testing.

ARTICLE 12 ASSIGNMENT AND SUBLETTING

Lessee shall not voluntarily or involuntarily assign, sublease, mortgage, encumber, or otherwise transfer (collectively, a "Transfer") all or any portion of the Premises or its interest in this Lease without MTS' prior written consent. MTS may not reasonably withhold its consent to any Transfer. Any attempted Transfer without MTS' consent shall be void and shall constitute a material breach of this Lease. As used herein, the term "Transfer" shall include an arrangement (including without limitation management agreements, concessions, and licenses) that allows the use and occupancy of all or part of the Premises by anyone other than Lessee.

ARTICLE 13 MTS' RIGHT OF ACCESS

a. MTS, its agents, employees, and contractors may enter the Premises at any time in response to an emergency, and at reasonable hours to (a) inspect the Premises, (b) exhibit the Premises to prospective purchasers or Lessees, (c) determine whether Lessee is complying with its obligations in this Lease (including its obligations with respect to compliance with Hazardous Materials Laws), (d) supply cleaning service and any other service that this Lease requires MTS to provide, (e) post notices of non-responsibility or similar notices, or (f) make repairs that this Lease requires MTS to make, or make repairs to any adjoining space or utility services, or make repairs, alterations, or improvements to any other portion of the Premises; provided, however,

that all work will be done as promptly as reasonably possible and so as to cause as little interference to Lessee as reasonably possible.

b. Lessee waives any claim of injury or inconvenience to Lessee's business, interference with Lessee's business, loss of occupancy or quiet enjoyment of the Premises, or any other loss occasioned by such entry. If necessary, Lessee shall provide MTS with keys to unlock all of the doors in the Premises (excluding Lessee's vaults, safes, and similar areas designated in writing by Lessee in advance). MTS will have the right to use any means that MTS may deem proper to open doors in the Premises and to the Premises in an emergency. No entry to the Premises by MTS by any means will be a forcible or unlawful entry into the Premises or a detainer of the Premises or an eviction, actual or constructive, of Lessee from the Premises, or any part of the Premises, nor shall the entry entitle Lessee to damages or an abatement of rent or other charges that this Lease requires Lessee to pay.

ARTICLE 14 QUIET ENJOYMENT

If Lessee is not in breach under the covenants made in this Lease, MTS covenants that Lessee shall have peaceful and quiet enjoyment of the Premises without hindrance on the part of MTS. MTS will defend Lessee in the peaceful and quiet enjoyment of the Premises against claims of all persons claiming through or under the MTS.

ARTICLE 15 NOTICES

15.1 Notices. Whenever in this Lease it shall be required or permitted that notice or demand be given or served by either party to this Lease to or on the other, such notice or demand shall be in writing, mailed or delivered to the other party at the following addresses:

To MTS:
Manager of Real Estate Assets
1225 Imperial Avenue, Suite 1000
San Diego, CA 92101

To Lessee:
Mark Haack
Mark E Haack
610 India Street
San Diego, CA 92101

Mailed notices shall be sent by United States Postal Service, certified or registered mail, postage prepaid and shall be deemed to have been given, delivered and received three (3) business days after the date such notice or other communication is posted by the United States Postal Service. All other such notices or other communications shall be deemed given, delivered and received upon actual receipt. Either party may, by written notice delivered pursuant to this provision, at any time designate a different address to which notices shall be sent.

15.2 Default Notices. Notwithstanding anything to the contrary contained within this

Article, any notices MTS is required or authorized to deliver to Lessee in order to advise Lessee of alleged violations of Lessee's covenants under this Lease must be in writing but shall be deemed to have been duly given or served upon Lessee by MTS attempting to deliver at the Premises during normal business hours a copy of such notice to Lessee or its managing employee and by MTS mailing a copy of such notice to Lessee in the manner specified in the preceding Section.

ARTICLE 16 WAIVER OF RELOCATION ASSISTANCE BENEFITS

16.1 Relocation Assistance Benefits. Lessee is hereby informed and acknowledges the following:

a. By entering into this Lease and becoming a tenant of MTS, Lessee will not be entitled to receipt of "relocation assistance benefits" ("Relocation Benefits") pursuant to the Federal Uniform Relocation Assistance Act (42 U.S.C. §§ 4601 et seq.) and/or the California Relocation Assistance Law (Cal. Gov. Code §§ 7270 et seq.) (collectively, the "Relocation Statutes"), should MTS at some time make use of the Premises in such a way as to "displace" Lessee from the Premises. Pursuant to the Relocation Statutes, MTS will not be obligated to make such payments to Lessee even where such displacement of Lessee may otherwise constitute a breach or default by MTS of its obligations pursuant to this Lease.

16.2 Lessee's Waiver and Release of Relocation Benefits. In consideration of MTS' agreement to enter into this Lease, Lessee hereby waives any and all rights it may now have, or may hereafter obtain, to Relocation Benefits arising out of the MTS' assertion or exercise of its contractual rights to terminate this Lease pursuant to its terms, whether or not such rights are contested by Lessee or any other entity, and releases MTS from any liability for payment of such Relocation Benefits; provided, however, that Lessee does not waive its rights to Relocation Benefits to the extent that Lessee's entitlement thereto may arise out of any condemnation or pre-condemnation actions taken by the MTS or any other public agency with respect to the Premises. Lessee shall in the future execute any further documentation of the release and waiver provided hereby as MTS may reasonably require.

ARTICLE 17 GENERAL PROVISIONS

17.1 Authority. Lessee represents and warrants that it has full power and authority to execute and fully perform its obligations under this Lease pursuant to its governing instruments, without the need for any further action, and that the person(s) executing this Lease on behalf of Lessee are the duly designated agents of Lessee and are authorized to do so.

17.2 Brokers. Lessee warrants that it has had no dealings with any real estate broker or agent in connection with the negotiation and/or execution of this Lease. In the event any broker other than the brokers acknowledged in writing by MTS make claim for monies owed, Lessee shall indemnify, defend and hold MTS harmless therefrom.

17.3 Captions. The captions, headings and index appearing in this Lease are inserted for convenience only and in no way define, limit, construe, or describe the scope or intent of the

provisions of this Lease.

17.4 Cumulative Remedies. In the event of a default under this Lease, each party's remedies shall be limited to those remedies set forth in this Lease. Any such remedies are cumulative and not exclusive of any other remedies under this Lease to which the non-defaulting party may be entitled.

17.5 Entire Agreement. This Lease, together with all addenda, exhibits and riders attached hereto, constitutes the entire agreement between the parties with respect to the subject matter hereof, and all prior or contemporaneous agreements, understandings and representations, oral or written, are superseded.

17.6 Estoppel Certificate. Lessee shall at any time during the term of this Lease, within ten (10) business days of written notice from MTS, execute and deliver to MTS a statement in writing certifying that this Lease is unmodified and in full force and effect or, if modified, stating the nature of such modification. Lessee's statement shall include other details requested by MTS, such as the date on which rent and other charges are paid, the current ownership and name of Lessee, Lessee's knowledge concerning any outstanding defaults with respect to MTS' obligations under this Lease and the nature of any such defaults. Any such statement may be relied upon conclusively by any prospective purchaser or encumbrancer of the Premises. Lessee's failure to deliver such statements within such time shall be conclusively deemed to mean that this Lease is in full force and effect, except to the extent any modification has been represented by MTS, that there are no uncured defaults in the MTS' performance, and that not more than one month's rent has been paid in advance.

17.7 Exhibits. All exhibits referred to herein are attached hereto and incorporated by reference.

17.8 Force Majeure. In the event either party is prevented or delayed from performing any act or discharging any obligation hereunder, except for the payment of rent by Lessee, because of any and all causes beyond either party's reasonable control, including unusual delays in deliveries, abnormal adverse weather conditions, unavoidable casualties, strikes, labor disputes, inability to obtain labor, materials or equipment, acts of God, governmental restrictions, regulations or controls, any hostile government actions, civil commotion and fire or other casualty, legal actions attacking the validity of this Lease or the MTS' occupancy of the Premises, or any other casualties beyond the reasonable control of either party except casualties resulting from Lessee's negligent operation or maintenance of the Premises ("Force Majeure"), performance of such act shall be excused for the period of such delay, and the period for performance of such act shall be extended for a period equivalent to the period of such delay. Force Majeure shall not include any bankruptcy, insolvency, or other financial inability on the part of either party hereto.

17.9 Governing Law. This Lease shall be governed, construed and enforced in accordance with the laws of the State of California.

17.10 Interpretation. The language of this Lease shall be construed simply according to its plain meaning and shall not be construed for or against either party.

17.11 Joint and Several Liability. If more than one person or entity executes this Lease as Lessee, each of them is jointly and severally liable for all of the obligations of Lessee hereunder.

17.12 Lease Administration. This Lease shall be administered on behalf of MTS by the Manager of Real Estate Assets, San Diego Metropolitan Transit System or by such person's duly-authorized designee.

17.13 Lessee's Lease Administration. Lessee confirms that Lessee's Lease Administrator has been given full operational responsibility for compliance with the terms of this Lease. Lessee shall provide MTS with a written schedule of its normal hours of business operation on the Premises, and Lessee's Lease Administrator or a representative designated thereby shall be (i) available to MTS on a twenty-four (24) hour a day, seven (7) days a week, basis, and (ii) present on the Premises during Lessee's normal business hours, to resolve problems or answer question pertaining to this Lease and Lessee's operations on the Premises.

17.14 Liquidated Damages. Any payments by Lessee to MTS under this Lease described as liquidated damages represent the parties' reasonable estimate of MTS' actual damages under the described circumstances, such actual damages being uncertain and difficult to ascertain in light of the impossibility of foreseeing the state of the leasing market at the time of the various deadlines set forth herein. MTS may, at its election, take any of the liquidated damages assessed in any portion of this Lease as direct monetary payments from Lessee and/or as an increase of rent due from Lessee under this Lease.

17.15 Modification. The provisions of this Lease may not be modified, except by a written instrument signed by both parties.

17.16 Partial Invalidity. If any provision of this Lease is determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Lease shall not be affected thereby. Each provision shall be valid and enforceable to the fullest extent permitted by law.

17.17 Payments. Except as may otherwise be expressly stated, each payment required to be made by Lessee shall be in addition to, and not a substitute for, other payments to be made by Lessee.

17.18 Successors & Assigns. This Lease shall be binding on and inure to the benefit of the parties and their successors and assigns, except as may otherwise be provided herein.

17.19 Time of Essence. Time is of the essence of each and every provision of this Lease.

17.20 Waiver. No provision of this Lease or the breach thereof shall be deemed waived, except by written consent of the party against whom the waiver is claimed. The waiver by MTS of any breach of any term, covenant or condition contained in this Lease shall not be deemed to be a waiver of such term, covenant or condition of any subsequent breach thereof, or of any other term, covenant or condition contained in this Lease. MTS' subsequent acceptance of partial rent or performance by Lessee shall not be deemed to be an accord and satisfaction or a

waiver of any preceding breach by Lessee of any term, covenant or condition of this Lease or of any right of MTS to a forfeiture of the Lease by reason of such breach, regardless of MTS' knowledge of such preceding breach at the time of MTS' acceptance. The failure on the part of MTS to require exact or full and complete compliance with any of the covenants, conditions of agreements of this Lease shall not be construed as in any manner changing or waiving the terms of this Lease or as estopping MTS from enforcing in full the provisions hereof. No custom or practice which may arise between the parties hereto in the course of administering this Lease shall be construed to waive, estop or in any way lessen MTS' right to insist upon Lessee's full performance of, or compliance with, any term, covenant or condition of this Lease or to inhibit or prevent MTS' exercise of its rights with respect to any default, dereliction or breach of this Lease by Lessee.

IN WITNESS WHEREOF, MTS and Lessee have duly executed this Lease as of the day and year first above written.

Brick By Brick, LLC:

MTS:

By: _____
Mark E. Haack, Managing Member

By: _____
Paul C. Jablonski, Chief Executive Officer

Attachments: Exhibits A, B & C:

A. Description of the Premises

B. Insurance Requirements

C. Concept Design Plan

EXHIBIT A DESCRIPTION OF THE PREMISES

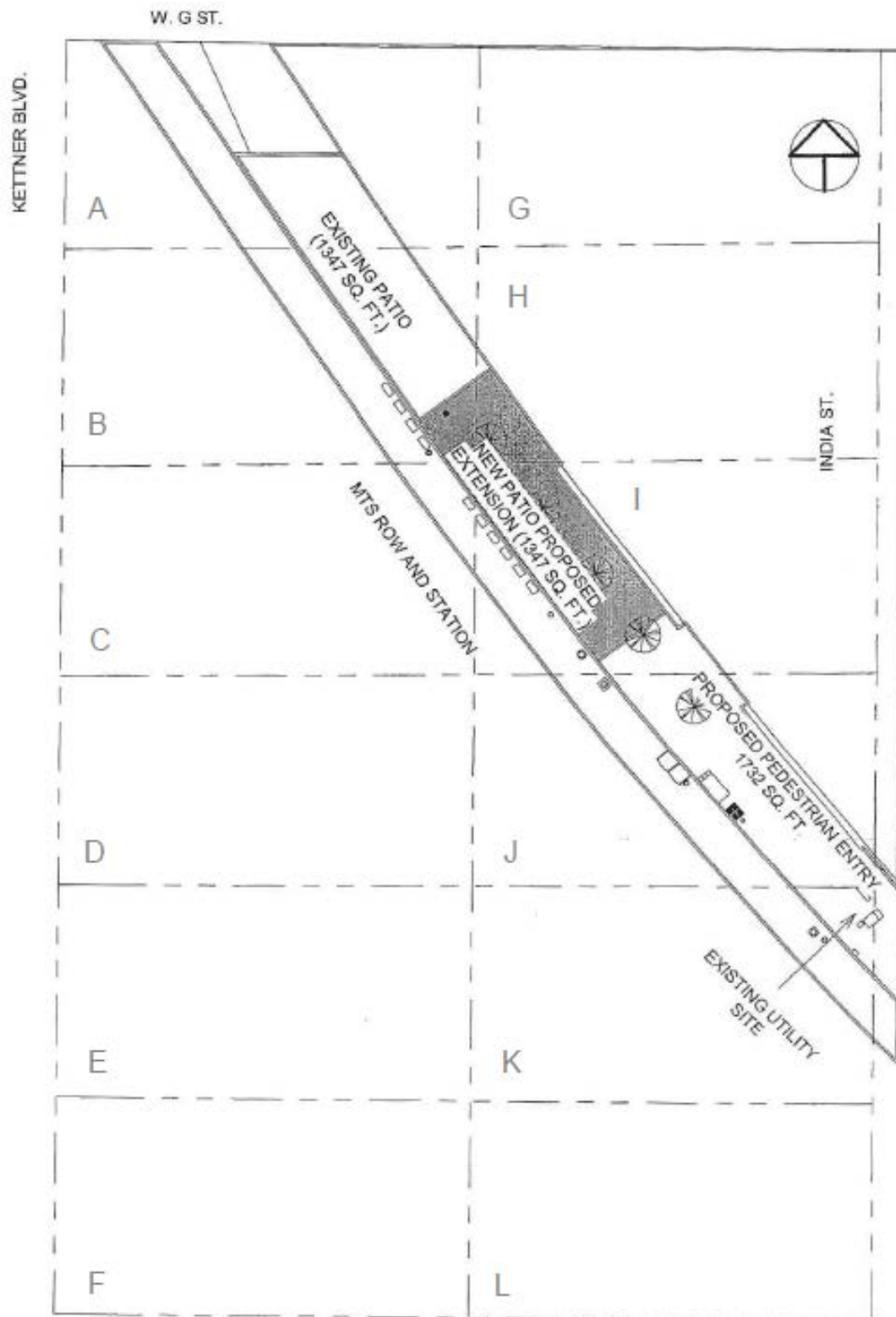


EXHIBIT B INSURANCE REQUIREMENTS

1.1 Commercial General Liability At all times during this Lease, Lessee agrees to maintain Commercial General Liability Insurance utilizing Insurance Services Office (ISO) coverage form CG0001, edition date 10/01 or later, or an equivalent form and with insurance companies reasonably acceptable to MTS. The coverage shall contain no restricting or exclusionary endorsements that would limit coverage for events related to Lessee's occupancy and activities on the Premises. An endorsement must accompany the certificate of insurance (COI) provided for general liability insurance to demonstrate that the standard railroad exclusionary language has been removed from the general liability insurance policy. The policy number listed on the COI and on the endorsement must match. All such policies shall name in the endorsement San Diego Metropolitan Transit System (MTS), San Diego Trolley, Inc. (SDTI), San Diego and Arizona Eastern Railway (SD&AE), San Diego and Imperial Valley Railroad (SD&IV), and San Diego Transit Corporation (SDTC), their directors, officers, agents, and employees as additional insureds as their interests may appear. Minimum policy limits shall be \$2,000,000 per occurrence and \$4,000,000 general aggregate.

1.2. Automobile Liability At all times during this Lease, Lessee agrees to maintain Automobile Liability Insurance for bodily injury and property damage including coverage for all owned, non-owned, and hired vehicles. Minimum policy limits shall be \$1,000,000 combined single limit.

1.3 Workers' Compensation At all times during this Lease, Lessee agrees to maintain Workers' Compensation in compliance with the applicable statutory requirements and shall maintain Employer's Liability Insurance at a minimum policy limit of \$1,000,000.

1.4 Property Insurance At all times during this Lease, Lessee agrees to maintain Property Insurance against all risk or special form perils, including Replacement Cost coverage, without deduction for depreciation, for Lessee's merchandise, fixtures owned by Lessee, any items identified in this Lease as improvements to the Premises constructed and owned by Lessee, and the personal property of Lessee, its agents and employees.

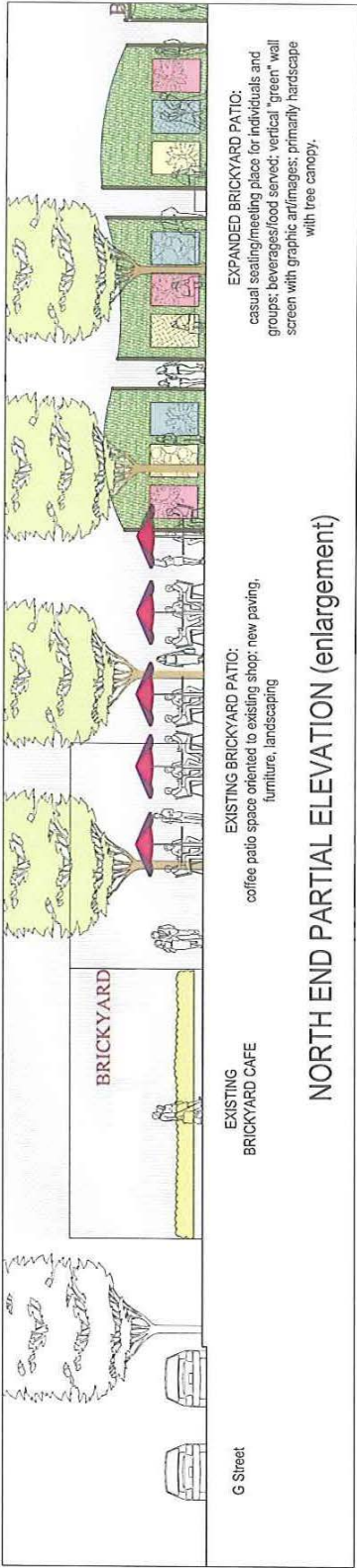
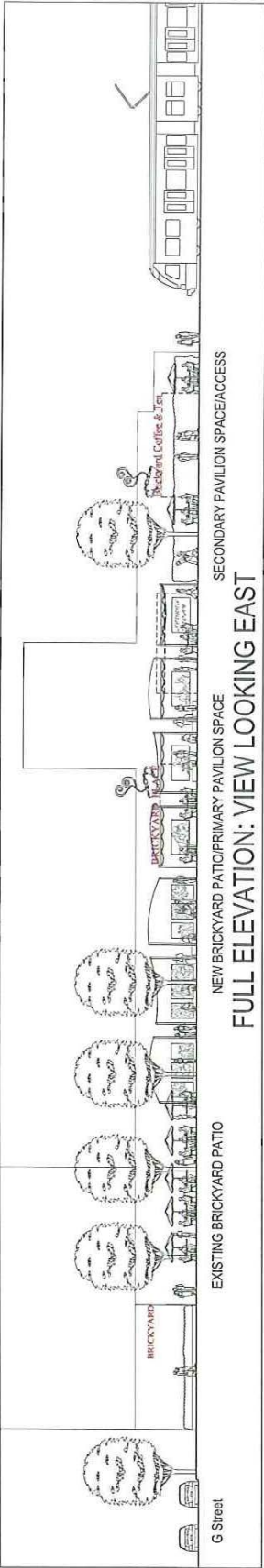
1.5 Primary and Non-Contributory Insurance/Waiver of Subrogation. Lessee agrees that all general liability coverages required under this insurance section are PRIMARY and that any insurance of MTS, SDTI, SD&AE, SD&IV, and SDTC shall be excess and noncontributory (endorsement required). Lessee waives any rights of subrogation against MTS, SDTI, SD&AE, SD&IV, and SDTC, and the policy form must permit and accept such waiver.

1.6 Policy Provisions Required. All policies and coverages shall contain a provision for 30 days' written notice by the Insurer(s) to MTS of any cancellation or material reduction of coverage. A ten-day notice is required for non-payment of premium.

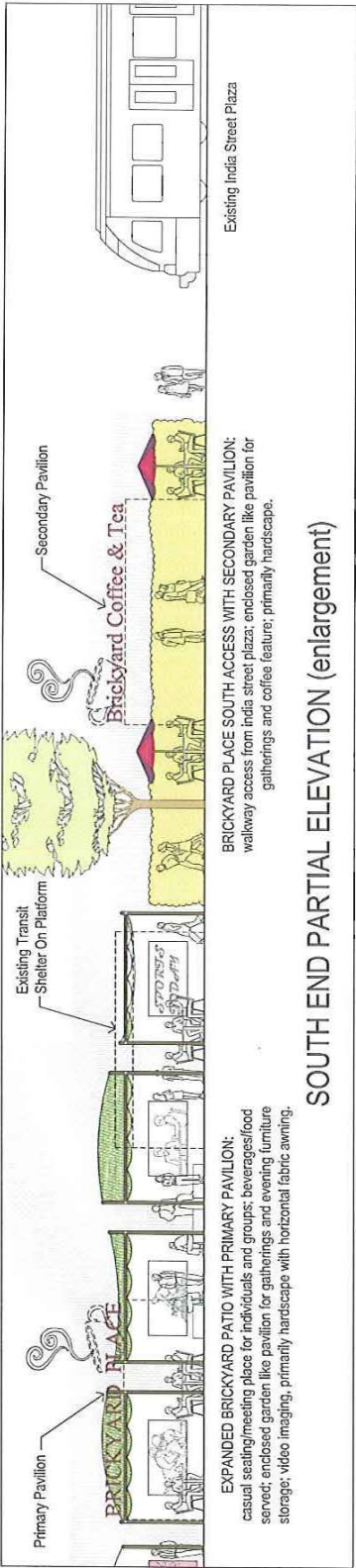
1.7 Evidence Required. Within ten (10) working days following execution of this Lease, Lessee shall have provided the MTS with satisfactory certification by a qualified representative of the Insurer(s) that Lessee's insurance complies with all provisions in this

insurance section. SD&AE, SD&IV, and SDTC, or their insurance consultant(s) are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by Lessee pursuant to this Agreement, including but not limited to the provisions concerning indemnification.

1.8 Special Provisions. The foregoing requirements as to the types and limits of insurance coverage to be maintained by Lessee, and any approval of said insurance by MTS, SDTI, SD&AE, SD&IV, and SDTC, or their insurance consultant(s) are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by Lessee pursuant to this Agreement, including but not limited to the provisions concerning indemnification.

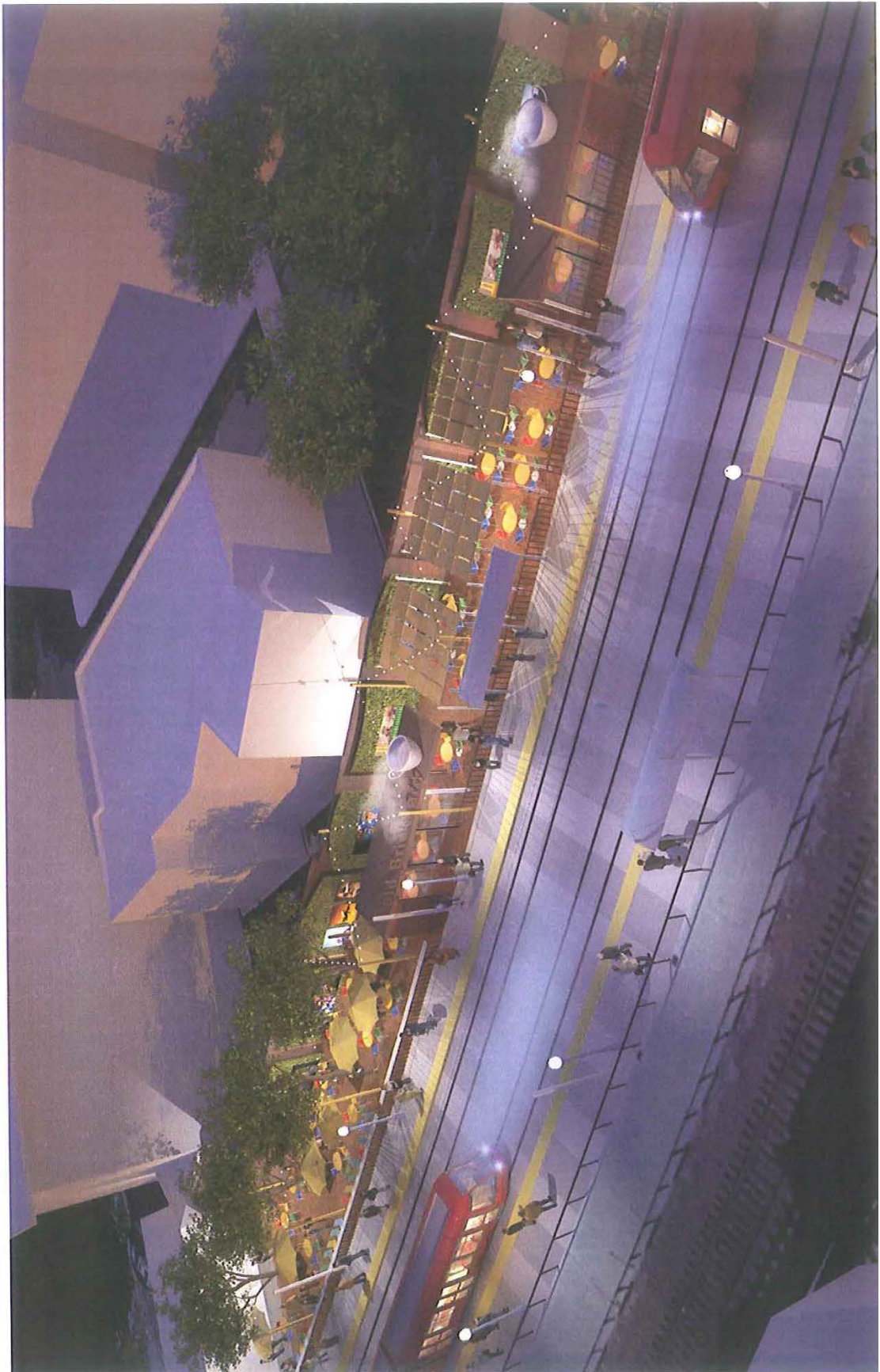


NORTH END PARTIAL ELEVATION (enlargement)



SOUTH END PARTIAL ELEVATION (enlargement)









1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 8

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

MILLS BUILDING RETAIL LEASE: EXTENSION OF A-MART LEASE

RECOMMENDATION:

That the Board of Directors authorize the Chief Executive Officer (CEO) to execute an amended and restated Lease Agreement with Ramzi and Anwar Murad dba A-Mart, MTS Doc. No. G0202.2-93 (in substantially the same format as Attachment A), including an extension of up to ten (10) years.

Budget Impact

The lease rate for 2019 to 2023 will increase by approximately \$600 per month, to \$4,002.14 per month and \$48,025.68 per year. In the first 5-year option period (2023-2028), the lease rate will escalate each year at San Diego CPI, not to exceed 3% annually (estimated at \$262,516 for the 5-year period). In the second option period (2028-2033), the lease rate will be reviewed and adjusted to market rate, and then escalated each year at San Diego CPI, not to exceed 3% annually (estimated at \$304,328 for the 5-year period).

DISCUSSION:

MTS purchased the parcel of land underneath the James R. Mills Building – 1255 Imperial Avenue -- (Mills Building) in 1985. In 1987, the County of San Diego (County) and MTS formed a joint powers authority known as the San Diego Regional Building Authority (SDRBA). The SDRBA was formed to provide for the financing of public capital improvements, including the construction of the Mills Building. Upon completion of construction in 1989, MTS occupied floors 1, 9, and 10, and the County occupied floors 2 through 8. The transaction is structured such that MTS leases the land underneath the building to the SDRBA, which in turn leases the building to the County. MTS then subleases floors 1, 9, and 10 from the County.



Upon completion of the Mills Building construction, the project's developer, Starboard Development Corporation, initiated a first floor convenience store lease with A-Mart. On April 22, 1993 (AI 15), the lease was formally transferred to MTS, with a thirty (30) year term expiring on March 31, 2023 including all options.

A-Mart has been a tenant in good standing for the twenty-five (25) years of the lease to date. The convenience store provides an amenity to MTS transit patrons and Mills Building employees and visitors. Today's action would approve an adjustment of the lease rate for the remaining term of the existing lease (January 1, 2019 to March 31, 2023) from \$2.02 per square foot (\$3,591.56/month) to \$2.25 per square foot (\$4,002.14/month). Based on a review of nearby lease rates and market conditions in the vicinity of the Mills Building, MTS staff concluded this brings the rate up to fair market value. Today's action would also grant A-Mart two additional 5-year options, extending the lease to March 31, 2033. An amended and restated lease has been prepared, ensuring that the lease terms and conditions meet MTS's current standards (Attachment A).

/s/ Paul C. Jablonski
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. Draft MTS Doc. No. G0202.2-93

AMENDED AND RESTATED LEASE AGREEMENT

THIS LEASE AGREEMENT ("Lease") is made and entered into, effective as of January 1, 2019 ("Effective Date"), by and between the SAN DIEGO METROPOLITAN TRANSIT SYSTEM, a California public agency ("MTS") and RAMZI AND ANWAR MURAD, d/b/a A-MART ("Lessee"). This Amended and Restated Lease Agreement replaces in its entirety that lease dated April 13, 1993, and amended on March 29, 2013, between MTS and Lessee.

IN CONSIDERATION OF THE RENTS AND COVENANTS hereinafter set forth, MTS ("Lessor") hereby leases to Lessee, and Lessee hereby leases from MTS, the premises described below upon the following terms and conditions:

ARTICLE 1 LEASE OF PREMISES

MTS hereby leases to Lessee and Lessee hereby leases from MTS, for the rent and upon the covenants and conditions hereinafter set forth, the premises ("Premises") consisting of that certain real property described as follows:

That certain real property situated in the City of San Diego, County of San Diego, State of California, located at 1255 Imperial Avenue, Suite 120, consisting of 1,778 square feet of retail space on the first floor of the Mills Building, which represents 1.04% of the entire building.

All of said leased real property, including the land and all improvements therein, is hereinafter called the "Premises", and is outlined on the exhibit marked Exhibit "A" attached hereto and by this reference incorporated herein, together with rights of ingress and egress over common areas of the Mills Building. Lessor additionally grants to Lessee the use of a fenced storage area, measuring approximately 12' x 8', and located under the parking ramp on the first floor of the parking garage without additional charge. Lessee agrees to add a demising fence and additional gate required at Lessee's sole cost and expense. Lessee's right to use this storage space may be revoked at any time by Lessor providing thirty (30) days advance written notice of their intent to revoke.

ARTICLE 2 TERM

The initial term of this Lease shall extend through December 31, 2022, hereinafter called the "Initial Term," and Lessee shall have two Five-Year options to extend ("Options").

Lessee shall exercise each Option by providing Lessor with written notice at least ninety days (90) prior to the expiration date of Lease, or last day of the then-current Option. If Lessee exercises an Option, Lessor's and Lessee's respective rights, duties and obligations shall be governed by the terms and conditions of this Lease.

ARTICLE 3 RENT

3.1 Base Rent. The base rent ("Base Rent") for the Initial Term is \$4,002.14 per

month commencing on the Effective Date, based on a per square foot initial lease rate of \$2.25 per square foot.

3.2 Cost Of Living Adjustments ("COLA") to the Base Rent. At the time of the exercise of the first Option, the Base Rent provided for in Section 3.1 shall be adjusted annually on the first anniversary of the Effective Date, and thereafter every year on such date. The annual rent will increase, over rent paid the previous year, based on the Consumer Price Index (All Items) for the San Diego-Carlsbad region, All Urban consumers, published by the United States Department of Labor, Bureau of Labor Statistics ("Index") which is published for the month preceding the start of the rental year ("Adjustment Index"), shall be compared with the Index published twelve months prior ("Prior Index"). The monthly rent payable during the next rental year shall be increased (but not decreased) and calculated by multiplying the previous rental year monthly rent by a fraction, the numerator of which is the Adjustment Index and the denominator is the Prior Index; provided, however that any increase in monthly rent calculated from the above method shall never exceed three percent (3%) per year.

The second Option shall be based on the fair market rental rate mutually agreed by the Lessor and Lessee. Each subsequent rental year COLA adjustment will be based on the method described above.

3.3 Delivery of Rent Payments. All rent due under this Lease shall be made payable to MTS, and shall be considered paid when delivered to:

MTS
Attn: Finance Department
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101

MTS may, at any time, by written notice to Lessee, designate a different address to which Lessee shall deliver the rent payments. MTS may, but is not obligated to, send rent invoices to Lessee.

3.4 Failure to Pay Base Rent or Additional Rent; Late Charge.

a. If any such rental is not received by MTS within fifteen (15) calendar days following the due date, Lessee shall immediately pay to MTS a late charge equal to five percent (5%) of such overdue amount. Should Lessee pay said late charge but fail to pay contemporaneously therewith all unpaid amounts of rent due hereunder, MTS' acceptance of this late charge shall not constitute a waiver of Lessee's default with respect to such nonpayment by Lessee nor prevent MTS from exercising all other rights and remedies available to MTS under this Lease or under law.

b. In the event of a dispute between the parties as to the correct amount of Base Rent or Additional Rent owed by Lessee, MTS may accept any sum tendered by Lessee in payment thereof, without prejudice to MTS' claim as to the proper amount of rent owing. If it is later determined that Lessee has not paid the full amount of rent owing, the late charge specified herein shall apply only to that portion of the rent still due and payable from Lessee.

Notwithstanding any provision of this Section to the contrary, however, MTS may waive any delinquency payment or late charge upon written application of Lessee.

ARTICLE 4 POSSESSION AND USE

4.1 Permitted Uses. Lessee shall use the Premises in a manner consistent with the operation of a convenience store similar to Lessee's other operations throughout the City of San Diego. No one other than Lessee, its agents, volunteers and employees, or any sublessee of Lessee approved by MTS as provided in Article 12, "Assignment and Subletting," below, is permitted to use the Premises, unless Lessor has provided written consent (which shall not be unreasonably withheld, conditioned, or delayed), for the purposes described herein, and Lessee shall be fully responsible for the activities of its agents, volunteers and employees and sublessees, if any, on the Premises.

4.2 Duties and Prohibited Conduct. Where Lessee is reasonably in doubt as to the propriety of any particular use, Lessee may request the written determination of MTS that such use is or is not permitted, and Lessee will not be in breach or default under this Lease if Lessee abides by such determination. Notwithstanding the foregoing, however, Lessee shall not use nor permit the use of the Premises in any manner that will tend to create waste or a nuisance. Lessee shall, at Lessee's expense, comply promptly with all applicable statutes, laws, ordinances, rules, regulations, orders, covenants and restrictions of record, and requirements in effect during the term, regulating the use by Lessee of the Premises. Lessee shall not use, or permit any person or persons to use, the Premises for the sale or display of any goods and/or services, which, in the sole discretion of MTS, are inconsistent with the permitted uses of the Premises pursuant to this Lease. Lessee shall keep the Premises, and every part thereof, in a decent, safe and sanitary condition, free from any objectionable noises or odors, except as may be typically present for the permitted uses specified above.

4.3 Compliance With Stormwater Laws. Lessee's use of the Premises is subject to federal, state and local laws regarding the discharge into the stormwater conveyance system of pollutants. Compliance with these laws may require Lessee to develop, install, implement and maintain pollution prevention measures, source control measures and Best Management Practices ("BMPs"). BMPs can include operational practices; water or pollutant management practices; physical site features; or devices to remove pollutants from stormwater, to affect the flow of stormwater or to infiltrate stormwater to the ground. BMPs applicable to Lessee's use of the Premises may include a requirement that all materials, wastes or equipment with the potential to pollute urban runoff be stored in a manner that either prevents contact with rainfall and stormwater, or contains contaminated runoff for treatment and disposal. Lessee is required and agrees to use, operate, maintain, develop, redevelop and retrofit the Premises, as necessary, in accordance with all applicable federal, state and local laws restricting the discharge of non-stormwater at or from the Premises; and all such laws, regulations, or local guidance requiring pollution prevention measures, source control measures, or the installation or use of BMPs. Lessee further agrees to develop, install, implement and/or maintain at Lessee's sole cost and expense, any BMPs or similar pollution control devices required by federal, state and/or local law and any implementing regulations or guidance.

Lessee understands and acknowledges that the stormwater and non-stormwater requirements applicable to Lessee's use of the Premises may be changed from time to time by federal, state and/or local authorities, and that additional requirements may become applicable based on changes in Lessee's activities or development or redevelopment by Lessee or MTS. Lessee shall perform and record annual stormwater training, perform and record regular stormwater self-inspections, and maintain and provide all necessary stormwater documentation to stormwater auditors.

Lessee shall develop, install, implement, and maintain such additional BMPs and/or other pollution control practices at the Premises at Lessee's sole cost and expense. To the extent there is a conflict between any federal, state or local law, Lessee shall comply with the more restrictive provision. If MTS receives any fine or fines from any regulatory agency as a result of Lessee's failure to comply with applicable stormwater laws as set forth in this Article, Lessee shall reimburse MTS for the entire fine amount issued by the applicable public agency.

ARTICLE 5 UTILITIES

5.1 Utilities and Services. Lessee agrees to provide and pay for all of the utilities and services necessary for the occupancy and use of the Premises, including, but not limited to, gas, water, electricity, trash, sewage charges or septic service, janitorial, and telephone not otherwise provided by MTS. MTS shall have no responsibility either to provide or pay for such services other than those provided as part of the building plant services.

MTS shall furnish heating, ventilation and air conditioning for normal office use, Monday through Friday, typically from 6:00 a.m. to 6:00 p.m., and Saturday from 7:00 a.m. to 2:00 p.m., except for recognized federal and state holidays. Lessor shall also provide light replacement service for all standard lighting fixtures, toilet room supplies, exterior window washing at reasonable intervals and normal and customary building janitorial service for the Mills Building other than the Premises. Lessee shall be responsible for such services on the Premises. A separate electrical meter for usage on the Premises has been installed and Lessee shall pay for the electrical charges to the Premises.

In the event of a variation, interruption or failure of services, Lessor shall use its utmost diligence to restore such service. Any interruption or failure of services continuing for more than ten (10) days, incident to the making of repairs, alterations, or improvements, or due to accident or strike, may, upon Lessee's written notification to Lessor, be deemed the eviction of Lessee and relieve Lessee from any of Lessee's obligations hereunder.

5.2 Energy Conservation by Lessee. Lessee shall be responsible for promoting energy conservation measures in the operation of all activities at the Lease premises. Lessee shall cooperate with the Landlord in all forms of energy conservation including energy-efficient lighting, heating and air-conditioning systems, and fixtures and equipment. Lessee shall comply with all existing and newly-enacted laws, by-laws, regulations, etc., relating to the conservation of energy. Lessee shall comply with all reasonable requests and demands of the Lessor

pertaining to the installation and maintenance of energy conservation systems, fixtures, and equipment.

5.3 Parking. Lessor hereby grants to Lessee and Lessee's customers, suppliers, employees and invitees, a non-exclusive privilege to use the parking areas located on the Land for the use of motor vehicles during the term of this lease. Lessor shall provide Lessee with up to ten (10) parking spaces on a non-exclusive basis, first come, first served for the term of this Lease and any extension thereof at the "Tenant Monthly Parking Rate" as designated by the San Diego Regional Building Authority or its Parking Manager. Lessor reserves the right at any time to grant similar non-exclusive privilege to other tenants, to promulgate rules and regulations relating to the use of such parking areas, including reasonable restrictions on parking by tenants and employees, to designate specific spaces for the use of any tenant, to construct or make changes in the parking layout from time to time, and to establish reasonable time limits on parking. Overnight parking is prohibited and any vehicle violating this or any other vehicle regulation adopted by Lessor is subject to removal at the owner's expense.

ARTICLE 6 MECHANICS' LIENS

Lessee shall pay, or cause to be paid, all costs for work done by it, or caused to be done by it, on the Premises, and for all materials furnished for or in connection with any such work. If any lien is filed against the Premises, Lessee shall cause the lien to be discharged of record within thirty (30) days after it is filed. Lessee shall indemnify, defend and hold MTS harmless from any and all liability, loss, damage, costs, attorneys' fees and all other expenses on account of claims of lien of laborers, materialmen or others for work performed or materials or supplies furnished for Lessee or persons claiming under Lessee, its agents, and/or subcontractors.

ARTICLE 7 SECURITY

MTS shall provide 24-hour security of the grounds and the Mills Building. No security will be provided for Lessee's business activities. MTS shall provide Lessee access to the Premises twenty-four (24) hours per day, 365 days per year, unless in the case of an emergency prevents Lessee from access the Premises. Lessee may install a security system subject to MTS' prior written approval.

ARTICLE 8 TAXES, ASSESSMENTS AND FEES

8.1 Responsibility for Payment of Taxes and Assessments. MTS shall not be obligated to pay any taxes or assessments accruing against Lessee on the Premises or any interest of Lessee therein before, during or after the Term, or any extension thereof; all such payments shall be the sole responsibility of Lessee. In addition, Lessee shall be solely responsible for payment of any taxes or assessments levied upon any Improvements, Fixtures or Personal Property located on the Premises, to the extent that such taxes or assessments result from the business or other activities of Lessee upon, or in connection with, the Premises.

8.2 Definition of "Taxes". As used herein, the term "taxes" means all taxes, governmental bonds, special assessments, Mello-Roos assessments, charges, rent income or transfer taxes, license and transaction fees, including, but not limited to, (i) any state, local, federal, personal or corporate income tax, or any real or personal property tax, (ii) any estate inheritance taxes, (iii) any franchise, succession or transfer taxes, (iv) interest on taxes or penalties resulting from Lessee's failure to pay taxes, (v) any increases in taxes attributable to the sale of Lessee's leasehold interest in the Premises, or (vi) any taxes which are essentially payments to a governmental agency for the right to make improvements to the Premises.

8.3 Creation of Possessory Interest. Pursuant to the provisions of Revenue and Taxation Code section 107.6, Lessee is hereby advised that the terms of this Lease may result in the creation of a possessory interest. If such a possessory interest is vested in Lessee, Lessee may be subjected to the payment of real property taxes levied on such interest. Lessee shall be solely responsible for the payment of any such real property taxes. Lessee shall pay all such taxes when due, and shall not allow any such taxes, assessments or fees to become a lien against the Premises or any improvement thereon; provided, however, that nothing herein shall be deemed to prevent or prohibit Lessee from contesting the validity of any such tax, assessment or fee in a manner authorized by law.

ARTICLE 9 IMPROVEMENTS; REPAIRS; MAINTENANCE

9.1 Acceptance of Premises. Lessee acknowledges that Lessee has made a thorough inspection of the Premises prior to the Effective Date of this Lease, and that it accepts the Premises as of the Effective Date in their condition at that time. Lessee further acknowledges that MTS has made no oral or written representations or warranties to Lessee regarding the condition of the Premises, and that Lessee is relying solely on its inspection of the Premises with respect thereto.

9.2 Lessee's Improvements, Repair and Maintenance Obligations. Lessee shall at all times from and after the Effective Date, at its own cost and expense, repair, maintain in good and tenable condition and replace, as necessary, the Premises and every part thereof, including, without limitation, the following as applicable: the roof; the heating, ventilation and air conditioning system; mechanical and electrical systems; all meters, pipes, conduits, equipment, components and facilities (whether or not within the Premises) that supply the Premises exclusively with utilities (except to the extent the appropriate utility company has assumed these duties); all Fixtures and other equipment installed in the Premises; all exterior and interior glass installed in the Premises; all signs, lock and closing devices; all interior window sashes, casements and frames; doors and door frames (except for the painting of the exterior surfaces thereof); floor coverings; and all such items of repair, maintenance, alteration, improvement or reconstruction as may be required at any time or from time to time by a governmental agency having jurisdiction thereof. Lessee's obligations hereunder shall apply regardless of whether the repairs, restorations and replacements are ordinary or extraordinary, foreseeable or unforeseeable, capital or noncapital, or the fault or not the fault of Lessee, its agents, employees, invitees, visitors, sublessees or contractors. All replacements made by Lessee in accordance with this Section shall be of like size, kind and quality to the items replaced and shall be subject to MTS' approval. Upon surrender of the Premises, Lessee shall deliver the

Premises to MTS in good order, condition and state of repair, but shall not be responsible for damages resulting from ordinary wear and tear. Lessee shall provide for trash removal, at its expense, and shall maintain all trash receptacles and trash areas in a clean, orderly and first-class condition. Excepting the above, Lessor shall be responsible for the repairs and replacements of broken glass doors, windows on the exterior of the Premises.

Lessee shall not, without MTS' prior written consent (which shall not be unreasonably withheld, conditioned, or delayed), make any alterations, install or remove any landscaping, including trees, improvements or additions to the Premises, whether structural or non-structural. Any such improvements, excepting movable furniture and trade fixtures, shall become part of the realty and belong to MTS; provided, however, that MTS may require the removal of any such alterations, improvements or additions as a condition to granting MTS' consent. All alterations, improvements or additions shall be accomplished by Lessee in a good and workmanlike manner, in conformity with all applicable laws and regulations. Particularly, Lessee may install building signage to assist Lessee's customers in finding Lessee's business. All signage shall be approved in writing by MTS prior to installation. MTS shall provide electricity where appropriate for sign illumination, location of which will be approved by MTS. All signage shall conform to all zoning and municipal regulations, and MTS shall have review and approval rights of Lessee's signage and location. All signage must comply with the sign criteria of the Mills Building, and is for the exclusive use of Lessee.

The exercise of any and all rights provided by this Lease is subject to the requirement that Lessee's contractors and agents first obtain a Right of Entry Permit ("ROE Permit") from MTS prior to entry onto the Premises for the construction any tenant improvements or maintenance of the Premises. The ROE Permit requires that Lessee's contractors and agents procure and maintain in force at all times during the construction contract, the insurance described in the ROE Permit. MTS shall timely process any applications required to obtain the ROE Permit, and shall not unreasonably deny or delay the issuance of such ROE Permit. Lessee's contractors and agents will comply with all MTS policies, rules and regulations as stated in the ROE Permit, and the instructions of MTS' representatives.

9.3 Lessee's Failure to Maintain. If Lessee refuses or neglects to repair, replace, or maintain the Premises, or any part thereof, in a manner reasonably satisfactory to MTS, MTS may, upon giving Lessee reasonable written notice of its election to do so, make such repairs or perform such maintenance on behalf of and for the account of Lessee. If MTS makes or causes any such repairs to be made or performed, as provided for herein, Lessee shall pay the cost thereof to MTS, as additional rent, promptly upon receipt of an invoice therefore.

9.4 Right to Enter. Lessee shall permit MTS, or its authorized representatives, to enter the Premises at all times during usual business hours to inspect the same, and to perform any work therein that (a) may be necessary to comply with any laws, ordinances, rules or regulations of any public authority, (b) MTS may deem necessary to prevent waste or deterioration in connection with the Premises if Lessee does not make, or cause to be made, such repairs or perform, or cause to be performed, such work promptly after receipt of written demand from MTS, and (c) MTS may deem necessary in connection with the expansion, reduction, remodeling, protection or renovation of any MTS constructed or owned facilities on or off of the Premises. Nothing herein shall imply any duty on the part of MTS to do any such work which,

under any provision of this Lease, Lessee may be required to do, nor shall MTS' performance of any repairs on behalf of Lessee constitute a waiver of Lessee's default in failing to do the same. If MTS exercises any of its rights under this Section, Lessee shall not be entitled to any compensation, damages or abatement of rent from MTS for any injury or inconvenience occasioned thereby.

9.5 MTS Not Obligated to Repair or Maintain; Lessee's Waiver of California Civil Code Section 1942. To the extent that any remedies specified in this Lease conflict or are inconsistent with any provisions of California Civil Code section 1942, or any successor statute thereto ("CC §1942"), the provisions of this Lease shall control. Lessee specifically waives any right it may have pursuant to CC §1942 to effect maintenance or repairs to the Premises and to abate the costs thereof from rent due to the MTS under this Lease.

ARTICLE 10 INDEMNITY AND INSURANCE

10.1 Lessee's Indemnity. MTS shall not be liable for, and Lessee shall defend and indemnify MTS and the employees and agents of MTS (collectively "MTS Parties"), against any and all claims, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs (hereinafter collectively referred to as "Claims"), related to this Lease and arising either directly or indirectly from any act, error, omission or negligence of Lessee or its contractors, licensees, agents, volunteers, servants or employees, including, without limitation, Claims caused by the concurrent negligent act, error or omission, whether active or passive, of MTS Parties. Lessee shall have no obligation, however, to defend or indemnify MTS Parties from a Claim if it is determined by a court of competent jurisdiction that such Claim was caused by the sole negligence or willful misconduct of MTS Parties.

10.2 MTS' Indemnity. MTS shall defend and indemnify Lessee and hold it harmless from and against any Claims related to this Lease that arise solely from any act, omission or negligence of MTS Parties.

10.3 Covered Claims. The obligations of Lessee and MTS hereunder to indemnify, defend and hold each other harmless shall not apply to the extent that insurance carried by Lessee or MTS, other than any program of self-insurance covers any Claim.

10.4 Lessee's Insurance Obligations. Without limiting Lessee's indemnification obligations to MTS under this Lease, Lessee shall provide and maintain, during the Term and for such other period as may be required herein, at its sole expense, insurance in the amounts and form specified in Exhibit "B," attached hereto.

10.5 MTS' Insurance Obligations. MTS maintains a policy of All-Risk Insurance covering the MTS' personal property in the Premises, including any fixtures or equipment in the Premises owned by MTS. The MTS utilizes a program of self-funding with regard to any liability it may incur for personal injury or property damage arising out its use or occupancy of the Premises.

ARTICLE 11 HAZARDOUS MATERIALS

11.1 Hazardous Materials Laws-Definition. As used in this section, the term "Hazardous Materials' Laws" means any and all federal, state or local laws or ordinances, rules, decrees, orders, regulations or court decisions (including the so-called "common law"), including without limitation the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C., § 9601 et seq.), the Hazardous Materials Transportation Act, as amended (49 U.S.C., § 1801 et seq.), the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C., § 6901 et seq.), and the California Environmental Quality Act of 1970, relating to hazardous substances, hazardous materials, hazardous waste, toxic substances, environmental conditions on, under or about the Premises, soil and ground water conditions or other similar substances or conditions.

11.2 Hazardous Materials - Definition. As used in this section the term "Hazardous Materials" means any chemical, compound, material, substance or other matter that:

- a. Is a flammable, explosive, asbestos, radioactive nuclear medicine, vaccine, bacteria, virus, hazardous waste, toxic, overtly injurious or potentially injurious material, whether injurious or potentially injurious by itself or in combination with other materials;
- b. Is controlled, referred to, designated in or governed by any Hazardous Materials Laws;
- c. Gives rise to any reporting, notice or publication requirements under any Hazardous Materials Laws; or
- d. Is any other material or substance giving rise to any liability, responsibility or duty upon the MTS or Lessee with respect to any third person under any Hazardous Materials Law.

11.3 Lessee's Representations and Warranties. Lessee represents and warrants that, during the Term or any extension thereof, or for such longer period as may be specified herein, Lessee shall comply with the following provisions unless otherwise specifically approved in writing by MTS:

- a. Lessee shall not cause or permit any Hazardous Materials to be brought, kept or used in or about the Premises by Lessee, its agents, employees, sublessees, assigns, contractors or invitees, except as required by Lessee's permitted use of the Premises, as described in Section 4.1, "Permitted Uses."
- b. Any handling, transportation, storage, treatment or usage by Lessee of Hazardous Materials that is to occur on the Premises following the Commencement Date shall be in compliance with all applicable Hazardous Materials Laws.
- c. Any leaks, spills, release, discharge, emission or disposal of Hazardous Materials which may occur on the Premises following the Commencement Date shall be

promptly and thoroughly cleaned and removed from the Premises by Lessee at its sole expense, and any such discharge shall be promptly reported in writing to MTS, and to any other appropriate governmental regulatory authorities.

d. No friable asbestos shall be constructed, placed on, deposited, stored, disposed of, or located by Lessee in the Premises.

e. No underground improvements, including but not limited to treatment or storage tanks, or water, gas or oil wells shall be located by Lessee on the Premises without MTS' prior written consent.

f. Lessee shall conduct and complete all investigations, studies, sampling, and testing procedures and all remedial, removal, and other actions necessary to clean up and remove all Hazardous Materials on, from, or affecting the Premises in accordance with all applicable Hazardous Materials' Laws and to the satisfaction of MTS.

g. Activities proposed by Lessee that involve disturbing asbestos materials on site shall only be conducted in accordance with all federal, state and local asbestos rules and regulations including, but not limited to, the California Occupational Safety and Health Administration (Cal/OSHA), Environmental Protection Agency (EPA) and Air Pollution Control District (APCD), with prior written consent of MTS.

Any asbestos related activities shall be performed by a contractor that is registered with Cal/OSHA and certified by the California Contractors State Licensing Board to perform asbestos work. Any asbestos related activities shall be overseen by a California Certified Asbestos Consultant (CAC), or a Certified Site Surveillance Technician under the direction of a CAC.

Replacement products used in tenant improvements or other construction activities shall not contain asbestos. Any replacement products used by Lessee shall be verified as non-asbestos products by using Material Safety Data Sheets (MSDS) and/or having the architect or project engineer verify that ACMs were not used.

h. Lessee shall promptly supply MTS with copies of all notices, reports, correspondence, and submissions made by Lessee to the United States Environmental Protection Agency, the United Occupational Safety and Health Administration, and any other local, state or federal authority which requires submission of any information concerning environmental matters or hazardous wastes or substances pursuant to applicable Hazardous Materials' Laws.

i. Lessee shall promptly notify MTS of any liens threatened or attached against the Premises pursuant to any Hazardous Materials' Law. If such a lien is filed against the Premises, then within twenty (20) days following such filing or before any governmental authority commences proceedings to sell the Premises pursuant to the lien, whichever occurs first, Lessee shall either: (a) pay the claim and remove the lien from the Premises; or (b) furnish either (1) a bond or cash deposit reasonably satisfactory to MTS in an amount not less than the claim from which the lien arises, or (2) other security satisfactory to MTS in an amount not less than that which is sufficient to discharge the claim from which the lien arises. At the end of this

lease, Lessee shall surrender the Premises to MTS free of any and all Hazardous Materials and in compliance with all Hazardous Materials' Laws affecting the Premises.

11.4 Indemnification by Lessee. Lessee (and, if applicable, each of its general partners) and its successors, assigns, and guarantors, if any, jointly and severally agree to protect, indemnify, defend (with counsel selected by MTS), reimburse and hold MTS and its officers, employees and agents harmless from any claims, judgments, damages, penalties, fines, costs or expenses (known or unknown, contingent or otherwise), liabilities (including sums paid in settlement of claims), personal injury (including wrongful death), property damage (real or personal) or loss, including attorneys' fees, consultants' fees, and experts' fees (consultants and experts to be selected by MTS) which arise during or after the Term from or in connection with the presence or suspected presence of Hazardous Materials, including the soil, ground water or soil vapor on or under the Premises. Without limiting the generality of the foregoing, the indemnification provided by this section shall specifically cover costs incurred in connection with investigation of site conditions or any cleanup, remedial, removal or restoration work required by any Hazardous Materials Laws because of the presence of Hazardous Materials in the soil, ground water or soil vapor on the Premises, and the release or discharge of Hazardous Materials by Lessee during the course of Lessee's alteration or improvement of the Premises.

11.5 Remedies Cumulative; Survival. The provisions of this Article shall be in addition to any and all common law obligations and liabilities Lessee may have to MTS, and any remedies and the environmental indemnities provided for herein shall survive the expiration or termination of this Lease and/or any transfer of all or any portion of the Premises, or of any interest in this Lease, and shall be governed by the laws of the State of California.

11.6 Inspection. MTS and MTS' agents, servants, and employees including, without limitation, legal counsel and environmental consultants and engineers retained by MTS, may (but without the obligation or duty so to do), at any time and from time to time, on not less than ten (10) business days' notice to Lessee (except in the event of an emergency in which case no notice shall be required), inspect the Premises to determine whether Lessee is complying with Lessee's obligations set forth in this Article, and to perform environmental inspections and samplings, during regular business hours (except in the event of an emergency) or during such other hours as MTS and Lessee may agree. If Lessee is not in compliance, MTS shall have the right, in addition to MTS' other remedies available at law and in equity, to enter upon the Premises immediately and take such action as MTS in its sole judgment deems appropriate to remediate any actual or threatened contamination caused by Lessee's failure to comply. MTS will use reasonable efforts to minimize interference with Lessee's use of Premises but shall not be liable for any interference caused by MTS' entry and remediation efforts. Upon completion of any sampling or testing MTS will (at Lessee's expense if MTS' actions are a result of Lessee's default under this section) restore the affected area of the Premises from any damage caused by MTS' sampling and testing.

ARTICLE 12 ASSIGNMENT AND SUBLETTING

Lessee shall not voluntarily or involuntarily assign, sublease, mortgage, encumber, or

otherwise transfer (collectively, a "Transfer") all or any portion of the Premises or its interest in this Lease without MTS' prior written consent. MTS may reasonably withhold its consent to any Transfer. Any attempted Transfer without MTS' consent shall be void and shall constitute a material breach of this Lease. As used herein, the term "Transfer" shall include an arrangement (including without limitation management agreements, concessions, and licenses) that allows the use and occupancy of all or part of the Premises by anyone other than Lessee.

ARTICLE 13 MTS' RIGHT OF ACCESS

a. MTS, its agents, employees, and contractors may enter the Premises at any time in response to an emergency, and at reasonable hours to (a) inspect the Premises, (b) exhibit the Premises to prospective purchasers or Lessees, (c) determine whether Lessee is complying with its obligations in this Lease (including its obligations with respect to compliance with Hazardous Materials Laws), (d) supply cleaning service and any other service that this Lease requires MTS to provide, (e) post notices of non-responsibility or similar notices, or (f) make repairs that this Lease requires MTS to make, or make repairs to any adjoining space or utility services, or make repairs, alterations, or improvements to any other portion of the Premises; provided, however, that all work will be done as promptly as reasonably possible and so as to cause as little interference to Lessee as reasonably possible.

b. Lessee waives any claim of injury or inconvenience to Lessee's business, interference with Lessee's business, loss of occupancy or quiet enjoyment of the Premises, or any other loss occasioned by such entry. If necessary, Lessee shall provide MTS with keys to unlock all of the doors in the Premises (excluding Lessee's vaults, safes, and similar areas designated in writing by Lessee in advance). MTS will have the right to use any means that MTS may deem proper to open doors in the Premises and to the Premises in an emergency. No entry to the Premises by MTS by any means will be a forcible or unlawful entry into the Premises or a detainer of the Premises or an eviction, actual or constructive, of Lessee from the Premises, or any part of the Premises, nor shall the entry entitle Lessee to damages or an abatement of rent or other charges that this Lease requires Lessee to pay.

ARTICLE 14 QUIET ENJOYMENT

If Lessee is not in breach under the covenants made in this Lease, MTS covenants that Lessee shall have peaceful and quiet enjoyment of the Premises without hindrance on the part of MTS. MTS will defend Lessee in the peaceful and quiet enjoyment of the Premises against claims of all persons claiming through or under the MTS.

ARTICLE 15 NOTICES

15.1 Notices. Whenever in this Lease it shall be required or permitted that notice or demand be given or served by either party to this Lease to or on the other, such notice or demand

shall be in writing, mailed or delivered to the other party at the following addresses:

To MTS:
Manager of Real Estate Assets
1225 Imperial Avenue, Suite 1000
San Diego, CA 92101

To Lessee:
Ramzi & Anwar Murad
D/B/A "A"-MART
1255 Imperial Avenue, Suite 120
San Diego, CA 92101

Mailed notices shall be sent by United States Postal Service, certified or registered mail, postage prepaid and shall be deemed to have been given, delivered and received three (3) business days after the date such notice or other communication is posted by the United States Postal Service. All other such notices or other communications shall be deemed given, delivered and received upon actual receipt. Either party may, by written notice delivered pursuant to this provision, at any time designate a different address to which notices shall be sent.

15.2 Default Notices. Notwithstanding anything to the contrary contained within this Article, any notices MTS is required or authorized to deliver to Lessee in order to advise Lessee of alleged violations of Lessee's covenants under this Lease must be in writing but shall be deemed to have been duly given or served upon Lessee by MTS attempting to deliver at the Premises during normal business hours a copy of such notice to Lessee or its managing employee and by MTS mailing a copy of such notice to Lessee in the manner specified in the preceding Section.

ARTICLE 16 WAIVER OF RELOCATION ASSISTANCE BENEFITS

16.1 Relocation Assistance Benefits. Lessee is hereby informed and acknowledges the following:

a. By entering into this Lease and becoming a tenant of MTS, Lessee will not be entitled to receipt of "relocation assistance benefits" ("Relocation Benefits") pursuant to the Federal Uniform Relocation Assistance Act (42 U.S.C. §§ 4601 et seq.) and/or the California Relocation Assistance Law (Cal. Gov. Code §§ 7270 et seq.) (collectively, the "Relocation Statutes"), should MTS at some time make use of the Premises in such a way as to "displace" Lessee from the Premises. Pursuant to the Relocation Statutes, MTS will not be obligated to make such payments to Lessee even where such displacement of Lessee may otherwise constitute a breach or default by MTS of its obligations pursuant to this Lease.

16.2 Lessee's Waiver and Release of Relocation Benefits. In consideration of MTS'

agreement to enter into this Lease, Lessee hereby waives any and all rights it may now have, or may hereafter obtain, to Relocation Benefits arising out of the MTS' assertion or exercise of its contractual rights to terminate this Lease pursuant to its terms, whether or not such rights are contested by Lessee or any other entity, and releases MTS from any liability for payment of such Relocation Benefits; provided, however, that Lessee does not waive its rights to Relocation Benefits to the extent that Lessee's entitlement thereto may arise out of any condemnation or pre-condemnation actions taken by the MTS or any other public agency with respect to the Premises. Lessee shall in the future execute any further documentation of the release and waiver provided hereby as MTS may reasonably require.

ARTICLE 17 GENERAL PROVISIONS

17.1 Authority. Lessee represents and warrants that it has full power and authority to execute and fully perform its obligations under this Lease pursuant to its governing instruments, without the need for any further action, and that the person(s) executing this Lease on behalf of Lessee are the duly designated agents of Lessee and are authorized to do so.

17.2 Brokers. Lessee is represented by Perry Commercial REI ("Broker") in this transaction. It is mutually agreed that Broker shall receive a commission equal to four percent (4%) of the base rental consideration of the lease for the first five (5) years of the Initial Term and two percent of the base rental consideration of the lease for the second five (5) years of the Initial Term. The total of the Broker's commission is \$8,679. The Broker's commission shall be paid by MTS, one half upon the mutual execution and delivery of the Lease, and one half upon occupancy and rent commencement.

17.3 Captions. The captions, headings and index appearing in this Lease are inserted for convenience only and in no way define, limit, construe, or describe the scope or intent of the provisions of this Lease.

17.4 Cumulative Remedies. In the event of a default under this Lease, each party's remedies shall be limited to those remedies set forth in this Lease. Any such remedies are cumulative and not exclusive of any other remedies under this Lease to which the non-defaulting party may be entitled.

17.5 Entire Agreement. This Lease, together with all addenda, exhibits and riders attached hereto, constitutes the entire agreement between the parties with respect to the subject matter hereof, and all prior or contemporaneous agreements, understandings and representations, oral or written, are superseded.

17.6 Estoppel Certificate. Lessee shall at any time during the term of this Lease, within five (5) business days of written notice from MTS, execute and deliver to MTS a statement in writing certifying that this Lease is unmodified and in full force and effect or, if modified, stating the nature of such modification. Lessee's statement shall include other details requested by MTS, such as the date on which rent and other charges are paid, the current ownership and name of Lessee, Lessee's knowledge concerning any outstanding defaults with respect to MTS' obligations under this Lease and the nature of any such defaults. Any such

statement may be relied upon conclusively by any prospective purchaser or encumbrancer of the Premises. Lessee's failure to deliver such statements within such time shall be conclusively deemed to mean that this Lease is in full force and effect, except to the extent any modification has been represented by MTS, that there are no uncured defaults in the MTS' performance, and that not more than one month's rent has been paid in advance.

17.7 Exhibits. All exhibits referred to herein are attached hereto and incorporated by reference.

17.8 Force Majeure. In the event either party is prevented or delayed from performing any act or discharging any obligation hereunder, except for the payment of rent by Lessee, because of any and all causes beyond either party's reasonable control, including unusual delays in deliveries, abnormal adverse weather conditions, unavoidable casualties, strikes, labor disputes, inability to obtain labor, materials or equipment, acts of God, governmental restrictions, regulations or controls, any hostile government actions, civil commotion and fire or other casualty, legal actions attacking the validity of this Lease or the MTS' occupancy of the Premises, or any other casualties beyond the reasonable control of either party except casualties resulting from Lessee's negligent operation or maintenance of the Premises ("Force Majeure"), performance of such act shall be excused for the period of such delay, and the period for performance of such act shall be extended for a period equivalent to the period of such delay. Force Majeure shall not include any bankruptcy, insolvency, or other financial inability on the part of either party hereto.

17.9 Governing Law. This Lease shall be governed, construed and enforced in accordance with the laws of the State of California.

17.10 Interpretation. The language of this Lease shall be construed simply according to its plain meaning and shall not be construed for or against either party.

17.11 Joint and Several Liability. If more than one person or entity executes this Lease as Lessee, each of them is jointly and severally liable for all of the obligations of Lessee hereunder.

17.12 Lease Administration. This Lease shall be administered on behalf of MTS by the Manager of Real Estate Assets, San Diego Metropolitan Transit System or by such person's duly-authorized designee.

17.13 Lessee's Lease Administration. Lessee confirms that Lessee's Lease Administrator has been given full operational responsibility for compliance with the terms of this Lease. Lessee shall provide MTS with a written schedule of its normal hours of business operation on the Premises, and Lessee's Lease Administrator or a representative designated thereby shall be (i) available to MTS on a twenty-four (24) hour a day, seven (7) days a week, basis, and (ii) present on the Premises during Lessee's normal business hours, to resolve problems or answer question pertaining to this Lease and Lessee's operations on the Premises.

17.14 Liquidated Damages. Any payments by Lessee to MTS under this Lease

described as liquidated damages represent the parties' reasonable estimate of MTS' actual damages under the described circumstances, such actual damages being uncertain and difficult to ascertain in light of the impossibility of foreseeing the state of the leasing market at the time of the various deadlines set forth herein. MTS may, at its election, take any of the liquidated damages assessed in any portion of this Lease as direct monetary payments from Lessee and/or as an increase of rent due from Lessee under this Lease.

17.15 Modification. The provisions of this Lease may not be modified, except by a written instrument signed by both parties.

17.16 Partial Invalidity. If any provision of this Lease is determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Lease shall not be affected thereby. Each provision shall be valid and enforceable to the fullest extent permitted by law.

17.17 Payments. Except as may otherwise be expressly stated, each payment required to be made by Lessee shall be in addition to, and not a substitute for, other payments to be made by Lessee.

17.18 Successors & Assigns. This Lease shall be binding on and inure to the benefit of the parties and their successors and assigns, except as may otherwise be provided herein.

17.19 Time of Essence. Time is of the essence of each and every provision of this Lease.

17.20 Waiver. No provision of this Lease or the breach thereof shall be deemed waived, except by written consent of the party against whom the waiver is claimed. The waiver by MTS of any breach of any term, covenant or condition contained in this Lease shall not be deemed to be a waiver of such term, covenant or condition of any subsequent breach thereof, or of any other term, covenant or condition contained in this Lease. MTS' subsequent acceptance of partial rent or performance by Lessee shall not be deemed to be an accord and satisfaction or a waiver of any preceding breach by Lessee of any term, covenant or condition of this Lease or of any right of MTS to a forfeiture of the Lease by reason of such breach, regardless of MTS' knowledge of such preceding breach at the time of MTS' acceptance. The failure on the part of MTS to require exact or full and complete compliance with any of the covenants, conditions of agreements of this Lease shall not be construed as in any manner changing or waiving the terms of this Lease or as estopping MTS from enforcing in full the provisions hereof. No custom or practice which may arise between the parties hereto in the course of administering this Lease shall be construed to waive, estop or in any way lessen MTS' right to insist upon Lessee's full performance of, or compliance with, any term, covenant or condition of this Lease or to inhibit or prevent MTS' exercise of its rights with respect to any default, dereliction or breach of this Lease by Lessee.

IN WITNESS WHEREOF, MTS and Lessee have duly executed this Lease as of the day and year first above written.

Lessee:

MTS:

By: _____
Ramzi Murad

By: _____
Paul C. Jablonski, Chief Executive Officer

Attachments:

A. Description of the Premises

B. Insurance Requirements

EXHIBIT A
DESCRIPTION OF THE PREMISES

EXHIBIT B INSURANCE REQUIREMENTS

1.1 Commercial General Liability At all times during this Lease, Lessee agrees to maintain Commercial General Liability Insurance utilizing Insurance Services Office (ISO) coverage form CG0001, edition date 10/01 or later, or an equivalent form and with insurance companies reasonably acceptable to MTS. The coverage shall contain no restricting or exclusionary endorsements that would limit coverage for events related to Lessee's occupancy and activities on the Premises. An endorsement must accompany the certificate of insurance (COI) provided for general liability insurance to demonstrate that the standard railroad exclusionary language has been removed from the general liability insurance policy. The policy number listed on the COI and on the endorsement must match. All such policies shall name in the endorsement San Diego Metropolitan Transit System (MTS), San Diego Trolley, Inc. (SDTI), San Diego and Arizona Eastern Railway (SD&AE), San Diego and Imperial Valley Railroad (SD&IV), and San Diego Transit Corporation (SDTC), their directors, officers, agents, and employees as additional insureds as their interests may appear. Minimum policy limits shall be \$2,000,000 per occurrence and \$4,000,000 general aggregate.

1.2 Automobile Liability At all times during this Lease, Lessee agrees to maintain Automobile Liability Insurance for bodily injury and property damage including coverage for all owned, non-owned, and hired vehicles. Minimum policy limits shall be \$1,000,000 combined single limit.

1.3 Workers' Compensation At all times during this Lease, Lessee agrees to maintain Workers' Compensation in compliance with the applicable statutory requirements and shall maintain Employer's Liability Insurance at a minimum policy limit of \$1,000,000.

1.4 Property Insurance At all times during this Lease, Lessee agrees to maintain Property Insurance against all risk or special form perils, including Replacement Cost coverage, without deduction for depreciation, for Lessee's merchandise, fixtures owned by Lessee, any items identified in this Lease as improvements to the Premises constructed and owned by Lessee, and the personal property of Lessee, its agents and employees.

1.5 Primary and Non-Contributory Insurance/Waiver of Subrogation. Lessee agrees that all general liability coverages required under this insurance section are PRIMARY and that any insurance of MTS, SDTI, SD&AE, SD&IV, and SDTC shall be excess and noncontributory (endorsement required). Lessee waives any rights of subrogation against MTS, SDTI, SD&AE, SD&IV, and SDTC, and the policy form must permit and accept such waiver.

1.6 Policy Provisions Required. All policies and coverages shall contain a provision for 30 days' written notice by the Insurer(s) to MTS of any cancellation or material reduction of coverage. A ten-day notice is required for non-payment of premium.

1.7 Evidence Required. Within ten (10) working days following execution of this Lease, Lessee shall have provided the MTS with satisfactory certification by a qualified representative of the Insurer(s) that Lessee's insurance complies with all provisions in this

insurance section. SD&AE, SD&IV, and SDTC, or their insurance consultant(s) are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by Lessee pursuant to this Agreement, including but not limited to the provisions concerning indemnification.

1.8 Special Provisions. The foregoing requirements as to the types and limits of insurance coverage to be maintained by Lessee, and any approval of said insurance by MTS, SDTI, SD&AE, SD&IV, and SDTC, or their insurance consultant(s) are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by Lessee pursuant to this Agreement, including but not limited to the provisions concerning indemnification.



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 9

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

IMPERIAL AVENUE DIVISION (IAD) MAINTENANCE FLOOR PROJECT- AWARD
WORK ORDER UNDER A JOB ORDER CONTRACT (JOC)

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute Work Order No. MTSJOC7503-13 to MTS Doc. No. PWL234.0-17 (in substantially the same format as the Attachment A) with ABC Construction Company, Inc. (ABC) for the epoxy floor installation in the maintenance building at IAD.

Budget Impact

The total value of this contract will not exceed \$178,142.68 inclusive of a direct cost of \$172,987.99 and the contractor's share of administrative fees totaling \$1,747.35. Total administrative fees are \$5,154.69 (contractor's share is \$1,747.35 and MTS's share is \$3,407.34). Funding for this Work Order is allocated under Fiscal Year (FY) 2019 Capital Improvement Program number 3006107401 (IAD maintenance Floor).

DISCUSSION:

The current floor inside the IAD maintenance shop is in a failing state. The current floor is a concrete hardener/acrylic sealer that was installed originally with the building in 2001. This seal on the floor has begun to show signs of failing; this has resulted in pitting of the concrete and exposure of the concrete in the shop. A new seal needs to be applied throughout the shop and bottom floor hallways to protect the existing concrete from exposure to the chemicals used in the shop which will result in concrete corrosion, additional damage to the concrete and increased potential for slip and falls.



The project generally consists of the phased replacement of the deteriorating sealer with an epoxy floor coating throughout the maintenance bays and first floor hallways of the building. This will result in a longer lifespan for the maintenance building.

In September 2015, the San Diego Association of Governments (SANDAG) and MTS issued a joint solicitation for the provision of on-call JOC general civil construction services. This includes general civil and site improvements, earthwork, utilities, paving, concrete, drainage, building facilities, landscaping mitigation, site clearing, and all incidental professional and technical services required. JOC is a procurement method under which public agencies may accomplish frequently encountered repairs, maintenance, and construction projects through a single, competitively procured long-term agreement. Three bids were received and the contract was awarded to ABC.

A work order will be issued to ABC for the maintenance floor project. ABC will be providing all materials, labor, equipment, and disposal necessary for repairing the floor in the maintenance bays. Work is expected to be complete by early spring 2019.

Pricing for this task order was reviewed and determined to be fair and reasonable.

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to execute Work Order No. MTSJOC7503-13 to MTS Doc. No. PWL234.0-17 (in substantially the same format as Attachment A) with ABC Construction Company, Inc., for the epoxy floor installation in the maintenance building at IAD.

/s/ Paul C. Jablonski

Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. MTS Doc. No. PWL234.0-17, Work Order MTSJOC7503-13

JOB ORDER CONTRACT
WORK ORDER

PWL234.0-17

CONTRACT NUMBER

MTSJOC7503-13

WORK ORDER NUMBER

THIS AGREEMENT is entered into this _____ day of _____ 2019, in the state of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: ABC Construction Company, Inc. Address: 3120 National Avenue

Form of Business: Corporation San Diego, CA 92113
(Corporation, partnership, sole proprietor, etc.)

Telephone: (619) 239-3428

Authorized person to sign contracts: Wayne Czubernat Project Manager
Name Title

Pursuant to the existing Job Order Contract (MTS Doc. No. PWL234.0-17), MTS issues a Work Order to Contractor to complete the detailed Scope of Work (attached as Exhibit A.), the Cost Breakdown for the Scope of Work (attached as Exhibit B.), and the subcontractor listing form applicable to this Work Order (attached as Exhibit C.)

Pursuant to the SANDAG JOC Contract Section 7-1.04A(3), 1% of the work order value has been deducted. MTS will pay both the Contractor (1%) and the MTS/Owner share of the Gordian Group license fee. The total cost for this work order will not exceed \$174,735.34 inclusive of a direct cost of \$172,987.99 and a 1% Gordian Group license fee of \$1,747.35.

TOTAL PAYMENTS TO CONTRACTOR SHALL NOT EXCEED \$172,987.99

SAN DIEGO METROPOLITAN TRANSIT SYSTEM	CONTRACTOR AUTHORIZATION
By: _____ Chief Executive Officer	Firm: _____
Approved as to form:	By: _____ Signature
By: _____ Office of General Counsel	Title: _____

AMOUNT ENCUMBERED	BUDGET ITEM	FISCAL YEAR
\$172,987.99	3006107401/599908	2019

By: _____
Chief Financial Officer Date

(XX total pages, each bearing contract number and work order number)



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 10

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

FASHION VALLEY STAIR REPAIR – AWARD WORK ORDER UNDER A JOB ORDER
CONTRACT (JOC)

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute Work Order MTSJOC7504-24 for MTS Doc. No. PWL204.0-16 (in substantially the same format as Attachment A) with ABC Construction Company, Inc. (ABC) for the Fashion Valley Stair Repair located at Fashion Valley Transit Center.

Budget Impact

The total cost will not exceed \$150,000.00 inclusive of a direct cost of \$148,500.00 and the contractor share of administrative fees totaling \$1,500.00. Total administrative fees are \$4,425.00 (contractor share \$1,500.00 and MTS share \$2,925.00). Funding will be from the MTS Capital Improvement Program 2006006601 – Fashion Valley Stairs.

DISCUSSION:

MTS has five (5) metal pan stairwells that require repair due to damage from corrosion. The corrosion has caused holes and uneven surfaces on many of the stairs which in turn has created potential tripping hazards for trolley patrons. This project will replace one hundred twenty four (124) existing stair tread nosings with new aluminum stair tread nosings and repair existing holes in the stair treads as directed by the engineer.



In September 2015, the San Diego Association of Governments (SANDAG) and MTS issued a joint solicitation for the provision of on-call JOC general civil construction services. This includes general civil and site improvements, earthwork, utilities, paving, concrete, drainage, building facilities, landscaping mitigation, site clearing, and all incidental professional and technical services required. JOC is a procurement method under which public agencies may accomplish frequently encountered repairs, maintenance, and construction projects through a single, competitively procured long-term agreement. Three bids were received and the contract was awarded to ABC.

A work order will be issued to ABC for the Fashion Valley Stair Repair Project. ABC will be providing all materials, labor, equipment, and disposal necessary for replacing the 124 existing stair tread nosings. Work is expected to be complete by early summer 2019.

Pricing for this repair task order was reviewed and determined to be fair and reasonable.

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to execute Work Order MTSJOC7504-24 for MTS Doc. No. PWL204.0-16 with ABC Construction Company, Inc. (ABC) for the Fashion Valley Stair Repair located at Fashion Valley Transit Center.

/s/ Paul C. Jablonski
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. MTS Doc. No. PWL204.0-16, Work Order MTSJOC7504-24

DRAFT**JOB ORDER CONTRACT
WORK ORDER**PWL204.0-16CONTRACT NUMBERMTSJOC7504-24WORK ORDER NUMBER

THIS AGREEMENT is entered into this _____ day of _____, 2019, in the state of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: ABC Construction Company, Inc. Address: 3120 National Avenue

Form of Business: Corporation San Diego, CA 92113
(Corporation, partnership, sole proprietor, etc.)

Telephone: (619) 239-3428

Authorized person to sign contracts: Wayne Czubernat Project Manager
Name Title

Pursuant to the existing Job Order Contract (MTS Doc. No. PWL204.0-16), MTS issues a Work Order to Contractor to complete the detailed Scope of Work (attached as Exhibit A.), the Cost Breakdown for the Scope of Work (attached as Exhibit B.), and the subcontractor listing form applicable to this Work Order (attached as Exhibit C.)

Pursuant to the SANDAG JOC Contract Section 7-1.04A(3), 1% of the work order value has been deducted. MTS will pay both the Contractor (1%) and the MTS/Owner share of the Gordian Group license fee. The total cost for this work order will not exceed \$150,000.00 inclusive of a direct cost of \$148,500.00 and a 1% Gordian Group license fee of \$1,500.00

TOTAL PAYMENTS TO CONTRACTOR SHALL NOT EXCEED \$148,500.00

SAN DIEGO METROPOLITAN TRANSIT SYSTEMCONTRACTOR AUTHORIZATION

By: _____
Chief Executive Officer

Firm: _____

Approved as to form:

By: _____
Signature

By: _____
Office of General Counsel

Title: _____

AMOUNT ENCUMBERED

BUDGET ITEM

FISCAL YEAR

\$ 148,500.00

2006006601/599908

2019

By: _____
Chief Financial Officer Date

SAUGUSTYN
PWL204.0-16.MTSJOC7504-24.SAUGUSTYN.011719

(XX total pages, each bearing contract number and work order number)



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 11

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

DESIGN SERVICES FOR ZERO EMISSION BUS (ZEB) PILOT PROGRAM,
CHARGERS PHASE II - WORK ORDER

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute Work Order WOA1947-AE-34 for MTS Doc. No. G1947.1-17 (in substantially the same format as Attachment A) with HDR Engineering, Inc. (HDR) in the amount of \$245,460.38 for design services for ZEB Chargers Phase II.

Budget Impact

The value of the Engineering Design Work Order will not exceed \$245,460.38 and is allocated under fiscal year (FY) 2019 Capital Improvement Program number 1001105501 (ZEB Pilot Program).

MTS is working closely with San Diego Gas and Electric (SDG&E) as part of its SB350 submission to the State of California "Proposal To Accelerate Widespread Transit Electrification". SDG&E's proposal, if approved, may fund or reimburse owners for certain infrastructure costs associated with transit vehicle electrification, including design. SDG&E's current proposal is not expected to be considered for approval until the spring of 2019. Any funds available from its approved plan could be used to offset the amount drawn from the ZEB pilot program for these designed services.

DISCUSSION:

In October 2017, the MTS Board of Directors directed staff to implement a ZEB pilot program. As part of the pilot, MTS has ordered six (6) ZEB buses. They will be tested on existing routes throughout San Diego for a period of up to two years. The pilot program



will allow MTS to analyze vehicle performance, challenges and capabilities. Staff will analyze characteristics such as depot charging times, route profiles, passenger loads, operator performance, battery capacity and more.

On August 10, 2018, MTS contracted HDR to provide engineering services for Phase I of the project that included preparation of plans, specifications and a construction cost estimate for the installation of six (6) owner-furnished, contractor-installed chargers at our Imperial Avenue Division (IAD). The design services for this work order have been completed.

Today's proposed action would authorize HDR provide professional design services for Phase II of the project. Under this Work Order, the consultant will provide engineering services that include preparation of plans, specifications and a construction cost estimate for the installation of two (2) electric bus chargers each at the South Bay Bus Maintenance Facility, East County Division, and Kearny Mesa Division. In addition, this work order will include geotechnical engineering support for the underground work and concrete paving including subgrade.

The work is necessary to accommodate bus charging and service operation at each division and corresponding routes for the ZEB pilot program. This will allow MTS staff to monitor and analyze the performance of ZEB buses on all routes within the system and will also allow staff, mechanics and drivers to familiarize themselves with zero emission buses.

On January 12, 2016, San Diego Association of Governments (SANDAG) and MTS issued a joint Request for Statement of Qualifications (RFSQ) for On-Call Architectural and Engineering (A&E) Design Consulting services. The RFSQ resulted in the approval of eight (8) firms qualified to perform A&E services. Tasks are assigned to the firms through a work order process, and MTS selects the most qualified firm based on the scope of work to be performed.

MTS staff reviewed the approved A&E firms and utilizing a direct order process, selected HDR to perform the requisite services. As previously noted, HDR is currently providing similar design services for the ZEB Phase I Project. Utilizing HDR for this project will ensure design consistency of each phase of the pilot program, create efficiencies and ultimately reduce design costs.

HDR's proposed amount of \$245,460.38 is less than MTS's Independent Cost Estimate (ICE) and determined to be fair and reasonable.

Engineering services - Zero Emission Bus Charger Phase II	
COMPANY NAME	BID AMOUNT
<i>HDR</i>	\$245,460.38
<i>ICE</i>	\$280,257.24

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to execute Work Order WOA1947-AE-34 for MTS Doc. No. G1947.1-17 (in substantially the same format as Attachment A) with HDR, Inc. in the amount of \$245,460.38 for design services for ZEB Chargers Phase II.

/s/ Paul C. Jablonski
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. Draft Work Order Work Order WOA1947-AE-34 for MTS Doc. No. G1947.1-17

January 17, 2019

MTS DOC No. G1947.1-17
Work Order WOA1947-AE-34

Mr. Thomas K. Kim
Senior Vice President
HDR Engineering, Inc.
401 B Street, Suite 110
San Diego, CA 92101

Dear Mr. Kim:

Subject: MTS DOC. NO. G1947.1-17, WORK ORDER WOA1947-AE-34; ENGINEERING SERVICES FOR ZERO EMISSION BUS (ZEB) CHARGERS PHASE II

This letter shall serve as our agreement for professional services, Work Order WOA1947-AE-34, under the General Engineering Consultant Agreement, MTS Doc. No. G1947.1-17, as further described below.

SCOPE OF SERVICES

Provide engineering services for the preparation of plans, specifications and a construction cost estimate for the installation of two electric bus chargers each at the South Bay Bus Maintenance Facility, East County Division, and Kearny Mesa Division. Work provided under this Work Order will be performed in accordance with the attached Scope of Services (Attachment A, A1 and B)

SCHEDULE

This Work Order will not change the original schedule. The Scope of Services, as described above, shall remain in effect through completion of construction.

PAYMENT

Payment shall be based on actual costs in the amount not to exceed without prior authorization of \$245,460.38.

Sincerely,

Accepted:

Paul C. Jablonski
Chief Executive Officer

Thomas K. Kim
HDR Engineering, Inc.

SAUGUSTYN
WOA1947-AE-16 HDR

Date: _____

Attachments: Attachment A, Scope of services
Attachment A1, HDR's Technical Proposal
Attachment B, Negotiated Fee Proposal



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 12

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

KEARNY MESA DIVISION (KMD) CONCRETE REPLACEMENT - AWARD WORK
ORDER UNDER A JOB ORDER CONTRACT (JOC)

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute Work Order No. MTSJOC7504-50 for MTS Doc. No. PWL204.0-16 (in substantially the same format as Attachment A) with ABC Construction Company, Inc. (ABC) for the partial replacement of concrete at KMD.

Budget Impact

The total value of this contract will not exceed \$423,806.15 inclusive of a direct cost of \$411,543.00 and the contractor's share of administrative fees totaling \$4,157.00. Total administrative fees are \$12,263.15 (contractor's share is \$4,157.00 and MTS's share is \$8,106.15). Funding for the Work Order is provided in Capital Improvement Program No. 3006101901 – KMD Concrete Lot.

DISCUSSION:

MTS staff has determined that the twenty year old concrete paving in the main bus parking area at KMD is heavily cracked, beyond its useful life and poses a tripping hazard. The constant bus movements at the site has increased the deterioration of the concrete. This project consists of the phased replacement of about 10,000 square feet of the most heavily cracked concrete. The work is necessary to maintain a functioning lot and mitigate safety hazards.



In September 2015, the San Diego Association of Governments (SANDAG) and MTS issued a joint solicitation for the provision of on-call JOC general civil construction services. This includes general civil and site improvements, earthwork, utilities, paving, concrete, drainage, building facilities, landscaping mitigation, site clearing, and all incidental professional and technical services required. JOC is a procurement method under which public agencies may accomplish frequently encountered repairs, maintenance, and construction projects through a single, competitively procured long-term agreement. Three bids were received and the contract was awarded to ABC.

A work order will be issued to ABC for the concrete replacement project. ABC will be providing all materials, labor, equipment, and disposal necessary for replacing 10,000 square feet of concrete surface. Work is expected to be complete by early summer 2019.

Pricing for this task order was reviewed and determined to be fair and reasonable.

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to execute Work Order No. MTSJOC7504-50 for MTS Doc. No. PWL204.0-16 (in substantially the same format as Attachment A) with ABC, for the partial replacement of the concrete paving at KMD.

/s/ Paul C. Jablonski
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. MTS Doc. No. PWL204.0-16, Work Order MTSJOC7504-50

DRAFTJOB ORDER CONTRACT
WORK ORDERPWL204.0-16CONTRACT NUMBERMTSJOC7504-50WORK ORDER NUMBER

THIS AGREEMENT is entered into this _____ day of _____ 2019, in the state of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: ABC Construction Company, Inc. Address: 3120 National Avenue

Form of Business: Corporation San Diego, CA 92113
(Corporation, partnership, sole proprietor, etc.)

Telephone: (619) 239-3428

Authorized person to sign contracts: Wayne Czubernat Project Manager
Name Title

Pursuant to the existing Job Order Contract (MTS Doc. No. PWL204.0-16), MTS issues a Work Order to Contractor to complete the detailed Scope of Work (attached as Exhibit A.), the Cost Breakdown for the Scope of Work (attached as Exhibit B.), and the subcontractor listing form applicable to this Work Order (attached as Exhibit C.)

Pursuant to the SANDAG JOC Contract Section 7-1.04A(3), 1% of the work order value has been deducted. MTS will pay both the Contractor (1%) and the MTS/Owner share of the Gordian Group license fee. The total cost for this work order will not exceed \$415,700.00 inclusive of a direct cost of \$411,543.00 and a 1% Gordian Group license fee of \$4,157.00

TOTAL PAYMENTS TO CONTRACTOR SHALL NOT EXCEED \$411,543.00

SAN DIEGO METROPOLITAN TRANSIT SYSTEMCONTRACTOR AUTHORIZATION

By: _____
Chief Executive Officer

Firm: _____

Approved as to form:

By: _____
Signature

By: _____
Office of General Counsel

Title: _____

AMOUNT ENCUMBEREDBUDGET ITEMFISCAL YEAR

\$ 411,543.00

3006101901/599908

2019

By: _____
Chief Financial Officer Date

(XX total pages, each bearing contract number and work order number)



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 13

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

PAINT BOOTH BLOWER UPGRADES AND REPAIR – AWARD WORK ORDER
UNDER A JOB ORDER CONTRACT (JOC)

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute Work Order MTSJOC7503-47 for MTS Doc. No. PWL234.0-17 (in substantially the same format as Attachment A) with ABC Construction Company, Inc. (ABC) for Paint Booth Blower upgrades and repair at the Trolley Paint Booth.

Budget Impact

The total cost will not exceed \$152,925.00 inclusive of a direct cost of \$148,500.00 and the contractor share of administrative fees totaling \$1,500.00. Total administrative fees are \$4,425.00 (contractor share \$1,500.00 and MTS share \$2,925.00). Funding will be from the MTS Capital Improvement Program No. 2006106801 – Paint Booth Blowers.

DISCUSSION:

MTS has three (3) paint booth blowers that require upgrade and repair due to damage from corrosion and various mechanical parts that are at the end of their useful service life. This project will repair damaged corroded sheet metal, clean burner trays, procure and install new pulleys, flame sensors, belts, and fan motors to the paint booth blowers. The work is necessary to ensure that the blowers are fully operational, and function as intended.



On September 12, 2016, the San Diego Association of Governments (SANDAG) and MTS issued a joint solicitation for the provision of on-call JOC general building and facilities construction services. This includes general building and facility contracting services such as demolition, maintenance, and modification of existing buildings and facilities, as well as the construction of buildings and facilities with all required incidental professional and technical services required. JOC is a procurement method under which public agencies may accomplish frequently encountered repairs, maintenance, and construction projects through a single, competitively procured long-term agreement. Four bids were received and the JOC contract was awarded to ABC.

A work order will be issued to ABC for the Paint Booth Blower upgrade project. ABC will be providing all materials, labor, equipment, and disposal necessary for repairing the three (3) paint booth blowers. Work is expected to be complete by early summer 2019.

Pricing for this task order was reviewed and determined to be fair and reasonable.

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to execute Work Order MTSJOC7503-47 for MTS Doc. No. PWL234.0-17 with ABC for Paint Booth Blower Upgrades and Repairs.

/s/ Paul C. Jablonski

Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. Draft Work Order MTSJOC7503-47, PWL234.0-17

DRAFTJOB ORDER CONTRACT
WORK ORDERPWL234.0-17

CONTRACT NUMBER

MTSJOC7503-47

WORK ORDER NUMBER

THIS AGREEMENT is entered into this _____ day of _____, 2019, in the state of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: ABC Construction Company, Inc. Address: 3120 National Avenue

Form of Business: Corporation San Diego, CA 92113
(Corporation, partnership, sole proprietor, etc.)

Telephone: (619) 239-3428

Authorized person to sign contracts: Wayne Czubernat Project Manager
Name Title

Pursuant to the existing Job Order Contract (MTS Doc. No. PWL234.0-17), MTS issues a Work Order to Contractor to complete the detailed Scope of Work (attached as Exhibit A.), the Cost Breakdown for the Scope of Work (attached as Exhibit B.), and the subcontractor listing form applicable to this Work Order (attached as Exhibit C.)

Pursuant to the SANDAG JOC Contract Section 7-1.04A(3), 1% of the work order value has been deducted. MTS will pay both the Contractor (1%) and the MTS/Owner share of the Gordian Group license fee. The total cost for this work order will not exceed \$150,000.00 inclusive of a direct cost of \$148,500.00 and a 1% Gordian Group license fee of \$1,500.00

TOTAL PAYMENTS TO CONTRACTOR SHALL NOT EXCEED \$148,500.00

SAN DIEGO METROPOLITAN TRANSIT SYSTEM	CONTRACTOR AUTHORIZATION
By: _____ Chief Executive Officer	Firm: _____
Approved as to form:	By: _____ Signature
By: _____ Office of General Counsel	Title: _____

AMOUNT ENCUMBERED	BUDGET ITEM	FISCAL YEAR
\$ 148,500.00	2006106801/599908	2019

By: _____
Chief Financial Officer Date

(XX total pages, each bearing contract number and work order number)



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 14

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

SOUTH BAY MAINTENANCE FACILITY FLOORING – CONTRACT AWARD

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. PWB265.0-19 (in substantially the same format as Attachment A) with Stoncor Group, Inc. dba Stonhard (Stonhard) for the installation of a multi component epoxy mortar floor system (flooring) in the maintenance bays at the South Bay Bus Maintenance Facility.

Budget Impact

The value of this agreement will not exceed \$378,789.00 and is funded under the San Diego Transit Corporation (SDTC) Capital Improvement Program account 1006107301.

DISCUSSION:

The current concrete slab in the maintenance bays at the South Bay Maintenance Facility was installed using a dry shake on hardener which was applied directly to the concrete slab. The hardener has failed in multiple areas resulting in blistering, cracking, delaminating, and there are visible trowel marks throughout the slab. The constant presence of oil, grease and grime in the concrete slab not only creates an unsightly appearance, it is nearly impossible to clean and also increases the potential for slip and falls.

The South Bay Maintenance Facility Flooring project generally consists of the grinding and removal of the top ¼" of the concrete across the entirety of the 26,053 square foot maintenance bays and then installing a flooring system similar to what was installed at the East County Division. The flooring that was installed at the East County Division has



been in service for over two years, has great clean-ability, does not absorb chemicals, oil, grease, or grime and provides superior impact resistance.

On October 30, 2018 staff issued an Invitation for Bids (IFB). One responsive bid was received by the due date of December 18, 2018.

SB Facility Flooring	
COMPANY NAME	BID AMOUNT
<i>Stonhard</i>	\$378,789.00
<i>ICE</i>	\$441,612

A single bid analysis was conducted in order to determine if there was an element of the solicitation or the specification that limited competition, and it was determined that the solicitation and specifications met all requirements for an open competition. Potential bidders cited current work load as the major reason for not submitting a bid. Based on the bid received, and in comparison with the independent cost estimate, Stonhard's price of \$378,789.00 was determined to be fair and reasonable.

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to execute MTS Doc. No. PWB265.0-19 (in substantially the same format as Attachment A) with Stoncor Group Inc. dba Stonhard for the installation of a multi component epoxy mortar floor system in the maintenance bays at the South Bay Bus Maintenance Facility.

/s/ Paul C. Jablonski
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. Draft MTS Doc. No. PWB265.0-19

PWB265.0-19 CONTRACT NUMBER

**STANDARD CONSTRUCTION AGREEMENT
FOR
SOUTH BAY MAINTENANCE FACILITY FLOORING REPLACEMENT**

THIS AGREEMENT is entered into this _____ day of _____ 2018, in the State of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: Stoncor Group, Inc. dba Stonhard (Stonhard) Address: _____

Form of Business: Corporation _____
(Corporation, Partnership, Sole Proprietor, etc.)

Telephone: _____ Email Address: _____

Authorized person to sign contracts: _____
Name Title

The specified Contract Documents are part of this Agreement. The Contractor agrees to furnish to MTS services and materials, as follows:

Contractor shall furnish all necessary management, supervision, labor, materials, tools, supplies, equipment, plant, services, engineering, testing and/or any other act or thing required to diligently and fully perform and complete the Project as specified in the Scope of Work (Exhibit A), Bid Proposal (Exhibit B), and in accordance with the Standard Construction Agreement and Special Conditions (Exhibit C).

SCOPE OF WORK. Contractor, for and in consideration of the payment to be made to Contractor as hereinafter provided, shall furnish all plant, labor, technical and professional services, supervision, materials and equipment, other than such materials and equipment as may be specified to be furnished by MTS, and perform all operations necessary to complete the Work in strict conformance with the Contract Documents (defined below) for the following public work of improvement:

SOUTH BAY MAINTENANCE FACILITY FLOORING REPLACEMENT

Contractor is an independent contractor and not an agent of MTS. The Contractor and its surety shall be liable to MTS for any damages arising as a result of the Contractor's failure to comply with this obligation.

CONTRACT TIME. Time is of the essence in the performance of the Work. The Work shall be commenced by the date stated in MTS's Notice to Proceed. The Contractor shall complete all Base Bid Work required by the Contract Documents within **fifty (50) calendar days** from the commencement date stated in the Notice to Proceed. Add Alternate work shall be exercised within 180 days of Bid Opening. The Contractor shall complete all Add alternate work, required by the Contract Documents, within an **additional five (5) days** from the commencement date stated in the Notice to Proceed (NTP). By its signature hereunder, Contractor agrees the Contract Time is adequate and reasonable to complete the Work.

CONTRACT PRICE. MTS shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs, the sum of _____ Dollars (\$_____). Payment shall be made as set forth in the General Conditions.

LIQUIDATED DAMAGES. It is agreed that the Contractor will pay MTS the sum of \$800.00 for each and every calendar day of delay beyond the time prescribed in the Contract Documents for finishing the Work, as Liquidated Damages and not as a penalty or forfeiture. In the event this is not paid, the Contractor agrees MTS may deduct that amount from any money due or that may become due the Contractor under the Contract. This Section does not exclude recovery of other damages specified in the Contract Documents.

COMPONENT PARTS OF THE CONTRACT. The "Contract Documents" include the following:

- Invitation for Bids (IFB)
- Information and Instructions for Bidders
- Contractor's Bid Forms
- Bid Bond
- Designation of Subcontractors
- Designation of Other Third Party Contractors
- Information Required of Bidders
- Non-Collusion Declaration Form
- Iran Contracting Act Certification
- Public Works Contractor Registration Certification
- Performance Bond
- Payment (Labor and Materials) Bond
- General Conditions
- Special Provisions (or Special Conditions)
- Technical Specifications prepared by N/A., dated N/A
- Standard Specifications (Excluding sections 1-9 in their entirety)
- Addenda
- Plans prepared by N/A., dated N/A
- Change Orders as executed by MTS

The Contractor shall complete the Work in strict accordance with all of the Contract Documents.

This Contract shall supersede any prior agreement of the parties.

PROVISIONS REQUIRED BY LAW. Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of the California Labor Code applicable to this Project.

INDEMNIFICATION. Contractor shall provide indemnification as set forth in the General Conditions.

PREVAILING WAGES. Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates shall be made available at MTS's Administrative Office or may be obtained online at <http://www.dir.ca.gov> and which must be posted at the job site

SAN DIEGO METROPOLITAN TRANSIT SYSTEM	CONTRACTOR AUTHORIZATION
---------------------------------------	--------------------------

By: _____ Chief Executive Officer Approved as to form: By: _____ Office of General Counsel	Firm: _____ By: _____ Signature Title: _____
----------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------

AMOUNT ENCUMBERED	BUDGET ITEM	FISCAL YEAR
\$378,789.00	1006107301	FY20

By: _____
 Chief Financial Officer
 (___ total pages, each bearing contract number)

Date

SA-CONSTRUCTION (REV X-18)



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 30

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

SAN DIEGO TRANSIT CORPORATION (SDTC) PENSION INVESTMENT STATUS
(JEREMY MILLER, REPRESENTATIVE FROM RVK AND LARRY MARINESI)

INFORMATIONAL ONLY

Budget Impact

None at this time.

DISCUSSION:

Representatives from RVK will provide the Board of Directors with an update as to the performance of the SDTC Employee Retirement Plan (Plan). RVK's pension investment performance analysis (Attachment A) for the Plan as of June 30, 2018 includes assets with a market value of \$166,887,868.

During fiscal year 2018, the Plan's assets increased by approximately \$4.7 million. This resulted from a net investment gain of \$9.7 million, partially offset by a net payout of benefits and expenses less contributions of \$5.0 million. The Plan's twelve managers achieved a combined investment return of 5.98% for the year. The Plan's returns over the past three and five years were 4.88% and 5.36% respectively. Since inception (10/1/1982), the Plan's investments have returned 9.02%.

The Plan's investment advisor, Jeremy Miller, will be attending the meeting to discuss capital markets performance in general and the Plan's performance specifically.

/s/ Sharon Cooney for
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. RVK Pension Investment Performance Analysis





Monthly Investment Performance Analysis

San Diego Transit Corporation

Employees Retirement Plan

Period Ended: June 30, 2018

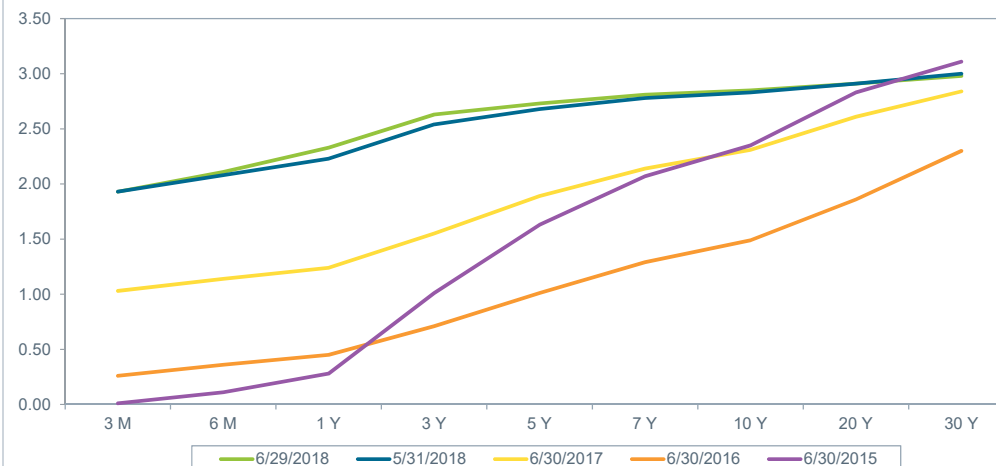


General Market Commentary

- While broad US equity markets were relatively flat in June, international markets experienced sharp drawdowns, as fears of a trade war with the US increased. The US imposed additional tariffs on some Chinese products, as China, India, and Canada levied tariffs on select US goods.
- The Treasury yield curve flattened during June, as short-term rates increased while longer-term rates fell due to anticipation of rate increases. After reaching an intra-month high of 3.00%, the yield on the ten year treasury dropped back down to 2.85%, ending the month flat.
- The Federal Reserve raised US interest rates by 25 basis points in June, lifting the target range to 1.75% to 2.00%. The Fed also increased its 2018 US GDP growth rate forecast from 2.7% to 2.8%, while maintaining its long-term projection of 1.8%.
- Equity markets posted mixed returns in June as the S&P 500 (Cap Wtd) Index returned 0.62% and the MSCI EAFE (Net) Index returned -1.22%. Emerging markets returned -4.15% as measured by the MSCI EM (Net) Index.
- The Bloomberg US Aggregate Bond Index returned -0.12% in June, underperforming the -0.01% return by the Bloomberg US Treasury Intermediate Term Index. International fixed income markets returned -0.45%, as measured by the FTSE Non-US World Gov't Bond Index.
- Public real estate, as measured by the Wilshire US REIT Index, returned 3.55% in June and 7.94% over the trailing five-year period.
- The Cambridge US Private Equity Index returned 17.45% for the trailing one-year period and 13.57% for the trailing five-year period ending December 2017.
- Absolute return strategies, as measured by the HFRI FOF Comp Index, returned -0.26% for the month and 5.49% over the trailing one-year period.
- Crude oil's price increased by 10.61% during the month, and has increased by 61.06% YoY.

Economic Indicators	Jun-18		May-18	Jun-17	10 Yr	20 Yr
Federal Funds Rate (%)	1.91	▲	1.70	1.06	0.37	2.02
Breakeven Inflation - 1 Year (%)	1.42	▼	1.65	0.72	0.76	N/A
Breakeven Inflation - 5 Year (%)	2.08	▲	2.05	1.66	1.64	N/A
Breakeven Inflation - 10 Year (%)	2.13	▲	2.09	1.74	1.95	N/A
Breakeven Inflation - 30 Year (%)	2.12	▲	2.09	1.85	2.14	N/A
Bloomberg US Agg Bond Index - Yield (%)	3.29	▲	3.22	2.55	2.72	4.04
Bloomberg US Agg Bond Index - OAS (%)	0.44	▲	0.42	0.43	0.67	0.65
Bloomberg US Agg Credit Index - OAS (%)	1.16	▲	1.09	1.03	1.65	1.48
Bloomberg US Corp: HY Index - OAS (%)	3.63	▲	3.62	3.64	5.90	5.60
Capacity Utilization (%)	78.00	▲	77.70	76.23	75.74	77.41
Unemployment Rate (%)	4.0	▲	3.8	4.3	6.9	5.9
PMI - Manufacturing (%)	60.2	▲	58.7	56.7	53.0	52.5
Baltic Dry Index - Shipping	1,385	▲	1,090	901	1,547	2,295
Consumer Conf (Conf Board)	126.40	▼	128.80	117.30	78.89	92.77
CPI YoY (Headline) (%)	2.9	▲	2.8	1.6	1.6	2.2
CPI YoY (Core) (%)	2.3	▲	2.2	1.7	1.8	2.0
PPI YoY (%)	4.0	▼	4.1	2.1	1.7	2.2
M2 YoY (%)	4.2	▲	3.8	5.6	6.3	6.4
US Dollar Total Weighted Index	89.97	▲	89.27	90.49	80.74	86.45
WTI Crude Oil per Barrel (\$)	74	▲	67	46	74	59
Gold Spot per Oz (\$)	1,253	▼	1,299	1,242	1,286	856

Treasury Yield Curve (%)



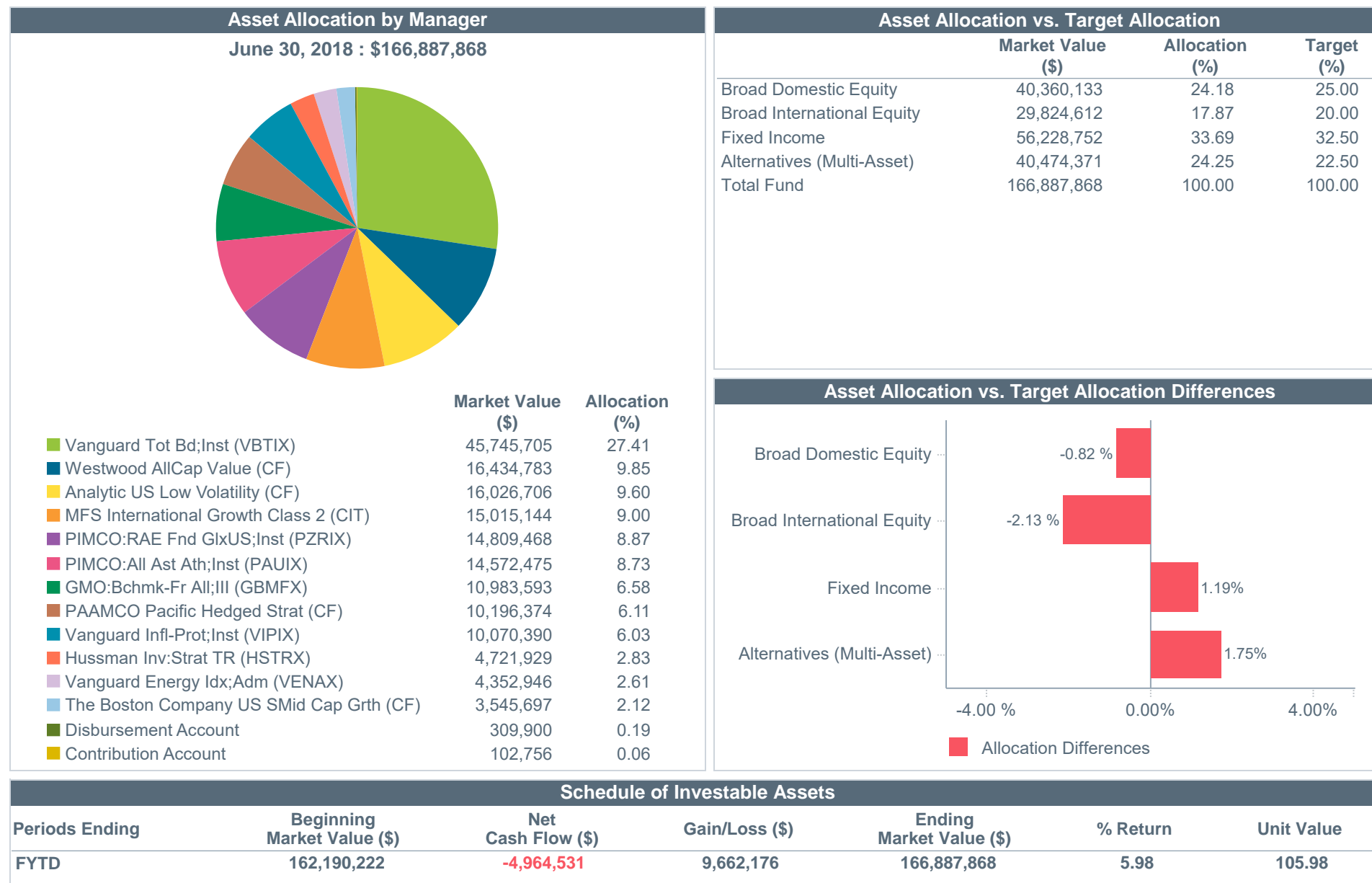
Treasury Yield Curve (%)	Jun-18	May-18	Jun-17	Jun-16	Jun-15
3 Month	1.93	1.93	1.03	0.26	0.01
6 Month	2.11	2.08	1.14	0.36	0.11
1 Year	2.33	2.23	1.24	0.45	0.28
3 Year	2.63	2.54	1.55	0.71	1.01
5 Year	2.73	2.68	1.89	1.01	1.63
7 Year	2.81	2.78	2.14	1.29	2.07
10 Year	2.85	2.83	2.31	1.49	2.35
20 Year	2.91	2.91	2.61	1.86	2.83
30 Year	2.98	3.00	2.84	2.30	3.11

Market Performance (%)	MTD	QTD	CYTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr
S&P 500 (Cap Wtd)	0.62	3.43	2.65	14.37	11.93	13.42	13.23	10.17
Russell 2000	0.72	7.75	7.66	17.57	10.96	12.46	11.83	10.60
MSCI EAFE (Net)	-1.22	-1.24	-2.75	6.84	4.90	6.44	4.89	2.84
MSCI EAFE SC (Net)	-1.95	-1.57	-1.33	12.45	10.09	11.32	8.37	6.81
MSCI EM (Net)	-4.15	-7.96	-6.66	8.20	5.60	5.01	1.43	2.26
Bloomberg US Agg Bond	-0.12	-0.16	-1.62	-0.40	1.72	2.27	2.57	3.72
ICE BofAML 3 Mo US T-Bill	0.17	0.45	0.81	1.36	0.68	0.42	0.33	0.35
NCREIF ODCE (Gross)	2.03	2.03	4.27	8.42	9.36	11.03	11.39	5.29
Wilshire US REIT	3.55	7.33	-0.70	1.60	7.05	7.94	8.74	7.57
HFRI FOF Comp Index	-0.26	0.75	1.02	5.49	2.05	3.53	2.86	1.43
Bloomberg Cmtty Index (TR)	-3.50	0.40	0.00	7.35	-4.54	-6.40	-7.81	-9.04

Treasury data courtesy of the US Department of the Treasury. Economic data courtesy of Bloomberg Professional Service. Breakeven Inflation does not have 20 years of history; therefore, its 20-year average is shown as "N/A."

San Diego Transit Corporation Employees Retirement Plan
AA by Manager, AA vs. Target, and Schedule of Investable Assets

Att. A, AI 30, 1/17/19
As of June 30, 2018



Allocations shown may not sum up to 100% exactly due to rounding. Performance shown is gross of fees. Fiscal year ends 06/30. Market values and performance are preliminary and subject to change.

**San Diego Transit Corporation Employees Retirement Plan
Asset Allocation & Performance**

	Allocation		Performance (%)												
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	Since Incep.	Inception Date
San Diego Transit Total Fund	166,887,868	100.00	-0.11	0.33	-0.41	5.98	5.98	4.88	5.36	4.68	13.21	7.19	-2.64	9.02	10/01/1982
Policy Index			-0.27	0.62	-0.21	5.90	5.90	4.75	5.44	4.99	11.91	6.26	-1.57	9.17	
Difference			0.16	-0.29	-0.20	0.08	0.08	0.13	-0.08	-0.31	1.30	0.93	-1.07	-0.15	
Domestic Equity Composite	40,360,133	24.18	1.27	3.66	2.78	12.52	12.52	9.72	11.81	8.61	17.26	11.96	1.06	7.79	03/01/2005
Russell 3000 Index			0.65	3.89	3.22	14.78	14.78	11.58	13.29	10.23	21.13	12.74	0.48	8.74	
Difference			0.62	-0.23	-0.44	-2.26	-2.26	-1.86	-1.48	-1.62	-3.87	-0.78	0.58	-0.95	
International Equity Composite	29,824,612	17.87	-1.43	-1.22	-2.43	9.25	9.25	8.04	8.08	2.91	30.60	8.11	-4.55	4.10	03/01/2005
MSCI ACW Ex US Index (USD) (Net)			-1.88	-2.61	-3.77	7.28	7.28	5.07	5.99	2.54	27.19	4.50	-5.66	5.05	
Difference			0.45	1.39	1.34	1.97	1.97	2.97	2.09	0.37	3.41	3.61	1.11	-0.95	
Fixed Income Composite	56,228,752	33.69	0.15	0.05	-1.35	-0.21	-0.21	0.97	2.03	4.58	3.57	0.97	0.72	4.78	03/01/2005
Bloomberg US Agg Bond Index			-0.12	-0.16	-1.62	-0.40	-0.40	1.72	2.27	3.72	3.54	2.65	0.55	3.90	
Difference			0.27	0.21	0.27	0.19	0.19	-0.75	-0.24	0.86	0.03	-1.68	0.17	0.88	
Alternative Investment Composite	40,474,371	24.25	-0.85	-1.27	-1.61	3.04	3.04	2.28	1.81	1.95	7.90	8.56	-6.43	2.18	05/01/2007
HFRI FOF: Cnsvt Index			-0.07	1.00	1.56	4.09	4.09	1.90	3.00	1.22	4.12	1.89	0.37	1.25	
Difference			-0.78	-2.27	-3.17	-1.05	-1.05	0.38	-1.19	0.73	3.78	6.67	-6.80	0.93	

Performance shown is gross of fees with the exception of the Absolute Return Composite which is shown net of fees. Inception dates shown represent the first full month following initial funding. Fiscal year ends 06/30. Market values and performance are preliminary and subject to change.

**San Diego Transit Corporation Employees Retirement Plan
Comparative Performance**

Att. A, AI 30, 1/17/19
As of June 30, 2018

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	Since Incep.	Inception Date
San Diego Transit Total Fund	-0.11	0.33	-0.41	5.98	5.98	4.88	5.36	4.68	13.21	7.19	-2.64	9.02	10/01/1982
Policy Index	-0.27	0.62	-0.21	5.90	5.90	4.75	5.44	4.99	11.91	6.26	-1.57	9.17	
Difference	0.16	-0.29	-0.20	0.08	0.08	0.13	-0.08	-0.31	1.30	0.93	-1.07	-0.15	
Westwood AllCap Value (CF) (1)	1.22	2.04	0.43	12.27	12.27	8.70	11.08	8.88	19.12	13.56	-2.45	10.81	07/01/1986
Russell 3000 Val Index (2)	0.28	1.71	-1.16	7.25	7.25	8.48	10.40	9.06	13.19	18.40	-4.13	9.97	
Difference	0.94	0.33	1.59	5.02	5.02	0.22	0.68	-0.18	5.93	-4.84	1.68	0.84	
Vanguard Energy Idx;Adm (VENAX)	0.68	14.33	7.53	22.40	22.40	N/A	N/A	N/A	-2.29	N/A	N/A	9.59	08/01/2016
MSCI US IM Energy 25/50 Index (Gross)	0.69	14.35	7.55	22.37	22.37	2.95	1.56	N/A	-2.33	29.56	-23.20	9.57	
Difference	-0.01	-0.02	-0.02	0.03	0.03	N/A	N/A	N/A	0.04	N/A	N/A	0.02	
Analytic US Low Volatility (CF)	1.50	1.66	-0.08	6.63	6.63	8.76	11.02	N/A	13.37	10.36	4.99	11.74	10/01/2012
MSCI US Min Vol Index (USD) (Net)	1.61	2.70	1.44	10.16	10.16	11.33	12.04	10.35	18.41	9.84	4.92	12.38	
Difference	-0.11	-1.04	-1.52	-3.53	-3.53	-2.57	-1.02	N/A	-5.04	0.52	0.07	-0.64	
Russell 1000 Index	0.65	3.57	2.85	14.54	14.54	11.64	13.37	10.20	21.69	12.05	0.92	14.11	
Difference	0.85	-1.91	-2.93	-7.91	-7.91	-2.88	-2.35	N/A	-8.32	-1.69	4.07	-2.37	
The Boston Company US SMid Cap Grth (CF)	1.18	8.84	17.45	31.27	31.27	14.69	15.98	N/A	27.31	11.75	-1.28	19.20	04/01/2009
Russell 2500 Grth Index	0.84	5.53	8.04	21.53	21.53	10.86	13.87	11.38	24.46	9.73	-0.19	18.80	
Difference	0.34	3.31	9.41	9.74	9.74	3.83	2.11	N/A	2.85	2.02	-1.09	0.40	
PIMCO:RAE Fnd GlxUS;Inst (PZRIX)	-2.60	-4.85	-5.22	6.59	6.59	5.98	6.97	N/A	26.66	13.61	-10.81	6.87	03/01/2012
FTSE RAFI Dvl'd Ex US 1000 Index	-1.48	-1.58	-3.51	7.64	7.64	5.87	7.38	3.83	25.72	7.30	-4.80	6.98	
Difference	-1.12	-3.27	-1.71	-1.05	-1.05	0.11	-0.41	N/A	0.94	6.31	-6.01	-0.11	
MSCI ACW Ex US Index (USD) (Net)	-1.88	-2.61	-3.77	7.28	7.28	5.07	5.99	2.54	27.19	4.50	-5.66	5.28	
Difference	-0.72	-2.24	-1.45	-0.69	-0.69	0.91	0.98	N/A	-0.53	9.11	-5.15	1.59	
MFS International Growth Class 2 (CIT)	-0.25	2.64	1.71	13.47	13.47	10.40	9.23	N/A	33.94	3.58	1.29	8.18	03/01/2013
MSCI ACW Ex US Grth Index (USD) (Net)	-1.60	-1.42	-2.28	9.90	9.90	6.56	7.18	3.01	32.01	0.12	-1.25	6.26	
Difference	1.35	4.06	3.99	3.57	3.57	3.84	2.05	N/A	1.93	3.46	2.54	1.92	
Vanguard Tot Bd;Inst (VBTIX)	0.04	-0.14	-1.60	-0.47	-0.47	N/A	N/A	N/A	3.61	N/A	N/A	-0.43	07/01/2016
Vanguard Spl B US Agg Flt Adj Index	-0.14	-0.20	-1.67	-0.45	-0.45	1.74	2.26	3.74	3.63	2.75	0.44	-0.39	
Difference	0.18	0.06	0.07	-0.02	-0.02	N/A	N/A	N/A	-0.02	N/A	N/A	-0.04	
Vanguard Infl-Prot;Inst (VIPIX)	0.65	0.86	-0.06	1.99	1.99	2.00	1.75	N/A	3.04	4.71	-1.60	2.83	08/01/2010
Bloomberg US Trsy US TIPS Index	0.40	0.77	-0.02	2.11	2.11	1.93	1.68	3.03	3.01	4.68	-1.44	2.79	
Difference	0.25	0.09	-0.04	-0.12	-0.12	0.07	0.07	N/A	0.03	0.03	-0.16	0.04	

Performance shown is gross of fees with the exception of GMO:Bchmk-Fr All;III (GBMFX), Hussman Inv:Strat TR (HSTRX), and PAAMCO Pacific Hedged Strat (CF), which are shown net of fees. Manager inception dates shown represent the first full month following initial funding. Fiscal year ends 06/30. Please see Addendum for more information regarding custom hybrids denoted with a number in parentheses. Performance is preliminary and subject to change.

**San Diego Transit Corporation Employees Retirement Plan
Comparative Performance**

Att. A, AI 30, 1/17/19
As of June 30, 2018

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	Since Incep.	Inception Date
PIMCO:All Ast Ath;Inst (PAUIX)	-1.32	-2.94	-2.59	3.08	3.08	4.09	2.40	4.70	13.09	14.80	-10.89	4.51	06/01/2008
All Asset Custom Index (EqI Wtd) (3)	0.07	0.51	0.26	4.47	4.47	4.49	4.26	4.70	8.94	6.47	-1.07	4.46	
Difference	-1.39	-3.45	-2.85	-1.39	-1.39	-0.40	-1.86	0.00	4.15	8.33	-9.82	0.05	
Consumer Price Index+5%	0.57	2.21	4.74	8.01	8.01	6.92	6.61	6.49	7.21	7.18	5.77	6.59	
Difference	-1.89	-5.15	-7.33	-4.93	-4.93	-2.83	-4.21	-1.79	5.88	7.62	-16.66	-2.08	
GMO:Bchmk-Fr All;III (GBMFX)	-1.35	-2.32	-1.57	3.41	3.41	2.91	N/A	N/A	13.04	3.40	-4.30	2.28	04/01/2014
60% MSCI ACW (Net)/40% Bbrg US Agg Idx	-0.37	0.26	-0.83	6.25	6.25	5.70	6.64	5.31	15.41	5.92	-0.98	5.23	
Difference	-0.98	-2.58	-0.74	-2.84	-2.84	-2.79	N/A	N/A	-2.37	-2.52	-3.32	-2.95	
Consumer Price Index+5%	0.57	2.21	4.74	8.01	8.01	6.92	6.61	6.49	7.21	7.18	5.77	6.60	
Difference	-1.92	-4.53	-6.31	-4.60	-4.60	-4.01	N/A	N/A	5.83	-3.78	-10.07	-4.32	
Hussman Inv:Strat TR (HSTRX)	-0.19	-0.44	-0.88	-0.18	-0.18	2.05	2.06	N/A	1.21	8.03	-1.01	0.57	10/01/2011
Bloomberg US Agg Bond Index	-0.12	-0.16	-1.62	-0.40	-0.40	1.72	2.27	3.72	3.54	2.65	0.55	2.10	
Difference	-0.07	-0.28	0.74	0.22	0.22	0.33	-0.21	N/A	-2.33	5.38	-1.56	-1.53	
ICE BofAML 3 Mo US T-Bill Index+5% (4)	0.58	1.69	3.30	6.43	6.43	5.71	5.44	5.64	5.90	5.34	5.05	5.43	
Difference	-0.77	-2.13	-4.18	-6.61	-6.61	-3.66	-3.38	N/A	-4.69	2.69	-6.06	-4.86	
PAAMCO Pacific Hedged Strat (CF)	0.03	1.89	1.13	3.78	3.78	0.31	2.11	1.52	4.51	-0.04	-1.65	2.34	06/01/2007
HFRI FOF: Cnsvt Index	-0.07	1.00	1.56	4.09	4.09	1.90	3.00	1.22	4.12	1.89	0.37	1.12	
Difference	0.10	0.89	-0.43	-0.31	-0.31	-1.59	-0.89	0.30	0.39	-1.93	-2.02	1.22	
ICE BofAML 3 Mo US T-Bill Index+5% (4)	0.58	1.69	3.30	6.43	6.43	5.71	5.44	5.64	5.90	5.34	5.05	6.07	
Difference	-0.55	0.20	-2.17	-2.65	-2.65	-5.40	-3.33	-4.12	-1.39	-5.38	-6.70	-3.73	

Performance shown is gross of fees with the exception of GMO:Bchmk-Fr All;III (GBMFX), Hussman Inv:Strat TR (HSTRX), and PAAMCO Pacific Hedged Strat (CF), which are shown net of fees. Manager inception dates shown represent the first full month following initial funding. Fiscal year ends 06/30. Please see Addendum for more information regarding custom hybrids denoted with a number in parentheses. Performance is preliminary and subject to change.

San Diego Transit Corporation Employees Retirement Plan Addendum

Performance Related and Miscellaneous Comments

- Manager inception dates shown represent the first full month following initial funding.
- Performance is annualized for periods greater than one year.
- PIMCO:All Ast Ath;Inst (PAUIX) performance prior to 08/2011 is represented by PIMCO:All Asset;Inst (PAAIX).
- Vanguard Infl-Prot;Inst (VIPIX) performance prior to 06/2012 is represented by Vanguard Infl-Prot;Adm (VAIPX).
- Performance is gross of fees with the exception of GMO:Bchmk-Fr All;III (GBMFX), Hussman Inv:Strat TR (HSTRX), and PAAMCO Pacific Hedged Strat (CF), which are net of fees.
- PIMCO:RAE Fnd GlxUS;Inst (PZRIX) performance prior to 06/2015 is represented by Research Affiliates Global AC Ex-US, L.P. (CF).
- Fiscal year ends 06/30.

Custom Hybrid Comments

- The Policy Index is calculated monthly and currently consists of 25% Russell 3000 Index, 20% MSCI ACW Ex US Index (USD) (Net), 32.50% Bloomberg US Agg Bond Index and 22.50% HFRI FOF Cnsvt Index.
- Performance shown for Westwood AllCap Value (CF) (1) represents Westwood AllCap Value (CF) from 08/2011 through present; beginning of month market value weighted average of Westwood LargeCap Value (CF) and Westwood SMidCap Equity (CF) from 07/2008 through 07/2011; Westwood LargeCap Value (CF) from 10/2004 through 06/2008; beginning of month market value weighted average of Westwood LargeCap Value (CF) and Westwood SmallCap Growth (CF) from 01/1997 through 09/2004; and Westwood LargeCap Value (CF) from 07/1986 through 12/1996.
- Performance shown for Russell 3000 Val Index (2) represents Russell 3000 Val Index from 08/2011 through present; beginning of month market value weighted average of Westwood LargeCap Value (CF) and Westwood SMidCap Equity (CF) applied to the Russell 1000 Val Index and Russell 2500 Val Index, respectively, from 07/2008 through 07/2011; Russell 1000 Val Index from 10/2004 through 06/2008; beginning of month market value weighted average of Westwood LargeCap Value (CF) and Westwood SmallCap Growth (CF) applied to the Russell 1000 Val Index and Russell 2000 Grth Index, respectively, from 01/1997 through 09/2004; and Russell 1000 Val Index from 01/1986 through 12/1996.
- Performance shown for All Asset Custom Index (3) represents All Asset Custom Index (EqI Wtd) from 01/2014 through present; and All Asset Composite Index from 09/1997 through 12/2013.
- Performance shown for ICE BofAML 3 Mo US T-Bill Index+5% (4) represents ICE BofAML 3 Mo US T-Bill Index+5% from 02/2013 through present; and ICE 3 Month LIBOR Index+5% from 01/1980 through 01/2013.
- The All Asset Custom Index (EqI Wtd) is an equal-weighted hybrid created independently by RVK specifically for PIMCO's All Asset strategies, and it consists of the following benchmarks:

1. *Short Term Strategies*: ICE BofAML 1 Year T-Bill Index
2. *US Core and Long Maturity Bond Strategies*: Bloomberg US Agg Bond Index
3. *EM and Gbl Bond Strategies*: PIMCO GLADI Index*
4. *Crdt Strategies*: ICE BofAML US Hi Yld Master II Index
5. *Inflation Related Strategies*: Bloomberg US Trsy: US TIPS Index
6. *US Equity Strategies*: Russell 3000 Index
7. *Global Equity Strategies*: MSCI ACW Index (USD) (Net)
8. *Alternative Strategies*: ICE BofAML 3 Mo US T-Bill Index+3%

* Performance for the PIMCO Gbl Advantage Bond Index (London Close) prior to 01/01/2004 consists of the JPM EMBI Gbl Dvf'd TR Index (USD).

- The All Asset Composite Index is an equal-weighted hybrid of the 13 benchmarks for each of the core funds initially held by PIMCO:All Ast Ath;Inst (PAUIX) at its inception. RVK began calculating the benchmark in 01/2007. Prior performance was calculated by PIMCO.

PORTLAND

CHICAGO

NEW YORK

Disclaimer of Warranties and Limitation of Liability - This document was prepared by RVK, Inc. (RVK) and may include information and data from some or all of the following sources: client staff; custodian banks; investment managers; specialty investment consultants; actuaries; plan administrators/record-keepers; index providers; as well as other third-party sources as directed by the client or as we believe necessary or appropriate. RVK has taken reasonable care to ensure the accuracy of the information or data, but makes no warranties and disclaims responsibility for the accuracy or completeness of information or data provided or methodologies employed by any external source. This document is provided for the client's internal use only and does not constitute a recommendation by RVK or an offer of, or a solicitation for, any particular security and it is not intended to convey any guarantees as to the future performance of the investment products, asset classes, or capital markets.





1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 31

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

SAN DIEGO TRANSIT CORPORATION (SDTC) EMPLOYEE RETIREMENT PLAN'S
ACTUARIAL VALUATION AS OF JULY 1, 2018 (ANNE HARPER AND ALICE
ALSBERGHE OF CHEIRON INC. AND LARRY MARINESI)

RECOMMENDATION:

That the Board of Directors receive the SDTC Employee Retirement Plan's (Plan) actuarial valuation as of July 1, 2018 (Attachment A), and adopt the pension contribution amount of \$15,919,058 for fiscal year 2020.

Executive Committee Recommendation

At its meeting on January 10, 2019, the Executive Committee voted 5 to 0 (Board members Fletcher, Gomez, Montgomery, Rios and Salas in favor, with Arambula and Arapostathis absent) to recommend that the Board approve the staff recommendation.

Budget Impact

Board adoption would result in the annual pension contribution of \$15,919,058 for fiscal year 2020, consisting of both employer and employee contributions.

DISCUSSION:

The actuarial valuation of the Plan as of July 1, 2018 was completed in November 2018 by Cheiron, Inc., and the entire report is included as Attachment A. The purpose of the actuarial valuation is to measure, describe, and identify the following as of the valuation date:

- The financial condition of the Plan,
- Past and expected trends in the financial progress of the Plan, and
- Compute the total annual pension contribution amount.



The Plan's funding policy is to contribute an amount equal to the sum of:

- The normal cost,
- Expected administrative expenses, and
- Amortization of the unfunded actuarial liability.

This valuation has produced a total contribution of \$15,919,058 which would be used for the fiscal year 2020 budget. This represents an increase in the contribution amount of \$304,743, compared to the previous valuation that was completed in December 2017. The following table details the cost element changes year over year.

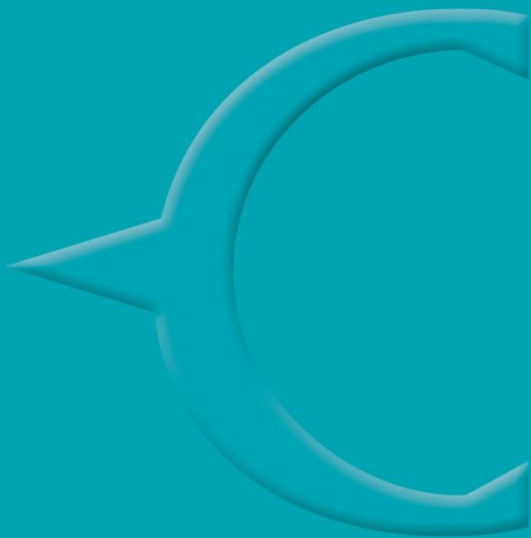
Total Contribution Reconciliation	
Fiscal Year 2018-2019, middle of year	\$ 15,614,315
Change due to actuarial investment experience	515,370
Change due to effect of closed plan on benefits earned	(255,386)
Change due to other miscellaneous factors	44,759
Fiscal Year 2019-2020, middle of year	\$ 15,919,058

Anne Harper and Alice Alsberghe of Cheiron, Inc. will provide an overview of the report in more detail and be available for any questions.

/s/ Sharon Cooney for
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. Actuarial Report (Board Only Due to Volume)



Retirement Plans of San Diego Transit Corporation

Actuarial Valuation Report as of July 1, 2018

Produced by Cheiron

November 2018

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Letter of Transmittal	i
Foreword	ii
Section I Executive Summary	1
Section II Assets	13
Section III Liabilities	18
Section IV Contributions.....	22
 <u>Appendices</u>	
Appendix A Membership Information	24
Appendix B Actuarial Assumptions and Methods	36
Appendix C Summary of Plan Provisions.....	42
Appendix D Glossary	58

November 20, 2018

Mr. Larry Marinesi
San Diego Transit Corporation
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490

Dear Mr. Marinesi:

At your request, we have conducted an actuarial valuation of the Retirement Plans of San Diego Transit Corporation ("Plan," "SDTC") as of July 1, 2018. This report contains information on the Plan's assets, liabilities, and contribution levels. In the Foreword, we refer to the general approach employed in the preparation of this report.

The purpose of this report is to present the results of the annual actuarial valuation of the Plans. This report was prepared solely for the Retirement Board and MTS Board in accordance with applicable law for the purposes described herein. It is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Sincerely,
Cheiron

A handwritten signature in blue ink that reads "Anne Harper".

Anne D. Harper, FSA, EA, MAAA
Consulting Actuary

A handwritten signature in blue ink that reads "Alice I. Alsberghe".

Alice I. Alsberghe, ASA, MAAA
Associate Actuary

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

FOREWORD

Cheiron has performed the actuarial valuation of the Retirement Plans of San Diego Transit Corporation as of July 1, 2018. The valuation is organized as follows:

- In Section I, the **Executive Summary**, we describe the purpose of an actuarial valuation, summarize the key results found in this valuation, and disclose important trends;
- The **Main Body** of the report presents details on the Plan's
 - Section II – Assets
 - Section III – Liabilities
 - Section IV – Contributions
- In the **Appendices**, we conclude our report with detailed information describing plan membership (Appendix A), actuarial assumptions and methods employed in the valuation (Appendix B), a summary of pertinent plan provisions (Appendix C), and a glossary of key actuarial terms (Appendix D).

The results of this report rely on future Plan experience conforming to the underlying assumptions. To the extent that actual Plan experience deviates from the underlying assumptions, the results would vary accordingly.

In preparing our report, we relied on information (some oral and some written) supplied by the plan administrator. This information includes, but is not limited to, the Plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION I – EXECUTIVE SUMMARY

The primary purpose of the actuarial valuation and this report is to measure, describe, and identify the following as of the valuation date:

- The financial condition of the Plan,
- Past and expected trends in the financial progress of the Plan, and
- The total contribution amount (employer and employee) to be made during Fiscal Year 2019-2020.

In the balance of this Executive Summary, we present (A) the basis upon which this year's valuation was completed, (B) the key results of this valuation including a summary of all key financial results, (C) changes in Plan cost, (D) an examination of historical trends, and (E) the future expected financial trends for the Plan.

A. Valuation Basis

This valuation determines total employer and employee contributions for the plan year.

The Plan's funding policy is to contribute an amount equal to the sum of:

- The normal cost under the Entry Age Normal Cost Method,
- Expected administrative expenses, and
- Amortization of the Unfunded Actuarial Liability (UAL) based on level dollar payments.

The employee will contribute according to the Plan schedules below. Member contribution rates in the future may change in response to collective bargaining. It will be the responsibility of the employer to contribute the remaining portion of the total contribution determined in this report.

- IBEW members contributed 3% of compensation to the Plan in April 2013 and 4% of compensation in April 2014. The contribution rate increased to 6% of compensation in April 2015 and increased to 8% of compensation in April 2016.
- ATU drivers and clerical members contributed 3% of compensation to the Plan in July 2013. The contribution rate increased to 5% of compensation in July 2014, to 6% in July 2015, and to 7% of compensation in July 2016. As of December 2017, the member contribution rate increased to 8% of compensation.
- Non-contract members hired before July 1, 2013 contributed 2% of compensation to the Plan prior to January 2014. The Non-contract member contributions increased to 4% of compensation in January 2014, to 6% of in January 2015, and to 7% of compensation on January 1, 2016. As of January 1, 2017, the member contribution rate increased to 8% of compensation.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION I – EXECUTIVE SUMMARY

- **PEPRA:** New Members must contribute half of the normal cost of the Plan, rounded to the nearest 0.25%. Currently, PEPRA members are paying 6.25% of pay and the employer pays the remaining cost of the Plan.

This valuation was prepared based on the Plan provisions shown in Appendix C. There have been no changes in plan provisions since the prior valuation.

The SDTC Plans are closed to new entrants, except for Non-Contract members. A closed plan has very different dynamics as active plan membership declines and grows older and a larger portion of the Plan's liability shifts to payees. This dynamic shortens the investment horizon thus mitigating investment risk becomes more important. If the asset mix changes to reflect the expected pattern of benefit payments, it will become more conservative and the expected return on plan assets will decrease. Thus, adjusting the Plan's investment rate of return to be consistent with the expected trending decrease of future asset returns is necessary.

Finally, the true cost of the Plan is a function of actual Plan experience, not the actuarial assumptions. It is important to set realistic assumptions to mitigate the risk of Plan contribution volatility.

The results of this valuation do not include members participating in the defined contribution plans.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION I – EXECUTIVE SUMMARY

B. Key Results of this Valuation

The key results of the July 1, 2018 actuarial valuation are as follows:

- The actuarial contribution determined in this report is the total contribution required from both, the employer and the employees. The total contribution increased from \$15,614,315 to \$15,919,058, an increase of \$304,743 from the July 1, 2017 valuation. This increase is primarily due to the recognition of current and prior years' deferred asset losses in the Actuarial Value of Assets partially offset by the continued decrease due to the effects of a closed plan. See Table I-2 for a reconciliation of the contribution cost from last year to this year.
- During the year ending June 30, 2018, the return on Plan assets was 5.51% on a market value basis as compared to the 7.00% assumption. The Actuarial Value of Assets (AVA) returned 4.14% as 20% of the difference between the expected and actual return on the Market Value of Assets (MVA) for each of the prior five years is recognized. See Table II-3 and II-4 for the detailed calculations.
- There was a method change in the development of valuation salary as of July 1, 2018. Valuation salary is now based on a two-year average of the most recent pensionable pay instead of only the prior year's salary. The new method should minimize volatility in the salary used to calculate retirement benefits and thus the required contributions. This volatility is largely due to annual fluctuations in overtime pay. The method change resulted in a slight decrease to the total contribution of about \$0.1 million. To align with the amortization of the July 1, 2012 UAL and the UAL impact of the July 1, 2016 assumption changes, this method change is amortized using level dollar payments over a 19-year period ending June 30, 2037.
- The Plan's funded ratio, the ratio of actuarial (smoothed) assets over the Actuarial Liability, slightly increased from 58.1% last year to 58.2% as of July 1, 2018. Additionally, the funded ratio based on the Market Value of Assets increased from 54.6% to 55.4%.
- The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Actuarial Value of Assets. The Plan's UAL increased from \$123,961,789 to \$125,395,896 as of July 1, 2018.
- Overall, participant membership decreased compared to last year since the Plan is closed to most new entrants. Total projected payroll decreased from \$28,966,717 for FYE June 30, 2018 to \$27,015,234 for FYE June 30, 2019. However, average total pay increased by about 4%. As the closed Plan continues to mature, average pay is expected to continue to increase without new members entering the Plan at lower pay levels to offset the average.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION I – EXECUTIVE SUMMARY

Below we present Table I-1, which summarizes all the key results of the valuation with respect to membership, assets and liabilities, and contributions. The results are presented and compared for both the current and prior plan year.

**Table I-1
Summary of Principal Plan Results**

<u>Participant Counts</u>	July 1, 2017	July 1, 2018	% Change
Active Participants	513	462	-9.9%
Participants Receiving a Benefit	952	975	2.4%
Inactive Participants	214	230	7.5%
Total	1,679	1,667	-0.7%
Projected Plan Member Payroll ¹ for Fiscal Year 2018 and 2019	\$ 28,966,717	\$ 27,015,234	-6.7%
<u>Assets and Liabilities</u>			
Actuarial Liability (AL)	\$ 296,010,712	\$ 300,300,433	1.4%
Actuarial Value of Assets (AVA)	172,048,923	174,904,537	1.7%
Unfunded Actuarial Liability (UAL)	\$ 123,961,789	\$ 125,395,896	1.2%
Market Value of Assets (MVA)	\$ 161,635,007	\$ 166,239,057	2.8%
Funded Ratio (AVA)	58.1%	58.2%	0.1%
Funded Ratio (MVA)	54.6%	55.4%	0.8%
<u>Contributions</u>	FY 2018-2019	FY 2019-2020	
Total Normal Cost ²	\$ 3,958,564	\$ 3,744,307	-5.4%
Total UAL Contribution	11,655,751	12,174,751	4.5%
Total Contribution (middle of year)	\$ 15,614,315	\$ 15,919,058	2.0%

¹ Based on valuation data projected using half-year of salary increases but excludes payroll for members expected to leave employment or retire during the year.

² Includes assumed administrative expenses of \$267,150 for FY 2017-2018 and \$274,497 for FY 2018-2019.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION I – EXECUTIVE SUMMARY

C. Changes in Plan Cost

Table I-2 below summarizes the impact of actuarial experience on Plan cost.

Table I-2 Total Contribution Reconciliation	
Fiscal Year 2018-2019, middle of year	\$ 15,614,315
Change due to valuation salary averaging method change	(97,094)
Change due to actuarial investment experience	515,370
Change due to effect of closed plan on benefits earned	(255,386)
Change due to demographic and salary experience	45,208
Change due to other miscellaneous factors	<u>96,645</u>
Fiscal Year 2019-2020, middle of year	\$ 15,919,058

An analysis of the cost **changes from the prior valuation** reveals the following:

- A change to the method for computing salary decreased the contribution by \$97,094. Valuation salary is now based on a two-year averaging of payroll to mitigate fluctuations in overtime pay year over year. This better reflects future salary expectations.
- Investment experience produced a loss based on both the Market Value of Assets (MVA) and the Actuarial Value of Assets (AVA). This resulted in an increase of \$515,370 in the total contribution. The AVA is larger than the MVA since there are approximately \$8.7 million in deferred investment losses that will be recognized over the next four years.
- Closing the Plan to most new entrants decreases the total amount of benefits that are being earned as members continue to leave employment through retirements, terminations, disabilities, and death, and thus cease to earn additional benefits. This decreased the Plan contribution by \$255,386.
- Actual demographic experience will always differ from the actuarial assumptions. Overall, the salary experience and demographic experience of the Plan – rates of retirement, death, disability, and termination – were relatively close to what was expected based on the actuarial assumptions. The salary and turnover experience caused an increase in the contribution of \$45,208.
- The net effect of other miscellaneous factors, including inflationary increases in the administrative expense assumption, actual administrative expenses being different than expected, and a contribution timing adjustment, increased the Plan contributions by \$96,645.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION I – EXECUTIVE SUMMARY

One measures of a plan's risk is the ratio of plan assets to payroll shown in Table I-3 below.

This ratio indicates the sensitivity of the Plan to the returns earned on plan assets. We note in the table that plan assets currently are about six times covered payroll for the Plan. As funding improves and the Plan reaches 100% funding, the ratio of asset to payroll will increase to over 11 times payroll, perhaps higher depending on the Plan's future demographic makeup. The asset to payroll ratio is expected to increase with the dynamics of a closed Plan.

Table I-3	
Asset to Payroll Ratio as of July 1, 2018	
Active Member Payroll	\$ 27,015,234
Assets (Market Value)	\$ 166,239,057
Ratio of Assets to Payroll	6.15
Ratio with 100% Funding	11.12

To appreciate the impact of the ratio of assets to payroll on plan cost, consider the situation for a new plan with almost no assets. Even if the assets suffer a bad year of investment returns, the impact on the Plan cost is nil, because the assets are so small.

On the other hand, consider the situation for this Plan. Suppose the Plan's assets lose 10% of their value in a year. Since they are assumed to earn 7.0%, there is an actuarial loss of 17.0% of plan assets. Based on the current ratio of asset to payroll (6.15), that means the loss in assets is about 105% of active payroll (615% of the 17.0% loss). There is only one source of funding to make up for this loss: contributions. Consequently, barring future offsetting investment gains, the loss must be made up with future contributions. The loss would be even larger – over 189% of payroll – if the Plan were 100% funded.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION I – EXECUTIVE SUMMARY

D. Historical Trends

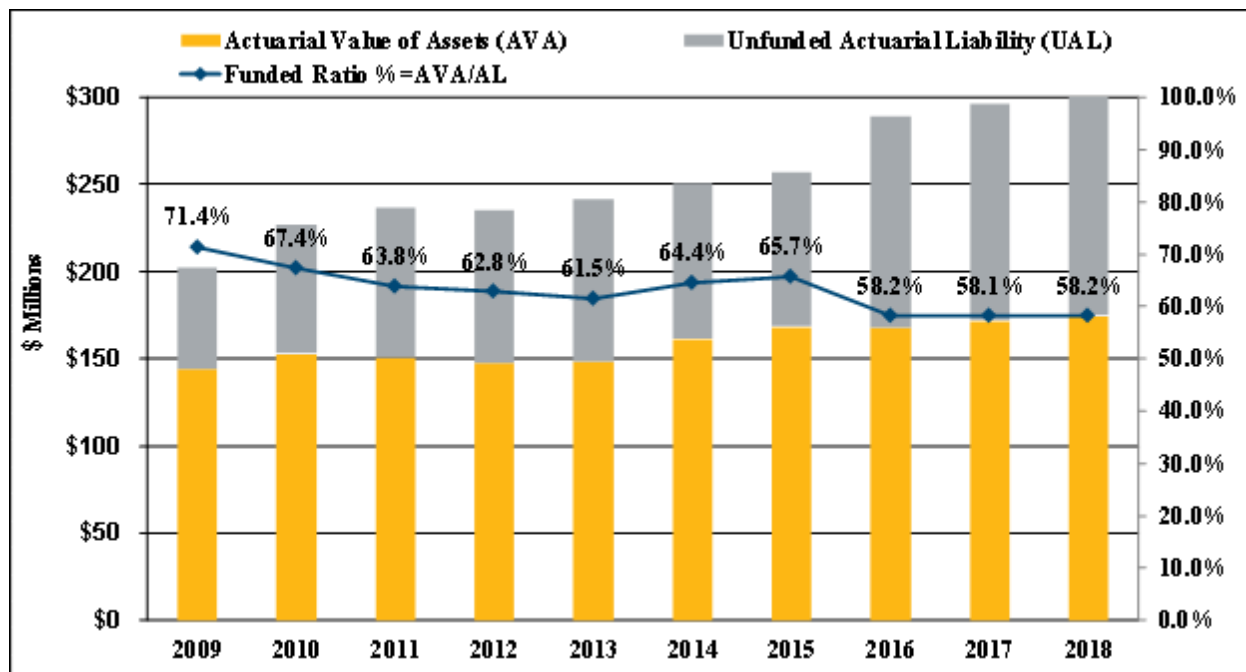
Despite the fact that for most retirement plans the greatest attention is given to the current valuation results – in particular the size of the current Unfunded Actuarial Liability and the total contribution – it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension fund. It is important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future.

Assets and Liabilities

The chart below compares the Market Value of Assets (MVA) and Actuarial Value of Assets (AVA) to the Actuarial Liabilities (AL). There are deferred investment losses when the Market Value of Assets (gold line) is below the Actuarial Value of Assets (teal line). The percentage shown at the top of each bar is the ratio of the Actuarial Value of Assets to the Actuarial Liability (the funded ratio).

Following the severe market downturn in 2008, the funded ratio continued to decrease after 2009 primarily due to the gradual recognition of deferred investment losses in the Actuarial Value of Assets. The funded ratio decreased again in 2016 to 58.2% following an actuarial experience study which significantly increased the Actuarial Liability. Since 2016, the funded ratio has remained stable, reporting a funded ratio of 58.2% in 2018.

This chart presents the Actuarial Value of Assets, Unfunded Actuarial Liability, and Funded Ratio. The top of the bars depicts the total Actuarial Liability. Over the period shown, the Actuarial Liability was increasing with relatively steady Actuarial Value of Assets, therefore leading to a decreasing funded ratio.



**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

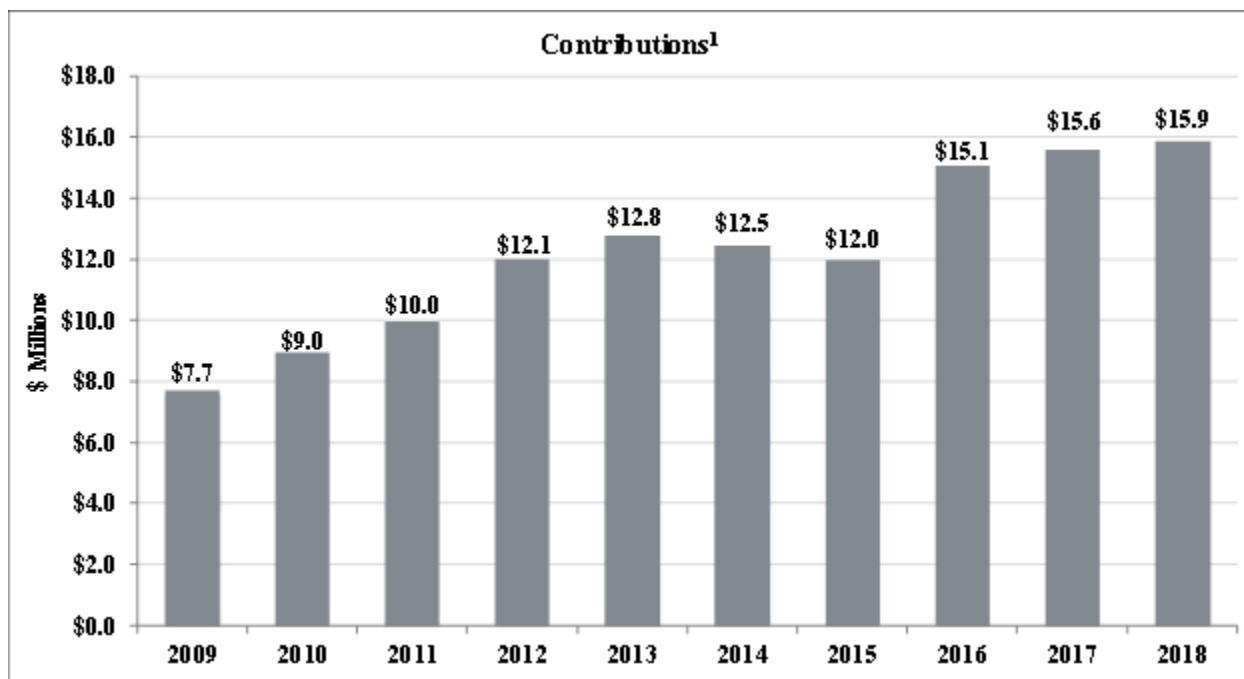
SECTION I – EXECUTIVE SUMMARY

Contributions

The chart below shows a history of the Plan's actuarially determined total contribution. The Plan's actuarially determined contributions have increased from 2009 to 2012 primarily due to the phasing in over five years of the 2009 asset loss, along with assumption changes in 2010, and actuarial funding policy changes in 2012. The contributions leveled off between \$12-\$13 million from 2012 to 2015 primarily due to closing the Plan to new entrants.

In 2016, the Board approved actuarial assumption changes based on the recommendations in the Actuarial Experience Study for July 1, 2010 through June 30, 2015. Most notably were the new mortality assumptions and the assumed investment rate of return decreasing from 7.50% to 7.00%. In aggregate, the assumption changes increased the total 2016 contribution by \$2.7 million.

The total contribution for 2018 increased slightly from 2017 primarily due to continued recognition of the deferred investment losses in the Actuarial Value of Assets offset by less benefits being earned as the effect of a closed Plan. A reconciliation of the contributions from the 2017 to 2018 valuations can be found in Table I-2 of this report.



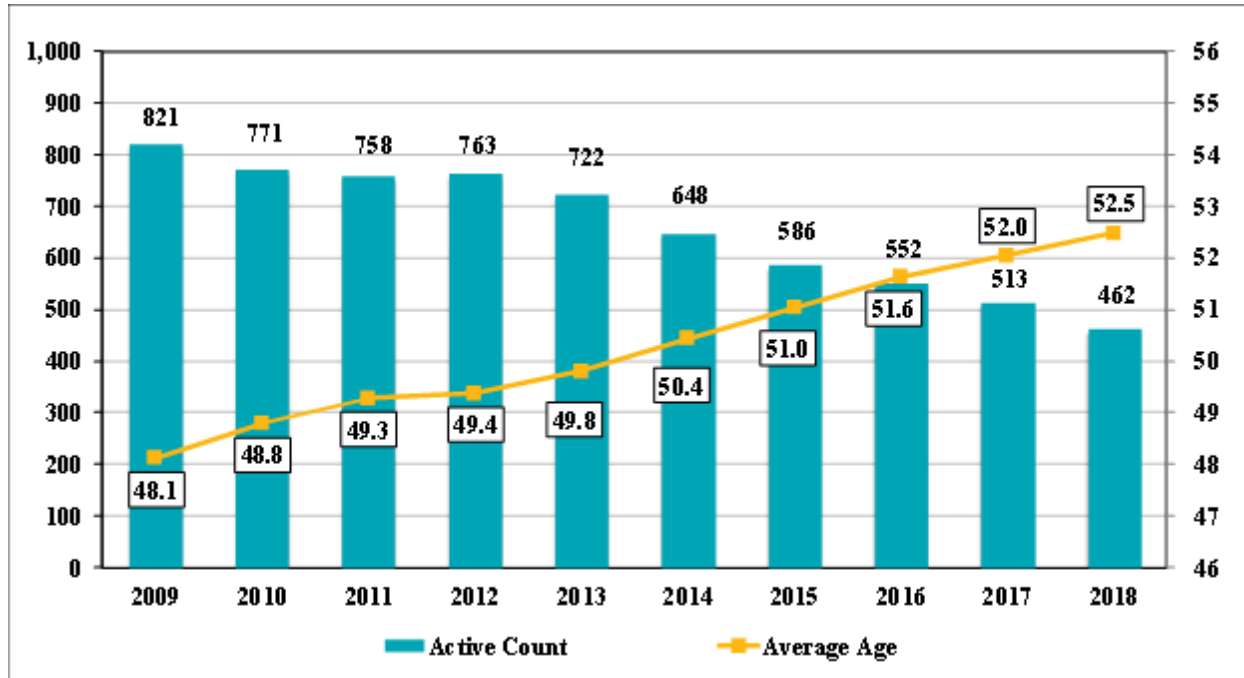
¹ Beginning with 2015, contribution amounts are mid-year values for the upcoming fiscal year.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION I – EXECUTIVE SUMMARY

Participant Trends

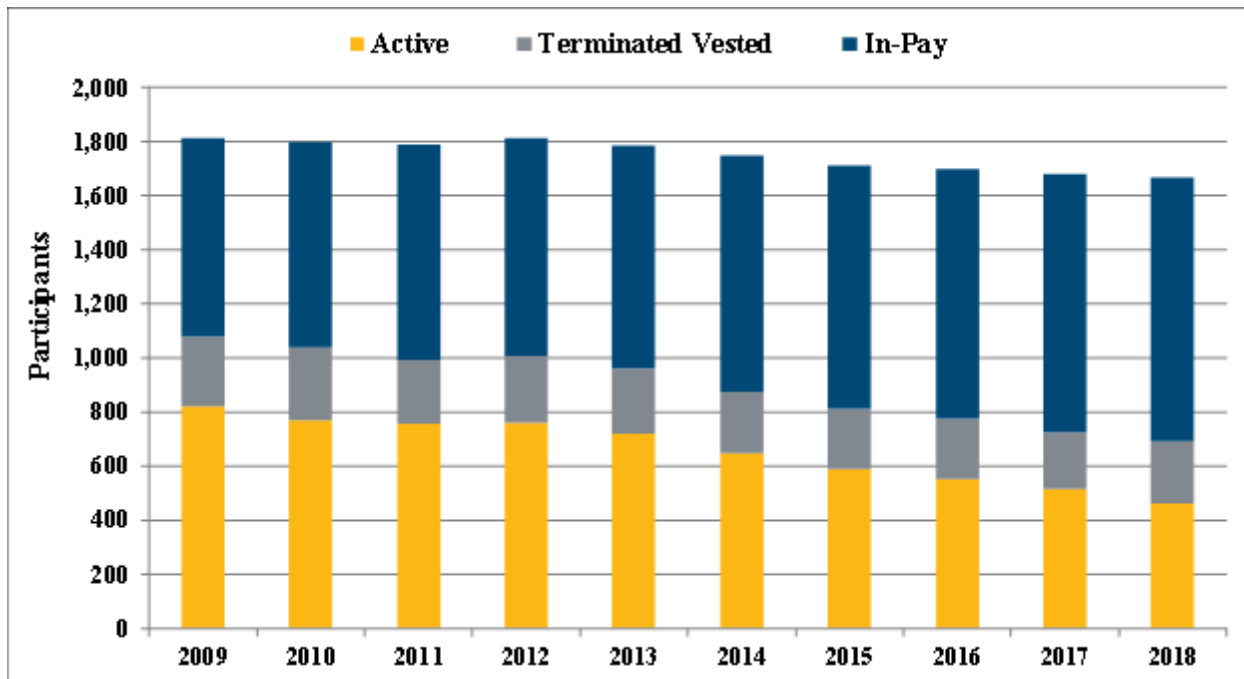
The number and average age of active Plan members for the last 10 years is shown in the chart below. We can see that membership has declined from 821 actives on July 1, 2009, to 462 on July 1, 2018, a decrease of 44%. In addition, the average age of an active member has increased by over four years during the period shown. These trends are expected to continue, as most new employees participate instead in the defined contribution plan.



**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION I – EXECUTIVE SUMMARY

The number of Plan members across all statuses (active, terminated vested, and in-pay) for the last 10 years are shown in the chart below. Total membership has declined from 1,815 members on July 1, 2009, to 1,667 on July 1, 2018, a decrease of 8%. This chart shows the shift in membership status over the period shown, from active status (gold) to inactive statuses (gray and blue). This trend is expected to continue, as most new employees participate instead in the defined contribution plan.



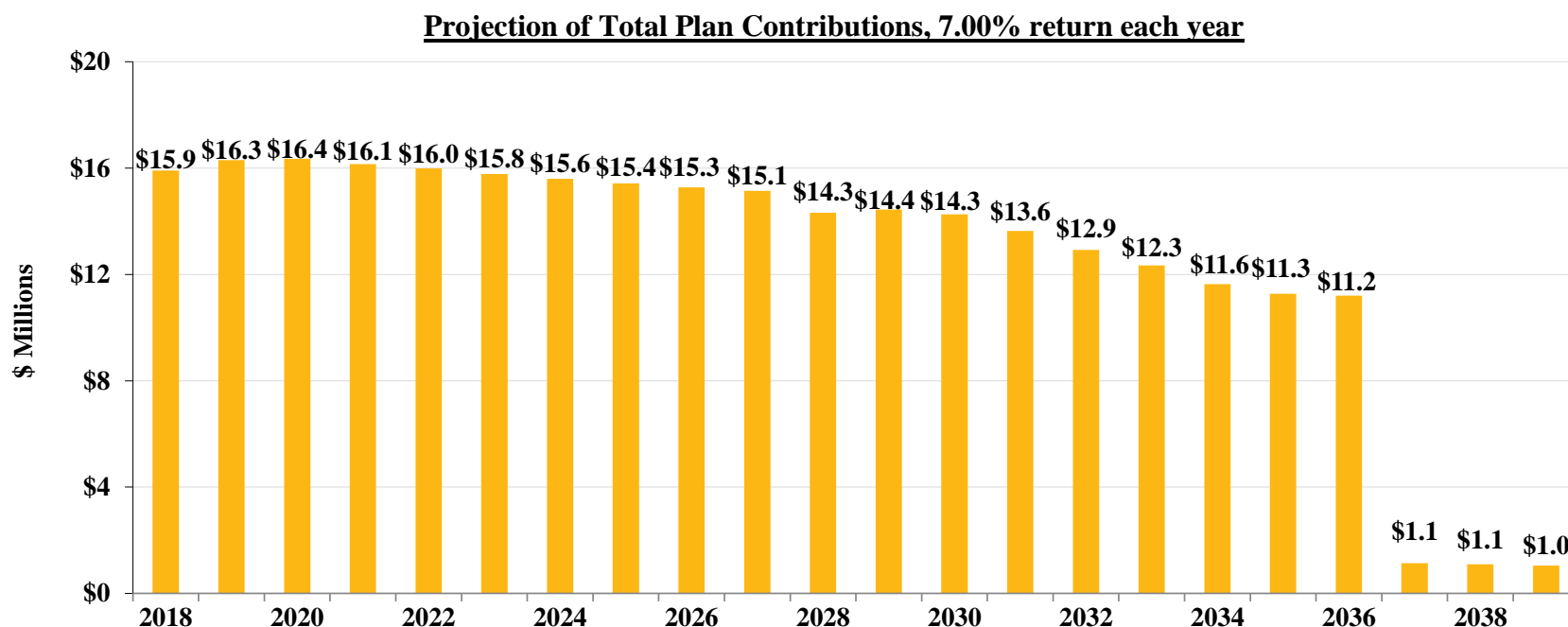
Active	821	771	758	763	722	648	586	552	513	462
Term Vested	260	270	237	244	239	229	226	225	214	230
In-Pay	734	759	794	805	827	873	902	921	952	975
Total	1,815	1,800	1,789	1,812	1,788	1,750	1,714	1,698	1,679	1,667

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION I – EXECUTIVE SUMMARY

E. Future Expected Financial Trends

The analysis of projected financial trends is perhaps the most important component of this valuation. In this section, we present our assessment of the implications of the July 1, 2018 valuation results in terms of benefit security (assets over liabilities) and contributions over the next 20 years. All the projections in this section are based on the assumption that the Plan will exactly achieve the 7.00% investment return assumption each year, which is clearly an impossibility. We assume the current funding method and amortization policy adopted in 2012, will remain in place throughout the projection period.



The graph shows that the Plan's contributions are expected to gradually increase over the next two years as the Plan recognizes the \$8.7 million in net deferred asset losses from the unfavorable returns during FYE 2015 and FYE 2016. Thereafter, the Plan's contributions are expected to steadily decline from \$16.4 million in 2020 to \$11.2 million in 2036. The gradual decline in the contribution is due to the decrease in the annual benefits that are earned as the number of active members decline since the Plan is closed to most new entrants. During Fiscal Year 2036-37, the last payment for the majority of the Plan's UAL will be made.

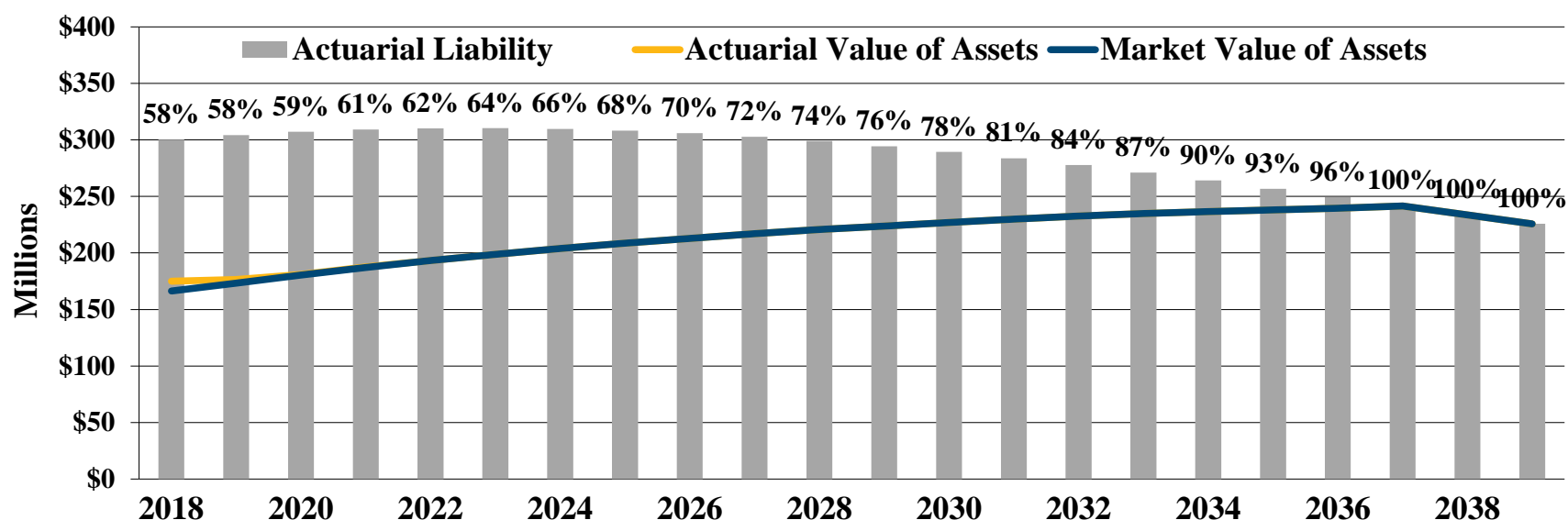
RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018

SECTION I – EXECUTIVE SUMMARY

Asset and Liability Projections:

The following graph shows the projection of assets and liabilities assuming that assets will earn the 7.00% assumption each year during the projection period.

Projection of Assets and Liabilities, 7.00% return each year



The funded status is expected to remain somewhat level at 58% over the next three years and then gradually increases over the projection period. The Plan is projected to be fully funded by 2037 assuming the actuarial assumptions are achieved. However, it is the actual return on Plan assets that will determine the future funding status and contribution to the Plan.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION II – ASSETS

Pension Plan assets play a key role in the financial operation of the Plan and in the decisions the Board may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact benefit levels, contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on Plan assets including:

- **Disclosure** of Plan assets as of June 30, 2017 and June 30, 2018,
- Statement of the **changes** in market values during the year,
- Development of the **Actuarial Value of Assets**.

Disclosure

There are two types of asset values disclosed in the valuation, the Market Value of Assets and the Actuarial Value of Assets. The market value represents a snapshot value that provides the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not as suitable for long-range planning as are the Actuarial Value of Assets that reflect smoothing of annual investment returns.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION II – ASSETS

Table II-1 discloses and compares each component of the Market Value of Assets as of June 30, 2017 and June 30, 2018.

Table II-1		
Statement of Assets at Market Value		
Investments	June 30, 2017	June 30, 2018
Common Stock	\$ 69,998,311	\$ 65,774,104
Mutual Funds	34,941,685	34,630,810
REIT Mutual Funds	0	0
Corporate Debt / Bond Funds	38,926,399	45,745,179
Closely Held Instruments	9,824,652	10,187,258
US Treasury Obligations	7,885,322	10,070,291
Short-Term Investments	613,495	470,322
Total Investments	\$ 162,189,864	\$ 166,877,964
Receivables		
Dividends and Interest	\$ 400	\$ 777
Other Receivables	0	0
Total Receivables	\$ 400	\$ 777
Payables		
Due to Plan Sponsor	\$ 447,050	\$ 510,821
Other Payables	108,207	128,863
Total Payables	\$ 555,257	\$ 639,684
Market Value of Assets	\$ 161,635,007	\$ 166,239,057

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION II – ASSETS

Changes in Market Value

The components of asset change are:

- Contributions (employer and employee)
- Investment income (realized and unrealized), net of investment expenses
- Benefit payments
- Administrative Expenses

Table II-2 shows the components of a change in the Market Value of Assets during FYE 2017 and FYE 2018.

Table II-2 Changes in Market Values		
	June 30, 2017	June 30, 2018
Contributions		
Employer's Contribution	12,649,101	13,020,223
Members' Contributions	<u>2,047,593</u>	<u>1,751,616</u>
Total Contributions	14,696,694	14,771,839
Investment Income		
Interest	3,126	9,888
Dividends	2,746,299	3,565,546
REIT Mutual Funds	0	0
Miscellaneous	0	0
Realized & Unrealized Gain/(Loss)	9,775,278	5,535,603
Investment Expenses	<u>(307,767)</u>	<u>(318,737)</u>
Net Investment Income	12,216,936	8,792,300
Disbursements		
Benefit Payments	(17,977,346)	(18,715,199)
Administrative Expenses	<u>(234,128)</u>	<u>(244,890)</u>
Total Disbursements	(18,211,474)	(18,960,089)
Net Increase (Decrease)	8,702,156	4,604,050
Net Assets Held in Trust for Benefits		
Beginning of Year	<u>152,932,851</u>	<u>161,635,007</u>
End of Year	<u>161,635,007</u>	<u>166,239,057</u>
Approximate Return	8.08%	5.51%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION II – ASSETS

Actuarial Value of Assets (AVA)

The Actuarial Value of Assets represents a “smoothed” value developed by the actuary to reduce the volatile results, which could develop due to short-term fluctuations in the Market Value of Assets. For this Plan, the Actuarial Value of Assets is calculated on a modified market-related value. The Market Value of Assets is adjusted to recognize, over a five-year period, investment earnings which are greater than (or less than) the assumed investment return. The actuarial value is constrained to fall within 20% of the market value.

**Table II-3
Development of Actuarial Value of Assets
as of June 30, 2018**

	(a) Expected Earnings	(b) Actual Earnings	(c) = (b) – (a) Unexpected Earnings	(d) Phase-In Factor	(c) x (d) Phase-In Adjustment
<u>Plan Year</u>					
2013 -14	11,577,862	18,159,297	6,581,435	0%	0
2014 -15	12,204,882	(2,018,866)	(14,223,748)	20%	(2,844,750)
2015 -16	11,704,510	(540,093)	(12,244,603)	40%	(4,897,841)
2016 -17	10,584,363	12,216,936	1,632,573	60%	979,544
2017 -18	11,170,341	8,792,300	(2,378,041)	80%	(1,902,433)
1. Total Unrecognized Asset Gains/(Losses)					(8,665,480)
2. Market Value of Assets as of June 30, 2018					166,239,057
3. Actuarial Value of Assets as of June 30, 2018: [(2) - (1)]					174,904,537
4. Ratio of Actuarial Value to Market Value [(3) ÷ (2)]					105.21%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION II – ASSETS

Investment Performance

The following table calculates the investment related gain/loss for the plan year on both a market value and an actuarial value basis. The market value gain/loss is an appropriate measure for comparing the actual asset performance to the valuation's long-term 7.00% assumption.

Table II-4 Asset Gain/(Loss)		
	Market Value	Actuarial Value
As of June 30, 2017	\$ 161,635,007	\$ 172,048,923
Employer Contributions	13,020,223	13,020,223
Employee Contributions	1,751,616	1,751,616
Benefit Payments	(18,715,199)	(18,715,199)
Administrative Expenses	(244,890)	(244,890)
Expected Investment Earnings (7.00%)	11,170,341	11,899,315
Expected Value as of July 1, 2018	\$ 168,617,098	\$ 179,759,988
Investment Gain/(Loss)	<u>(2,378,041)</u>	<u>(4,855,451)</u>
As of June 30, 2018	\$ 166,239,057	\$ 174,904,537
Return	5.51%	4.14%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION III – LIABILITIES

In this section, we present detailed information on Plan liabilities including:

- **Disclosure** of Plan liabilities at July 1, 2017 and July 1, 2018,
- Statement of **changes** in these liabilities during the year.

Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them. Note that these liabilities are not appropriate for settlement purposes, including the purchase of annuities and the payment of lump sums.

- **Present Value of Future Benefits:** Used for measuring all future Plan obligations; the obligations of the Plan earned as of the valuation date and those to be earned in the future by current Plan participants, under the current Plan provisions.
- **Actuarial Liability:** Used for funding calculations, this liability is calculated taking the total Projected Value of Future Benefits and subtracting all future normal costs. The method used for this Plan is called the Entry Age Normal (EAN) funding method.
- **Unfunded Actuarial Liability:** The excess of the Actuarial Liability over the Actuarial Value of Assets.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION III – LIABILITIES

Table III-1 discloses each of these liabilities for the current and prior valuations.

Table III-1		
Liabilities and Unfunded Actuarial Liability		
	July 1, 2017	July 1, 2018
1. Present Value of Future Benefits		
Active Participant Benefits		
ATU/Drivers	\$ 65,291,904	\$ 62,871,053
IBEW/Mechanics	29,892,285	26,899,768
ATU/Clerical	2,422,132	2,317,565
Non-Contract/Admin ¹	<u>24,165,953</u>	<u>21,986,491</u>
Total	\$ 121,772,274	\$ 114,074,877
2. Inactive Actuarial Liability		
ATU/Drivers	\$ 108,029,652	\$ 112,517,249
IBEW/Mechanics	23,284,255	27,614,109
ATU/Clerical	4,773,769	4,737,714
Non-Contract/Admin	<u>61,190,448</u>	<u>62,495,725</u>
Total	\$ 197,278,124	\$ 207,364,797
3. Active Actuarial Liability		
ATU/Drivers	\$ 52,286,565	\$ 51,077,768
IBEW/Mechanics	24,236,851	21,787,973
ATU/Clerical	2,038,996	2,015,149
Non-Contract/Admin ¹	<u>20,170,176</u>	<u>18,054,746</u>
Total	\$ 98,732,588	\$ 92,935,636
4. Total Actuarial Liability, [(2) + (3)]	\$ 296,010,712	\$ 300,300,433
5. Plan Assets (Actuarial Value)	<u>172,048,923</u>	<u>174,904,537</u>
6. Unfunded Actuarial Liability (UAL), [(4) - (5)]	\$ 123,961,789	\$ 125,395,896

¹ Includes PEPRA members.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION III – LIABILITIES

Table III-2 below analyzes the increases or decreases in the liabilities since the last valuation.

Changes in Liabilities

Each of the liabilities disclosed in the prior table are expected to change at each valuation. The components of that change (as shown in Table III-2 below), depending upon which liability is analyzed, can include:

- Benefits accrued since the last valuation
- Plan amendments changing benefits (none for the 2018 Valuation)
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial assumptions
- A change in the actuarial funding method or software

Table III-2		
Changes in Actuarial Liability		
Actuarial Liability at July 1, 2018	\$	300,300,433
Actuarial Liability at July 1, 2017	\$	<u>296,010,712</u>
Liability Increase (Decrease)	\$	4,289,721
Change due to:		
Actuarial Methods / Software Changes	\$	(640,322)
Assumption Changes		0
Accrual of Benefits		3,559,738
Actual Benefit Payments		(18,715,199)
Interest		20,325,978
Actuarial (Gain)/Loss		<u>(240,474)</u>
Liability Increase (Decrease)	\$	4,289,721

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION III – LIABILITIES

Unfunded liabilities will change (as shown in Table III-3 below) because of all of the above, and also due to changes in Plan assets resulting from:

- Contributions different than expected
- Investment earnings different than expected
- Expenses different than expected

**Table III-3
Development of Actuarial Gain / (Loss)**

1. Unfunded Actuarial Liability (UAL) at Start of Year (not less than zero)	\$ 123,961,789
2. Expected UAL Payment	(11,268,040)
3. Interest on (1) and (2) to End of Year	7,888,562
4. Increase in UAL due to Method Changes	<u>(640,322)</u>
5. Expected Unfunded Actuarial Liability at End of Year, [(1) + (2) + (3) + (4)]	\$ 119,941,989
6. Actual Unfunded Actuarial Liability at End of Year (not less than zero)	\$ 125,395,896
7. Actuarial Gain/(Loss), [(5) – (6)]	\$ (5,453,907)
(a) Liability Gain/(Loss)	240,474
(b) Asset Gain/(Loss) on Actuarial Value	(4,855,451)
(c) Contribution Timing Gain/(Loss)	(871,464)
(d) Administrative Expenses Less than Expected	32,534

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION IV – CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions are needed to properly maintain the funding status of the Plan. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

Based on the assumptions and cost method, Plan assets are currently below the target level of assets determined by the cost method; consequently, there is an Unfunded Actuarial Liability. As a result, the required Plan contribution consists of three components: The normal cost, the amortization of the Unfunded Actuarial Liability (UAL), and assumed administrative expenses.

The normal cost represents the cost of the additional benefits earned during the plan year by active Plan members. The balance of the Plan contribution represents the amortization of the unfunded liability, which is a payment designed to bring the Plan's assets up to the target level set by the actuarial cost method. Currently, the amortization of UAL represents about three-fourths of the total contribution.

As the UAL is paid over time, the Plan contribution is expected to decrease to a level near the normal cost plus administrative expenses. The normal cost itself will be changing since the Plan is closed to new members other than non-contract employees.

The table below presents the total Plan contributions (both employer and employee) for the current and prior valuations.

Table IV-1 Development of Annual Contribution		
	July 1, 2017	July 1, 2018
1. Total Actuarial Liability	\$ 296,010,712	\$ 300,300,433
2. Plan Assets (Actuarial Value)	<u>172,048,923</u>	<u>174,904,537</u>
3. Unfunded Actuarial Liability (UAL), [(1) - (2)]	\$ 123,961,789	\$ 125,395,896
4. UAL Amortization Payment (BOY)	\$ 11,268,040	\$ 11,769,776
5. Total Plan Normal Cost	\$ 3,559,738	\$ 3,345,262
6. Expected Administrative Expenses	\$ 267,150	\$ 274,497
7. Total Cost, [(4) + (5) + (6)]	\$ 15,094,928	\$ 15,389,535
8. Total Cost (interest adjusted to middle of year)	\$ 15,614,315	\$ 15,919,058

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

SECTION IV – CONTRIBUTIONS

The table below presents the calculation of the UAL payments for the Plan under the amortization policy adopted in 2012.

Table IV-2 Development of the Amortization Payment (BOY) as of July 1, 2018						
Type of Base	Date Established	Initial Balance	Initial Amortization	Outstanding Balance	Remaining Amortization	Amortization Amount
Initial Unfunded						
1. Actuarial Liability	7/1/2012	\$ 87,613,245	25	\$ 78,071,984	19	\$ 7,059,533
2. Actuarial Loss	7/1/2013	6,555,553	15	5,079,926	10	675,951
3. Actuarial Gain	7/1/2014	(2,132,368)	15	(1,761,213)	11	(219,505)
4. Actuarial Loss	7/1/2015	740,624	15	646,886	12	76,116
5. Assumption Changes	7/1/2016	29,699,872	21	28,329,571	19	2,561,656
6. Actuarial Loss	7/1/2016	4,978,340	15	4,568,251	13	510,837
7. Actuarial Loss	7/1/2017	5,880,935	15	5,646,906	14	603,453
8. Method Changes	7/1/2018	(640,322)	19	(640,322)	19	(57,900)
9. Actuarial Loss	7/1/2018	5,453,907	15	<u>5,453,907</u>	15	<u>559,635</u>
TOTAL				\$ 125,395,896		\$ 11,769,776
				Total UAL Payment, Middle of Year		\$ 12,174,751

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

Data pertaining to active and inactive Members and their beneficiaries as of the valuation date was supplied by the Plan Administrator on electronic media. As is usual in studies of this type, Member data was neither verified nor audited; however, it was reviewed to ensure that it complies with generally accepted actuarial standards.

Summary of Participant Data

Active Participants

Non-Contract/Admin	July 1, 2017	July 1, 2018
Number	61	55
Average Age	51.9	51.6
Average Service	17.2	17.1
Average Pay	\$ 73,791	\$ 72,966
Non-Contract/PEPRA	July 1, 2017	July 1, 2018
Number	12	17
Average Age	43.2	46.6
Average Service	4.5	4.4
Average Pay	\$ 65,009	\$ 64,128
ATU/Clerical	July 1, 2017	July 1, 2018
Number	17	14
Average Age	49.3	50.4
Average Service	12.8	14.6
Average Pay	\$ 47,159	\$ 50,106
ATU/Drivers	July 1, 2017	July 1, 2018
Number	296	264
Average Age	53.2	53.8
Average Service	15.3	16.0
Average Pay	\$ 56,363	\$ 59,536
IBEW/Mechanics	July 1, 2017	July 1, 2018
Number	127	112
Average Age	50.6	50.8
Average Service	19.5	19.2
Average Pay	\$ 59,234	\$ 61,062
Total	July 1, 2017	July 1, 2018
Number	513	462
Average Age	52.0	52.5
Average Service	16.2	16.4
Average Pay	\$ 59,043	\$ 61,388

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

Summary of Participant Data

Deferred Participants

Terminated Vested	July 1, 2017	July 1, 2018
Number	214	230
Average Age	53.7	53.9
Average Annual Benefit	\$ 7,596	\$ 8,917

In-Pay Participants

Service Retired	July 1, 2017	July 1, 2018
Number	721	746
Average Age	69.9	70.2
Average Annual Benefit	\$ 22,253	\$ 22,618
Beneficiaries	July 1, 2017	July 1, 2018
Number	145	149
Average Age	71.0	71.3
Average Annual Benefit	\$ 9,962	\$ 10,001
Disabled	July 1, 2017	July 1, 2018
Number	86	80
Average Age	68.9	70.0
Average Annual Benefit	\$ 9,682	\$ 9,905
Total	July 1, 2017	July 1, 2018
Number	952	975
Average Age	70.0	70.3
Average Annual Benefit	\$ 19,245	\$ 19,647

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

Data Summary as of July 1, 2018

Active Participants	<u>Non-Contract/Administrative</u>			ATU/ Clerical	ATU/ Drivers	IBEW/ Mechanics	Total
	Non-PEPRA	PEPRA	Sub-Total				
Number	55	17	72	14	264	112	462
Average Age	51.6	46.6	50.5	50.4	53.8	50.8	52.5
Average Service	17.1	4.4	14.1	14.6	16.0	19.2	16.4
Average Pay	\$72,966	\$64,128	\$70,879	\$50,106	\$59,536	\$61,062	\$61,388

Inactive Participants	Non-Contract/Administrative			ATU/ Clerical	ATU/ Drivers	IBEW/ Mechanics	Total
	Non-PEPRA	PEPRA	Sub-Total				
Service Retired							
Number	122	n/a	122	33	484	107	746
Average Age	68.5	n/a	68.5	71.8	70.5	70.0	70.2
Average Annual Benefit	\$37,232	n/a	\$37,232	\$13,137	\$19,734	\$21,921	\$22,618
Beneficiaries							
Number	30	n/a	30	3	89	27	149
Average Age	67.7	n/a	67.7	72.2	72.6	71.1	71.3
Average Annual Benefit	\$18,776	n/a	\$18,776	\$3,146	\$8,129	\$7,186	\$10,001
Disabled							
Number	2	n/a	2	3	67	8	80
Average Age	68.7	n/a	68.7	79.9	69.7	69.0	70.0
Average Annual Benefit	\$9,133	n/a	\$9,133	\$6,102	\$9,746	\$12,855	\$9,905
Terminated Vested							
Number	24	n/a	24	13	142	51	230
Average Age	51.0	n/a	51.0	54.7	54.3	54.2	53.9
Average Annual Benefit	\$19,889	n/a	\$19,889	\$4,697	\$8,118	\$7,053	\$8,917

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

**Status Reconciliation - All Divisions
Changes in Plan Membership as of July 1, 2018**

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2017	513	214	86	721	145	1,679
New Entrants	8					8
Rehires						0
Disabilities	(1)		1			0
Retirements/ Domestic Relations Order (DRO)	(32)	(12)		44	5	5
Vested Terminations	(24)	28	(3)	(1)		0
Died, with Beneficiaries' Benefit Payable			(1)	(4)	5	0
Transfers						0
Died, without Beneficiary, and Other Terminations	(2)		(3)	(14)	(6)	(25)
Beneficiary Deaths						0
Data Corrections						0
Total Change	(51)	16	(6)	25	4	(12)
Participant count as of July 1, 2018	462	230	80	746	149	1,667

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

**Status Reconciliation - Non-Contract/Administrative¹
Changes in Plan Membership as of July 1, 2018**

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2017	73	21	2	120	29	245
New Entrants	8					8
Rehires						0
Disabilities						0
Retirements/ Domestic Relations Order (DRO)	(5)	(2)		7	1	1
Vested Terminations	(5)	5				0
Died, with Beneficiaries' Benefit Payable				(2)	2	0
Transfers	1					1
Died, without Beneficiary, and Other Terminations				(2)	(2)	(4)
Beneficiary Deaths						0
Data Corrections				(1)		(1)
Total Change	(1)	3	0	2	1	5
Participant count as of July 1, 2018	72	24	2	122	30	250

¹ Includes 17 active individuals participating in PEPRA.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

**Status Reconciliation - Clerical
Changes in Plan Membership as of July 1, 2018**

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2017	17	12	3	32	3	67
New Entrants						0
Rehires						0
Disabilities						0
Retirements/ Domestic Relations Order (DRO)	(1)	(1)		2		0
Vested Terminations	(2)	2				0
Died, with Beneficiaries' Benefit Payable						0
Transfers						0
Died, without Beneficiary, and Other Terminations						0
Beneficiary Deaths						0
Data Corrections				(1)		(1)
Total Change	(3)	1	0	1	0	(1)
Participant count as of July 1, 2018	14	13	3	33	3	66

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

**Status Reconciliation - ATU/Drivers
Changes in Plan Membership as of July 1, 2018**

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2017	296	133	71	471	91	1,062
New Entrants						0
Rehires						0
Disabilities	(1)		1			0
Retirements/ Domestic Relations Order (DRO)	(15)	(7)		22	2	2
Vested Terminations	(14)	16	(2)			0
Died, with Beneficiaries' Benefit Payable						0
Transfers	(1)					(1)
Died, without Beneficiary, and Other Terminations	(1)		(3)	(12)	(4)	(20)
Beneficiary Deaths						0
Data Corrections				3		3
Total Change	(32)	9	(4)	13	(2)	(16)
Participant count as of July 1, 2018	264	142	67	484	89	1,046

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

**Status Reconciliation - IBEW/Mechanics
Changes in Plan Membership as of July 1, 2018**

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2017	127	48	10	98	22	305
New Entrants						0
Rehires						0
Disabilities						0
Retirements/ Domestic Relations Order (DRO)	(11)	(2)		13	2	2
Vested Terminations	(3)	5	(1)	(1)		0
Died, with Beneficiaries' Benefit Payable			(1)	(2)	3	0
Transfers						0
Died, without Beneficiary, and Other Terminations	(1)					(1)
Beneficiary Deaths						0
Data Corrections				(1)		(1)
Total Change	(15)	3	(2)	9	5	0
Participant count as of July 1, 2018	112	51	8	107	27	305

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - Non-Contract/Administrative ¹ (Counts) As of July 1, 2018													
Age	Service												Total
	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	1	1	0	1	0	1	2	0	0	0	0	0	6
35 to 39	0	0	0	0	2	4	2	0	0	0	0	0	8
40 to 44	0	0	0	0	2	1	2	1	2	0	0	0	8
45 to 49	0	0	0	1	1	4	1	2	1	0	0	0	10
50 to 54	0	0	0	1	1	1	1	0	1	1	2	0	8
55 to 59	0	1	0	1	1	2	5	3	3	1	1	1	19
60 to 64	0	0	0	0	0	3	2	1	2	2	1	2	13
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	2	0	4	7	16	15	7	9	4	4	3	72

¹ Includes 17 active individuals participating in PEPRA.

Age / Service Distribution Of Active Participants - Non-Contract/Administrative ¹ (Average Salary) As of July 1, 2018													
Age	Service												Total
	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	\$0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	\$0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	\$0
30 to 34	47,008	57,013	0	57,886	0	60,008	64,946	0	0	0	0	0	\$58,635
35 to 39	0	0	0	0	75,001	61,512	73,651	0	0	0	0	0	\$67,919
40 to 44	0	0	0	0	66,787	76,288	53,882	93,502	73,838	0	0	0	\$69,851
45 to 49	0	0	0	75,118	44,387	66,916	69,945	66,515	62,408	0	0	0	\$65,255
50 to 54	0	0	0	57,886	71,445	68,349	64,260	0	51,722	62,178	94,021	0	\$70,485
55 to 59	0	73,965	0	39,437	45,510	71,160	71,952	79,357	87,639	56,732	73,452	125,008	\$74,588
60 to 64	0	0	0	0	0	69,261	61,945	102,129	88,045	72,146	104,467	78,526	\$78,131
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	\$0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	\$0
Total	\$47,008	\$65,489	\$0	\$57,582	\$63,560	\$66,779	\$66,854	\$80,962	\$77,868	\$65,800	\$91,490	\$94,020	\$70,879

¹ Includes 17 active individuals participating in PEPRA.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - ATU/Clerical (Counts)													
As of July 1, 2018													
Age	Service												Total
	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	2	0	0	0	0	0	0	2
35 to 39	0	0	0	0	0	0	1	0	0	0	0	0	1
40 to 44	0	0	0	0	0	2	0	0	0	0	0	0	2
45 to 49	0	0	0	0	0	1	0	0	0	0	0	0	1
50 to 54	0	0	0	0	0	1	0	1	0	0	0	0	2
55 to 59	0	0	0	0	0	0	1	1	1	0	0	0	3
60 to 64	0	0	0	0	0	0	0	0	0	1	0	1	2
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	6	3	2	1	1	0	1	14

Age / Service Distribution Of Active Participants - ATU/Clerical (Average Salary)													
As of July 1, 2018													
Age	Service												Total
	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	\$0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	\$0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	\$0
30 to 34	0	0	0	0	0	45,652	0	0	0	0	0	0	\$45,652
35 to 39	0	0	0	0	0	0	43,468	0	0	0	0	0	\$43,468
40 to 44	0	0	0	0	0	59,208	0	0	0	0	0	0	\$59,208
45 to 49	0	0	0	0	0	42,504	0	0	0	0	0	0	\$42,504
50 to 54	0	0	0	0	0	44,075	0	42,504	0	0	0	0	\$43,290
55 to 59	0	0	0	0	0	0	57,939	58,513	60,459	0	0	0	\$58,971
60 to 64	0	0	0	0	0	0	0	0	0	42,776	0	50,026	\$46,401
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	\$0
70 & up	0	0	0	0	0	0	49,505	0	0	0	0	0	\$49,505
Total	\$0	\$0	\$0	\$0	\$0	\$49,383	\$50,304	\$50,509	\$60,459	\$42,776	\$0	\$50,026	\$50,106

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - ATU/Drivers (Counts)													
As of July 1, 2018													
Age	Service												Total
	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	5	2	0	0	0	0	0	7
35 to 39	0	0	0	0	0	7	9	1	0	0	0	0	17
40 to 44	0	0	0	0	0	4	14	3	1	0	0	0	22
45 to 49	0	0	0	0	0	6	13	11	2	0	0	0	32
50 to 54	0	0	0	0	0	16	14	10	4	4	2	0	50
55 to 59	0	0	0	0	0	17	10	11	15	12	3	0	68
60 to 64	0	0	0	0	0	7	13	8	9	5	2	3	47
65 to 69	0	0	0	0	0	2	4	2	2	5	2	1	18
70 & up	0	0	0	0	0	0	0	1	0	0	1	1	3
Total	0	0	0	0	0	64	79	47	33	26	10	5	264

Age / Service Distribution Of Active Participants - ATU/Drivers (Average Salary)													
As of July 1, 2018													
Age	Service												Total
	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	\$0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	\$0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	\$0
30 to 34	0	0	0	0	0	47,734	58,467	0	0	0	0	0	\$50,801
35 to 39	0	0	0	0	0	47,098	56,768	68,213	0	0	0	0	\$53,460
40 to 44	0	0	0	0	0	47,879	58,048	71,622	67,032	0	0	0	\$58,458
45 to 49	0	0	0	0	0	52,935	62,193	63,040	65,185	0	0	0	\$60,936
50 to 54	0	0	0	0	0	54,099	60,641	59,522	64,104	63,847	61,796	0	\$58,904
55 to 59	0	0	0	0	0	51,390	64,289	63,690	63,294	62,253	58,919	0	\$60,152
60 to 64	0	0	0	0	0	49,303	58,365	58,622	64,025	63,723	76,882	66,585	\$60,026
65 to 69	0	0	0	0	0	52,524	59,544	63,996	82,145	66,686	68,497	71,052	\$65,388
70 & up	0	0	0	0	0	0	0	55,044	0	0	70,668	57,658	\$61,123
Total	\$0	\$0	\$0	\$0	\$0	\$51,045	\$59,972	\$62,220	\$64,962	\$63,633	\$66,178	\$65,693	\$59,536

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - IBEW/Mechanics (Counts) As of July 1, 2018													
Age	Service												Total
	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	2	1	0	0	0	0	0	3
30 to 34	0	0	0	0	0	6	10	0	0	0	0	0	16
35 to 39	0	0	0	0	0	2	2	2	0	0	0	0	6
40 to 44	0	0	0	0	0	0	0	3	5	0	0	0	8
45 to 49	0	0	0	0	0	2	0	2	2	4	0	0	10
50 to 54	0	0	0	0	0	1	4	5	2	3	0	0	15
55 to 59	0	0	0	0	0	0	5	7	5	7	2	2	28
60 to 64	0	0	0	0	0	2	3	2	1	7	2	2	19
65 to 69	0	0	0	0	0	0	2	2	0	1	0	1	6
70 & up	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	15	27	24	15	22	4	5	112

Age / Service Distribution Of Active Participants - IBEW/Mechanics (Average Salary) As of July 1, 2018													
Age	Service												Total
	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	\$0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	\$0
25 to 29	0	0	0	0	0	53,030	72,240	0	0	0	0	0	\$59,433
30 to 34	0	0	0	0	0	47,074	68,738	0	0	0	0	0	\$60,614
35 to 39	0	0	0	0	0	50,665	72,240	72,240	0	0	0	0	\$65,048
40 to 44	0	0	0	0	0	0	0	69,696	53,625	0	0	0	\$59,652
45 to 49	0	0	0	0	0	68,424	0	56,803	68,424	68,424	0	0	\$66,100
50 to 54	0	0	0	0	0	33,820	41,517	62,789	68,424	61,820	0	0	\$55,742
55 to 59	0	0	0	0	0	0	64,461	62,396	61,262	67,879	72,240	72,240	\$65,339
60 to 64	0	0	0	0	0	49,214	48,855	68,424	46,892	67,774	64,608	72,240	\$61,939
65 to 69	0	0	0	0	0	0	37,593	48,612	0	41,366	0	72,240	\$47,669
70 & up	0	0	0	0	0	0	0	33,820	0	0	0	0	\$33,820
Total	\$0	\$0	\$0	\$0	\$0	\$50,595	\$59,786	\$61,907	\$59,668	\$65,913	\$68,424	\$72,240	\$61,062

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Method

For the Retirement Plans of San Diego Transit Corporation (the Plan), the actuarial funding method used to determine the normal cost and the Unfunded Actuarial Liability is the Individual Entry Age to Final Decrement cost method. This method is consistent with the method required under the GASB accounting statements.

Under this cost method, the normal cost is calculated as the amount necessary to fund Members' benefits as a level percentage of total payroll over their projected working lives. At each valuation date, the Actuarial Liability is equal to the difference between the liability for the Members' total projected benefit and the present value of future normal cost contributions. The total normal cost is calculated as the sum of the individual normal costs for each active member (Individual Entry Age Method).

The excess of the Actuarial Liability over the smoothed value of Plan assets is the Unfunded Actuarial Liability (UAL); the initial Unfunded Actuarial Liability as of July 1, 2012 is amortized in level dollar payments over a 25-year period ending June 30, 2037.

Changes in the Unfunded Actuarial Liability due to Plan amendments, changes in actuarial assumptions or methods will be amortized in level dollar payments over a separate period, of length from five to 30 years depending on the source. The UAL resulting from the assumption changes effective with the July 1, 2016 actuarial valuation is amortized in level dollar payments over a 21-year period, ending June 30, 2037. The decrease in UAL resulting from the recent method change with the July 1, 2018 actuarial valuation is amortized in level dollar payments over a 19-year period, also ending June 30, 2037.

Changes in the Unfunded Actuarial Liability due to actuarial gains and losses are amortized over closed separate 15-year periods in level dollar payments. Though the Retirement Board may make exceptions, in general, the intent is to follow the guidelines published by the California Actuarial Advisory Panel and the Government Finance Officers' Association.

The total Plan cost is the sum of the normal cost, assumed administrative expenses, and the amortization of the Unfunded Actuarial Liability. The employer is responsible for contributing the difference between the total cost and member contributions.

Actuarial Value of Plan Assets

The Actuarial Value of Assets (AVA) is determined using an adjusted market value. Under this method, a preliminary AVA is determined as the Market Value of Assets on the valuation date less a decreasing fraction (4/5, 3/5, 2/5, 1/5) of the gain or loss in each of the preceding four years. The gain or loss for a given year is the difference between the actual investment return (on a market-to-market basis) and the assumed investment return based on the Market Value of Assets at the beginning of the year and actual cash flow. The AVA is adjusted, if necessary, to remain between 80% and 120% of the market value.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Assumptions

The economic and demographic assumptions are based on the experience study covering the period from July 1, 2010 through June 30, 2015 that was adopted at the Budget Development Meeting in April 2016. The rationale for all the assumptions can also be found in the experience study report dated April 2016. All assets and liabilities are computed as of the valuation date, July 1, 2018.

1. Rate of Return

The annual rate of return on all Plan assets is assumed to be 7.00%, net of investment expenses.

2. Cost of Living

The cost of living as measured by the Consumer Price Index (CPI) will increase at the rate of 2.75% per year.

3. Post Retirement COLA

Benefits for Non-Contract retirees assumed to increase after retirement at the rate of 2.0% per year.

4. Pay for Benefits

In most cases, pay for benefits is based on a two-year average of each Participant's pay during the two years preceding the valuation date. Special procedures are used in some cases, as noted for full-time Participants.

<u>Unit</u>	<u>Pay for Continuing Participants</u>	<u>Pay for New Participants</u>
Drivers	The larger of gross pay or 1,800 hours times the member's hourly rate	
Mechanics	2,150 hours times the Participant's hourly rate	
Clerical	Gross pay	The larger of gross pay or 2,100 hours times the Participant's hourly rate
Non-Contract	Gross pay	The larger of gross pay or 2,080 hours times the Participant's hourly rate

Part-time Participants are assumed to work 1,040 hours in the calculations shown above.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

5. Merit Pay (Longevity and Promotion) Increases

Assumed pay increases for active Participants consist of increases due to inflation (cost-of-living adjustments) and those due to longevity and promotion. Based on an analysis of pay levels and service, we developed the following assumptions:

Longevity and Promotion Increases				
Service	ATU Drivers	IBEW Mechanics	Clerical	Non-Contract
0	6.00%	7.50%	10.00%	3.50%
1	6.00%	7.50%	10.00%	3.50%
2	6.00%	7.50%	0.25%	3.50%
3	6.00%	7.50%	0.25%	3.50%
4	6.00%	7.50%	0.25%	3.50%
5	6.00%	7.50%	0.25%	3.50%
6	6.00%	7.50%	0.25%	3.50%
7	6.00%	7.50%	0.25%	3.50%
8	0.50%	7.50%	0.25%	3.50%
9	0.50%	7.50%	0.25%	3.50%
10+	0.50%	0.50%	0.25%	0.25%

In addition, annual adjustments in pay due to inflation will equal the CPI, for an additional annual increase of 2.75%. The combination of rates is compounded rather than using an additive method.

6. Active Participant Mortality

Rates of mortality for all active Participants are given by the Combined Healthy Retired Pensioners (RP) 2000 Tables published by the Society of Actuaries using male's rates for both male and female members with generational improvements from the base year 2010 using Scale MP-2015.

7. Healthy Inactive Participant and Beneficiary Mortality

Rates of mortality for healthy inactive Participants, spouses, and surviving spouses are given by the Combined Healthy Retired Pensioners (RP) 2000 Tables with Blue Collar Adjustments for males and no collar adjustments for females published by the Society of Actuaries with generational improvements from the base year 2010 using Scale MP-2015.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

8. Disabled Participant Mortality

Rates of mortality for male disabled members are given by the Retired Pensioners (RP) 2014 Tables for Disabled Annuitants. Rates of mortality for female disabled members are given by Retired Pensioners (RP) 2000 Combined Healthy Table published by the Society of Actuaries, with future mortality improvements to 2010, the midpoint of the experience used for the mortality study, using projection scale MP-2015.

9. Mortality Improvement

For active and healthy inactive Participants, mortality is assumed to improve in future years in accordance with the MP-2015 generational improvement tables. For disabled Participants no explicit provision for mortality improvement is used.

10. Disability

Among ATU Drivers and IBEW Mechanics, 0.50% of Participants eligible for a disability benefit are assumed to become disabled each year. Disabled Participants are assumed not to return to active service. No disability is assumed for Clerical and Non-Contract Participants.

11. Plan Expenses

Plan administrative expenses of \$274,497 are included in the annual cost calculated, increasing each year with the assumed rate of inflation.

12. Family Composition

100% of active Participants are assumed married. Male spouses are assumed four years older than their wives are.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

13. Service Retirement

Retirement is assumed to occur in accordance with the rates shown in the following table:

Age	ATU Drivers	IBEW Mechanics	Clerical/Non Contract
52 ¹	0%	0%	10%
53-54	0%	0%	10%
55-56	10%	5%	10%
57-59	10%	5%	15%
60-61	15%	10%	15%
62	25%	20%	40%
63-64	25%	20%	30%
65	40%	40%	30%
66-69	30%	30%	30%
70 and older	100%	100%	100%

¹Non-Contract retirement assumption at age 52 is for PEPPRA participants only, 0% otherwise.

14. Termination

Service-based or age-based termination rates are shown below by group. For all participants, termination rates are assumed zero once a participant is eligible for retirement.

Termination for ATU Driver, IBEW Mechanic, and Non-Contract Participants are assumed to occur in accordance with the service-based rates shown in the following table:

Service	ATU Driver	IBEW Mechanic	Non- Contract
0	25.0%	25.0%	10.0%
1	25.0%	25.0%	10.0%
2	12.0%	12.0%	10.0%
3	12.0%	12.0%	10.0%
4 – 9	5.0%	5.0%	10.0%
10 +	2.0%	2.0%	3.0%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Termination for Clerical Participants is assumed to occur in accordance with the age-based rates shown in the following table:

Clerical	
Age	Rate
20-24	25.0%
25-29	11.0%
30-34	13.0%
35-39	17.0%
40-44	12.0%
45-49	8.0%
50 and older	5.0%

15. Employment Status

No future transfers among Participant groups are assumed.

16. Changes in Actuarial Methods and Assumptions since the Prior Valuation

Valuation salary changed from using the most recent pensionable pay preceding the valuation date to a two-year average of pay from the two years preceding the valuation date. This method change was done to mitigate fluctuations in overtime pay year over year which better reflects future salary expectations.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

A. Definitions

Average Monthly

Final Earnings: Average Monthly Final Earnings means the average monthly compensation during the consecutive months that produces a Participant's highest average compensation, computed by dividing the Compensation Earnable for such period by the number of months in such period.

- For ATU, IBEW, and Clerical Participants, the averaging period is thirty-six (36) consecutive months.
- For Non-Contract Participants, the number of consecutive months is twelve (12).
- Public Employees' Pension Reform Act (PEPRA): For Non-Contract Participants hired on and after July 1, 2013, the number of consecutive months is thirty-six (36).
- Those months during which the Participant did not receive compensation from the Employer equivalent to one-half the regular working days will be excluded. The average is then based on that portion of the averaging period remaining after the excluded months.
- PEPRA: It is possible that exclusions for months in which the Participant did not work full-time may be subject to change.
- Use the total of the Periodic Pensionable Earnings from the highest three calendar (payroll) years. These years need not be consecutive years. There shall be no skips and drops within the three calendar (payroll) years. Add the total Periodic Pensionable Earnings to Terminal Earnings and then divide by 36.

Compensation: Compensation means the remuneration for services paid by the Employer. The monetary value of board, lodgings, fuel, car allowance, laundry, or other advantages furnished to a Participant is not included.

PEPRA: For Participants joining the Plan on or after July 1, 2013, only base compensation up to the Social Security-integrated PEPRA compensation limit (\$117,020 for 2015 and 2016) will count for computing Plan benefits and employee and employer contributions; in particular, all or most overtime will be excluded.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Compensation

Earnable:

Compensation Earnable is the compensation actually received by a Participant during a period of employment. For ATU and Non-Contract Participants, any bonus or retroactive wage increases are treated as compensation when received rather than when the services are performed. For IBEW Participants, Compensation Earnable is limited to 2,140 hours of straight time equivalent hours in any 12-month period.

In addition, the value of any vacation or sick leave accumulated but unused when benefits begin is excluded from Compensation Earnable and from Average Monthly Final Earnings.

PEPRA: For Participants joining the Plan on and after July 1, 2013, it is likely that some sources of compensation, such as those underlined above, may be excluded from benefit and contribution computations for these new Participants.

Credited Years

Of Service:

In general, Credited Years of Service is continuous service with the San Diego Transit Corporation and its predecessor company from the last date of employment through the date of retirement, death, disability, or other termination of service.

As of November 10, 1997, part-time ATU employees receive one Credited Year of Service for every 2,080 hours of service worked as a part-time employee after December 1, 1990.

For Non-Contract Participants, Credited Years of Service includes any year commencing on or after July 1, 1982 in which the Participant completes at least 1,000 Hours of Service. In addition, Credited Years of Service for Non-Contract Participants will exclude any period of service after the Participant's Normal Retirement Date.

A Participant who is disabled and recovers from disability and reenters the Plan as an active Participant will not receive Credited Years of Service for the period of disability.

B. Membership

All full-time and certain part-time IBEW employees hired prior to May 1, 2011 will become Participants on their date of hire. IBEW employees hired on and after May 1, 2011 will become Participants of a separate defined contribution plan and will not be Participants of this Plan.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

All full-time and certain part-time ATU employees hired prior to November 1, 2012 will become Participants on their date of hire. ATU employees hired on and after November 1, 2012 will become Participants of a separate defined contribution plan and will not be Participants of this Plan.

All Non-Contract employees become Participants after earning one Credited Year of Service.

PEPRA: Any Participant joining the Plan for the first time on or after January 1, 2013 is a New Participant.

C. Retirement Benefit

Eligibility: Clerical and Non-Contract Participants are eligible for normal service retirement upon attaining age 63 and completing five or more Credited Years of Service and eligible for early service retirement upon attaining age 53 and completing five or more Credited Years of Service.

ATU and IBEW Participants are eligible for normal service retirement upon attaining age 63 (65 for IBEW) and completing five or more Credited Years of Service and eligible for early service retirement upon attaining age 55 and completing five or more Credited Years of Service.

PEPRA: New Participants are eligible to retire upon attaining age 52 and completing five or more Credited Years of Service.

Benefit Amount: The monthly service retirement benefit is the Participant's Average Monthly Final Earnings multiplied by the percentage figures shown in the tables below.

- For ATU and Clerical Participants terminating prior to October 1, 2005, ATU/Clerical Table A-1 is used; for ATU and Clerical Participants terminating on and after October 1, 2005, ATU/Clerical Table A-2 is used. Prior to July 1, 2006, the benefit from the table is limited to 60%.
- For IBEW Participants terminating prior to January 1, 2007, IBEW Table A-1 is used; for IBEW Participants terminating on and after January 1, 2007, IBEW Table A-2 is used.
- For Non-Contract participants terminating prior to July 1, 2000, Non-Contract Table A-1 is used; for Non-Contract participants terminating on and after July 1, 2000, Non-Contract Table A-2 is used.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

For Participants with fractions of a year of age or service, the Participant's age or service will be rounded to the completed quarter year, and the percentage multiplier will be computed from the table using interpolation.

ATU participants who are active from November 10, 1997 to December 31, 1998 and from November 10, 1997 to December 31, 1999 receive an additional 2.5% and 2.5%, respectively. However, the multiplier from Table A-1 or A-2, as augmented by the additional 2.5% increments, is still limited to 60% prior to July 1, 2006 and 70% thereafter.

Non-Contract Participants who are active as of July 1, 1994 and July 1, 1995 receive an additional 6% and 2%, respectively. However, the benefit multiplier, as augmented by the additional 6% and 2% increments, is still limited to 60% under Table A-1 and 70% under Table A-2.

A Participant who is disabled and recovers from disability and reenters the Plan as an active Participant will have this benefit amount reduced by the actuarial equivalent of the benefits paid during the period of disability.

PEPRA: For New Participants, the benefit multiplier will be 1% at age 52, increasing by 0.1% for each year of age to 2.5% at 67. In between exact ages, the multiplier will increase by 0.025% for each quarter year increase in age.

Form of Benefit: The normal form of benefit is an annuity payable for the life of the Participant, with no continuation of benefits to a beneficiary after death. The retirement benefit will be paid as a 50% Joint and Survivor benefit actuarially equivalent to the normal form for participants who have been married for at least one year. Otherwise, the normal form will be paid.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant (if any) upon death.

The ATU and IBEW benefits have been amended from time to time to remove the actuarial reduction in benefits for previously retired Participants whose spouses have died before them. However, these adjustments are retroactive only, and they do not apply to benefits paid to currently active Participants.

ATU and IBEW Participants may elect an Alternative Retirement Formula if they terminate employment before early retirement but after 10 Credited Years of Service or were hired between April 1, 1968 and March 31, 1971

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

and desire to retire at their Normal Retirement Date. These Participants are eligible for a deferred benefit commencing at age 65 based on Table B.

Tables A-1 and A-2 for each employee group, as well as Table B, can be found at the end of Appendix C herein.

D. Disability Retirement Benefit

Eligibility: A Participant is eligible for a Disability Retirement Benefit if:

- The Participant has earned five Credited Years of Service (ATU, IBEW, Clerical and Non-Contract), and
- The Participant is unable to perform the duties of his or her job with the Corporation, cannot be transferred to another job with the Corporation, and has submitted satisfactory medical evidence of permanent disqualification from his or her job.

Benefit Amount: The Disability Retirement Benefit is a monthly benefit equal to the lesser of:

1. 1.5% times Credited Years of Service at Disability Retirement Date times the Participant's Average Monthly Final Earnings; and,
2. The Normal Retirement Benefit calculated using the Average Monthly Final Earnings at Disability Retirement Date and the projected Credited Years of Service to Normal Retirement Date.

The benefit is reduced by 50% of the amount of any earned income from other sources in excess of 50% of the Participant's Average Monthly Earnings during the 12 months prior to disability; this reduction applies to all IBEW and Non-Contract Participants, but only to ATU Participants hired after June 30, 1983.

PEPRA: Note that the Disability Retirement Benefit for New Participants is based on the new definition of Compensation, which is subject to a maximum and excludes overtime.

Form of Benefit: The normal form of benefit is an annuity commencing at disability and payable for the life of the Participant, with no continuation of benefits to a beneficiary after death. The Disability Retirement Benefit will be paid as a 50% Joint and Survivor benefit actuarially equivalent to the normal form

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

for participants who have been married for at least one year. Otherwise, the normal form will be paid.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant (if any) upon death.

The ATU and IBEW benefits have been amended from time to time to remove the actuarial reduction in benefits for previously retired Participants whose spouses have died before them. However, these adjustments are retroactive only, and they do not apply to benefits paid to currently active Participants.

E. Pre-Retirement Death Benefit

Eligibility: A vested Participant is entitled to elect coverage of a pre-retirement spouse's benefit.

For years, a Participant is age 55 or under, the cost of the coverage is paid by the Company. For the years, a Participant is over age 55 and has elected this coverage, the cost of this coverage is paid by the Participant in the form of a reduced benefit upon retirement. The reduction is 3.5¢ per \$10 of monthly benefit for each year of coverage.

There is no cost for this benefit for any ATU, Clerical, or Non-Contract Participant whose monthly benefit commences after November 27, 1990. There is no cost for this benefit for any IBEW Participant whose monthly benefit commences after December 3, 1996.

In order for the spouse to be eligible for this benefit, the participant must be married to the spouse for one year prior to death, unless death occurs from accidental causes.

Benefit Amount: For a Participant who is eligible to retire at death, the pre-retirement death benefit is 50% of the benefit that would have been payable had the Participant retired immediately prior to his or her death and elected to receive a 50% Joint and Survivor annuity.

For a Participant who dies before being eligible to retire, the pre-retirement death benefit is 50% of the benefit that would have been payable had the Participant survived to his or her earliest retirement date, retired, elected to receive a 50% Joint and Survivor annuity, and died immediately.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

PEPRA: Note that the Pre-Retirement Death Benefit for New Participants is based on the new definition of compensation, which is subject to a maximum and excludes overtime.

Form of Benefit: For a Participant who is eligible to retire at death, the death benefit begins when the Participant dies and continues for the life of the surviving spouse.

For a Participant who dies before being eligible to retire, the death benefit begins when the Participant would have reached his or her earliest retirement date and continues for the life of the surviving spouse.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant or spouse (if any) upon death.

F. Termination Benefit

Eligibility: A Participant is eligible for a termination benefit after earning five Credited Years of Service.

Benefit Amount: The termination benefit is computed in the same manner as the Normal Retirement Benefit, but it is based on Credited Years of Service and Average Monthly Final Earnings on the date of termination.

Effective July 1, 2000, Non-Contract participants who terminate prior to eligibility for early service retirement will have their benefits actuarially reduced if they begin receiving benefits before Normal Retirement Age.

PEPRA: For New Participants, the benefit multiplier will be 1% at age 52, increasing by 0.1% for each year of age to 2.5% at 67. In between exact ages, the multiplier will increase by 0.025% for each quarter year increase in age. Note also that the Termination Benefit for New Participants is based on the new definition of compensation, which is subject to a maximum and excludes overtime.

We assume a refund of employee contributions, with no interest, if termination occurs before five years of service.

Form of Benefit: The Participant will be eligible to commence benefits at the later of termination and earliest retirement eligibility age.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

The normal form of benefit is an annuity payable for the life of the Participant, with no continuation of benefits to a beneficiary after death. The retirement benefit will be paid as a 50% Joint and Survivor benefit actuarially equivalent to the normal form for participants who have been married for at least one year. Otherwise, the normal form will be paid.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant (if any) upon death.

The ATU and IBEW benefits have been amended from time to time to remove the actuarial reduction in benefits for previously retired Participants whose spouses have died before them. However, these adjustments are retroactive only, and they do not apply to benefits paid to currently active Participants.

G. Cost-of-Living Adjustments

Eligibility: An annual Cost-of-Living Adjustment (COLA) has been added for Non-Contract Participants who were actively employed on or after June 30, 1999. One time only (ad hoc) COLAs were granted to ATU and IBEW Participants in 1991 and 1992.

Benefit Amount: For Non-Contract Participants, the cumulative COLA is the increase in the Consumer Price Index (CPI) since the Participant began receiving benefits.

The COLA is subject to the following limits for Non-Contract Participants:

- The cumulative COLA cannot exceed 2% compounded annually for all years since the Participant's benefits began;
- The annual COLA is zero if the CPI increase in that year is less than 1%;
- The annual COLA is limited to 6% of the initial benefit amount in any year; and,
- A Participant's benefit cannot be reduced below the benefit level when payments commenced.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

H. Voluntary Early Retirement Program

The Plan provided enhanced benefits to ATU participants who voluntarily elected early retirement during the window period from July 1, 1998 through February 20, 1998.

The Plan provided enhanced benefits to certain IBEW participants who voluntarily elected early retirement during the window period from July 1, 2004 through December 31, 2004.

I. DROP Program

The Plan provided DROP benefits to a number of ATU participants who elected retirement from July 1, 2002 through December 31, 2002.

J. Funding

- IBEW members contributed 3% of compensation to the Plan in April 2013 and 4% of compensation in April 2014. The contribution rate increased to 6% of compensation in April 2015 and increased to 8% of compensation in April 2016.
- ATU drivers and clerical members contributed 3% of compensation in July 2013. The contribution rate increased to 5% of compensation in July 2014, to 6% in July 2015, and to 7% of compensation in July 2016. The contribution rate will increase to 8% of compensation in December 2017.
- Non-contract members hired before July 1, 2013 contributed 2% of compensation to the Plan prior to January 2014. The Non-contract member contributions increased to 4% of compensation in January 2014, to 6% of in January 2015, and will increase to 7% of compensation on January 1, 2016. As of January 1, 2017, the member contribution rate increased to 8% of compensation.
- PEPPRA: New Members must contribute half of the normal cost of the Plan, rounded to the nearest 0.25%. Currently, PEPPRA members are paying 6.25% of pay and the employer pays the remaining cost of the Plan.

The Corporation pays the actuarial cost of the Plan as reduced by Member contributions. Member contribution rates in the future may change in response to collective bargaining.

K. Changes in Plan Provisions since Prior Valuation

None

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

ATU/Clerical Table A-1: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement								
	55	56	57	58	59	60	61	62	63+
5	5.9%	6.3%	6.7%	7.2%	7.8%	8.3%	8.9%	9.5%	10.1%
6	7.1%	7.5%	8.1%	8.7%	9.3%	10.0%	10.7%	11.4%	12.1%
7	8.2%	8.8%	9.4%	10.1%	10.9%	11.7%	12.4%	13.3%	14.1%
8	9.4%	10.1%	10.8%	11.6%	12.4%	13.3%	14.2%	15.1%	16.1%
9	10.6%	11.3%	12.1%	13.0%	14.0%	15.0%	16.0%	17.0%	18.1%
10	11.8%	12.6%	13.5%	14.4%	15.5%	16.7%	17.8%	18.9%	20.1%
11	12.9%	13.8%	14.8%	15.9%	17.1%	18.3%	19.5%	20.8%	22.2%
12	14.1%	15.1%	16.2%	17.3%	18.6%	20.0%	21.3%	22.7%	24.2%
13	15.3%	16.3%	17.5%	18.8%	20.2%	21.7%	23.1%	24.6%	26.2%
14	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	24.9%	26.5%	28.2%
15	17.6%	18.9%	20.2%	21.7%	23.3%	25.0%	26.7%	28.4%	30.2%
16	18.8%	20.1%	21.5%	23.1%	24.8%	26.7%	28.4%	30.3%	32.2%
17	20.0%	21.4%	22.9%	24.5%	26.4%	28.3%	30.2%	32.2%	34.3%
18	21.2%	22.6%	24.2%	26.0%	27.9%	30.0%	32.0%	34.1%	36.3%
19	22.3%	23.9%	25.6%	27.4%	29.5%	31.7%	33.8%	36.0%	38.3%
20	23.5%	25.2%	26.9%	28.9%	31.0%	33.3%	35.5%	37.9%	40.3%
21	24.7%	26.4%	28.3%	30.3%	32.6%	35.0%	37.3%	39.7%	42.3%
22	25.9%	27.7%	29.6%	31.8%	34.1%	36.7%	39.1%	41.6%	44.3%
23	27.0%	28.9%	31.0%	33.2%	35.7%	38.3%	40.9%	43.5%	46.3%
24	28.2%	30.2%	32.3%	34.6%	37.2%	40.0%	42.6%	45.4%	48.4%
25	29.4%	31.4%	33.7%	36.1%	38.8%	41.7%	44.4%	47.3%	50.4%
26	30.6%	32.7%	35.0%	37.5%	40.3%	43.3%	46.2%	49.2%	52.4%
27	31.7%	34.0%	36.4%	39.0%	41.9%	45.0%	48.0%	51.1%	54.4%
28	32.9%	35.2%	37.7%	40.4%	43.4%	46.7%	49.8%	52.0%	56.4%
29	34.1%	36.5%	39.1%	41.9%	45.0%	48.3%	50.0%	55.0%	58.4%
30	35.3%	37.7%	40.4%	43.4%	46.5%	50.0%	51.0%	55.5%	60.0%
31	36.5%	39.0%	41.7%	44.8%	48.1%	51.0%	51.5%	56.0%	60.0%
32	37.6%	40.2%	43.1%	46.2%	49.6%	51.5%	52.0%	56.5%	60.0%
33	38.8%	41.5%	44.4%	47.6%	50.0%	52.0%	52.5%	57.0%	60.0%
34	40.0%	42.8%	45.8%	49.1%	51.0%	52.5%	53.0%	57.5%	60.0%
35 or more	41.2%	44.0%	47.1%	50.0%	51.5%	53.0%	53.5%	58.0%	60.0%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

ATU/Clerical Table A-2: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	Clerical										
	53	54	55	56	57	58	59	60	61	62	63+
5	8.71%	9.33%	10.00%	10.26%	10.52%	10.78%	11.05%	11.31%	11.57%	11.83%	12.09%
6	10.45%	11.20%	12.00%	12.31%	12.62%	12.94%	13.26%	13.57%	13.88%	14.20%	14.51%
7	12.19%	13.06%	14.00%	14.36%	14.73%	15.09%	15.47%	15.83%	16.20%	16.56%	16.93%
8	13.94%	14.93%	16.00%	16.42%	16.83%	17.25%	17.68%	18.10%	18.51%	18.93%	19.34%
9	15.68%	16.79%	18.00%	18.47%	18.94%	19.40%	19.89%	20.36%	20.83%	21.29%	21.76%
10	17.42%	18.66%	20.00%	20.52%	21.04%	21.56%	22.10%	22.62%	23.14%	23.66%	24.18%
11	19.16%	20.53%	22.00%	22.57%	23.14%	23.72%	24.31%	24.88%	25.45%	26.03%	26.60%
12	20.90%	22.39%	24.00%	24.62%	25.25%	25.87%	26.52%	27.14%	27.77%	28.39%	29.02%
13	22.65%	24.26%	26.00%	26.68%	27.35%	28.03%	28.73%	29.41%	30.08%	30.76%	31.43%
14	24.39%	26.12%	28.00%	28.73%	29.46%	30.18%	30.94%	31.67%	32.40%	33.12%	33.85%
15	26.13%	27.99%	30.00%	30.78%	31.56%	32.34%	33.15%	33.93%	34.71%	35.49%	36.27%
16	27.87%	29.86%	32.00%	32.83%	33.66%	34.50%	35.36%	36.19%	37.02%	37.86%	38.69%
17	29.61%	31.72%	34.00%	34.88%	35.77%	36.65%	37.57%	38.45%	39.34%	40.22%	41.11%
18	31.36%	33.59%	36.00%	36.94%	37.87%	38.81%	39.78%	40.72%	41.65%	42.59%	43.52%
19	33.10%	35.45%	38.00%	38.99%	39.98%	40.96%	41.99%	42.98%	43.97%	44.95%	45.94%
20	34.84%	37.32%	40.00%	41.04%	42.08%	43.12%	44.20%	45.24%	46.28%	47.32%	48.36%
21	36.58%	39.19%	42.00%	43.09%	44.18%	45.28%	46.41%	47.50%	48.59%	49.69%	50.78%
22	38.32%	41.05%	44.00%	45.14%	46.29%	47.43%	48.62%	49.76%	50.91%	52.05%	53.20%
23	40.07%	42.92%	46.00%	47.20%	48.39%	49.59%	50.83%	52.03%	53.22%	54.42%	55.61%
24	41.81%	44.78%	48.00%	49.25%	50.50%	51.74%	53.04%	54.29%	55.54%	56.78%	58.03%
25	43.55%	46.65%	50.00%	51.30%	52.60%	53.90%	55.25%	56.55%	57.85%	59.15%	60.45%
26	45.29%	48.52%	52.00%	53.35%	54.70%	56.06%	57.46%	58.81%	60.16%	61.52%	62.87%
27	47.03%	50.38%	54.00%	55.40%	56.81%	58.21%	59.67%	61.07%	62.48%	63.88%	65.29%
28	48.78%	52.25%	56.00%	57.46%	58.91%	60.37%	61.88%	63.34%	64.79%	66.25%	67.70%
29	50.52%	54.11%	58.00%	59.51%	61.02%	62.52%	64.09%	65.60%	67.11%	68.61%	70.00%
30	52.26%	55.98%	60.00%	61.56%	63.12%	64.68%	66.30%	67.86%	69.42%	70.00%	70.00%
31	54.00%	57.85%	62.00%	63.61%	65.22%	66.84%	68.51%	70.00%	70.00%	70.00%	70.00%
32	55.74%	59.71%	64.00%	65.66%	67.33%	68.99%	70.00%	70.00%	70.00%	70.00%	70.00%
33	57.49%	61.58%	66.00%	67.72%	69.43%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
34	59.23%	63.44%	68.00%	69.77%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
35 or more	60.97%	65.31%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

IBEW Table A-1: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	55	56	57	58	59	60	61	62	63	64	65+
5	5.2%	5.5%	5.9%	6.3%	6.7%	7.2%	7.8%	8.3%	8.9%	9.5%	10.1%
6	6.2%	6.6%	7.1%	7.5%	8.1%	8.7%	9.3%	10.0%	10.7%	11.4%	12.1%
7	7.2%	7.7%	8.2%	8.8%	9.4%	10.1%	10.9%	11.7%	12.4%	13.3%	14.1%
8	8.2%	8.8%	9.4%	10.1%	10.8%	11.6%	12.4%	13.3%	14.2%	15.1%	16.1%
9	9.3%	9.9%	10.6%	11.3%	12.1%	13.0%	14.0%	15.0%	16.0%	17.0%	18.1%
10	10.2%	11.0%	11.8%	12.6%	13.5%	14.4%	15.5%	16.7%	17.8%	18.9%	20.1%
11	11.2%	12.1%	12.9%	13.8%	14.8%	15.9%	17.1%	18.3%	19.5%	20.8%	22.2%
12	12.3%	13.2%	14.1%	15.1%	16.2%	17.3%	18.6%	20.0%	21.3%	22.7%	24.2%
13	13.3%	14.3%	15.3%	16.3%	17.5%	18.8%	20.2%	21.7%	23.1%	24.6%	26.2%
14	14.4%	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	24.9%	26.5%	28.2%
15	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	25.0%	26.7%	28.4%	30.2%
16	16.4%	17.6%	18.8%	20.1%	21.5%	23.1%	24.8%	26.7%	28.4%	30.3%	32.2%
17	17.5%	18.7%	20.0%	21.4%	22.9%	24.5%	26.4%	28.3%	30.2%	32.2%	34.3%
18	18.5%	19.8%	21.2%	22.6%	24.2%	26.0%	27.9%	30.0%	32.0%	34.1%	36.3%
19	19.6%	20.9%	22.3%	23.9%	25.6%	27.4%	29.5%	31.7%	33.8%	36.0%	38.3%
20	20.6%	22.0%	23.5%	25.2%	26.9%	28.9%	31.0%	33.3%	35.5%	37.9%	40.3%
21	21.6%	23.1%	24.7%	26.4%	28.3%	30.3%	32.6%	35.0%	37.3%	39.7%	42.3%
22	22.7%	24.2%	25.9%	27.7%	29.6%	31.8%	34.1%	36.7%	39.1%	41.6%	44.3%
23	23.7%	25.3%	27.0%	28.9%	31.0%	33.2%	35.7%	38.3%	40.9%	43.5%	46.3%
24	24.8%	26.4%	28.2%	30.2%	32.3%	34.6%	37.2%	40.0%	42.6%	45.4%	48.4%
25	25.8%	27.5%	29.4%	31.4%	33.7%	36.1%	38.8%	41.7%	44.4%	47.3%	50.4%
26	26.9%	28.6%	30.6%	32.7%	35.0%	37.5%	40.3%	43.3%	46.2%	49.2%	52.4%
27	27.9%	29.7%	31.7%	34.0%	36.4%	39.0%	41.9%	45.0%	48.0%	51.1%	54.4%
28	29.0%	30.9%	32.9%	35.2%	37.7%	40.4%	43.4%	46.7%	49.8%	52.0%	56.4%
29	30.0%	32.0%	34.1%	36.5%	39.1%	41.9%	45.0%	48.3%	50.0%	55.0%	58.4%
30	31.1%	33.1%	35.3%	37.7%	40.4%	43.4%	46.5%	50.0%	51.0%	55.5%	60.0%
31	32.1%	34.2%	36.5%	39.0%	41.7%	44.8%	48.1%	51.0%	51.5%	56.0%	60.0%
32	33.2%	35.3%	37.6%	40.2%	43.1%	46.2%	49.6%	51.5%	52.0%	56.5%	60.0%
33	34.3%	36.5%	38.8%	41.5%	44.4%	47.6%	50.0%	52.0%	52.5%	57.0%	60.0%
34	35.4%	37.6%	40.0%	42.8%	45.8%	49.1%	51.0%	52.5%	53.0%	57.5%	60.0%
35 or more	36.5%	38.7%	41.2%	44.0%	47.1%	50.0%	51.5%	53.0%	53.5%	58.0%	60.0%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

IBEW Table A-2: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement								
	55	56	57	58	59	60	61	62	63+
5	10.00%	10.26%	10.52%	10.78%	11.05%	11.31%	11.57%	11.83%	12.09%
6	12.00%	12.31%	12.62%	12.94%	13.26%	13.57%	13.88%	14.20%	14.51%
7	14.00%	14.36%	14.73%	15.09%	15.47%	15.83%	16.20%	16.56%	16.93%
8	16.00%	16.42%	16.83%	17.25%	17.68%	18.10%	18.51%	18.93%	19.34%
9	18.00%	18.47%	18.94%	19.40%	19.89%	20.36%	20.83%	21.29%	21.76%
10	20.00%	20.52%	21.04%	21.56%	22.10%	22.62%	23.14%	23.66%	24.18%
11	22.00%	22.57%	23.14%	23.72%	24.31%	24.88%	25.45%	26.03%	26.60%
12	24.00%	24.62%	25.25%	25.87%	26.52%	27.14%	27.77%	28.39%	29.02%
13	26.00%	26.68%	27.35%	28.03%	28.73%	29.41%	30.08%	30.76%	31.43%
14	28.00%	28.73%	29.46%	30.18%	30.94%	31.67%	32.40%	33.12%	33.85%
15	30.00%	30.78%	31.56%	32.34%	33.15%	33.93%	34.71%	35.49%	36.27%
16	32.00%	32.83%	33.66%	34.50%	35.36%	36.19%	37.02%	37.86%	38.69%
17	34.00%	34.88%	35.77%	36.65%	37.57%	38.45%	39.34%	40.22%	41.11%
18	36.00%	36.94%	37.87%	38.81%	39.78%	40.72%	41.65%	42.59%	43.52%
19	38.00%	38.99%	39.98%	40.96%	41.99%	42.98%	43.97%	44.95%	45.94%
20	40.00%	41.04%	42.08%	43.12%	44.20%	45.24%	46.28%	47.32%	48.36%
21	42.00%	43.09%	44.18%	45.28%	46.41%	47.50%	48.59%	49.69%	50.78%
22	44.00%	45.14%	46.29%	47.43%	48.62%	49.76%	50.91%	52.05%	53.20%
23	46.00%	47.20%	48.39%	49.59%	50.83%	52.03%	53.22%	54.42%	55.61%
24	48.00%	49.25%	50.50%	51.74%	53.04%	54.29%	55.54%	56.78%	58.03%
25	50.00%	51.30%	52.60%	53.90%	55.25%	56.55%	57.85%	59.15%	60.45%
26	52.00%	53.35%	54.70%	56.06%	57.46%	58.81%	60.16%	61.52%	62.87%
27	54.00%	55.40%	56.81%	58.21%	59.67%	61.07%	62.48%	63.88%	65.29%
28	56.00%	57.46%	58.91%	60.37%	61.88%	63.34%	64.79%	66.25%	67.70%
29	58.00%	59.51%	61.02%	62.52%	64.09%	65.60%	67.11%	68.61%	70.00%
30	60.00%	61.56%	63.12%	64.68%	66.30%	67.86%	69.42%	70.00%	70.00%
31	62.00%	63.61%	65.22%	66.84%	68.51%	70.00%	70.00%	70.00%	70.00%
32	64.00%	65.66%	67.33%	68.99%	70.00%	70.00%	70.00%	70.00%	70.00%
33	66.00%	67.72%	69.43%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
34	68.00%	69.77%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
35 or more	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Non-Contract Table A-1: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	53	54	55	56	57	58	59	60	61	62	63+
5	5.2%	5.5%	5.9%	6.3%	6.7%	7.2%	7.8%	8.3%	8.9%	9.5%	10.1%
6	6.2%	6.6%	7.1%	7.5%	8.1%	8.7%	9.3%	10.0%	10.7%	11.4%	12.1%
7	7.2%	7.7%	8.2%	8.8%	9.4%	10.1%	10.9%	11.7%	12.4%	13.3%	14.1%
8	8.2%	8.8%	9.4%	10.1%	10.8%	11.6%	12.4%	13.3%	14.2%	15.1%	16.1%
9	9.3%	9.9%	10.6%	11.3%	12.1%	13.0%	14.0%	15.0%	16.0%	17.0%	18.1%
10	10.2%	11.0%	11.8%	12.6%	13.5%	14.4%	15.5%	16.7%	17.8%	18.9%	20.1%
11	11.2%	12.1%	12.9%	13.8%	14.8%	15.9%	17.1%	18.3%	19.5%	20.8%	22.2%
12	12.3%	13.2%	14.1%	15.1%	16.2%	17.3%	18.6%	20.0%	21.3%	22.7%	24.2%
13	13.3%	14.3%	15.3%	16.3%	17.5%	18.8%	20.2%	21.7%	23.1%	24.6%	26.2%
14	14.4%	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	24.9%	26.5%	28.2%
15	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	25.0%	26.7%	28.4%	30.2%
16	16.4%	17.6%	18.8%	20.1%	21.5%	23.1%	24.8%	26.7%	28.4%	30.3%	32.2%
17	17.5%	18.7%	20.0%	21.4%	22.9%	24.5%	26.4%	28.3%	30.2%	32.2%	34.3%
18	18.5%	19.8%	21.2%	22.6%	24.2%	26.0%	27.9%	30.0%	32.0%	34.1%	36.3%
19	19.6%	20.9%	22.3%	23.9%	25.6%	27.4%	29.5%	31.7%	33.8%	36.0%	38.3%
20	20.6%	22.0%	23.5%	25.2%	26.9%	28.9%	31.0%	33.3%	35.5%	37.9%	40.3%
21	21.6%	23.1%	24.7%	26.4%	28.3%	30.3%	32.6%	35.0%	37.3%	39.7%	42.3%
22	22.7%	24.2%	25.9%	27.7%	29.6%	31.8%	34.1%	36.7%	39.1%	41.6%	44.3%
23	23.7%	25.3%	27.0%	28.9%	31.0%	33.2%	35.7%	38.3%	40.9%	43.5%	46.3%
24	24.8%	26.4%	28.2%	30.2%	32.3%	34.6%	37.2%	40.0%	42.6%	45.4%	48.4%
25	25.8%	27.5%	29.4%	31.4%	33.7%	36.1%	38.8%	41.7%	44.4%	47.3%	50.4%
26	26.9%	28.6%	30.6%	32.7%	35.0%	37.5%	40.3%	43.3%	46.2%	49.2%	52.4%
27	27.9%	29.7%	31.7%	34.0%	36.4%	39.0%	41.9%	45.0%	48.0%	51.1%	54.4%
28	29.0%	30.9%	32.9%	35.2%	37.7%	40.4%	43.4%	46.7%	49.8%	52.0%	56.4%
29	30.0%	32.0%	34.1%	36.5%	39.1%	41.9%	45.0%	48.3%	50.0%	55.0%	58.4%
30	31.1%	33.1%	35.3%	37.7%	40.4%	43.4%	46.5%	50.0%	51.0%	55.5%	60.0%
31	32.1%	34.2%	36.5%	39.0%	41.7%	44.8%	48.1%	51.0%	51.5%	56.0%	60.0%
32	33.2%	35.3%	37.6%	40.2%	43.1%	46.2%	49.6%	51.5%	52.0%	56.5%	60.0%
33	34.3%	36.5%	38.8%	41.5%	44.4%	47.6%	50.0%	52.0%	52.5%	57.0%	60.0%
34	35.4%	37.6%	40.0%	42.8%	45.8%	49.1%	51.0%	52.5%	53.0%	57.5%	60.0%
35 or more	36.5%	38.7%	41.2%	44.0%	47.1%	50.0%	51.5%	53.0%	53.5%	58.0%	60.0%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Non-Contract Table A-2: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	53	54	55	56	57	58	59	60	61	62	63+
5	8.71%	9.33%	10.00%	10.26%	10.52%	10.78%	11.05%	11.31%	11.57%	11.83%	12.09%
6	10.45%	11.20%	12.00%	12.31%	12.62%	12.94%	13.26%	13.57%	13.88%	14.20%	14.51%
7	12.19%	13.06%	14.00%	14.36%	14.73%	15.09%	15.47%	15.83%	16.20%	16.56%	16.93%
8	13.94%	14.93%	16.00%	16.42%	16.83%	17.25%	17.68%	18.10%	18.51%	18.93%	19.34%
9	15.68%	16.79%	18.00%	18.47%	18.94%	19.40%	19.89%	20.36%	20.83%	21.29%	21.76%
10	17.42%	18.66%	20.00%	20.52%	21.04%	21.56%	22.10%	22.62%	23.14%	23.66%	24.18%
11	19.16%	20.53%	22.00%	22.57%	23.14%	23.72%	24.31%	24.88%	25.45%	26.03%	26.60%
12	20.90%	22.39%	24.00%	24.62%	25.25%	25.87%	26.52%	27.14%	27.77%	28.39%	29.02%
13	22.65%	24.26%	26.00%	26.68%	27.35%	28.03%	28.73%	29.41%	30.08%	30.76%	31.43%
14	24.39%	26.12%	28.00%	28.73%	29.46%	30.18%	30.94%	31.67%	32.40%	33.12%	33.85%
15	26.13%	27.99%	30.00%	30.78%	31.56%	32.34%	33.15%	33.93%	34.71%	35.49%	36.27%
16	27.87%	29.86%	32.00%	32.83%	33.66%	34.50%	35.36%	36.19%	37.02%	37.86%	38.69%
17	29.61%	31.72%	34.00%	34.88%	35.77%	36.65%	37.57%	38.45%	39.34%	40.22%	41.11%
18	31.36%	33.59%	36.00%	36.94%	37.87%	38.81%	39.78%	40.72%	41.65%	42.59%	43.52%
19	33.10%	35.45%	38.00%	38.99%	39.98%	40.96%	41.99%	42.98%	43.97%	44.95%	45.94%
20	34.84%	37.32%	40.00%	41.04%	42.08%	43.12%	44.20%	45.24%	46.28%	47.32%	48.36%
21	36.58%	39.19%	42.00%	43.09%	44.18%	45.28%	46.41%	47.50%	48.59%	49.69%	50.78%
22	38.32%	41.05%	44.00%	45.14%	46.29%	47.43%	48.62%	49.76%	50.91%	52.05%	53.20%
23	40.07%	42.92%	46.00%	47.20%	48.39%	49.59%	50.83%	52.03%	53.22%	54.42%	55.61%
24	41.81%	44.78%	48.00%	49.25%	50.50%	51.74%	53.04%	54.29%	55.54%	56.78%	58.03%
25	43.55%	46.65%	50.00%	51.30%	52.60%	53.90%	55.25%	56.55%	57.85%	59.15%	60.45%
26	45.29%	48.52%	52.00%	53.35%	54.70%	56.06%	57.46%	58.81%	60.16%	61.52%	62.87%
27	47.03%	50.38%	54.00%	55.40%	56.81%	58.21%	59.67%	61.07%	62.48%	63.88%	65.29%
28	48.78%	52.25%	56.00%	57.46%	58.91%	60.37%	61.88%	63.34%	64.79%	66.25%	67.70%
29	50.52%	54.11%	58.00%	59.51%	61.02%	62.52%	64.09%	65.60%	67.11%	68.61%	70.00%
30	52.26%	55.98%	60.00%	61.56%	63.12%	64.68%	66.30%	67.86%	69.42%	70.00%	70.00%
31	54.00%	57.85%	62.00%	63.61%	65.22%	66.84%	68.51%	70.00%	70.00%	70.00%	70.00%
32	55.74%	59.71%	64.00%	65.66%	67.33%	68.99%	70.00%	70.00%	70.00%	70.00%	70.00%
33	57.49%	61.58%	66.00%	67.72%	69.43%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
34	59.23%	63.44%	68.00%	69.77%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
35 or more	60.97%	65.31%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Table B: Alternate Retirement Formula Multipliers

Credited Years Of Service	Percentage
10	20.1%
11	22.2%
12	24.2%
13	26.2%
14	28.2%
15	30.2%
16	32.2%
17	34.3%
18	36.3%
19	38.3%
20	40.3%
21	42.3%
22	44.3%
23	46.3%
24	48.4%
25	50.4%
26	52.4%
27	54.4%
28	56.4%
29	58.4%
30	60.4%
31	62.5%
32	64.5%
33	66.5%
34	68.5%
35 or more	70.5%

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX D – GLOSSARY

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs such as mortality, withdrawal, disability, retirement, changes in compensation, and rates of investment return.

2. Actuarial Cost Method

A procedure for determining the actuarial present value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an Actuarial Liability.

3. Actuarial Gain (Loss)

The difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

4. Actuarial Liability

The portion of the Actuarial Present Value of Projected Benefits, which will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made.

6. Actuarial Valuation

The determination, as of a specified date, of the normal cost, Actuarial Liability, Actuarial Value of Assets, and related actuarial present values for a pension plan.

**RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2018**

APPENDIX D – GLOSSARY

7. Actuarial Value of Assets

The value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values.

8. Actuarially Equivalent

Of equal actuarial present value, determined as of a given date, with each value based on the same set of actuarial assumptions.

9. Amortization Payment

The portion of the pension plan contribution that is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

10. Entry Age Normal Actuarial Cost Method

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages.

11. Funded Ratio

The ratio of the Actuarial Value of Assets to the Actuarial Liabilities.

12. Normal Cost

That portion of the actuarial present value of pension plan benefits and expenses, which is allocated to a valuation year by the actuarial cost method.

13. Projected Benefits

Those pension plan benefit amounts which are expected to be paid in the future under a particular set of actuarial assumptions, taking into account such items as increases in future compensation and service credits.

14. Unfunded Actuarial Liability

The excess of the Actuarial Liability over the Actuarial Value of Assets.



Classic Values, Innovative Advice



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 45

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

E STREET TROLLEY STATION JOINT DEVELOPMENT AND REIMBURSEMENT
AGREEMENT WITH THE CITY OF CHULA VISTA (TIM ALLISON)

INFORMATIONAL ONLY

Budget Impact

Initial expenditures up to \$36,000 would be funded from the Land Management Budget.

DISCUSSION:

The City of Chula Vista and MTS have contemplated coordinating development of both the MTS E Street Trolley Station and the adjacent City of Chula Vista's vacant property for many years. The City is now in a position and the economic climate is now suitable to pursue this development. The City and MTS are proposing to jointly develop and release a Request for Qualifications / Proposals (RFQ/P) to solicit qualified developers for the City-owned 707 F Street property and the MTS-owned 750 E Street trolley station.

In pursuit of this initiative, MTS recently entered into a Reimbursement Agreement with the City to equally share the costs for professional economic, financial and market consulting services to evaluate developer proposals. The City negotiated services through competitive bidding with Keyser-Marston Associates, Inc. for \$72,000 for these tasks. MTS's cost share would be \$36,000.

Proposed MTS-Chula Vista Joint Development Sites

The properties are shown in the attached Site Plan (Attachment A). The City-owned property located at 707 F Street in Chula Vista was previously used as the City's Public Works Corporation Yard and has not been utilized for that purpose since approximately 1999 when the City's Public Works administration and operations uses were relocated to 1800 Maxwell Road. Since vacating the approximately six-acre property, the City has



utilized it for various purposes. Over the last nearly 20 years the site has been leased to organizations such as a sand and gravel operation and food storage and distribution services provided by South Bay Community Services. Improvements to 707 F Street have outlived their useful life and demolition of the site is expected in the first quarter of calendar year 2019.

Directly north of and adjacent to the City-owned 707 F Street, is the E Street Transit Center at 750 E Street, which is owned by MTS. This site is approximately four acres and provides ancillary support for the UC San Diego Blue Line Trolley. The site is currently improved with 267 vehicular surface parking spaces, bus transfer terminals and a small building currently occupied by Cool Down Coffee. Given the underutilization of both the 707 F Street and 750 E Street sites, City-staff and MTS-staff have discussed coordinating efforts to jointly solicit development proposals from potential developers for both City- and MTS-owned properties. MTS Board approval indicating support of the City releasing a RFQ/P for both sites is desired and will take place prior to the City releasing said RFQ/P.

Development Possibilities

In April 2007, the City adopted the Urban Core Specific Plan, which establishes land use and development standards applicable to approximately 1,700 acres in Western Chula Vista. This Specific Plan was subsequently amended in 2011 and 2015. The 707 F Street and 750 E Street properties are located within the Urban Core 15 (UC-15) District of the Urban Core Specific Plan. The UC-15 District is identified as the E Street Trolley Transit Focus Area. The Urban Core Specific Plan establishes that primary land uses in the UC-15 District are: mixed-use residential, residential; office (not allowed on the ground floor façade, except for access); and hospitality. A comprehensive list of permitted, conditionally permitted and prohibited uses is available within the Urban Core Specific Plan Land Use Matrix.

Development standards for the UC-15 District provide for a minimum Floor Area Ratio of 4.0 and a maximum Floor Area Ratio of 6.0. Minimum building height for the sites is 45 feet or approximately 4 stories and maximum building height is established at 210 feet or approximately 20 stories. Additional development standards such as setbacks, open space requirements and parking regulations are established by the Land Use & Development Standards section of the Urban Core Specific Plan. The vision for the E Street Trolley Transit Focus Area is to develop a robust mix of multi-family residential, office, retail and hospitality uses at high densities. Despite underutilization of the 707 F Street site since approximately 1999, the City had been reluctant to pursue its redevelopment. This was due to market conditions in Western Chula Vista that were unable to support the development types and intensities envisioned for the property.

Currently, western Chula Vista is experiencing a significant revitalization with momentum surging to redevelop vacant and underutilized properties. Much of this momentum is sustained by projects like the 1,600-room Gaylord Hotel and associated 275,000 square foot convention center at the Chula Vista Bayfront, which are anticipated to break ground in early 2020. Milestones achieved to redevelop the Bayfront have and continue to function as a catalyst for other redevelopment projects in Chula Vista. In fact, the city currently has more than 1,000 residential units in design or development in Western Chula Vista alone. With market conditions improving, the opportunity exists to attract revenue and employment-based development proposals for the 707 F Street and 750 E Street sites.

MTS-Chula Vista Joint Development Efforts

To solicit and evaluate developer proposals for development of 707 F Street and 750 E Street, both the City and MTS require the expertise of economic, market and financial consulting services to assist in developing the RFQ/P, evaluate developer proposals, negotiate with developer(s) and structure potential transactions. Therefore, MTS entered into a Reimbursement Agreement with Chula Vista (Attachment B) to equally share the payment of costs for the City to procure the services to the benefit of both agencies.

The City released a Request for Qualifications (RFQ) to solicit consultants to provide economic, market and financial consulting services to the City through its competitive bidding process. The City received eight responses to the RFQ. A rating panel consisting of the City's Finance Director, Economic Development Director and Senior Economic Development Specialist evaluated responses and short-listed three consultants with the ability and qualifications to provide the City with these services. The three short-listed consultants include: Keyser Marston Associates, Inc.; Kosmont Companies; and Jones, Lang LaSalle. These consultants will remain on an as-needed/on-call eligibility list for a period of five years. During that time, the City may select any of these three consultants to provide services on projects.

City and MTS staff agreed that for the purposes of soliciting and evaluating developer qualifications and proposals for 707 F Street and 750 E Street in Chula Vista, Keyser Marston and Associates, Inc. is the most appropriate and qualified to provide consulting services. This is due to several factors, including: 1) the consultant's history and experience working on projects in Chula Vista; 2) the consultant's history and experience working as a consultant to the City and MTS; and 3) cost. The projected cost for Keyser Marston Associates, Inc. to provide economic, market and financial consulting services to solicit and evaluate developer qualifications and proposals for 707 F Street and 750 E Street is \$72,000.

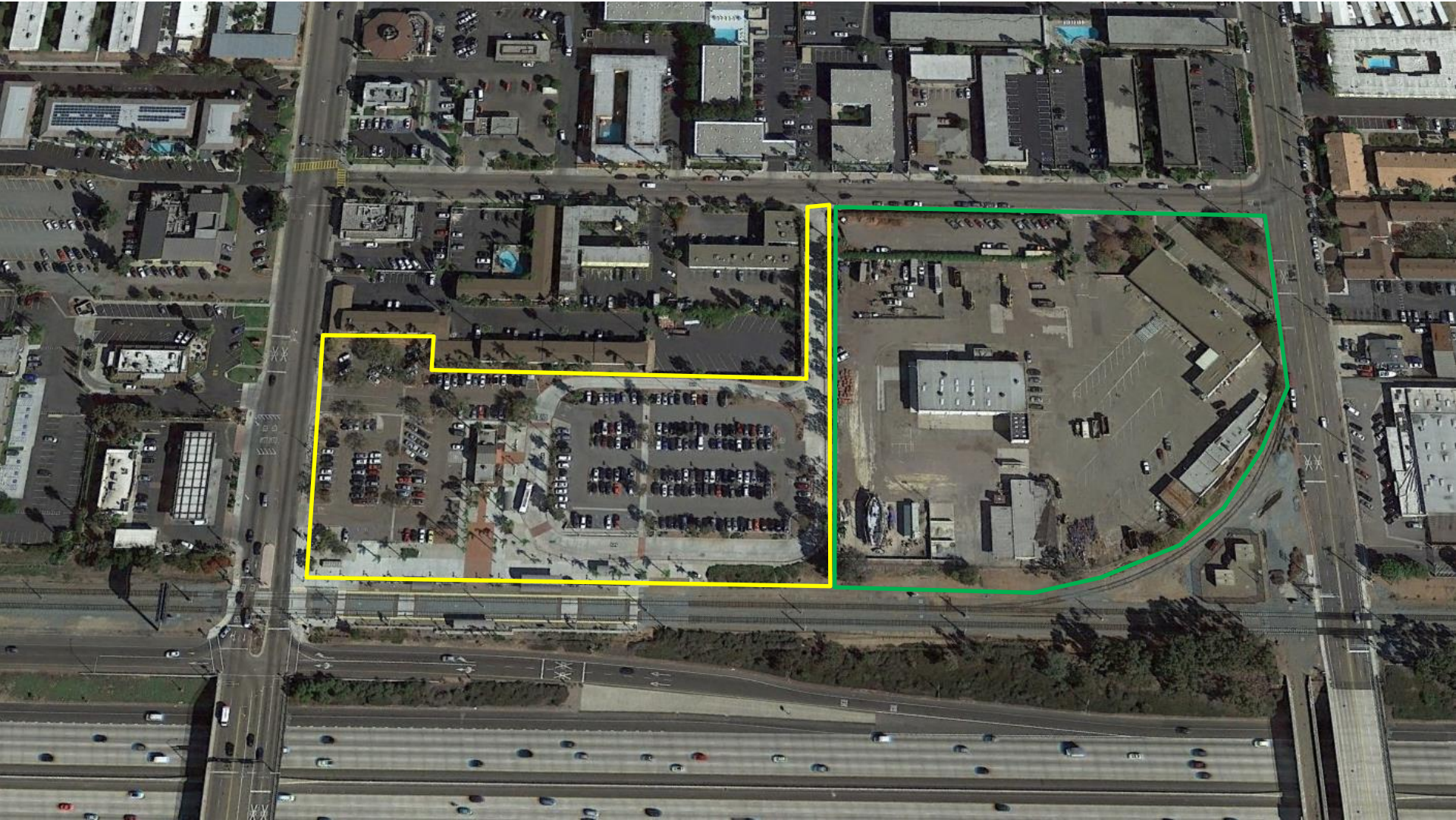
Once a draft RFQ/RFP is prepared, staff will return to the Board for authorization to jointly initiate the public proposal process with the City.

/s/ Sharon Cooney for _____
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachments: A. Site Plan
B. Reimbursement Agreement

E Street Trolley Station and F Street Corp Yard



**REIMBURSEMENT AGREEMENT FOR PAYMENT OF COSTS FOR
PROFESSIONAL ECONOMIC, FINANCIAL AND MARKET CONSULTING
SERVICES**

This Reimbursement Agreement for Payment of Costs for Professional Economic, Financial, and Market Consulting Services (“Agreement”) is entered into effective as of _____ (“Effective Date”) by and between the City of Chula Vista, a chartered municipal corporation (“CITY”) and San Diego Metropolitan Transit System (“MTS”) (collectively, the “Parties” and, individually, a “Party”) with reference to the following facts:

Recitals

The CITY intends to solicit qualifications and proposals for the development of CITY-owned property located at 707 F Street in the City of Chula Vista.

The MTS intends to solicit qualifications and proposals for the development of MTS-owned property located at 750 E Street in the City of Chula Vista.

The CITY and MTS desire to jointly release a Request for Qualifications/Proposals for the development of 707 F Street and 750 E Street in the City of Chula Vista.

The CITY and MTS require third-party professional services for Economic, Financial and Market Consulting services to assist in the development and evaluation of developer qualifications and proposals that CITY and MTS receive.

Agreement

NOW, THEREFORE, in consideration of the above recitals, the covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which the Parties hereby acknowledge, City and MTS hereby agree as follows:

I. Work to be Done

CITY shall enter into a two-party professional services agreement with KEYSER MARSTON AND ASSOCIATES, INC. for the purposes of conducting professional Economic, Financial and Market Consulting services to develop a Request for Qualifications/Proposals to solicit and to evaluate development qualifications and proposals for CITY-owned 707 F Street and MTS-owned 750 E Street in the City of Chula Vista. CITY’s two-party professional services agreement with KEYSER MARSTON AND ASSOCIATES is presented in Exhibit “A,” which by this reference is made part hereof. MTS hereby acknowledges review of CITY’s two-party professional services agreement with KEYSER MARSTON AND ASSOCIATES and agrees to the scope of work and payment terms provided therein.

Deviations from the scope of work described above that are initiated by either the CITY shall be agreed upon in writing by both Parties hereto under a Revised Notice to MTS (“Revised Notice”). The Revised Notices shall be mailed or delivered to MTS to the address provided, and

in the manner specified in Article IV. General Conditions – “Notices”. Such Revised Notices, once approved by MTS and acknowledged by CITY, will constitute agreement to amend the two-party professional services agreement between CITY and KEYSER MARSTON AND ASSOCIATES, INC. No work under said deviation shall commence prior to receipt of the Revised Notice by MTS. Changes in the scope of work or payment terms will require written amendment to this Agreement in addition to the Revised Notice.

II. Performance of Work

CITY agrees to provide MTS with access to all work product, written communication, and project notes associated with work performed by KEYSER MARSTON AND ASSOCIATES, INC., in the same manner and to the same extent allowed by CITY under the two-party agreement, for the purpose of inspection to ensure that the work is performed in accordance with the two-party professional services agreement between CITY and KEYSER MARSTON AND ASSOCIATES, INC. and this Agreement. MTS shall direct all questions and comments regarding work being performed by KEYSER MARSTON AND ASSOCIATES, INC. to CITY’s Director of Economic Development for his/her evaluation and final disposition.

III. Payment for Work

CITY and MTS agree that CITY will pay for costs identified in the two-party professional services agreement between CITY and KEYSER MARSTON AND ASSOCIATES, INC. and that MTS will reimburse CITY with fifty percent (50%) of all such costs.

The projected total cost for work bid and to be performed by KEYSER MARSTON AND ASSOCIATES, INC. is \$72,000. Subsequent to the execution of this Agreement and upon demand of CITY, MTS shall deposit with CITY fifty percent (50%) of the projected cost for the work totaling \$36,000 (“Deposit”).

MTS acknowledges and agrees that CITY shall draw down the Deposit in the following manner:

1. Following the receipt of an invoice from KEYSER MARSTON AND ASSOCIATES, INC., CITY will determine fifty percent (50%) of the invoice (“MTS’ Share”).
2. The CITY will then deduct MTS’ Share from the Deposit.
3. On a monthly basis, the CITY will submit to MTS a summary of the balance of MTS’ Share and the amounts deducted from the Deposit.

Following the completion of work by KEYSER MARSTON AND ASSOCIATES, INC., the City shall conduct an accounting of the actual charges associated with the two-party agreement between CITY and KEYSER MARSTON AND ASSOCIATES, INC. In the event that the actual cost exceeds the amount of the Deposit, the CITY shall invoice MTS for the difference, and MTS shall remit such amount to the CITY within forty-five (45) calendar days. If the actual cost is less than the Deposit, the CITY shall remit the balance of the Deposit to MTS within forty-five (45) calendar days.

IV. General Conditions

Notices. All notices, demands, or requests provided for or permitted to be given pursuant to this Agreement shall be sent by United States mail, postage prepaid or by a similar means reasonably calculated to ensure delivery within five (5) calendar days after deposit addressed as follows:

If to CITY: City of Chula Vista
Director of Economic Development
276 Fourth Avenue
Chula Vista, CA 91910

With a copy to:

City of Chula Vista
City Attorney
276 Fourth Avenue
Chula Vista, CA 91910

If to MTS: San Diego Metropolitan Transit System
Manager of Real Estate Assets
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101

With a copy to: San Diego Metropolitan Transit System
General Counsel
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101

Successors and Assigns: Neither party to this Agreement may assign or transfer its rights or obligations under this Agreement without the other party's prior written consent thereto.

Authority: Each party and its respective agents executing this Agreement warrants and represents that it has the full power and authority to execute, deliver and perform the obligations under this Agreement and that each party's performance hereunder has been duly authorized by all requisite actions on the part of that party.

Entire Agreement: This Agreement represent the entire understanding of CITY and MTS as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to the matters covered herein. This Agreement may not be modified or altered except in writing signed by both Parties.

Severability. Should any part of this Agreement be held to be invalid by a court of competent jurisdiction, the remainder of this Agreement shall be considered as the whole Agreement and be binding on the contracting Parties.

Governing Law and Venue: This Agreement shall be construed in accordance with and governed by the laws of the State of California. This Agreement shall be deemed made and entered into in San Diego County, which shall also be deemed to be the sole and proper venue for any action or proceeding relating to this Agreement

Captions and Counterparts: The captions of this Agreement are for the purposes of reference only and shall not limit or define the meaning of the provisions of this Agreement. This Agreement may be executed in a number of counterparts, each of which shall be an original and all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, THE BELOW Parties have executed this Agreement as of the date of the last party to sign.

CITY OF CHULA VISTA

**SAN DIEGO METROPOLITAN
TRANSIT SYSTEM**

By: _____
Gary Halbert
City Manager

By: _____
Paul Jablonski
Chief Executive Officer

Date: _____

Date: _____

Approved as to form and legality:

By: _____
Glen R. Googins
City Attorney

By: _____
Karen Landers
General Counsel

Date: _____

Date: _____

\\\\ad\\dfs\\SDAT-Shared\\Attorney\\ProLaw_DocumentDirectory\\2013-12006\\Contracts - Agreements\\681529_2.doc



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 46

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

UPDATE ON INNOVATIVE CLEAN TRANSIT REGULATION (PAUL JABLONSKI)

INFORMATIONAL ONLY

Budget Impact

None at this time.

DISCUSSION:

On December 14, 2018, the California Air Resources Board (CARB) adopted the “Innovative Clean Transit” (ICT) regulation (Attachment A). This regulation requires transit agencies to transition to one hundred percent zero-emission bus fleets by 2040. Zero Emission Buses (ZEBs) are urban buses that produce zero-exhaust emissions of any pollutant. The types of vehicles that qualify under this definition include hydrogen fuel-cell buses, electric trolley buses with overhead twin-wire power supply, and battery-electric buses. MTS staff will provide an update on the regulation and our compliance efforts moving forward.

/s/ Sharon Cooney for
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. Final Regulation Order – Innovative Clean Transit



FINAL REGULATION ORDER

Amend sections 2023, 2023.1, 2023.2, 2023.3, and 2023.4, title 13, California Code of Regulations, to read as follows, add new sections 2023.5 – 2023.11, and codify under new Article 4.3:

(Note: The proposed amendments are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions from the existing regulatory text. Non-substantive changes made since the 15-Day changes are shown with **bold italic underline** for additions and **~~bold italic strikethrough~~** for deletions. These non-substantive changes address issues such as, but not limited to, spelling and grammatical errors, and do not materially alter the requirements or conditions of the proposed rulemaking action. All non-substantive changes will be incorporated into the proposed amendments as explained at the beginning of this note when it is submitted to the Office of Administrative Law)

~~13 CCR § 2023~~

~~§ 2023. Fleet Rule for Transit Agencies.~~

~~(a) The definitions in section 2020 shall apply to sections 2023, 2023.1, 2023.2, 2023.3 and 2023.4. In addition, the following definitions apply only to sections 2023, 2023.1, 2023.2, 2023.3 and 2023.4.~~

~~(1) "Active fleet" means the total number of urban buses operated by a transit agency or under contract to a transit agency, including spare buses, but not emergency contingency vehicles or non-revenue producing vehicles.~~

~~(2) "Commuter Service Bus" means a passenger-carrying vehicle powered by a heavy heavy-duty diesel engine or of a type normally powered by a heavy heavy-duty diesel engine that is not otherwise an urban bus and which operates on a fixed route primarily during peak commute hours and that has~~

~~no more than ten scheduled stops per day, excluding park-and-ride lots. A commuter service bus is a transit fleet vehicle.~~

~~(3) "Diesel PM emission total," for the purposes of sections 2023.1 and 2023.2, means the sum of the particulate matter (PM) value, based on the engine certification standard, of each diesel fuel, dual-fuel, bi-fuel (except for heavy-duty pilot ignition engines), and diesel hybrid-electric engine in a transit agency's active fleet or transit fleet vehicle fleet in g/bhp-hr. For 1987 and earlier engines, the PM exhaust emission value shall be presumed to be 1.0 g/bhp-hr.~~

~~(4) "Emergency contingency vehicle" means an urban bus placed in an inactive contingency fleet for energy or other local emergencies, after the urban bus has reached the end of its normal minimum useful life.~~

~~(5) "Hybrid-electric bus" (HEB) means an urban bus equipped with at least two sources of energy on board; this energy is converted to motive power using electric drive motors and an auxiliary power unit, which converts consumable fuel energy into mechanical or electrical energy. The electric drive motors must be used partially or fully to drive the vehicle's wheels.~~

~~(6) "Low Usage Vehicle" means a non-revenue-generating transit fleet vehicle that operates for no more than 1000 miles per year.~~

~~(7) "New Transit Agency" means,~~

~~(A) For the purposes of section 2023.1, a transit agency formed after January 1, 2002;~~

~~(B) For the purposes of section 2023.2, a transit agency formed after January 1, 2005.~~

~~(8) "NOx Fleet Average" for the purposes of sections 2023.1 and 2023.2 means the average of the oxides of nitrogen (NOx) emissions for all transit fleet vehicles or urban buses, owned, operated, or leased by a transit agency, based on the engine certification standard of each engine. The NOx fleet average is calculated by summing the NOx engine certification standards in g/bhp-hr, of each engine in an active fleet or transit fleet vehicle fleet, and~~

~~dividing by the total number of vehicles in that fleet.~~

~~(9) "Retirement" or "Retire" means an engine will be withdrawn from a transit vehicle fleet in California. The engine may be sold outside of California, scrapped or used in an emergency contingency vehicle or low usage vehicle.~~

~~(10) "Spare bus" means an urban bus that is used to accommodate routine maintenance and repair operations, and to replace a bus in scheduled service that breaks down or is involved in an accident.~~

~~(11) "Transit Fleet" means a transit agency's urban buses and transit fleet vehicles, excluding emergency contingency vehicles and low usage vehicles.~~

~~(12) "Transit Fleet Vehicle" means an on-road vehicle greater than 8,500 pounds gross vehicle weight rating (GVWR) powered by a heavy-duty engine fueled by diesel or alternative fuel, owned or operated by a transit agency, and which is not an urban bus.~~

~~(13) "Urban bus" means a passenger-carrying vehicle powered by a heavy heavy-duty diesel engine, or of a type normally powered by a heavy heavy-duty diesel engine, with a load capacity of fifteen (15) or more passengers and intended primarily for intra-city operation, i.e., within the confines of a city or greater metropolitan area. Urban bus operation is characterized by short rides and frequent stops. To facilitate this type of operation, more than one set of quick-operating entrance and exit doors would normally be installed. Since fares are usually paid in cash or token, rather than purchased in advance in the form of tickets, urban buses would normally have equipment installed for the collection of fares. Urban buses are also typically characterized by the absence of equipment and facilities for long distance travel, e.g., restrooms, large luggage compartments, and facilities for stowing carry-on luggage.~~

~~(b) A new transit agency shall:~~

~~(1) Notify the Executive Officer in writing of its existence and submit reports to the Executive Officer as required in section 2023.4(j);~~

~~(2) Choose a compliance path for its active fleet and notify the Executive Officer within 120 days of formation of its intent to follow either the diesel path~~

~~or alternative path, as described in section 2023.1(a), except that a new transit agency that is a successor to an existing transit agency shall follow the compliance path of the transit agency out of which it has been formed;~~

~~(3) Meet the NOx fleet average and the diesel PM total of the urban buses or transit fleet vehicles~~

~~(A) used in the transit operations of the existing transit agency out of which the new transit agency is formed or,~~

~~(B) if not formed from an existing transit agency, meet the requirements set forth in 2023.1(d)(4), 2023.1(e)(5) for urban buses and 2023.2(a)(1)(B), 2023.2(a)(2)(B) 2023.2(b)(3) for transit fleet vehicles; and,~~

~~(4) Comply with all applicable requirements of section 2023, section 2023.1, 2023.2 and 2023.4.~~

~~(c) A transit agency that installs a diesel emission control strategy to reduce diesel PM shall use a diesel emission control strategy that is verified by the Executive Officer in accordance with section 2700 et seq., title 13, CCR, or an urban bus retrofit device that has been exempted under Vehicle Code section 27156 as an engine rebuild kit and that reduces PM to 0.10 g/bhp-hr when used on an engine model 6V92TA DDEC for the model years specified for that engine.~~

~~(d) A transit agency that installs a diesel emission control strategy on an engine shall use the following percentage reductions from the engine certification standard value when calculating its total diesel PM emissions: 25 percent for a Level 1, 50 percent for a Level 2, and 85 percent for a Level 3 diesel emission control strategy.~~

~~(e) A transit agency with fewer than 30 buses in its transit fleet may apply for an extension to comply with the provisions of section 2023.1 and section 2023.2 by submitting documentation of financial hardship to the Executive Officer, in writing, at least thirty (30) days before the requirement becomes applicable for approval by the Executive Officer. Documentation of financial hardship shall include, but is not limited to, an analysis of the cost of compliance, the sources of available funds, and the shortfall between funds available and the cost of compliance. The transit agency must~~

~~also specify the date and means by which compliance will be achieved in the request for a delay.~~

~~(f) A transit agency that is unable to comply with an implementation deadline specified in section 2023.1 paragraph (e)(1), (2), (3), or (4) or section 2023.2(b)(1) or (2) because of the unavailability of technology may apply in writing to the Executive Officer for an extension of the compliance deadline. The application to the Executive Officer must be made in writing and at least ninety (90) days before the applicable implementation deadline. The Executive Officer may grant an extension of up to one year, provided that the applicant:~~

- ~~(1) Demonstrates that the technology is unavailable;~~
- ~~(2) Explains why the transit agency cannot comply by retiring older buses; and~~
- ~~(3) Provides a schedule for compliance.~~

~~(g) A transit agency that owns, operates, or leases fewer than 20 diesel fueled, dual-fuel, bi-fuel, or diesel hybrid electric buses in its transit fleet and that operates in a federal one-hour ozone attainment area may delay implementation of the intermediate total diesel PM emission reduction requirements provided the transit agency complies with the implementation deadlines set forth in Section 2023.1 paragraphs (e)(3)(A) or (e)(4) and section 2023.2 paragraph (b)(2).~~

~~(h) Non-Compliance. Any violations of sections 2023, 2023.1, 2023.2, 2023.3, or 2023.4 may be subject to civil penalties as specified in state law and regulations.~~

~~Note: Authority cited: Sections 39600, 39601, 39667, 43013, 43018 and 43701(b), Health and Safety Code.~~

~~Reference: Sections 39002, 39003, 39017, 39500, 39650, 39667, 40000, 43000, 43000.5, 43013, 43018, 43701(b), 43801 and 43806, Health and Safety Code; and Sections 233 and 28114, Vehicle Code.~~

~~13 CCR § 2023.1~~

~~§ 2023.1. Fleet Rule for Transit Agencies—Urban Bus Requirements.~~

~~(a) To encourage transit agencies that operate urban bus fleets to purchase or lease lower emission alternative-fuel buses, while also providing flexibility to such fleet operators to determine their optimal fleet mix in consideration of such factors as air quality benefits, service availability, cost, efficiency, safety, and convenience, two paths to compliance with this fleet rule are available: the alternative-fuel path and the diesel path.~~

~~(1) Transit agencies must choose their compliance path, and shall notify ARB of their intent to follow either the diesel or the alternative-fuel path, by January 31, 2001. Reporting requirements for that notification are set forth in subdivisions (a) and (b) of section 2023.4, title 13, CCR.~~

~~(2) A transit agency within the jurisdiction of the South Coast Air Quality Management District may elect to change its compliance path from the diesel path to the alternative-fuel path, provided that the transit agency notifies the Executive Officer of the change by January 31, 2004, and provided that the transit agency is in compliance with all requirements of section 2023.1, including specific requirements of the diesel path, on or before January 1, 2004. Reporting requirements for this notification are set forth in paragraph (b)(3) of section 2023.4, title 13, CCR.~~

~~(3) A new transit agency that is a successor to an existing transit agency or that has been created from a merger of two or more transit agencies or parts of two or more transit agencies must have the same compliance path as the transit agency or agencies out of which it is formed.~~

~~(4) A transit agency within the jurisdiction of the South Coast Air Quality Management District shall follow the alternative-fuel path. If the transit agency had previously stated its intent to follow the diesel path, the change to the alternative-fuel path shall be effective on October 7, 2006.~~

~~(5) Transit agencies on the diesel path with more than 30 buses in their~~

fleets purchasing model year 2007 through 2009 urban buses that are not certified at or below 0.2 g/bhp-hr NO_x emission level shall:

~~(A) Mitigate the increased NO_x emissions for each urban bus purchased by retrofitting an existing urban bus or transit fleet vehicle within the fleet with a level 3 particulate matter (PM) verified diesel emission control strategy with an oxides of nitrogen (NO_x) reduction efficiency of at least 40 percent, if available, otherwise, with a NO_x reduction efficiency of at least 25 percent. This retrofit requirement applies on a one-to-one basis until all diesel urban buses and transit fleet vehicles within the transit agency's fleet are either retrofitted or are determined to be unable to be retrofitted as specified in (B) below.~~

~~(B) Obtain Executive Officer approval for purchasing a 2007 through 2009 model year urban bus not subject to (A) above by submitting to the Executive Officer a report 90 days prior to the delivery of the urban bus. The report shall provide information that demonstrates that all vehicles in the transit agency's fleet have been retrofitted or are determined to be unable to be retrofitted including when the inability to retrofit occurs for reasons other than a device not verified for the specific urban bus or transit fleet vehicle engine family.~~

~~(C) Submit annual reports that meet the requirements in section 2023.4(b)(4).~~

~~(b) Transit agencies on the alternative-fuel path shall meet the following requirements:~~

~~(1) Upon approval of the regulation, and through Model Year 2015, at least 85 percent of all urban buses purchased or leased each year must be alternative-fuel buses or buses with engines purchased under paragraph (b)(9).~~

~~(2) NO_x fleet average requirements as set forth in subdivision (d), below.~~

~~(3) Beginning October 1, 2002, only engines certified to an optional PM standard of 0.03 g/bhp-hr or lower shall be purchased when making new bus purchases.~~

- ~~(4) Total diesel PM emission reduction requirements and use of low-sulfur or other allowed fuel as set forth in subdivision (e), below.~~
- ~~(5) Transit agencies on the alternative-fuel path shall not purchase any diesel-fueled, dual-fuel, or bi-fuel buses with 2004-2006 model year engines certified to emissions levels in excess of those specified in paragraph (a)(11) of section 1956.1, title 13, CCR, except as provided in paragraph (b)(8) or (b)(9) of this section.~~
- ~~(6) Zero-emission bus purchase requirements beginning in model year 2012, in accordance with the requirements set forth in subdivision (c) of section 2023.3, title 13, CCR.~~
- ~~(7) Reporting requirements as set forth in section 2023.4, title 13, CCR.~~
- ~~(8) The Executive Officer may exempt transit agencies on the alternative-fuel path from the requirements of paragraph (b)(5) of section 2023.1, title 13, CCR, provided that:~~
 - ~~(A) A transit agency applies to the Executive Officer for such exemption by June 30, 2001;~~
 - ~~(B) A transit agency demonstrates to the Executive Officer that it will achieve NOx emissions benefits through 2015 greater than what would have been achieved through compliance with paragraph (b)(5); and~~
 - ~~(C) The Executive Officer finds that transit agencies, after consulting with the Engine Manufacturers Association, have demonstrated, or are contractually committed to demonstrate, advanced NOx aftertreatment technology.~~
- ~~(9) A transit agency on the alternative-fuel path may purchase a bus operated with a heavy-duty pilot ignition engine provided the engine meets the standards set forth in subdivision (b) of section 1956.1, title 13, CCR.~~
- ~~(c) Transit agencies on the diesel path shall meet the following requirements:~~
 - ~~(1) NOx fleet average requirements as set forth in subdivision (d), below.~~
 - ~~(2) Total diesel PM emission reduction requirements and use of low-sulfur or other allowed fuel as set forth in subdivision (e), below.~~

~~(3) Zero-emission bus demonstration as required in subdivision (b) of section 2023.3, title 13, CCR.~~

~~(4) Transit agencies on the diesel path shall not purchase any diesel-fueled, dual-fuel, or bi-fuel buses with 2004-2006 model year engines certified to emissions levels in excess of those specified in paragraph (a)(11) of section 1956.1, title 13, CCR, except as provided in paragraph (c)(7) or (c)(8) of this section. Beginning July 1, 2003, a transit agency may not purchase alternative fuel buses certified to a PM emission level in excess of the optional standard of 0.03 g/bhp-hr when making new bus purchases.~~

~~(5) Zero-emission bus purchase requirements beginning in model year 2011, in accordance with the requirements set forth in subdivision (c) of section 2023.3, title 13, CCR.~~

~~(6) Reporting requirements as set forth in section 2023.4, title 13, CCR.~~

~~(7) The Executive Officer may exempt transit agencies on the diesel path from the requirements of paragraph (c)(4) of section 2023.1, title 13, CCR, provided that:~~

~~(A) A transit agency applies to the Executive Officer for such exemption by June 30, 2001;~~

~~(B) A transit agency demonstrates to the Executive Officer that it will achieve NOx emissions benefits through 2015 greater than what would have been achieved through compliance with paragraph (c)(4); and~~

~~(C) The Executive Officer finds that transit agencies, after consulting with the Engine Manufacturers Association, have demonstrated, or are contractually committed to demonstrate, advanced NOx aftertreatment technology.~~

~~(8) A transit agency on the diesel-fuel path may purchase a bus operated with a heavy-duty pilot ignition engine provided the engine meets the standards set forth in subdivision (b) of section 1956.1.~~

~~(9) The Executive Officer shall authorize, in writing, a transit agency on the diesel path to purchase one or more diesel-fueled hybrid-electric bus~~

~~certified under title 13, CCR, section 1956.1(a)(11)(B) provided that:~~

~~(A) The transit agency shall submit a mitigation plan and letter requesting approval by January 31, 2005, to the Executive Officer that demonstrates that the transit agency will provide surplus emission reductions from urban buses in its fleet that will offset the NO_x emission difference between the certified NO_x emission standard of the hybrid-electric bus and 0.5 g/bhp-hr. The transit agency may not use NO_x emission reductions that are otherwise required by any statute, regulation, or order or the emission reductions that will accrue from the retirement of an urban bus to be replaced by a hybrid-electric bus for the offset;~~

~~(B) The transit agency shall complete implementation of all mitigation measures set forth in the approved plan to offset NO_x emissions prior to the receipt of the last diesel-fueled hybrid-electric bus; and~~

~~(C) The transit agency shall submit the reports required by section 2023.4(g).~~

~~(d) Beginning October 1, 2002, no transit agency shall own, operate, or lease an active fleet of urban buses with average NO_x emissions in excess of 4.8 g/bhp-hr, based on the engine certification standards of the engines in the active fleet.~~

~~(1) This active fleet average requirement shall be based on urban buses owned, operated, or leased by the transit agency, including diesel buses, alternative-fuel buses, all heavy-duty zero-emission buses, electric trolley buses, and articulated buses, in each transit agency's active fleet. The Executive Officer may allow zero-emission buses that do not meet the definition of an urban bus to be included in the calculation of the fleet average standard upon written request to the ARB by January 31, 2002, and upon approval by the Executive Officer. The request shall include a description of the zero-emission buses, the zero-emission technology utilized, and the number of zero-emission buses to be used in calculating the NO_x fleet~~

~~average standard. Zero-emission buses not meeting the definition of an urban bus may not be used to satisfy the requirements of the Zero-emission Bus Demonstration Project set forth in subdivision (b) of section 2023.3, title 13, CCR.~~

~~(2) Transit agencies may use ARB-certified NOx retrofit systems to comply with the fleet average requirement (in addition to bus purchases, repowerings, and retirements).~~

~~(3) Transit agencies have the option of retiring all 1987 and earlier model year diesel urban buses by October 1, 2002, to comply with the fleet average standard requirement.~~

~~(4) A transit agency established after January 1, 2005, shall not operate an active fleet of urban buses with an average NOx emission in excess of:~~

~~(A) 4.0 g/bhp-hr, or~~

~~(B) The NOx average of the active fleet of the transit agency from which it was formed, whichever is lower, or~~

~~(C) In the case of a merger of two or more transit agencies or parts of two or more transit agencies, the average of the NOx fleet averages, whichever is lower.~~

~~(e) To reduce public exposure to diesel particulate matter, each transit agency shall reduce the diesel PM emissions total of the diesel buses in its active fleet relative to its diesel PM emission total as of January 1, 2002, according to the schedule below, and shall operate its diesel buses on diesel fuel with a maximum sulfur content of 15 parts per million by weight. Documentation of compliance with these requirements must be provided in accordance with the provisions of subdivision (d) of section 2023.4, title 13, CCR.~~

~~(1) No later than January 1, 2004:~~

~~(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 60 percent of its diesel PM emission total on January 1, 2002.~~

~~(B) The diesel PM emission total for a transit agency on the alternative~~

~~fuel path shall be no more than 80 percent of its diesel PM emission total on January 1, 2002.~~

~~(2) No later than January 1, 2005:~~

~~(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 40 percent of its diesel PM emission total on January 1, 2002.~~

~~(B) The diesel PM emission total for a transit agency on the alternative fuel path shall be no more than 60 percent of its diesel PM emission total on January 1, 2002.~~

~~(3) No later than January 1, 2007:~~

~~(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 15 percent of its diesel PM emission total on January 1, 2002 or equal to 0.01 g/bhp-hr times the total number of current diesel-fueled active fleet buses, whichever is greater.~~

~~(B) The diesel PM emission total for a transit agency on the alternative fuel path shall be no more than 40 percent of its diesel PM fleet average on January 1, 2002.~~

~~(4) No later than January 1, 2009, the diesel PM emission total for a transit agency on the alternative fuel path shall be no more than 15 percent of its diesel PM emission total on January 1, 2002 or equal to 0.01 g/bhp-hr times the total number of current diesel-fueled active fleet buses, whichever is greater.~~

~~(5) Beginning on January 1, 2005, a new transit agency may not have a diesel PM emission total exceeding the following values:~~

~~(A) As of January 1, 2005 through December 31, 2009, 0.05 g/bhp-hr (exhaust emission value) times the total number of diesel-fueled buses in the active fleet;~~

~~(B) As of January 1, 2010, 0.01 g/bhp-hr (exhaust emission value) times the total number of diesel-fueled buses in the active fleet.~~

~~(6) Beginning July 1, 2002, a transit agency shall not operate its diesel urban buses on diesel fuel with a sulfur content in excess of 15 parts per million by weight, except that a transit agency may operate its diesel buses on a fuel that is verified by the Executive Officer as a diesel emission control strategy that reduces PM in accordance with section 2700 et seq., title 13, CCR. A transit agency with fewer than 20 buses in its active fleet, and that operates in a federal one-hour ozone attainment area, is not subject to this low-sulfur fuel requirement until July 1, 2006. In areas redesignated as one-hour ozone non-attainment areas prior to July 1, 2006, a transit agency initially exempt from the low-sulfur fuel requirement shall submit a plan to the Executive Officer within 30 days of redesignation for achieving compliance with this requirement.~~

~~Note: Authority cited: Sections 39600, 39601, 39667, 43013, 43018 and 43701(b), Health and Safety Code.~~

~~Reference: Sections 39002, 39003, 39017, 39500, 39650, 39667, 40000, 43000, 43000.5, 43013, 43018, 43701(b), 43801 and 43806, Health and Safety Code; and Sections 233 and 28114, Vehicle Code.~~

~~13 CCR § 2023.2~~~~§ 2023.2. Fleet Rule for Transit Agencies – Transit Fleet Vehicle Requirements.~~

~~(a) A transit agency shall not operate transit fleet vehicles with a NOx fleet average exceeding the following values as of the specified dates. A transit agency shall provide documentation of compliance with the requirements in accordance with the provisions of subdivision (e)(2) of section 2023.4, title 13, CCR.~~

~~(1) Beginning December 31, 2007 through December 30, 2010, 3.2 g/bhp-hr;~~

~~(A) A transit agency may retire all 1997 and earlier model year engines in transit fleet vehicles by December 31, 2007, to comply with the NOx fleet average requirement.~~

~~(B) For a new transit agency established after December 31, 2007 and through December 31, 2009, either 3.2 g/bhp-hr or no higher than the NOx average of the transit fleet vehicles of the transit agency from which the new transit agency has been formed, whichever is lower.~~

~~(2) Beginning December 31, 2010, 2.4 g/bhp-hr;~~

~~(A) A transit agency may retire all 2001 and earlier model year engines in transit fleet vehicles by December 31, 2010, to comply with the NOx fleet average requirement.~~

~~(B) For a new transit agency established after December 31, 2010, either 2.4 g/bhp-hr or no higher than the NOx average of the transit fleet vehicles of the transit agency from which the new transit agency has been formed, whichever is lower.~~

~~(3) Zero-emission buses used to satisfy the requirements set forth in subdivision (d) of section 2023.1 may not be used to meet the requirements of this subdivision.~~

~~(4) A transit agency may claim NOx reductions by application of a system that has been verified by the Executive Officer in accordance with section~~

~~2700 et seq., title 13, CCR to comply with the fleet average requirement, in addition to transit fleet vehicle purchases, retirements, or engine repowering.~~

~~(b) A transit agency shall reduce the total diesel particulate matter (PM) emissions of its diesel transit fleet vehicles relative to its total diesel PM emissions from diesel transit fleet vehicles as of January 1, 2005, according to the schedule below. "Diesel PM emission total" and how it is calculated are defined in 2023(a)(3). A transit agency shall provide documentation of compliance with these requirements in accordance with the provisions of subdivision (e)(3) of section 2023.4, title 13, CCR.~~

~~(1) No later than December 31, 2007, the diesel PM emission total for a transit agency's transit fleet vehicle fleet shall be no more than 60 percent of its diesel PM emission total on January 1, 2005.~~

~~(2) No later than December 31, 2010, the diesel PM emission total for a transit agency's transit fleet vehicle fleet shall be no more than 20 percent of its diesel PM emission total on January 1, 2005, or equal to 0.01 g/bhp-hr times the total number of transit fleet vehicles in the current fleet, whichever is greater.~~

~~(3) A new transit agency established after January 1, 2005, may not have a diesel PM emission total exceeding the following values:~~

~~(A) For a new transit agency established January 1, 2005 through December 31, 2006, 0.1 g/bhp-hr (exhaust emission value) times the number of diesel-fueled transit fleet vehicles in its fleet. This value will serve as the transit agency's PM baseline. The transit agency must meet the requirements set forth in section 2023.2(b)(1) and (2).~~

~~(B) For a new transit agency established January 1, 2007 through December 31, 2009, 0.1 g/bhp-hr (exhaust emission value) times the number of diesel-fueled transit fleet vehicles in its fleet. This value will serve as the transit agency's PM baseline and shall be reduced by 50 percent of its PM baseline value by December 31, 2010, and 80 percent~~

~~by December 31, 2012.~~

~~(C) For a new transit agency established January 1, 2010 or later,
0.01 g/bhp-hr (exhaust emission value) times the total number of
diesel transit fleet vehicles in its fleet.~~

~~(c) A transit agency may apply to the Executive Officer for a delay in meeting the provisions of section 2023.2(a) and 2023.2(b) for up to one year to allow for the termination of a vehicle lease, maintenance/lease, turnkey or vehicle/service contract as defined by the Federal Transit Administration (FTA). The transit agency shall apply to the Executive Officer no later than 90 days prior to the applicable deadlines and shall include a description of the reason the delay is required, the reason the contractor cannot provide a newer vehicle to replace an existing vehicle within the terms of the contract, and provide a schedule for compliance by the end of the compliance extension.~~

~~Note: Authority cited: Sections 39600, 39601, 39659, 39667 and 43018, Health and Safety Code.~~

~~Reference: Sections 39667, 39700, 39701, 43000, 43000.5, 43013, 43018, 43801 and 43806, Health and Safety Code.~~

~~13 CCR § 2023.3~~

~~§ 2023.3. Zero-Emission Bus Requirements~~

~~(a) "Zero-emission bus" means an Executive Officer certified urban bus that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) under any and all possible operational modes and conditions.~~

~~(1) A hydrogen-fuel cell bus shall qualify as a zero-emission bus.~~

~~(2) An electric trolley bus with overhead twin-wire power supply shall qualify as a zero-emission bus.~~

~~(3) A battery electric bus shall qualify as a zero-emission bus.~~

~~(4) Incorporation of a fuel-fired heater shall not preclude an urban bus from being certified as a zero-emission bus, provided the fuel-fired heater cannot be operated at ambient temperatures above 40(F) and the heater is demonstrated to have zero evaporative emissions under any and all possible operational modes and conditions.~~

~~(b) Zero-Emission Bus Demonstration Projects.~~

~~(1) Initial Demonstration Project.~~

~~(A) Except as provided in (D) below, the owner or operator of an urban bus fleet on the diesel path in accordance with the provisions of section 2023.1, with more than 200 urban transit buses in its active fleet on January 31, 2001, shall implement an Initial Demonstration Project in accordance with this subsection (b)(1). The owner or operator shall evaluate the operation of zero-emission buses in revenue service, and prepare and submit a report on the demonstration project to the Executive Officer for inclusion in a future review of zero-emission technology.~~

~~(B) This Initial Demonstration Project shall meet all of the following specifications and requirements:~~

~~1. Utilize a minimum of three zero-emission buses;~~

- ~~2. Include any necessary site improvements,~~
- ~~3. Locate fueling infrastructure onsite,~~
- ~~4. Provide appropriate maintenance and storage facilities,~~
- ~~5. Train bus operators and maintenance personnel,~~
- ~~6. Place the buses in revenue service for a minimum duration of 12 calendar months,~~
- ~~7. Retain operation and maintenance records, and~~
- ~~8. Report on the demonstration program as set forth in subdivision (f) of section 2023.4, title 13, CCR.~~

~~(C) When planning and implementing the Initial Demonstration Project, the operator or owner shall meet the following milestones:~~

- ~~1. No later than January 1, 2002, prepare and solicit bid proposals for materials and services necessary to implement the demonstration project, including but not limited to the zero-emission buses and the associated infrastructure;~~
- ~~2. No later than February 28, 2006, place at least three zero-emission buses in operation;~~
- ~~3. No later than July 31, 2005, submit a preliminary report on the demonstration project to the Executive Officer, in accordance with paragraph (f)(3) of section 2023.4, title 13, CCR;~~
- ~~4. No later than July 31, 2007, submit a report on the demonstration project to the Executive Officer, in accordance with paragraph (f)(4) of section 2023.4, title 13, CCR;~~
- ~~5. No later than January 31, 2003, initial documentation shall be submitted in accordance with paragraph (f)(1) of section 2023.4, title 13, CCR; and~~
- ~~6. No later than January 31, 2003, a financial plan shall be submitted in accordance with paragraph (f)(2) of section 2023.4, title 13, CCR.~~

~~(D) Multiple transit agencies within the same air basin may, on a case-by-~~

~~case basis, petition the Executive Officer to implement a joint zero-emission bus demonstration project. Electric trolley buses shall not qualify as zero-emission buses for purposes of this joint demonstration project. No more than three transit agencies can participate in any one joint project. Transit agencies that are participating in a joint demonstration project shall:~~

- ~~1. Designate the agency hosting the onsite demonstration,~~
- ~~2. Jointly fund the demonstration project, and~~
- ~~3. Place a minimum of three zero-emission buses per demonstration project in revenue service.~~

~~(2) *Advanced Demonstration Project.*~~

~~(A) Except as provided in (E) below, the owner or operator of an urban bus fleet on the diesel path in accordance with the provisions of section 2023.1, with more than 200 urban transit buses in its active fleet on January 1, 2007, for transit agencies on the diesel path shall implement an Advanced Demonstration Project. The owner or operator shall evaluate the operation of zero-emission buses in revenue service and prepare and submit a report on the demonstration project to the Executive Officer.~~

~~(B) Diesel fuel path transit agencies may choose to follow the single or joint path demonstration as described in 2023.3(b)(2)(D) or 2023.3(b)(2)(E).~~

~~(C) When planning and implementing the Advanced Demonstration Project for transit agencies on the diesel path, the operator or owner shall meet the following milestones:~~

- ~~1. No later than January 1, 2009, place all required zero-emission buses in operation,~~
- ~~2. No later than May 1, 2009, submit a preliminary report on the demonstration project to the Executive Officer, in accordance with paragraph (f)(3) of section 2023.4, title 13, CCR, and~~
- ~~3. No later than May 1, 2010, submit a final report on the demonstration project to the Executive Officer, in accordance with~~

~~paragraph (f)(4) of section 2023.4, title 13, CCR.~~

~~(D) Transit agencies choosing to participate in a single transit agency Advanced Demonstration Project shall meet all of the following specifications and requirements:~~

- ~~1. Utilize a minimum of six zero-emission buses,~~
- ~~2. Provide appropriate maintenance and storage facilities,~~
- ~~3. Train bus operators and maintenance personnel,~~
- ~~4. Place the buses in revenue service for a minimum duration of 12 calendar months after delivery of all demonstration buses,~~
- ~~5. Retain operation and maintenance records, and~~
- ~~6. Report on the demonstration program as set forth in subdivision (f) of section 2023.4, title 13, CCR.~~

~~(E) Multiple transit agencies may, on a case-by-case basis, petition the Executive Officer to implement a joint zero-emission bus demonstration project. Transit agencies that are participating in a joint demonstration project shall:~~

- ~~1. Jointly fund the demonstration project.~~
- ~~2. Utilize a minimum of 12 zero-emission buses in revenue service.~~
- ~~3. Operate the demonstration at a transit agency affected by the zero-emission bus regulation.~~
- ~~4. Purchase and put in revenue service a minimum of three zero-emission buses per transit agency.~~
- ~~5. Place the buses in revenue service for a minimum duration of 12 calendar months after delivery of all demonstration buses.~~
- ~~6. Provide appropriate maintenance and storage facilities.~~
- ~~7. Train bus operators and maintenance personnel from each participating transit agency.~~

~~(F) Zero-emission buses placed in service to meet the zero-emission bus initial demonstration projects as specified in subdivision (b)(1) are not permitted to count towards the advanced demonstration~~

~~requirements, unless upgraded with technology advancements to make the bus comparable to vehicles available for the advanced demonstration. One credit shall be earned for each bus.~~

~~(c) *Purchase Requirement for Zero-Emission Buses.* The number of urban buses in each transit agency's active urban bus fleet shall be reviewed annually, as described in sections 2023.4(a)(3) and (b)(2). The owner or operator of a transit agency with more than 200 urban buses in active service on January 1, 2007, for transit agencies on the diesel path, and January 1, 2009, for transit agencies on the alternative fuel path, shall purchase and/or lease zero-emission buses, in accordance with the following paragraphs. In addition, the owner or operator of diesel path transit agencies whose active urban bus fleet initially exceeds 200 urban buses after January 1, 2007 shall have three years to comply with the Zero-Emission Bus Purchase Requirement starting January 1, of the year they exceed 200 urban buses through 2026. The owner or operator of alternative fuel path transit agencies whose active urban bus fleet initially exceeds 200 urban buses after January 1, 2009, shall have three years to comply with the Zero-Emission Bus Purchase Requirement starting January 1, of the year they exceed 200 urban buses through 2026.~~

~~(1) For transit agencies on the diesel path, in accordance with the requirements in section 2023.1, a minimum 15 percent of purchase and lease agreements, when aggregated annually, for model year 2011, or from the start model year of Zero-Emission Bus purchases, through model year 2026 urban buses shall be zero-emission buses.~~

~~(2) For transit agencies on the alternative fuel path, in accordance with the requirements in section 2023.1, a minimum 15 percent of purchase and lease agreements, when aggregated annually, for model year 2012, or from the start model year of Zero-Emission Bus purchases, through model year 2026 urban buses shall be zero-emission buses.~~

~~(3) The provisions of paragraphs (1) and (2) shall not apply if the operator's urban bus fleet is composed of 15 percent or more zero-emission buses on January 1, 2008, for transit agencies on the diesel path, and on January 1,~~

2010, for transit agencies on the alternative-fuel path, or at any time thereafter.

(4) Earning Credits.

~~(A) Transit agencies on either the diesel path or alternative-fuel path may earn credits for use in meeting the purchase requirements for zero-emission buses specified in paragraphs (c)(1) and (c)(2) by placing zero-emission buses in service prior to the dates specified in paragraphs (c)(1) and (c)(2). For each zero-emission bus placed into early service and above what is required by section 2023.3 in paragraphs (b)(2), (c)(1) and (c)(2), credits shall be accrued according to the following table. Each earned credit is equivalent to one zero-emission bus.~~

Credits per Year Placed

Path	2007	2008	2009	2010	2011
Diesel	2.5	2	1.5	1.5	-
Alternative-	2.5	2	2	1.5	1.5

~~(B) Zero-emission buses placed in service to meet the zero-emission bus initial demonstration projects as specified in subdivision (b)(1) are not permitted to accrue credits towards the zero-emission bus purchase requirements, unless upgraded with technology advancements to make them comparable to vehicles available for the advanced demonstration. One credit shall be earned for each bus.~~

~~(C) Zero-emission buses placed in service to meet the advanced demonstration projects as specified in subdivision (b)(2) can accrue purchase credit towards the zero-emission purchase requirements. For each zero-emission bus required by the advanced demonstration, credit shall be accrued according to the following table. Each earned credit is equivalent to one zero-emission bus.~~

	<i>Credits per Year Placed for Advanced Demonstration Zero-Emission Buses</i>		
<i>Path</i>	2007	2008	2009
Diesel	2	1.5	4

~~(d) The Air Resources Board shall review zero-emission bus technology and the feasibility of implementing the requirements of subdivision (c) above no later than July 2009. Based on that assessment, the Board shall decide whether to proceed with the implementation of subdivision (c) or adjust the requirements.~~

~~Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43100, 43101, 43104, 43806 Health and Safety Code.~~

~~Reference: Sections 39002, 39003, 39017, 39018, 39500, 39701, 40000, 43000, 43000.5, 43009, 43013, 43018, 43102, 43801, and 43806 Health and Safety Code, and section 28114 Vehicle Code.~~

~~13 CCR § 2023.4~~

~~§ 2023.4. Reporting Requirements for Transit Agencies.~~

~~(a) The following reports on new urban bus purchases and/or leases by transit agencies on the alternative-fuel path shall be submitted as described below:~~

- ~~(1) The initial report shall be submitted by January 31, 2001, and shall state the transit agency's intent to follow the alternative-fuel path.~~
- ~~(2) Any requests for deviation from the requirement that 85 percent of buses purchased per year must be alternative-fuel buses must be submitted in writing and approved by the Executive Officer of the Air Resources Board 90 days prior to purchase. The written request must include the reason for requesting the deviation from the 85 percent annual purchase requirement and the transit agency's future planned alternative-fuel bus purchases.~~
- ~~(3) Each transit agency shall submit an annual report containing: the number, manufacturer, make, and model year of engines, and fuel used for each urban bus it currently owns or operates, urban bus purchases and/or leases beginning January 1, 2000, and annual average percentage of total urban bus purchases and/or leases that were alternative-fuel buses. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016. For transit agencies operating 150 or more urban buses, reports shall be submitted annually by January 31 through the year 2027.~~

~~(b) The following reports on new urban bus purchases and/or leases by transit agencies on the diesel path shall be submitted as described below:~~

- ~~(1) The initial report shall be submitted by January 31, 2001, and shall state the transit agency's intent to follow the diesel path.~~
- ~~(2) Each transit agency shall submit an annual report containing the number, manufacturer, make, and model year of engines, and fuel used for each urban bus it currently owns or operates, and urban bus purchases and/or~~

leases beginning January 1, 2000. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016. For transit agencies operating 150 or more urban buses, reports shall be submitted annually by January 31 through the year 2027.

(3) A transit agency within the jurisdiction of the South Coast Air Quality Management District that chooses to change from the diesel path to the alternative fuel path in accordance with paragraph (a)(2) of section 2023.1, title 13, CCR, must submit to the Executive Officer a letter of intent to follow the alternative fuel path no later than January 31, 2004. The letter of intent shall contain a statement certifying that the transit agency is in compliance with all provisions of the fleet rule for transit agencies on or before January 1, 2004.

(4) As set forth in section 2023.1(a)(5), transit agencies with more than 30 buses in their fleet that purchase model years 2007 through 2009 urban buses not certified at or below 0.2 g/bhp-hr NO_x emissions shall submit the following information for each urban bus purchased: the manufacturer, make, model year of the engine of the urban bus or transit fleet vehicle retrofitted and for each diesel emission control strategy applied, the date of installation, the device's product serial number, and its Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2706(g)(2), title 13, CCR. The first report shall be submitted by January 31, 2007. Subsequent reports shall be submitted annually by January 31 through the year 2016.

(c) Each transit agency shall submit the following reports on the urban bus NO_x fleet average requirement:

(1) Initial documentation shall be submitted by January 31, 2001, and contain, at a minimum, the active urban bus fleet NO_x emission average, and if that number exceeds the average required in subdivision (d), section 2023.1, title 13, CCR, a schedule of actions planned to achieve that average by October 1, 2002, including numbers and model years of bus purchases, retirements, retrofits, and/or repowerings, or shall indicate the intent of the transit agency to

~~retire all model year 1987 and earlier buses in its active fleet by October 1, 2002.~~

~~(2) A final report shall be submitted by January 31, 2003, detailing the active urban bus fleet NOx emission average as of October 1, 2002, and actions, if any were needed, taken to achieve that standard, including numbers and model years of bus purchases, retirements, retrofits, and/or repowerings, or documenting the retirement of all model year 1987 and earlier buses.~~

~~(d) Each transit agency shall submit the following reports on the total diesel PM emission reduction requirements for urban buses:~~

~~(1) An initial annual report shall be submitted by January 31, 2003, and shall contain, at a minimum, the following information:~~

~~(A) number, manufacturer, make, and model year of diesel-fueled, dual-fuel, bi-fuel (except for heavy-duty pilot ignition engines), and diesel hybrid-electric engines in urban buses in the active fleet; the PM engine certification value of each of those bus engines; the diesel PM emission total for the diesel buses in the active fleet; and the diesel PM emission total for the baseline date of January 1, 2002.~~

~~(B) For each urban bus for which a diesel emission control strategy has been applied, the device's product serial number; its Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2706(g)(2), title 13, CCR; and the date of installation.~~

~~(2) Annual reports shall be submitted each year beginning January 31, 2004 and each January 31 thereafter, through 2009, and shall contain the information required in paragraphs (d)(1)(A) and (B) above plus the total percentage reduction of PM achieved from the baseline diesel PM emission total as of January 1 of each applicable year.~~

~~(e) Each transit agency shall submit the following reports for its transit fleet vehicles:~~

~~(1) An annual report of the number, manufacturer, make, and model year of engines and fuel used for each transit fleet vehicle it currently owns, leases, or~~

~~operates as of January 1st of each year, beginning in 2006. The first report shall be submitted by January 31, 2006, and subsequent reports shall be submitted annually by January 31st through the year 2016.~~

~~(2) For the NOx fleet average reduction requirements set forth in section 2023.2(a):~~

~~(A) A report submitted by January 31, 2006, must contain at a minimum, the transit vehicle fleet NOx emission average. If that number exceeds the average required in section 2023.2(a)(1), the report must include a schedule of actions planned to achieve compliance by December 31, 2007.~~

~~1. If a change to the compliance schedule occurs that results in noncompliance, the transit agency must notify the Executive Officer within 30 days.~~

~~2. Notification to the Executive Officer must include a revised schedule showing how the agency will be in compliance within 90 days of the schedule change that caused noncompliance.~~

~~(B) A report submitted by January 31, 2008, must contain, details of the transit fleet vehicle fleet NOx emission average as of December 31, 2007, or must document the retirement of all model year 1997 and earlier transit fleet vehicle engines by December 31, 2007.~~

~~(C) A report submitted by January 31, 2009, must contain at a minimum, the transit vehicle fleet NOx emission average. If that number exceeds the average required in section 2023.2(a)(1), the report must include a schedule of actions planned to achieve compliance by December 31, 2010.~~

~~1. If a change to the compliance schedule occurs that results in noncompliance, the transit agency must notify the Executive Officer within 30 days.~~

~~2. Notification to the Executive Officer must include a revised schedule showing how the agency will be in compliance within~~

~~90 days of the schedule change that caused noncompliance.~~

~~(D) A final report submitted by January 31, 2011 must contain details the transit fleet vehicle fleet NOx emission average as of December 31, 2010, or must document the retirement of all model year 2001 and earlier transit fleet vehicle engines by December 31, 2010.~~

~~(3) For the total diesel PM reduction requirements set forth in section 2023.2(b):~~

~~(A) An initial report submitted by January 31, 2006, must contain the PM engine certification value of each transit fleet vehicle engine and the transit fleet vehicle diesel PM total as of January 1, 2005.~~

~~(B) A report submitted by January 31, 2008, must contain the transit fleet vehicle diesel PM total as of December 31, 2007, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2(b)(1).~~

~~(C) A final report submitted by January 31, 2011, of the transit fleet vehicle diesel PM total as of December 31, 2010, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2(b)(2).~~

~~(D) For each transit fleet vehicle for which a diesel emission control strategy has been applied, each report specified above must include the strategy's product serial number; its Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2705(g)(2), title 13, CCR; and the date of installation correlated to a specific transit fleet vehicle engine.~~

~~(f) The following reports on the zero-emission bus demonstration program shall be submitted by those transit agencies required to conduct such demonstrations, as described below:~~

~~(1) Initial documentation shall contain, at a minimum, the bus order and delivery schedule, fuel type, type of refueling station, any planned facility modifications, and a revenue service demonstration plan;~~

~~(2) A financial plan shall contain, at a minimum, projected expenditures for capital costs for purchasing and/or leasing buses, refueling stations, any facility modifications, and projected annual operating costs;~~

~~(3) A preliminary report shall contain, at a minimum, the following information:~~

~~(A) A brief description of the zero-emission technology utilized, identification of the bus manufacturer, and the product specifications;~~

~~(B) A comparison with conventional buses on the following parameters: miles driven per bus in revenue and non-revenue service, miles between propulsion related road calls, miles between road calls, availability of bus for pull out, fuel economy, fueling costs, infrastructure costs, initial cost of bus, maintenance costs of propulsion related components, warranty of fuel cell and propulsion related components, safety incidents, and maintenance (both scheduled and unscheduled);~~

~~(C) Qualitative transit personnel and passenger experience; and~~

~~(D) A financial summary of the capital costs of bus purchases and/or leases and fueling infrastructure.~~

~~(4) A final report shall contain, at a minimum, the following information:~~

~~(A) A brief description of the zero-emission technology utilized, identification of bus manufacturer and product specifications,~~

~~(B) A comparison with conventional buses on the following parameters: miles driven per bus in revenue service, miles between propulsion related road calls, miles between road calls, availability of bus for pull out, fuel economy, fueling costs, infrastructure costs, initial cost of bus, maintenance costs of propulsion related components, warranty of fuel cell and propulsion related components, bus down time (scheduled and unscheduled), safety incidents, driver and mechanic training conducted, and maintenance (both scheduled and unscheduled),~~

~~(C) Qualitative transit personnel and passenger experience, and~~

~~(D) A financial summary of capital costs of demonstration program,~~

~~including bus purchases and/or leases, fueling infrastructure, any new facilities or modifications, and annual operating costs.~~

~~(5) Beginning 1 month after the start of a demonstration and monthly thereafter, an update on the demonstration shall be provided to Air Resources Board staff. These updates shall provide staff with zero-emission bus qualitative data on the following parameters: brief description of each bus's operation, number of days in operation (in-service and testing), bus down time (scheduled and unscheduled), reason for bus down time, outreach events, and requests for future participation in outreach events.~~

~~(6) Beginning 2 months after the delivery of the first bus and quarterly thereafter, an update on the demonstration shall be provided to Air Resources Board staff. These updates shall provide staff with zero-emission and conventional bus quantitative data on the following parameters: reliability (defined as miles between propulsion related road calls), operating and maintenance costs, maintenance conducted, warranty issues, availability of bus for pull out, fuel economy, technology performance, bus downtime (scheduled and unscheduled), safety incidents, issues with fueling equipment, outreach efforts, and driver and mechanic training conducted.~~

~~(g) The following reports on new zero-emission bus purchases and/or leases shall be submitted by transit agencies required to purchase zero-emission buses as described below:~~

~~(1) The initial report shall contain, at a minimum, the following information:~~

~~(A) A brief description of the zero-emission technology to be utilized and a plan for the implementation of the requirement,~~

~~(B) For an exemption from the purchase requirement, documentation that 15 percent or more of the transit agency's active urban bus fleet is composed of zero-emission buses.~~

~~(2) Any requests for deviation from the requirement that 15 percent of buses purchased per year must be zero-emission buses must be submitted in writing and approved by the Executive Officer of the Air Resources Board 90~~

~~days prior to a transit agency submitting a purchase order(s) reflecting the purchase deviation. The written request shall include the reason for requesting the deviation and the transit agency's future planned zero-emission bus purchases.~~

~~(3) Transit agencies on the diesel path shall include in the annual reports required in paragraph (b)(2): zero-emission bus purchases and/or leases beginning with model year 2008 and through model year 2026, and the annual average percentage of total bus purchases and/or leases that were zero-emission buses.~~

~~(4) Transit agencies on the alternative-fuel path shall include in the annual reports required in paragraph (a)(3): zero-emission bus purchases and/or leases beginning with model year 2008 and through model year 2026, and the annual average percentage of total bus purchases and/or leases that were zero-emission buses.~~

~~(h) Transit agencies exempted from the requirements of paragraphs (b)(5) and (c)(4), section 2023.1, title 13, CCR, shall submit annual reports demonstrating that they are achieving NOx emission benefits required in paragraphs (b)(8)(B) and (c)(7)(B), section 2023.1, title 13, CCR. The first report shall be submitted by January 31, 2005. Subsequent reports shall be submitted annually by January 31 through the year 2016.~~

~~(i) A transit agency requesting approval for the purchase of diesel-fueled hybrid-electric buses pursuant to paragraph (c)(9), section 2023.1, title 13, CCR, shall:~~

~~(1) Submit an application for approval that meets the requirements of paragraphs (c)(9)(A) and (c)(9)(B), section 2023.1, title 13, CCR;~~

~~(2) Include in the application all of the following: the number, manufacturer, make and model year of diesel-fueled hybrid-electric buses to be purchased; the schedule for the purchase and delivery of the buses; a detailed description of all measures that will be used to offset the excess NOx emissions including identification of the specific buses to which the measures will be applied, and the schedule for implementing those measures; and~~

~~(3) Submit a final report to the Executive Officer within 30 days of receipt of the last diesel-fueled hybrid-electric bus that documents the schedule of delivery of the diesel-fueled hybrid-electric buses, timing, and completion of all measures to achieve the NOx offset.~~

~~(j) A new transit agency shall submit the following information to the Executive Officer:~~

~~(1) Within 60 days of formation, the name of the new transit agency, its mailing address, name of a contact person and that person's e-mail address and phone number; a description of the service area and proposed routes; and the planned number of urban buses and transit fleet vehicles, including model years of engines;~~

~~(2) Within 120 days of formation, its NOx fleet average for its active fleet and, separately, its transit fleet vehicles, and its diesel PM emission total for its active fleet and, separately, its diesel PM emission total for its transit fleet vehicles.~~

~~(k) Failure to submit complete reports.~~

~~(1) A transit agency that fails to submit a complete report in accordance with this section is subject to civil penalties of not less than \$100 per day for every day past January 31 of each reporting year through 2016. For transit agencies with more than 150 urban buses civil penalties of not less than \$100 per day for every day past January 31 shall continue for each reporting year through 2027.~~

~~(2) A new transit agency that fails to submit its report or required information in accordance with this section is subject to civil penalties of not less than \$100 per day for every day past the required reporting dates in section 2023.4(j).~~

~~(3) A report that does not contain all required information will not be considered complete. A report will be considered to be complete as of the date that all required information is submitted.~~

~~Note: Authority cited: Sections 39600, 39601, 39659 and 39667, Health and Safety Code.~~

~~Reference: Sections 39667, 39700, 43000, 43000.5, 43013, 43018, 43801 and 43806, Health and Safety Code.~~

Article 4.3. Innovative Clean Transit.

§ 2023. Innovative Clean Transit Regulations Applicability and Scope.

(a) Applicability.

(1) Except as provided in sections 2023(a)(2), these Innovative Clean Transit regulations, title **2013**, article 4.3, California Code of Regulations, apply to a transit agency that owns, operates, leases, rents, or contracts with another entity to operate buses in California.

(2) These regulations do not apply to any of the following:

(A) Vehicles that operate on rails, trolleybuses, or school buses, even if operated by a transit agency;

(B) Caltrans, Caltrain, Amtrak, or any local school district.

(b) Definitions. For the purposes of the regulations in this Article 4.3, the following definitions apply:

(1) “Active Bus” means a bus in a particular fleet at year-end that is available to operate in revenue service, including a spare bus and a bus temporarily out of service for routine maintenance and minor repairs. A bus in storage, an emergency contingency vehicle, a bus removed from the active bus fleet and awaiting sale, or a bus out of service for an extended period of time for major repairs is not considered an active bus.

(2) “Air Basin” has the same meaning as defined in section 39012 of the Health and Safety Code.

(3) “Annual Maximum Service” means the number of buses in revenue service that are operated during the peak season of the year, on the week and day that maximum service is provided, but excludes demand response buses. Annual maximum service excludes the following:

- (A) An atypical day, on which the transit agency provides extra service to meet demands for special events such as conventions, parades, or public celebrations, or operates significantly reduced service because of unusually bad weather (e.g., snowstorms, hurricanes, tornadoes, earthquakes) or major public disruptions (e.g., terrorism); or
- (B) One-time special events.
- (4) “Articulated Bus” is a 54-foot to 60-foot bus with two connected passenger compartments.
- (5) “Battery Electric Bus” means a bus that has an all-electric propulsion system and relies only on batteries to store electricity received from an external power source ~~for of~~ the vehicle. It has no internal combustion engine in the powertrain for the vehicle.
- (6) “Bus” means a rubber-tire vehicle designed to transport passengers by road with gross vehicle weight rating (GVWR) greater than 14,000 pounds, but does not include a trolleybus as specified in section 2023(a)(2)(A).
- (7) “Bus Purchase” or “Purchase” means the transit agency has identified, committed and encumbered funds and executes one of the following:
- (A) A written “Notice to Proceed” executed by a transit agency to a bus manufacturer to begin production of a bus either:
1. Under a previously-entered purchase contract; or
 2. To execute a contract option;
- or,**
- (B) If no Notice to Proceed is issued, a written purchase agreement between a transit agency and a bus manufacturer that specifies the date when the bus manufacturer is to proceed with the work to manufacture the bus; or

- (C) A signed written lease agreement between a transit agency and a bus manufacturer or sales representatives for a new bus to be placed in revenue service for a contract term of five years or more.
- (8) “Bus Testing Report” means the complete test report for a bus model required by title 49 of the Code of Federal Regulations (CFR) section 665.13. These bus tests are also commonly called “Altoona Testing”.
- (9) “Bus Type” means a bus body configuration, including a bus, articulated bus, over-the-road bus, double-decker bus, and cutaway buses.
- (10) “CalEnviroScreen” means a mapping tool that is developed by the Office of Environmental Health Hazard Assessment (OEHHA) at the request of the California Environmental Protection Agency (CalEPA) to identify California’s most pollution-burdened and vulnerable communities based on geographic, socioeconomic, public health, and environmental hazard criteria. The CalEnviroScreen is available for public use at <https://oehha.ca.gov/calenviroscreen>.
- (11) “CARB” is the same as California Air Resources Board.
- (12) “Compressed Natural Gas” or “CNG” has the same meaning as specified in the Low Carbon Fuel Standard Regulation, title 17, California Code of Regulations, section 95481(21).
- (13) “Conventional Internal Combustion Engine Bus” means a bus with an internal combustion engine (ICE) propulsion system or a combination of an internal combustion engine with an electric propulsion system commonly referred to as a hybrid powertrain.
- (14) “Conversion to a Zero-Emission Bus” means converting a conventional internal combustion engine bus, to a zero-emission bus as defined in section 2023(b)(54).

(15) “Criteria Pollutants” or “Criteria Air Pollutants” are air pollutants for which air quality criteria have been issued by the Administrator of the United States Environmental Protection Agency under title 42 of the ~~United States Code~~, **U.S.C.** section 7408.

(16) “Curb Weight” has the same meaning as defined in title 49 of Code of Federal Regulations, section 571.3.

(17) “Cutaway Bus” means a vehicle in which a bus body designed to transport passengers is mounted on the chassis of a van or light- or medium-duty truck chassis, and that has a GVWR greater than 14,000 pounds but not more than 26,000 pounds. The original van or light- or medium- duty truck chassis may be reinforced or extended. A cutaway bus may accommodate some standing passengers.

(18) “Date In-Service” means the date a purchased bus is brought into revenue service.

(19) “Demand Response” has the same meaning as defined in title 49 of the Code of Federal Regulations, section 604.3(g).

(20) “Diesel” has the same meaning as defined in title 13, California Code of Regulations, sections 2281 and 2282.

(21) “Double-Decker” means a high-capacity bus that has two levels of seating, one over the other, connected by one or more stairways. Total bus height is usually 13 to 14.5 feet, and typical passenger seating capacity ranges from 40 to 80 people.

(22) “Emergency” has the same meaning as defined in title 49 of ~~United States Code~~ **U.S.C.**, section 5324(a)(2).

(23) “Emergency Contingency Vehicle” is a revenue vehicle removed from an active **bus** fleet for local emergencies after this revenue vehicle has reached the end of its normal minimum useful life.

(24) “Engine Family Name” or “EFN” is an identifier, which is unique to an engine of a specific model year, build, and manufacturer, and can be found on the emission control label located on the engine.

(25) “Executive Officer” means the Executive Officer of the California Air Resources Board (CARB) or his/her designee.

(26) “FTA” is the Federal Transit Administration.

(27) “Fuel Cell Electric Bus” or “FCEB” means an electric bus that uses both a hydrogen fuel cell stack and a battery for propulsion. The fuel cell stack generates electricity on board to charge the battery that powers the on board motor. It has no internal combustion engine in the powertrain. A fuel cell electric bus relies on its hydrogen tank and fuel cell stack on board for its energy supply.

(28) “Gradeability” means a vehicle’s ability to climb slopes.

(29) “Gross Vehicle Weight Rating” or “GVWR” has the same meaning as defined in California Vehicle Code, section 350, subdivision (a).

(30) “Large Transit Agency” means either:

(A) A transit agency that operates either in the South Coast or the San Joaquin Valley Air Basin and operates more than 65 buses in annual maximum service; or

(B) A transit agency that does not operate in the South Coast or San Joaquin Valley Air Basin and has at least 100 buses in annual maximum service in an urbanized area with a population of at least 200,000 as last published by the Bureau of Census before December 31, 2017.

(31) “Low-NOx Engine” has the same meaning as defined in title 13 of California Code of Regulations, section 2208(c)(18).

- (32) "Manufacture Year" means the year of original manufacture of the vehicle. It is not necessarily the same as the model year.
- (33) "Metropolitan Planning Organization" or "MPO" has the same meaning as defined in 49 U.S.C. section 5303(b)(2).
- (34) "Minimum Useful Life" means the minimum years of service or accumulations of miles at which a transit agency is allowed to retire its federally funded bus without penalty under the terms of federal funding requirements.
- (35) "New Bus" means a bus, the equitable or legal title to which has never been transferred to a first entity who in good faith purchases the bus for purposes other than resale.
- (36) "New Entrant" means a transit agency that is newly established or is created through a merger of two or more transit agencies on or after December 31, 2017.
- (37) "Notice to Proceed" means a written direction to a bus manufacturer to commence production of a bus as provided in a contract.
- (38) "NOx" means oxides of nitrogen.
- (39) "NOx Exempt Areas" means the following counties and air basins: Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Eastern Kern (portion of Kern County within the Eastern Kern Air Pollution Control District), Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Monterey, Nevada, Northern Sonoma (as defined in title 17, California Code of Regulations, section 60100(e)), Plumas, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Shasta, Sierra, Siskiyou, Northern Sutter (portion of Sutter County that is north of the line that extends from the south east corner of Colusa County to the southwest corner of Yuba County), the portion of El Dorado that is within the Lake Tahoe Air Basin (as defined in title 17,

California Code of Regulations, section 60113), the portion of Placer that is East of Highway 89 or within the Lake Tahoe Air Basin, Trinity, Tehama, Tuolumne, and Yuba.

(40) "Orange County Bus Cycle" means a chassis dynamometer test developed by West Virginia University based on real bus operating data from the Orange County Transportation Authority. The test is based on Society of Automotive Engineers (SAE) International Recommended Practice for Measuring Fuel Economy and Emissions of Hybrid-Electric and Conventional Heavy-Duty Vehicles J2711_200209 (September 20, 2002), available at: https://www.sae.org/standards/content/j2711_200209/, which is incorporated by reference.

(41) "Over-The-Road Bus" means a bus characterized by an elevated passenger deck located over a baggage compartment. They are customarily used for long-distance bus services or connecting outlying areas with central cities with limited stops. Over-The-Road buses are also commonly called Coaches or Motor Coaches.

(42) "Regional Transportation Planning Organization" has the same meaning as defined in 49 U.S.C. section 5303(b)(5).

(43) "Renewable Diesel" or "Biomass-Based Diesel" has the same meaning as defined in title 17, California Code of Regulations, section 95481(18).

(44) "Renewable Natural Gas" or "Biomethane" or "RNG" has the same meaning as defined in title 17, California Code of Regulations, section 95481(19).

(45) "Repower" means to replace an older engine with a newer model engine that has reduced emissions.

(46) "Revenue Service" means the status of a bus being available to the general public for the purpose of carrying passengers.

(47) "Revenue Vehicle" means a bus that is available to operate in revenue service carrying passengers.

(48) "School Bus" has the same meaning as defined in California Vehicle Code, section 545.

(49) "Small Transit Agency" means a transit agency that is not a large transit agency.

(50) "Spare Bus" means a revenue vehicle that is maintained by the transit agency to preserve scheduled service operations during periods of:

(A) routine and unplanned maintenance; or

(B) unexpected vehicle breakdowns or accidents.

(51) "Transit Agency" has the same meaning as defined in title 13, California Code of Regulations, section 2020(b). A transit agency does not mean a correctional facility, airport, college or university, national park, tour bus service providers, or an entity that provide shuttle services solely for patrons of its organization.

(52) "Trolleybus" means a rubber-tired, electrically powered passenger vehicle operated on city streets drawing power from overhead wires using trolley poles.

(53) "Urbanized Area" has the same meaning as defined in 23 U.S.C. section 101(a)(34).

(54) "Zero-Emission Bus" or "ZEB" means a bus with zero tailpipe emissions and is either a battery electric bus or a fuel cell electric bus.

(55) "Zero-Emission Passenger Miles" means the number of miles traveled by passengers determined by multiplying the number of passengers who board zero emission vehicles, other than buses with a GVWR greater than 14,000 pounds by the length of their trips.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

§ 2023.1. Zero-Emission Bus Requirements.

(a) Zero-Emission Bus Purchase Requirements.

(1) In any given calendar year, transit agencies must purchase or operate a minimum number of zero-emission buses as determined by the following schedules:

(A) For a large transit agency:

- a. Starting January 1, 2023, twenty-five percent of the total number of new bus purchases in each calendar year must be zero-emission buses;
- b. Starting January 1, 2026, fifty percent of the total number of new bus purchases in each calendar year must be zero-emission buses; and
- c. Starting January 1, 2029, all new bus purchases must be zero-emission buses.

(B) For a small transit agency:

- a. Starting January 1, 2026, twenty-five percent of the total number of new bus purchases in each calendar year must be zero-emission buses; and
- b. Starting January 1, 2029, all new bus purchases must be zero-emission buses.

(2) If the calculated required minimum number of zero-emission buses as set forth in section 2023.1(a) in a given calendar year does not result in a whole number, the number must be rounded to the nearest integer.

(3) The zero-emission bus purchase requirements set forth in section 2023.1(a) apply only to the total number of new bus purchases in a calendar year. The

following are not considered to be new bus purchases for the purposes of calculating the minimum number of zero-emission buses required in a given calendar year:

(A) Purchase of used buses;

(B) Conversion of conventional internal combustion engine buses to zero emission buses; and

(C) Purchase of a cutaway bus, over-the-road bus, **double-decker**, or articulated bus, until the latter of either January 1, 2026 or until the criteria specified in section 2023.1(c) have been met.

(4) The required minimum number of zero-emission buses in section 2023.1(a) can be achieved with any combination of new zero-emission bus purchases and zero-emission buses already present in the fleet, less any available zero-emission bus bonus or zero-emission mobility credits, as provided in sections 2023.3 and 2023.5. The number of zero-emission buses in the fleet include all of the following zero-emission buses regardless of how and when they are acquired:

(A) Any zero-emission bus from a previous purchase that has been delivered;

(B) Any leased zero-emission bus that has been delivered; and

(C) Any zero-emission bus that is converted from a conventional internal combustion engine bus and is an active bus.

(D) A zero-emission bus identified in section 2023.1(a)(4)(A) through (C) may only be used once in accounting for the required minimum number of zero-emission buses in section 2023.1(a)(1).

(5) If a transit agency cancels a Notice to Proceed at any time before the bus delivery date, the purchase will be considered invalid and will not count towards required total new bus purchases.

(6) Starting January 1, 2023, a transit agency must retain a newly purchased zero-emission bus for at least five years starting from the date of being placed in the active bus fleet to satisfy a zero emission bus purchase requirement.

(7) Annual compliance with the zero-emission bus purchase requirements is determined as of December 31 of each calendar year.

(b) Discharge of the Initial Zero-Emission Bus Purchase Requirements. The zero-emission bus purchase requirements in section 2023.1(a) for calendar year 2023 and 2024 are discharged if the following circumstances exist:

(1) The zero-emission bus purchase requirements for calendar year ending December 31, 2023, are discharged if California transit agencies collectively have at least eight hundred and fifty (850) zero-emission buses purchased or in active bus fleets by December 31, 2020, based on the reporting data for the end of calendar year 2020.

(2) If the 2023 zero-emission bus purchase requirement is discharged as a result of the implementation of section 2023.1(b)(1), then the zero-emission bus purchase requirements for calendar year ending December 31, 2024, are discharged if California transit agencies collectively have at least one-thousand and two hundred fifty (1,250) zero-emission buses purchased or in active service by December 31, 2021, based on the reporting data for calendar year 2021.

(3) Zero-Emission Bus Bonus Credits as specified in section 2023.3 cannot be used to meet the ~~bus-fleet requirements discharge the purchase requirement~~ requirements of sections 2023.1(b)(1) and (2).

(c) Zero-Emission Cutaway, Over-The-Road, ~~Double-Decker Double-Decker~~, and Articulated Bus Purchase Requirements. Purchases of cutaway, over-the-road, ~~double-decker double-decker~~, or articulated buses are subject to the zero-emission bus purchase requirements as specified in section 2023.1(a) on or after January 1, 2026, if the cutaway, over-the-road, ~~double-decker double-~~

decker, or articulated bus type has a model that has passed the bus testing procedure and obtained a Bus Testing Report as described in section 2023(b)(8) for a given weight class.

(d) Zero-Emission Bus Rollout Plan Requirements. A transit agency must submit a Zero-Emission Bus Rollout Plan (Rollout Plan) to the Executive Officer that meets the following requirements.

(1) Rollout Plans must include all of the following components:

(A) A goal of full transition to zero-emission buses by 2040 with careful planning that avoids early retirement of conventional internal combustion engine buses;

(B) Identification of the types of zero-emission bus technologies a transit agency is planning to deploy, such as battery electric or fuel cell electric bus;

(C) A schedule for construction of facilities and infrastructure modifications or upgrades, including charging, fueling, and maintenance facilities, to deploy and maintain zero-emission buses. This schedule must specify the general location of each facility, type of infrastructure, service capacity of infrastructure, and a timeline for construction;

(D) A schedule for zero-emission and conventional internal combustion engine buses purchases and lease options. This schedule for bus purchases must identify the bus types, fuel types, and number of buses;

(E) A schedule for conversion of conventional internal combustion engine buses to zero-emission buses, if any. This schedule for bus conversion must identify number of buses, bus types, the propulsion systems being removed and converted to;

(F) A description on how a transit agency plans to deploy zero-emission buses in disadvantaged communities as listed in the latest version of CalEnviroScreen (<https://oehha.ca.gov/calenviroscreen>);

(G) A training plan and schedule for zero-emission bus operators and maintenance and repair staff; and

(H) Identification of potential funding sources.

(2) Each transit agency's ~~governing board~~ **Board of Directors** must approve the Rollout Plan through the adoption of a resolution, and submit the Rollout Plan and a copy of the resolution to the Executive Officer according to the following schedule:

(A) A large transit agency must submit its board approved Rollout Plan along with its approval to the Executive Officer by July 1, 2020;

(B) A small transit agency must submit its board approved Rollout Plan along with its approval to the Executive Officer by July 1, 2023.

(3) Transit agencies that are collectively complying with the requirements of Joint Zero-Emission Bus Groups as set forth in section 2023.2 may submit one joint Rollout Plan in lieu of an individual transit agency Rollout Plan along with board approval from each participating transit ~~agencies~~ **agency**. The joint Rollout Plan must be submitted to the Executive Officer based on the submittal date of the largest transit agency in the Joint Group, as set forth in section 2023.1(d)(2).

(e) **New Entrant.** A new entrant must meet the following requirements:

(1) It must submit a compliance report by March 31 following its existence and every year thereafter as specified in section 2023.8; and

(2) It must submit a Rollout Plan within 18 months of its existence.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

§ 2023.2. Compliance Option for Joint Zero-Emission Bus Groups.

(a) Two or more transit agencies may choose to form a Joint Zero-Emission Bus Group (Joint Group) to comply with the requirements of section 2023.1 collectively. A Joint Group must meet at least one of the following eligibility criteria:

(1) All participating transit agencies are located within the same service area of a Metropolitan Planning Organization or Regional Transportation Planning Organization;

(2) All participating transit agencies are located within the same Air Basin;

(3) All participating transit agencies are located within the same Air Quality Management District, Air Pollution Control District, or Air Resources District;
or,

(4) All participating transit agencies share infrastructure.

(b) Procedure to form a Joint Group.

(1) A group of transit agencies forming a Joint Group must provide the Executive Officer a notice at least one year before the Joint Group takes effect. The notice must include all of the following information:

(A) A list of all participating transit agencies;

(B) A statement of intent to form the Joint Group from a responsible official for each participating transit agency;

(C) The proposed start year and if known the end date of the Joint Group;

(D) A description on which criteria specified in section 2023.2(a) are met to form a Joint Group.

(2) The Executive Officer will approve the joint agreement if,

(A) At least one of the criteria set forth in section 2023.2(a) has been met, and

(B) The notice required by section 2023.2(b)(1) has been provided.

(3) The Executive Officer will assign a Joint Group Number to the group to be used by each participating transit agency for the purpose of annual reporting as specified in section 2023.8.

(c) Joint Group Compliance Requirements.

(1) Members of a Joint Group collectively may submit one joint Rollout Plan in lieu of individual transit agency Rollout Plans, along with board approval from each transit agency's governing board as set forth in section 2023.1(d)(3).

(2) Members of a Joint Group must collectively purchase and operate at least the same total number of zero-emission buses annually as each transit agency would be required to purchase and operate individually as set forth in section 2023.1(a).

(3) A Joint Group that is requesting a deferral from zero-emission bus purchase requirements as described in section 2023.4 must explain why the compliance requirements cannot be met by each member of the Joint Group.

(4) If a Joint Group fails to comply with the zero-emission bus requirements set forth in section 2023.1 in a given year, each transit agency will be evaluated for compliance individually.

(5) If the largest transit agency in a Joint Group is a large transit agency, this transit agency must have the required minimum number of zero-emission buses as a percentage of its total new bus purchases in that calendar year as set forth in section 2023.1(a).

(d) Changes to a Joint Group. In case of a change in membership, all participating transit agencies, including the new or departing transit agency, must collectively submit a request to change membership to the Executive Officer explaining the

change and its expected effective date. The member change request must be signed by the responsible official of each participating transit agency, including the new or departing transit agency, and must be submitted to the Executive Officer along with the board approvals for each participating transit agency, for such a change.

- (e) All transit agencies participating in a Joint Group must individually meet the reporting and record-keeping requirements of sections 2023.8 and 2023.9.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

§ 2023.3. Zero-Emission Bus Bonus Credits.

(a) A transit agency may earn Zero-Emission Bus Bonus Credits (Bonus Credits) for each early acquisition of a zero-emission bus as determined based on the following criteria:

(1) Each fuel cell electric bus that was in the fleet as of January 1, 2018 receives two Bonus Credits;

(2) Each fuel cell electric bus placed in service between January 1, 2018 and December 31, 2022 receives one Bonus Credit;

(3) Each battery electric bus that was in the fleet as of January 1, 2018 receives one Bonus Credit;

(4) Each electric trolleybus placed in service between January 1, 2018, and December 31, 2019, receives one-tenth of a Bonus Credit that will expire by December 31, 2024.

(b) Unless as specified in section 2023.3(a)(4), transit agencies that have Bonus Credits can use them in any subsequent year until December 31, 2028 to meet the required minimum number of zero-emission buses as set forth in section 2023.1(a)(4).

(1) Each Bonus Credit may only be used once to meet the zero-emission bus purchase requirements set forth in section 2023.1(a)(4);

(2) All Bonus Credits will expire on December 31, 2028, which is when the one hundred percent zero-emission bus purchase requirement begins.

(c) A Bonus Credit cannot be transferred to another transit agency, but may be used by transit agencies participating in a Joint Group to comply with zero-emission bus purchase requirements collectively as set forth in section 2023.2(c)(2).

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

§ 2023.4. Provisions for Exemption of a Zero-Emission Bus Purchase.

- (a) It is the intent of this section to ensure transit service is not adversely affected~~;~~, ~~transit~~ Transit agencies may request an exemption from the zero-emission bus requirements set forth in section 2023.1. The Executive Officer will grant an exemption upon request, if the specified criteria in section 2023.4(c) are met.
- (b) A request for exemption for a particular calendar year's compliance obligation must be submitted to the Executive Officer by November 30th of that year.
- (c) A request for exemption must demonstrate as provided below that at least one of the following circumstances exists beyond the transit agency's control:
 - (1) Delay in bus delivery is caused by setback of construction of infrastructure needed for the zero emission bus. A transit agency may request an exemption from the requirements of section 2023.1(a)(4) if it cannot finalize the zero-emission bus infrastructure within two years of the initial bus purchase and in time to operate the purchased buses after delivery due to circumstances beyond the transit agency's control.
 - (A) For purposes of this section, zero-emission bus infrastructure includes charging stations, hydrogen stations, and maintenance facilities~~;~~, and circumstances beyond the transit agency's control may include:
 - 1. Delays ~~with in~~ installing zero-emission bus infrastructure that would require the transit agency to purchase new rights-of-way or construct new facilities,
 - 2. Change of a general contractor,
 - 3. Delays obtaining power from a utility,
 - 4. Delays obtaining construction permits,
 - 5. ~~Archeological d~~Discovery of historical or tribal cultural resources under the California Environmental Quality Act, or

6. Natural disaster.

(B) A transit agency must submit a request for exemption to the Executive Officer by submitting the following documentation:

1. A letter from its Board of Directors, and,
2. A letter from the licensed contractor performing the work, related utility, building department, or other organizations involved in the project, explaining the reasons for delay and estimating the completion date of the project.

(C) The transit agency may request an exemption from the zero-emission bus purchase requirements **set forth** in section 2023.1(a) if the transit agency can provide documentation that demonstrates the needed infrastructure cannot be completed within the two-year extension period or in time to operate the purchased buses after delivery, whichever is later.

(D) A transit agency may purchase conventional internal combustion engine buses instead of zero-emission buses once **the Executive Officer grants** the exemption **is granted**.

(2) When available zero-emission buses cannot meet a transit agency's daily mileage needs.

A transit agency may submit a request for exemption from the zero-emission bus purchase requirements **in section 2023.1(a)** if no battery electric bus can meet the daily mileage needs of any similar bus type in the fleet by submitting documentation to show that the miles travelled between charges of all available depot charging battery electric buses cannot meet the transit agency's daily operational needs for any bus in the existing fleet.

(A) The request for exemption must include the following information:

1. An explanation of why the exemption is needed including:

- a. How zero-emission buses that have already been purchased or placed in service were suitable, and
 - b. Why the daily mileage range of any available depot charging battery electric bus is insufficient to meet the service needs of any conventional internal combustion engine bus in the transit agency's fleet of the same bus type;
2. A current monthly mileage report for each bus type in the fleet to show the daily usage for all of the buses of that type;
 3. A copy of the zero-emission bus request for proposal and resulting bids showing rated battery capacity that is available for each of the buses when new; and
 4. If available, measured energy use data from zero-emission buses operated on daily assignments in the transit agency's service which includes, but is not limited to, battery degradation, air conditioning, passenger loading, grades, and driving behavior that shows typical energy usage over one month or more of regular revenue service.
- (B) The Executive Officer will grant an exemption if the transit agency's required range cannot be met based on its battery electric bus energy use data. If energy use data is not available for the transit agency, the tested energy use on the Orange County Bus Cycle described in section 2023(b)(40) will be used to determine the energy use per mile. If the minimum required range is higher than eighty (80) percent of the range on available battery electric buses (using the largest available battery pack), the transit agency will be granted an exemption from the zero-emission bus purchase requirement.
- (C) A transit agency may purchase ~~an~~ internal combustion engine buses instead of ~~a~~ zero emission buses once the **Executive Officer grants the exemption *is granted***.

(3) A transit agency may request an exemption if available zero-emission buses do not have adequate gradeability performance to meet the transit agency's daily needs for any bus in its fleet.

(A) The transit agency must provide the following information to the Executive Officer.:

1. Documentation that **shows** no other buses in the fleet can meet the transit agency's gradeability requirements and that the available zero emission buses of that bus type cannot be placed into service anywhere else in the fleet;
2. Topography information including the measurement of the grade(s) where the zero-emission buses would be placed in service along with the explanation of which bus types currently provide these services;
3. **An A** description of the bus types that currently serve the route(s) in question, and data showing the performance of conventional internal combustion engine buses of the same bus type that includes the passenger load, bus speed and grade of slope measured when operating on the route(s) the zero-emission buses would be placed in service;
4. An explanation of why the gradeability of all available zero emission buses are insufficient to meet the transit agency's service needs;
5. A copy of the zero-emission bus request for proposal, specifying the transit agency's required gradeability and minimum sustained speed, and the resulting bids; and
6. If available, empirical data including but not limited to grades, passenger loading, and speed data from available zero-emission bus operated on the same grade to show that available zero-

emission buses are unable to meet the same speed requirements under the same operating conditions as the same type of conventional bus in the transit agency's fleet.

(B) A transit agency may purchase ~~an~~ internal combustion engine buses instead of ~~a~~ zero emission buses once the ***Executive Officer grants the exemption ~~is granted~~***.

(4) When a required zero-emission bus type for the applicable weight class based on gross vehicle weight rating (GVWR) is unavailable for purchase.

(A) A transit agency may request an exemption from an immediate zero-emission bus purchase requirement ~~as set forth~~ in section 2023.1(a) if ***no*** zero-emission buses are ~~un~~available as described below.

(B) A zero-emission bus type is considered unavailable for purchase if any of the following circumstances exists:

1. The zero-emission bus has not passed the complete Bus Testing and not obtained a Bus Testing Report as described in section 2023(b)(8);
2. The zero-emission bus cannot be configured to meet applicable requirements of the Americans with Disabilities Act; or
3. The physical characteristics of the zero-emission bus would result in a transit agency violating any federal, state, or local laws, regulations, or ordinances.

(C) The request for exemption must include the following information:

1. A summary of all bus body-types, vehicle weight classes being purchased with their GVWR, chassis (if applicable), and the reasons why existing zero-emission buses are unavailable for purchase;

2. Current fleet information showing how many zero-emission buses of that bus type are already in service and how many are on order and a demonstration that any available zero-emission bus that would meet the purchase requirement **have has** been purchased and that the zero-emission bus purchase requirement cannot be met with other zero-emission bus purchases in that year;
3. If the zero-emission bus type and vehicle weight class to be purchased cannot be adequately equipped to meet applicable Americans with Disabilities Act requirements, then the transit agency must submit documentation to show what Americans with Disabilities Act requirements cannot be met and why the manufacturer cannot meet it by submitting information from the manufacturer; and
4. If the zero-emission bus would result in a transit agency violating any federal, state, or local law, regulation, or ordinance, then the transit agency must submit a letter from its Board of Directors that details how the physical characteristics of the zero-emission bus would violate such federal, state, or local law, regulation or ordinance and how the violation would be avoided with the purchase of a combustion engine bus of the same type. This letter must include all relevant citations to state and federal regulatory code sections.

(D) The Executive Officer will grant an exemption from the requirement to purchase zero-emission buses of the unavailable weight class and bus type if the criteria of section 2023.4(c)(4)(B) are met and the information required by section 2023.4(c)(4)(C) had been provided.

(E) A transit agency may purchase conventional internal combustion engine buses instead of such unavailable zero-emission buses for that bus purchase once the exemption is granted.

(5) When a required zero-emission bus type cannot be purchased by a transit agency due to financial hardship. A transit agency may request an exemption from the zero-emission bus purchase requirements ~~set forth~~ in section 2023.1(a) due to financial hardship.

(A) Financial hardship would be granted if a fiscal emergency is declared under a resolution by a transit agency's Board of Directors following a public hearing, a transit agency can demonstrate that it cannot offset the incremental cost of purchasing all available zero emission buses when compared to the cost of the same type of conventional bus, or a transit agency can demonstrate that it cannot offset the managed, net electricity cost for depot charging battery electric buses when compared to the fuel cost of the same type of conventional internal combustion engine buses.

(B) The request for exemption must include the following documentation:

1. Either a resolution by a transit agency's board declaring a fiscal emergency; or
2. Documentation showing a transit agency cannot offset the initial capital cost of purchasing zero-emission buses, including:
 - a. A letter from a transit agency's ~~board~~ **Board of Directors** declaring the transit agency in good faith has applied for all available funding and financing options that could be used to offset the higher capital costs of zero-emission buses and associated infrastructure;
 - b. Documentation to show the transit agency has been denied financing, or financing options are not available; and
 - c. Documentation to show the transit agency cannot offset the higher incremental costs of available zero-emission buses.

(C) The Executive Officer will grant an exemption from the requirement to purchase zero-emission buses until the next bus purchase.

(D) A transit agency may purchase conventional internal combustion engine buses instead of zero-emission buses once the **Executive Officer grants the exemption-is granted.**

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

Adopt new sections 2023.5, 2023.6, 2023.7, 2023.8, 2023.9, 2023.10, and 2023.11, title 13, California Code of Regulations to read as follows:

(Note: The entire text of sections 2023.5, 2023.6, 2023.7, 2023.8, 2023.9, 2023.10, and 2023.11 set forth below is new language in “normal type” proposed to be added to the California Code of Regulations. Non-substantive changes made since the 15-Day changes are shown with **bold italic underline** for additions and **~~bold italic strikethrough~~** for deletions. These non-substantive changes address issues such as, but not limited to, spelling and grammatical errors, and do not materially alter the requirements or conditions of the proposed rulemaking action. All non-substantive changes will be incorporated into the proposed amendments as explained at the beginning of this note when it is submitted to the Office of Administrative Law)

§ 2023.5. Zero-Emission Mobility Option.

- (a) A transit agency may opt to use a Zero-Emission Mobility Program in lieu of making a zero-emission bus purchase to meet the required minimum number of zero-emission buses as set forth in section 2023.1(a)(4) if such program meets the following requirements:
 - (1) The program provides zero-emission mobility services by using bicycles, scooters, or other zero-emission vehicles with a GVWR of 14,000 pounds or less, or any combination of these;
 - (2) The program must be either directly operated by the transit agency or operated by a contractor to the transit agency;
 - (3) The transit agency must be able to track and record zero-emission passenger miles for each zero-emission vehicle.
 - (4) A transit agency must achieve the following zero-emission passenger miles per year to be eligible to receive each mobility credit:

- (A) A large transit agency must achieve at least 320,000 zero-emission passenger miles per year;
 - (B) A small transit agency must achieve at least 180,000 zero-emission passenger miles per year.
- (b) Procedure to opt-in and opt-out of a Zero-Emission Mobility Option.
- (1) To opt into a zero-emission mobility option, a transit agency must submit a ~~**Request to Opt-In**~~ **request to opt-in** to the Executive Officer with the following information to prove it is meeting the requirements set forth in section 2023.5(a):
 - (A) A description of the types of vehicles, including their GVWR and types of propulsion systems;
 - (B) Documentation to show who will operate these services; and
 - (C) A description of the method of collecting accurate zero-emission passenger miles per vehicle.
 - (2) A transit agency may choose to opt out from the Zero-Emission Mobility Option at any time with the submittal of a ~~**Request to Opt-Out**~~ **request to opt-out** to the Executive Officer with expected date of program termination.
- (c) Calculation and issuance of mobility credits.
- (1) Provided the criteria set forth in section 2023.5(a) has been met and the information required by section 2023.5(b) has been submitted to the Executive Officer, a transit agency that opts into a Zero-Emission Bus Mobility Option may receive one credit that is equivalent to operation of one zero-emission bus in the fleet based on the following calculations:
 - (A) When a bicycle is used in a Zero-Emission Mobility Option, a multiplier of three (3) shall apply when quantifying zero-emission passenger miles from a bicycle.

- (B) The zero-emission mobility credit is calculated by dividing the total zero-emission passenger miles in each calendar year achieved by the Zero Emission Mobility program by 320,000 passenger miles per year for a large transit agency or by 180,000 passenger miles per year for a small transit agency;
 - (C) For each calendar year, if a transit agency maintains at least the same zero-emission passenger miles as required in section 2023.5(a)(4) then the mobility credits will continue to count as zero-emission buses in the fleet.
 - (D) If the calculated number of mobility credits as set forth in section 2023.5(c)(1)(B) does not result to a whole number, the number must be rounded to the nearest integer to determine the number of credits.
- (d) Use of mobility credits.
- (1) Each calculated credit as set forth in section 2023.5(c)(1)(B) will be treated the same as operating one zero-emission bus in the fleet in a given calendar year.
 - (2) Each mobility credit earned annually by a transit agency may be counted the same as having a zero-emission bus by the transit agency in its fleet when calculating the required minimum number of zero-emission buses in the following year of achieving passenger miles as set forth in section 2023.1(a)(4).
- (e) Reporting. Any transit agency that opts into the Zero-Emission Mobility Option must report annually to show the total zero-emission passenger miles achieved in the previous calendar year. A transit agency using the Zero-Emission Mobility Option must meet the reporting and record keeping requirements set forth in section 2023.9(c) for zero-emission passenger miles.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

§ 2023.6. Low-NOx Engine Purchase Requirements.

- (a) Starting January 1, 2020, when new conventional internal combustion engine bus or hybrid bus purchases are made, transit agencies must purchase buses with Low-NOx engines if Low-NOx engines are available that meet both of the following criteria for the bus type and propulsions system type being purchased:
 - (1) The engine or hybrid propulsion system paired with the engine must have been commercially available for purchase or lease for at least two years; and
 - (2) The engine or hybrid propulsion system paired with the engine must be certified to the lowest level of NOx emissions per title 13 of California Code of Regulations, section 2208(c)(18) at the time of purchase that is suitable for the bus and fuel type for the engine being purchased.
- (b) The Low-NOx engine purchase requirements apply to the purchase of all new conventional internal combustion engine buses, except buses that will be dispatched from areas defined as NOx Exempt Areas as described in section 2023(b)(39).
- (c) Any Low-NOx engine purchases prior to January 1, 2020, including any voluntary Low-NOx engine repower, may be counted once towards meeting the requirements set forth in section 2023.6 (a) through (b).
- (d) A transit agency that is subject to Low-NOx engine purchase requirements must report annually as set forth in section 2023.8(g) and keep records of all conventional internal combustion engine bus purchases as required in section 2023.9(d).

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560,

39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

§ 2023.7. Requirements to Use Renewable Fuels.

- (a) Starting January 1, 2020, a large transit agency must purchase only renewable diesel or renewable natural gas when renewing fuel purchase or delivery contracts for diesel or natural gas. A small transit agency is exempt from this requirement.
- (b) A large transit agency that is subject to the requirements set forth in section 2023.7(a) must meet the reporting and record keeping requirements set forth in sections 2023.8(h) and 2023.9(e) for all new and renewed fuel purchase or delivery contracts.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

§ 2023.8. Reporting Requirements for Transit Agencies.

- (a) Commencing March 31, 2021, and continuing every year thereafter through March 31, 2050, each transit agency must annually submit by March 31 to the Executive Officer a compliance report meeting the requirements of this section for the prior calendar year.
- (b) The initial report must be submitted by March 31, 2021, and must include the number and information of active buses in the transit agency's fleet as of December 31, 2017.
- (c) Each transit agency must report the following information annually:
 - (1) Transit agency information.
 - (A) Name of the transit agency;
 - (B) Transit agency mailing address;
 - (C) National Transit Database (NTD) identification number;
 - (D) Name of related Metropolitan Planning Organization (MPO) or Regional Transportation Planning Agency;
 - (E) Air district;
 - (F) Air basin;
 - (G) Joint Group Number (if applicable as set forth in section 2023.2(b)(~~23~~);
 - (H) Name of contact person;
 - (I) Contact e-mail address;
 - (J) Contact title; and
 - (K) Phone number.

(2) Information on each bus purchased, owned, operated, leased, or rented by a transit agency, including the following:

(A) Information on vehicle.

1. Vehicle identification number (VIN);
2. License plate;
3. Transit agency fleet's own vehicle ID;
4. Ownership type (owned, leased, rented);
5. Make;
6. Model;
7. Bus type;
8. Bus length;
9. Chassis (if applicable);
10. Bus fuel type;
11. GVWR;
12. Manufacture year;
13. Propulsion technology type;
14. Vehicle status (active, emergency contingency, or retired);
15. Date in-service; and
16. Bus retired date.

(B) Information on engine and propulsion system.

1. Engine manufacturer;
2. Engine model;

3. Engine model year;
4. Engine family name;
5. Engine cylinder displacement size (liters);
6. Battery rated capacity or energy level (kWh);
7. Bus charging strategy type (on-route, in depot, or combination);
8. Fuel cell system manufacturer;
9. Fuel system model; and
10. Fuel system rated power (kW).

(C) Information on bus purchases. Quantity of zero-emission and conventional internal combustion engine buses purchased in the calendar year and their status as new or used, effective date of a Notice to Proceed, and actual or expected bus delivery date; and

(D) Information on converted buses. Quantity of buses fully converted to zero-emission from conventional internal combustion engine buses in each calendar year.

(d) Each transit agency subject to the requirements of section 2023.2 must report the same information as required under sections 2023.8(a) through 2023.8(c) using the assigned Joint Group Number.

(e) CARB will calculate the number of bonus credits set forth in section 2023.3(a) based on the required information in section 2023.8(c).

(f) Each transit agency operating a Zero-Emission Mobility Option as set forth in section 2023.5 must report the following information:

- (1) Total accumulated annual zero-emission passenger miles provided by scooters and other vehicles with a GVWR of 14,000 pounds or less;

- (2) Total accumulated annual zero-emission passenger miles provided by bicycles; and
- (3) CARB will calculate the number of mobility credits annually according the requirement of section 2023.5(c) and reported total **accumulated annual** zero-emission passenger miles.
- (g) Each transit agency subject to **the** requirements for purchase of Low-NOx engines ~~as set forth~~ in section 2023.6**(b)** must submit an annual report identifying the general location a conventional internal combustion engine bus is dispatched from, the NOx Certification Standard, and the NOx Executive Order number.
- (h) Each transit agency subject to requirements to use renewable fuels as set forth in section 2023.7 must submit annual report identifying fuel types used, quantity of renewable and non-renewable fuel purchased, and fuel contract number and its effective date and expected or actual end date.
- (i) A report that does not contain all required information in sections 2023.8(c) through (h) will not be considered complete. A report will be considered to be complete as of the date that all required information is submitted.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

§ 2023.9. Record Keeping Requirements.

- (a) Each transit agency subject to the reporting requirements of section 2023.8 must maintain copies of the information reported under section 2023.8, as well as the records described in subsections (b) through (e) in this section, and retain such records as required below in subsection (g).
- (b) Each transit agency must maintain records of all purchased, leased, rented, or operated conventional internal combustion engine buses, zero-emission, and fully converted buses to zero-emission buses, for the purpose of demonstrating compliance with the requirements of sections 2023.1 through 2023.4 and section 2023.6. Transit agencies must keep record of the following:
 - (1) Every Notice to Proceed sent to bus manufacturers or sales representatives for the purpose of purchasing buses;
 - (2) Bus purchase contracts that Notice to Proceeds are based upon;
 - (3) Any lease agreements with bus manufacturers or sales representatives;
 - (4) Documentation to show ownership transfer for purchase of used buses;
 - (5) Documentation to show when a conventional internal combustion engine bus is fully converted to a zero-emission bus;
 - (6) Copy of vehicle's registration;
 - (7) Proof of bus delivery date.
- (c) A transit agency that has opted-in to a Zero-Emission Mobility Option must keep records of zero-emission passenger miles generated by scooters, bicycles and other eligible ~~zero~~ zero-emission vehicles.
- (d) Each transit agency subject to requirements of section 2023.6 must maintain bus purchase contracts of conventional internal combustion engine buses, including the ones with Low-NOx engines, to demonstrate compliance.

- (e) Each large transit agency must maintain records of all fuel contracts that are executed on and after January 1, 2020, to demonstrate compliance with the requirements specified in section 2023.7.
- (f) Audit of Records. A transit agency must make the records required under ~~this~~ section 2023.9(b)-(e) available to CARB within 10 calendar days of its request for an audit to verify the accuracy of the reported information.
- (g) Record Retention. A transit agency shall maintain the records required under ~~this~~ section 2023.9(b)-(e) for each bus, zero-emission passenger miles, and fuel contracts that are subject to the reporting requirements of section 2023.8 and record keeping requirements of section 2023.9(b) through (e) for three (3) years after the bus is retired, ownership is transferred, or the fuel contract is expired.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

§ 2023.10. Authority to Suspend, Revoke, or Modify.

- (a) If the Executive Officer finds that any zero-emission bus bonus or mobility credit was obtained based on false information, the Executive Officer may revoke the credit. Each revoked credit is equivalent to one required zero-emission bus the agency has failed to purchase. A transit agency with a deficit in the number of required zero-emission buses is considered to be in violation of zero-emission bus requirements as set forth in section 2023.1.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

§ 2023.11. Severability.

- (a) If any subsection, paragraph, subparagraph, sentence, clause, phrase, or portion of the Innovative Clean Transit Regulations in this article 4.3 is for any reason held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of these Innovative Clean Transit Regulations.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 47

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM BOARD OF DIRECTORS

January 17, 2019

SUBJECT:

OPERATIONS BUDGET STATUS REPORT FOR NOVEMBER 2018 (MIKE THOMPSON)

INFORMATIONAL ONLY

Budget Impact

None at this time.

DISCUSSION:

This report summarizes the year-to-date operating results for November 2018 compared to the fiscal year (FY) 2019 adopted budget for San Diego Metropolitan Transit System (MTS). Attachment A-1 combines the operations', administrations' and other activities' results for November 2018. Attachment A-2 details the November 2018 combined operations' results and Attachments A-3 to A-7 present budget comparisons for each MTS operation. Attachment A-8 details budget comparisons for MTS Administration, and Attachment A-9 provides November 2018 results for MTS's other activities (Taxicab/San Diego and Arizona Eastern Railway Company).

MTS NET-OPERATING SUBSIDY RESULTS

As indicated within Attachment A-1, for the year-to-date period ending November 2018, MTS's net-operating income favorable variance totaled \$99,000 (0.1%). Operations produced an \$861,000 (-1.2%) unfavorable variance and the administrative/other activities areas were favorable by \$960,000.

MTS COMBINED RESULTS

Operating Revenues. Year-to-date combined revenues through November 2018 were \$46,678,000 compared to the year-to-date budget of \$46,158,000, representing a \$521,000 (1.1%) favorable variance. Year-to-date passenger revenue has an



unfavorable variance of \$302,000 (-0.8%). This was offset by an \$822,000 (11.7%) favorable experience in other operating revenue, primarily due to high prices of the state energy credits.

Operating Expenses. Year-to-date combined expenses through November 2018 were \$118,946,000 compared to the budget of \$118,525,000, resulting in a \$421,000 (-0.4%) unfavorable variance.

Personnel Costs. Year-to-date personnel-related costs totaled \$55,928,000, compared to a budgetary figure of \$55,933,000, producing a favorable variance of \$4,000 (0.0%).

Outside Services and Purchased Transportation. Total outside services through five months of the fiscal year totaled \$41,319,000, compared to a budget of \$41,222,000 resulting in an unfavorable variance of \$97,000 (-0.2%).

Materials and Supplies. Total year-to-date materials and supplies expenses were \$5,446,000, compared to a budgetary figure of \$5,040,000, resulting in an unfavorable variance of \$406,000 (-8.0%). This is primarily due to higher than expected costs for revenue vehicle parts.

Energy. Total year-to-date energy costs were \$12,970,000, compared to the budget of \$12,555,000 resulting in an unfavorable variance of \$416,000 (-3.3%). This is primarily due to higher than expected electricity rates.

Risk Management. Total year-to-date expenses for risk management were \$1,032,000, compared to the budget of \$1,411,000, resulting in a favorable variance totaling \$379,000 (26.8%). This is primarily due to favorable claim recoveries for both Bus and Rail Operations.

General and Administrative. The year-to-date general and administrative costs, including vehicle and facilities leases, were \$2,250,000 through November 2018, compared to a budget of \$2,364,000, resulting in a favorable variance of \$114,000 (4.8%).

YEAR-TO-DATE SUMMARY

The November 2018, year-to-date net-operating income totaled a favorable variance of \$99,000 (0.1%). These factors include favorable variances in other operating revenue, risk management, and general and administrative costs; partially offset by unfavorable variances in passenger revenue, outside services, materials and supplies, and energy costs.

/s/ Sharon Cooney for
Paul C. Jablonski
Chief Executive Officer

Key Staff Contact: Sharon Cooney, 619.557.4513, Sharon.Cooney@sdmts.com

Attachment: A. Comparison to Budget

MTS
CONSOLIDATED
COMPARISON TO BUDGET - FISCAL YEAR 2019
NOVEMBER 30, 2018
(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 38,829	\$ 39,131	\$ (302)	-0.8%
Other Revenue	7,849	7,027	822	11.7%
Total Operating Revenue	\$ 46,678	\$ 46,158	\$ 521	1.1%
Personnel costs	\$ 55,928	\$ 55,933	\$ 4	0.0%
Outside services	41,319	41,222	(97)	-0.2%
Transit operations funding	-	-	-	-
Materials and supplies	5,446	5,040	(406)	-8.0%
Energy	12,970	12,555	(416)	-3.3%
Risk management	1,032	1,411	379	26.8%
General & administrative	1,826	1,942	116	6.0%
Vehicle/facility leases	424	422	(2)	-0.5%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	0	-	(0)	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 118,946	\$ 118,525	\$ (421)	-0.4%
Operating income (loss)	\$ (72,268)	\$ (72,367)	\$ 99	0.1%
Total public support and nonoperating revenues	(916)	(900)	(16)	1.8%
Income (loss) before capital contributions	\$ (73,183)	\$ (73,267)	\$ 84	

OPERATIONS
CONSOLIDATED OPERATIONS
COMPARISON TO BUDGET - FISCAL YEAR 2019
NOVEMBER 30, 2018
(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 38,829	\$ 39,131	\$ (302)	-0.8%
Other Revenue	346	281	65	23.0%
Total Operating Revenue	\$ 39,175	\$ 39,412	\$ (237)	-0.6%
Personnel costs	\$ 47,266	\$ 47,128	\$ (138)	-0.3%
Outside services	35,080	34,973	(107)	-0.3%
Transit operations funding	-	-	-	-
Materials and supplies	5,439	5,035	(404)	-8.0%
Energy	12,614	12,232	(382)	-3.1%
Risk management	848	1,189	341	28.6%
General & administrative	267	315	48	15.2%
Vehicle/facility leases	335	354	19	5.3%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	10,431	10,431	(0)	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 112,280	\$ 111,656	\$ (624)	-0.6%
Operating income (loss)	\$ (73,105)	\$ (72,244)	\$ (861)	-1.2%
Total public support and nonoperating revenues	(210)	(214)	4	-1.7%
Income (loss) before capital contributions	\$ (73,315)	\$ (72,458)	\$ (857)	1.2%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
OPERATIONS
TRANSIT SERVICES (SAN DIEGO TRANSIT CORPORATION)
COMPARISON TO BUDGET - FISCAL YEAR 2019
NOVEMBER 30, 2018
(in \$000's)

Att. A, AI 47, 1/17/19

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 8,905	\$ 8,863	\$ 42	0.5%
Other Revenue	8	6	1	20.3%
Total Operating Revenue	\$ 8,912	\$ 8,869	\$ 43	0.5%
Personnel costs	\$ 31,092	\$ 31,577	\$ 485	1.5%
Outside services	679	822	142	17.3%
Transit operations funding	-	-	-	-
Materials and supplies	2,534	2,369	(166)	-7.0%
Energy	2,254	2,362	108	4.6%
Risk management	432	596	164	27.5%
General & administrative	127	151	24	15.9%
Vehicle/facility leases	124	133	9	7.0%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	3,151	3,151	(0)	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 40,392	\$ 41,159	\$ 767	1.9%
Operating income (loss)	\$ (31,480)	\$ (32,290)	\$ 810	2.5%
Total public support and nonoperating revenues	(303)	(307)	4	-1.2%
Income (loss) before capital contributions	\$ (31,783)	\$ (32,597)	\$ 814	0.0%

OPERATIONS
RAIL OPERATIONS (SAN DIEGO TROLLEY, INCORPORATED)
COMPARISON TO BUDGET - FISCAL YEAR 2019
NOVEMBER 30, 2018
(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 17,965	\$ 17,595	\$ 370	2.1%
Other Revenue	338	275	63	22.8%
Total Operating Revenue	\$ 18,302	\$ 17,870	\$ 433	2.4%
Personnel costs	\$ 15,941	\$ 15,375	\$ (566)	-3.7%
Outside services	1,961	2,032	70	3.5%
Transit operations funding	-	-	-	-
Materials and supplies	2,887	2,649	(237)	-9.0%
Energy	6,823	6,308	(516)	-8.2%
Risk management	410	587	176	30.1%
General & administrative	137	157	20	12.6%
Vehicle/facility leases	88	96	8	8.7%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	6,392	6,392	0	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 34,640	\$ 33,596	\$ (1,044)	-3.1%
Operating income (loss)	\$ (16,338)	\$ (15,726)	\$ (612)	-3.9%
Total public support and nonoperating revenues	-	-	-	-
Income (loss) before capital contributions	\$ (16,338)	\$ (15,726)	\$ (612)	3.9%

OPERATIONS
MULTIMODAL OPERATIONS (FIXED ROUTE)
COMPARISON TO BUDGET - FISCAL YEAR 2019
NOVEMBER 30, 2018
(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 10,759	\$ 11,558	\$ (799)	-6.9%
Other Revenue	1	-	1	-
Total Operating Revenue	\$ 10,760	\$ 11,558	\$ (798)	-6.9%
Personnel costs	\$ 171	\$ 124	\$ (47)	-38.1%
Outside services	24,934	24,724	(210)	-0.8%
Transit operations funding	-	-	-	-
Materials and supplies	18	17	(1)	-5.4%
Energy	2,609	2,688	80	3.0%
Risk management	-	-	-	-
General & administrative	0	3	2	94.2%
Vehicle/facility leases	7	8	1	10.9%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	686	686	(0)	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 28,425	\$ 28,250	\$ (175)	-0.6%
Operating income (loss)	\$ (17,666)	\$ (16,692)	\$ (973)	-5.8%
Total public support and nonoperating revenues	-	-	-	-
Income (loss) before capital contributions	\$ (17,666)	\$ (16,692)	\$ (973)	5.8%

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
OPERATIONS
MULTIMODAL OPERATIONS (PARATRANSIT)
COMPARISON TO BUDGET - FISCAL YEAR 2019
NOVEMBER 30, 2018
(in \$000's)

Att. A, AI 47, 1/17/19

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ 1,201	\$ 1,116	\$ 86	7.7%
Other Revenue	-	-	-	-
Total Operating Revenue	\$ 1,201	\$ 1,116	\$ 86	7.7%
Personnel costs	\$ 62	\$ 52	\$ (9)	-18.0%
Outside services	7,415	7,306	(109)	-1.5%
Transit operations funding	-	-	-	-
Materials and supplies	-	-	-	-
Energy	928	874	(54)	-6.2%
Risk management	6	6	-	0.0%
General & administrative	3	5	2	37.7%
Vehicle/facility leases	117	117	(0)	0.0%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	201	201	(0)	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 8,732	\$ 8,561	\$ (171)	-2.0%
Operating income (loss)	\$ (7,531)	\$ (7,445)	\$ (86)	-1.1%
Total public support and nonoperating revenues	-	-	-	-
Income (loss) before capital contributions	\$ (7,531)	\$ (7,445)	\$ (86)	1.1%

**OPERATIONS
CORONADO FERRY**

**COMPARISON TO BUDGET - FISCAL YEAR 2019
NOVEMBER 30, 2018
(in \$000's)**

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ -	\$ -	\$ -	-
Other Revenue	-	-	-	-
Total Operating Revenue	\$ -	\$ -	\$ -	-
Personnel costs	\$ -	\$ -	\$ -	-
Outside services	90	90	-	0.0%
Transit operations funding	-	-	-	-
Materials and supplies	-	-	-	-
Energy	-	-	-	-
Risk management	-	-	-	-
General & administrative	-	-	-	-
Vehicle/facility leases	-	-	-	-
Amortization of net pension asset	-	-	-	-
Administrative Allocation	-	-	-	-
Depreciation	-	-	-	-
Total Operating Expenses	\$ 90	\$ 90	\$ -	0.0%
Operating income (loss)	\$ (90)	\$ (90)	\$ -	0.0%
Total public support and nonoperating revenues	93	93	-	0.0%
Income (loss) before capital contributions	\$ 3	\$ 3	\$ -	0.0%

ADMINISTRATION

CONSOLIDATED

COMPARISON TO BUDGET - FISCAL YEAR 2019

NOVEMBER 30, 2018

(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ -	\$ -	\$ -	-
Other Revenue	7,374	6,545	828	12.7%
Total Operating Revenue	\$ 7,374	\$ 6,545	\$ 828	12.7%
Personnel costs	\$ 8,325	\$ 8,448	\$ 123	1.5%
Outside services	6,204	6,167	(37)	-0.6%
Transit operations funding	-	-	-	-
Materials and supplies	7	2	(5)	-228.2%
Energy	347	316	(31)	-9.9%
Risk management	169	211	41	19.5%
General & administrative	1,494	1,556	62	4.0%
Vehicle/facility leases	79	58	(22)	-37.5%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	(10,465)	(10,465)	-	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 6,161	\$ 6,292	\$ 131	2.1%
Operating income (loss)	\$ 1,213	\$ 253	\$ 960	-379.2%
Total public support and nonoperating revenues	(705)	(686)	(19)	2.8%
Income (loss) before capital contributions	\$ 508	\$ (433)	\$ 940	-217.4%

OTHER ACTIVITIES

CONSOLIDATED

COMPARISON TO BUDGET - FISCAL YEAR 2019

NOVEMBER 30, 2018

(in \$000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	% VARIANCE
Passenger Revenue	\$ -	\$ -	\$ -	-
Other Revenue	129	200	(71)	-35.4%
Total Operating Revenue	\$ 129	\$ 200	\$ (71)	-35.4%
Personnel costs	\$ 337	\$ 356	\$ 19	5.3%
Outside services	35	81	47	57.4%
Transit operations funding	-	-	-	-
Materials and supplies	0	3	3	99.2%
Energy	9	7	(2)	-32.1%
Risk management	15	12	(3)	-23.9%
General & administrative	65	71	6	8.6%
Vehicle/facility leases	10	10	1	7.4%
Amortization of net pension asset	-	-	-	-
Administrative Allocation	34	34	0	0.0%
Depreciation	-	-	-	-
Total Operating Expenses	\$ 505	\$ 576	\$ 71	12.3%
Operating income (loss)	\$ (376)	\$ (376)	\$ 0	0.1%
Total public support and nonoperating revenues	-	-	-	-
Income (loss) before capital contributions	\$ (376)	\$ (376)	\$ 0	-0.1%



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1466 • FAX (619) 234-3407

Agenda Item No. 61

Chief Executive Officer's Report

January 17, 2019

In accordance with Board Policy No. 52, "Procurement of Goods and Services", attached are listings of contracts, purchase orders, and work orders that have been approved within the CEO's authority (up to and including \$100,000) for the period December 5, 2018 through January 7, 2019.

*Please note additional reporting of purchase orders that is now possible with the new SAP Enterprise Resource Planning system.

CEO Travel Report (since last Board meeting)

December 13 – 14: California Air Resources Board Meeting re: Innovative Clean Transit Rule – Sacramento, CA

January 7: Mobility Data Roundtable Meeting – Las Vegas, NV

January 13 – 16: Transportation Research Board Annual Conference – Washington, DC

Board Member Travel Report (since last Board meeting)

N/A



EXPENSE CONTRACTS				
Doc #	Organization	Subject	Amount	Day
PWL240.1-18	MTM BUILDERS	ESCALATION	\$70,404.52	12/13/2018
PWG153.6-14	THYSSENKRUPP ELEVATOR (TKE)	REPAIR SVC ON BRT ELEVATORS - GROUP C	\$99,385.00	12/13/2018
PWB261.1-18	BIRD SOLUTIONS INTERNATIONAL	SANITIZE AND EXTENSION	\$4,875.00	12/17/2018
G1947.1-17-AE-05.02	HDR, INC.	ADDS DESIGN ELEMENTS TO THE ORIGINAL SOW	\$19,522.39	12/17/2018
G1767.2-15	BRICEHOUSE STATION, LLC	COMPASS CARD SALES OUTLET	\$49,500.00	12/18/2018
G1658.4-14	ISS FACILITIES SERVICES, INC.	EXERCISE OPTION YEARS 1	\$0.00	12/20/2018
PWL204.0-16-48	ABC CONSTRUCTION INC.	CONSTRUCTION SVC FOR EUCLID AVE PAVING	\$92,920.98	12/20/2018
B0614.1-14	TRANSDEV NORTH AMERICA	AUTHORIZE CONTRACTUAL RATE CHANGES	\$0.00	12/20/2018
G2172.1-19	AMERICAN INTERNET SYSTEM	INCREASE & CAP THE BANDWIDTH	\$3,900.00	12/21/2018
G1709.3-14	GOODWILL INDUSTRIES OF SD COUNTY	COMPASS CARD SALES OUTLET	\$9,000.00	12/21/2018
G1644.2-14	SMITH, WATTS & MARTINEZ	EXTENSION TO CONTRACT	\$34,800.00	12/21/2018
G2215.0-19	FLOYD SKEREN MANUKIAN LANGEVIN, LLP	LEGAL SERVICES FOR WORKERS COMPENSATION	\$75,000.00	12/28/2018
G2204.0-19	DALEY & HEFT, LLP	LEGAL SERVICES FOR LIABILITY	\$75,000.00	12/28/2018
G2022.0-19	MEYERS NAVE RIBACK SILVER & WILSON	LEGAL SERVICES FOR ALL AREAS OF MTS OPERATION	\$75,000.00	12/31/2018

REVENUE CONTRACTS & MOUs				
Doc #	Organization	Subject	Amount	Day
B0700.0-19	MCRT CALIFORNIA CONSTRUCTION LP	ROE - MODERA SD PROJECT 368 APARTMENT	\$2,550.00	12/11/2018
G1443.7-12	ROWLBERTOS MEDIA	PARTNERSHIP RENEWAL FOR 2019 WITH A RED TROLLEY SHOW	\$0.00	12/13/2018
L0901.0-10.80	BRICEHOUSE STATION	GASLAMP QUARTER ASSOCIATION - SUNDAY ARTISAN MARKET	\$0.00	12/14/2018
G2088.1-18	SAN DIEGO COMMUNITY COLLEGE DISTRICT	MTS TAXI DRIVER TRAINING	\$0.00	12/17/2018
S200-19-691	SEgni CONSTRUCTION	ROE - PERFORM LANDSCAPE WORK	\$750.00	12/17/2018
L1482.0-19	ADVANTAGE ENVIRONMENTAL CONSULTANT	ROE - SITE INVESTIGATIONS GRANTVILLE STATION	\$0.00	12/18/2018
S200-19-689	HMS CONSTRUCTION	ROE - PALOMAR ST RAILROAD CROSSING CHULA VISTA	\$750.00	12/18/2018

REVENUE CONTRACTS & MOUs				
Doc #	Organization	Subject	Amount	Day
S200-13-561.1	DAVEY TREE SURGERY	ROE - ACCESS TO PERFORM LANDSCAPE WORK	\$2,250.00	1/2/2019
S200-19-692	SAN DIEGO UNIFIED DISTRICT	CONSTRUCTION & MAINTENANCE E STREET CORONADO BRANCH	\$0.00	1/3/2019
L1486.0-19	SAN DIEGO HALF MARATHON	ROE - SD HALF MARATHON	\$750.00	1/3/2019
L5270.0-19	CITY OF SANTEE	ROE - SANTEE TROLLEY SQUARE	\$750.00	1/3/2019

Purchase Orders				
PO Number	PO Date	Name	Material Group	PO Value
4400000391	12/5/2018	Office Depot	G200-OFFICE SUPPLIES	3.70
4400000392	12/5/2018	Office Depot	G200-OFFICE SUPPLIES	111.29
4400000393	12/5/2018	W.W. Grainger Inc	G140-SHOP SUPPLIES	145.85
4400000394	12/5/2018	Office Depot	G200-OFFICE SUPPLIES	47.38
4400000395	12/5/2018	Office Depot	G200-OFFICE SUPPLIES	118.69
4400000396	12/5/2018	Office Depot	G200-OFFICE SUPPLIES	98.10
4400000397	12/6/2018	W.W. Grainger Inc	M160-SUMP PUMP STATIONS	123.32
4400000398	12/10/2018	W.W. Grainger Inc	B250-BUS REPAIR PARTS	99.44
4400000399	12/10/2018	W.W. Grainger Inc	M150-PWR SWITCHES/LOCKS	418.89
4400000400	12/10/2018	W.W. Grainger Inc	G130-SHOP TOOLS	56.03
4400000401	12/11/2018	Office Depot	G200-OFFICE SUPPLIES	3.86
4400000402	12/11/2018	Office Depot	G200-OFFICE SUPPLIES	113.58
4400000403	12/12/2018	Office Depot	G200-OFFICE SUPPLIES	190.95
4400000404	12/12/2018	Office Depot	G200-OFFICE SUPPLIES	14.68
4400000405	12/12/2018	Office Depot	G200-OFFICE SUPPLIES	583.02
4400000406	12/12/2018	Office Depot	G200-OFFICE SUPPLIES	41.86
4400000407	12/12/2018	Office Depot	G200-OFFICE SUPPLIES	150.23
4400000408	12/12/2018	W.W. Grainger Inc	M200-YARD FACILITIES	112.92
4400000409	12/13/2018	Office Depot	G200-OFFICE SUPPLIES	843.54
4400000410	12/14/2018	W.W. Grainger Inc	R170-RAIL/LRV HVAC	62.16
4400000411	12/14/2018	W.W. Grainger Inc	T110-TRACK, RAIL	168.20
4400000412	12/14/2018	Office Depot	G200-OFFICE SUPPLIES	5.03
4400000413	12/17/2018	W.W. Grainger Inc	R150-RAIL/LRV COMM EQUIP	12.73
4400000414	12/18/2018	Office Depot	G200-OFFICE SUPPLIES	195.79
4400000415	12/18/2018	W.W. Grainger Inc	G180-JANITORIAL SUPPLIES	256.83
4400000416	12/18/2018	Office Depot	G200-OFFICE SUPPLIES	91.54
4400000417	12/18/2018	Office Depot	G200-OFFICE SUPPLIES	52.27
4400000418	12/18/2018	Office Depot	G200-OFFICE SUPPLIES	74.89
4400000419	12/19/2018	W.W. Grainger Inc	G150-FASTENERS	54.56
4400000420	12/20/2018	W.W. Grainger Inc	B250-BUS REPAIR PARTS	41.54
4400000421	12/20/2018	Office Depot	G200-OFFICE SUPPLIES	128.40
4400000422	12/20/2018	Office Depot	G200-OFFICE SUPPLIES	49.33
4400000423	12/21/2018	Office Depot	G200-OFFICE SUPPLIES	37.29
4400000424	12/21/2018	Office Depot	G200-OFFICE SUPPLIES	334.59
4400000425	12/24/2018	Office Depot	G200-OFFICE SUPPLIES	65.67
4400000426	12/24/2018	Office Depot	G200-OFFICE SUPPLIES	14.30
4400000427	12/24/2018	Office Depot	G200-OFFICE SUPPLIES	15.48
4400000428	12/27/2018	W.W. Grainger Inc	G170-LUBRICANTS	99.13
4400000429	12/27/2018	W.W. Grainger Inc	R230-RAIL/LRV MECHANICAL	104.15
4400000430	12/28/2018	W.W. Grainger Inc	R230-RAIL/LRV MECHANICAL	163.91
4400000431	12/28/2018	Office Depot	G200-OFFICE SUPPLIES	68.04
4400000432	12/28/2018	Office Depot	G200-OFFICE SUPPLIES	34.33
4400000433	1/2/2019	Office Depot	G200-OFFICE SUPPLIES	37.29
4400000434	1/2/2019	Office Depot	G200-OFFICE SUPPLIES	22.17
4400000435	1/2/2019	Office Depot	G200-OFFICE SUPPLIES	1.62
4400000436	1/2/2019	Office Depot	G200-OFFICE SUPPLIES	41.81
4400000437	1/3/2019	W.W. Grainger Inc	M140-WAYSIDE SIGNALS	446.22
4400000438	1/3/2019	Office Depot	G200-OFFICE SUPPLIES	137.75
4400000439	1/3/2019	W.W. Grainger Inc	M160-SUMP PUMP STATIONS	456.13
4400000440	1/3/2019	Office Depot	G200-OFFICE SUPPLIES	410.97
4400000441	1/3/2019	Office Depot	G200-OFFICE SUPPLIES	56.36
4400000442	1/4/2019	Office Depot	G200-OFFICE SUPPLIES	25.45
4400000443	1/4/2019	Office Depot	G200-OFFICE SUPPLIES	603.92
4400000444	1/4/2019	Office Depot	G200-OFFICE SUPPLIES	82.87
4500022033	12/5/2018	W.W. Grainger Inc	F110-SHOP/BLDG MACHINERY	392.34
4500022034	12/5/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	120.91
4500022035	12/5/2018	Pro-Vision, Inc.	P210-NON-REV VEH REPAIRS	592.63
4500022036	12/5/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	1,656.09
4500022037	12/5/2018	Charter Industrial Supply Inc	B120-BUS MECHANICAL PARTS	131.98

Purchase Orders				
PO Number	PO Date	Name	Material Group	PO Value
4500022038	12/5/2018	Romaine Electric Corporation	B160-BUS ELECTRICAL	1,579.06
4500022039	12/5/2018	Genuine Parts Co	B250-BUS REPAIR PARTS	75.99
4500022040	12/5/2018	Curbell Plastics Inc	B130-BUS BODY	707.97
4500022041	12/5/2018	Harbor Diesel & Equipment	B200-BUS PWR TRAIN EQUIP	2,058.03
4500022042	12/5/2018	Kaman Industrial Technologies	B120-BUS MECHANICAL PARTS	2,751.93
4500022043	12/5/2018	Golden State Supply LLC	G140-SHOP SUPPLIES	51.22
4500022044	12/5/2018	Cummins Pacific LLC	B250-BUS REPAIR PARTS	312.39
4500022045	12/5/2018	Davra Networks USA	I110-INFORMATION TECH	50,000.00
4500022046	12/5/2018	Vern Rose Inc	G140-SHOP SUPPLIES	298.46
4500022047	12/5/2018	Industrial Power and Automation	M160-SUMP PUMP STATIONS	43,600.00
4500022048	12/5/2018	Delphin Computer Supply	G200-OFFICE SUPPLIES	1,119.04
4500022049	12/5/2018	Janek Corporation	B250-BUS REPAIR PARTS	2,478.25
4500022050	12/5/2018	Harbor Diesel & Equipment	B250-BUS REPAIR PARTS	465.05
4500022051	12/5/2018	W.W. Grainger Inc	G170-LUBRICANTS	294.00
4500022052	12/5/2018	Battery Power Inc.	B160-BUS ELECTRICAL	9,156.12
4500022053	12/5/2018	R.B. Hornberger Co Inc	G140-SHOP SUPPLIES	360.69
4500022054	12/5/2018	Ansaldo Sts Usa Inc	M130-CROSSING MECHANISM	822.69
4500022055	12/5/2018	Ismael Frausto	R220-RAIL/LRV TRUCKS	1,444.93
4500022056	12/5/2018	Carlos Guzman Inc	R120-RAIL/LRV CAR BODY	3,750.00
4500022057	12/5/2018	Kaman Industrial Technologies	B200-BUS PWR TRAIN EQUIP	760.37
4500022058	12/5/2018	M Power Truck & Diesel Repair	P130-EQUIP MAINT REPR SVC	190.00
4500022059	12/5/2018	General Auto Repair	P210-NON-REV VEH REPAIRS	75.00
4500022060	12/5/2018	Matthias Moos	M120-OVRHEAD CATENARY SYS	1,326.51
4500022061	12/5/2018	Cubic Transportation Systems	B190-BUS FARE EQUIP	4,848.75
4500022062	12/5/2018	Team One Repair Inc	G290-FARE REVENUE EQUIP	195.05
4500022063	12/5/2018	Green Clean Water & Waste	P280-GENERAL SVC AGRMNTS	27,889.44
4500022064	12/6/2018	Citywide Auto Glass Inc	R120-RAIL/LRV CAR BODY	4,253.97
4500022065	12/6/2018	MCAS Miramar Vet	G120-SECURITY	197.48
4500022066	12/6/2018	Door Service & Repair Inc	F110-SHOP/BLDG MACHINERY	806.00
4500022067	12/6/2018	Transit Holdings Inc	B120-BUS MECHANICAL PARTS	22,213.06
4500022068	12/6/2018	Allied Refrigeration Inc	B250-BUS REPAIR PARTS	215.50
4500022069	12/6/2018	Gillig LLC	B140-BUS CHASSIS	556.15
4500022070	12/6/2018	Neleco Products Inc	G170-LUBRICANTS	23,515.36
4500022071	12/6/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	16,823.54
4500022072	12/6/2018	Transit Holdings Inc	B130-BUS BODY	324.76
4500022073	12/6/2018	Home Depot USA Inc	G140-SHOP SUPPLIES	96.40
4500022074	12/6/2018	W.W. Grainger Inc	G120-SECURITY	957.28
4500022075	12/6/2018	Professional Contractors Supplies	G140-SHOP SUPPLIES	102.78
4500022076	12/6/2018	Airgas Inc	G190-SAFETY/MED SUPPLIES	3,389.39
4500022077	12/6/2018	ABC Construction Co., Inc.	F160-BLDG HVAC EQUIP	43,185.79
4500022078	12/6/2018	The Gordian Group, Inc.	F160-BLDG HVAC EQUIP	1,286.85
4500022079	12/6/2018	ABC Construction Co., Inc.	C130-CONSTRUCTION SVCS	78,069.68
4500022080	12/7/2018	Gillig LLC	B250-BUS REPAIR PARTS	1,131.38
4500022081	12/7/2018	Airgas Inc	G140-SHOP SUPPLIES	242.57
4500022082	12/7/2018	Supreme Oil Company	A120-AUTO/TRUCK GASOLINE	1,556.66
4500022083	12/7/2018	Waxie's Enterprises Inc.	G180-JANITORIAL SUPPLIES	5,622.31
4500022085	12/7/2018	Robcar Corporation	G160-PAINTS & CHEMICALS	297.70
4500022086	12/7/2018	Glass & Screens Etc	G110-BUS/TROLLEY SIGNAGE	445.50
4500022087	12/7/2018	W.W. Grainger Inc	G180-JANITORIAL SUPPLIES	1,065.99
4500022088	12/7/2018	Mcmaster-Carr Supply Co	G200-OFFICE SUPPLIES	645.84
4500022089	12/7/2018	R.S. Hughes Co Inc	G140-SHOP SUPPLIES	711.65
4500022090	12/7/2018	Transit Holdings Inc	B200-BUS PWR TRAIN EQUIP	805.62
4500022091	12/7/2018	Jeyco Products Inc	G130-SHOP TOOLS	205.59
4500022092	12/7/2018	SC Commercial, LLC	A120-AUTO/TRUCK GASOLINE	20,649.67
4500022093	12/7/2018	SC Commercial, LLC	B180-BUS DIESEL	7,371.83
4500022094	12/7/2018	M Power Truck & Diesel Repair	P210-NON-REV VEH REPAIRS	1,028.30
4500022095	12/7/2018	Industrial Maintenance Supply LLC	G150-FASTENERS	527.80
4500022096	12/7/2018	Beverly Christensen	G130-SHOP TOOLS	1,206.81
4500022097	12/7/2018	BJ's Rentals	P160-EQUIPMENT RENTALS	404.07

Purchase Orders				
PO Number	PO Date	Name	Material Group	PO Value
4500022098	12/7/2018	Harbor Diesel & Equipment	B200-BUS PWR TRAIN EQUIP	1,543.52
4500022099	12/7/2018	HI-TEC Enterprises	R220-RAIL/LRV TRUCKS	2,370.50
4500022101	12/9/2018	Cubic Transportation Systems	I110-INFORMATION TECH	50,810.00
4500022102	12/10/2018	Applied Industrial Technologies-CA	G170-LUBRICANTS	993.67
4500022103	12/10/2018	Office Solutions	G280-FARE MATERIALS	102.62
4500022104	12/10/2018	W.W. Grainger Inc	G140-SHOP SUPPLIES	154.13
4500022105	12/10/2018	Transit Holdings Inc	R180-RAIL/LRV LIGHTING	6,695.03
4500022106	12/10/2018	Charter Industrial Supply Inc	R220-RAIL/LRV TRUCKS	367.34
4500022107	12/10/2018	Controlled Motion Solutions Inc	R220-RAIL/LRV TRUCKS	820.03
4500022108	12/10/2018	Western-Cullen-Hayes Inc	T110-TRACK, RAIL	2,982.53
4500022109	12/10/2018	AxleTech International LLC	B140-BUS CHASSIS	496.14
4500022110	12/10/2018	Waxie's Enterprises Inc.	G140-SHOP SUPPLIES	2,737.60
4500022111	12/10/2018	Pressnet Express Inc	G230-PRINTED MATERIALS	312.48
4500022113	12/10/2018	Transit Holdings Inc	B140-BUS CHASSIS	3,375.63
4500022114	12/10/2018	San Diego Seal Inc	R120-RAIL/LRV CAR BODY	1,789.04
4500022115	12/10/2018	Advertising Concepts Inc	G230-PRINTED MATERIALS	5,252.82
4500022116	12/10/2018	San Diego Friction Products, Inc.	B140-BUS CHASSIS	2,965.51
4500022117	12/10/2018	Kidde Technologies Inc	B200-BUS PWR TRAIN EQUIP	803.21
4500022118	12/10/2018	Kaman Industrial Technologies	B120-BUS MECHANICAL PARTS	4,104.40
4500022119	12/10/2018	Home Depot USA Inc	G130-SHOP TOOLS	531.66
4500022120	12/10/2018	Sid Tool Co	G180-JANITORIAL SUPPLIES	265.60
4500022121	12/10/2018	Southern Counties Oil Co, LP	G170-LUBRICANTS	354.39
4500022122	12/10/2018	Chromate Industrial Corporation	G130-SHOP TOOLS	311.68
4500022123	12/10/2018	Professional Contractors Supplies	G190-SAFETY/MED SUPPLIES	223.39
4500022124	12/10/2018	Culligan of San Diego	G140-SHOP SUPPLIES	1,938.00
4500022125	12/10/2018	Golden State Supply LLC	G170-LUBRICANTS	152.06
4500022126	12/10/2018	Waxie's Enterprises Inc.	G180-JANITORIAL SUPPLIES	96.77
4500022127	12/10/2018	Freeby Signs	B250-BUS REPAIR PARTS	369.28
4500022128	12/10/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	9,506.49
4500022129	12/10/2018	APD Incorporated	B130-BUS BODY	24,417.24
4500022130	12/10/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	2,180.72
4500022131	12/10/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	101.96
4500022132	12/10/2018	Cummins Pacific LLC	B250-BUS REPAIR PARTS	195.25
4500022133	12/10/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	10,750.33
4500022134	12/10/2018	CDW LLC	I110-INFORMATION TECH	434.30
4500022136	12/10/2018	Dictation Sales and Service, Inc.	I110-INFORMATION TECH	1,409.00
4500022137	12/10/2018	Nth Generation Computing Inc	I110-INFORMATION TECH	36,920.92
4500022138	12/11/2018	Transit Holdings Inc	B110-BUS HVAC SYSTEMS	680.68
4500022139	12/11/2018	Southern Counties Lubricants LLC	G170-LUBRICANTS	3,297.15
4500022140	12/11/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	9,429.30
4500022141	12/11/2018	TK Services Inc	B110-BUS HVAC SYSTEMS	2,665.01
4500022142	12/11/2018	Prochem Specialty Products Inc	G180-JANITORIAL SUPPLIES	1,265.84
4500022143	12/11/2018	Industrial Maintenance Supply LLC	G150-FASTENERS	59.14
4500022144	12/11/2018	General Auto Repair	P210-NON-REV VEH REPAIRS	29.95
4500022145	12/11/2018	Cardiac Science Corporation	G200-OFFICE SUPPLIES	127.15
4500022146	12/11/2018	Waxie's Enterprises Inc.	G140-SHOP SUPPLIES	2,886.16
4500022147	12/11/2018	Sportworks Northwest Inc	B130-BUS BODY	103.44
4500022148	12/11/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	264.65
4500022149	12/11/2018	The Truck Lighthouse	G140-SHOP SUPPLIES	161.27
4500022150	12/11/2018	Sherwin Williams Company	B130-BUS BODY	1,630.10
4500022151	12/11/2018	Kidde Technologies Inc	B200-BUS PWR TRAIN EQUIP	2,257.28
4500022152	12/11/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	2,769.18
4500022153	12/11/2018	Siemens Mobility, Inc.	R160-RAIL/LRV ELECTRICAL	8,620.00
4500022154	12/11/2018	Knorr Brake Company	R160-RAIL/LRV ELECTRICAL	1,358.12
4500022155	12/11/2018	Romaine Electric Corporation	M130-CROSSING MECHANISM	1,193.62
4500022156	12/12/2018	Mohawk Mfg & Supply Co	B120-BUS MECHANICAL PARTS	693.27
4500022157	12/12/2018	W.W. Grainger Inc	F110-SHOP/BLDG MACHINERY	405.68
4500022158	12/12/2018	West End Holdings Inc	P260-TESTING & ANALYSIS	75.00
4500022159	12/12/2018	Knorr Brake Company	R220-RAIL/LRV TRUCKS	237.44

Purchase Orders				
PO Number	PO Date	Name	Material Group	PO Value
4500022160	12/12/2018	Southern Counties Oil Co, LP	G170-LUBRICANTS	7,994.51
4500022161	12/12/2018	W.W. Grainger Inc	G170-LUBRICANTS	1,169.20
4500022162	12/12/2018	Home Depot USA Inc	F110-SHOP/BLDG MACHINERY	82.11
4500022163	12/12/2018	Muncie Transit Supply	B130-BUS BODY	705.60
4500022164	12/12/2018	Center City Printing	G200-OFFICE SUPPLIES	45.13
4500022165	12/12/2018	Home Depot USA Inc	G140-SHOP SUPPLIES	208.58
4500022166	12/12/2018	R.S. Hughes Co Inc	G190-SAFETY/MED SUPPLIES	518.82
4500022167	12/12/2018	West-Lite Supply Co Inc	R180-RAIL/LRV LIGHTING	433.32
4500022169	12/12/2018	Airgas Inc	G190-SAFETY/MED SUPPLIES	1,329.99
4500022170	12/12/2018	Buswest LLC	B110-BUS HVAC SYSTEMS	117.10
4500022171	12/12/2018	Cummins Pacific LLC	B250-BUS REPAIR PARTS	625.59
4500022172	12/12/2018	Harbor Diesel & Equipment	G140-SHOP SUPPLIES	2,583.42
4500022173	12/12/2018	Rush Truck Centers of California	B140-BUS CHASSIS	4,412.37
4500022174	12/12/2018	Pulse Technology Partners LLC	P130-EQUIP MAINT REPR SVC	250.00
4500022175	12/12/2018	Golden Star Technology Inc	I110-INFORMATION TECH	71,689.52
4500022176	12/12/2018	Supreme Oil Company	B180-BUS DIESEL	7,306.88
4500022177	12/12/2018	SC Commercial, LLC	A120-AUTO/TRUCK GASOLINE	19,678.67
4500022178	12/12/2018	Western-Cullen-Hayes Inc	M130-CROSSING MECHANISM	350.19
4500022179	12/12/2018	Total Filtration Services Inc	F120-BUS/LRV PAINT BOOTHS	662.45
4500022180	12/12/2018	Professional Contractors Supplies	G140-SHOP SUPPLIES	797.21
4500022181	12/12/2018	ASPEN Refrigerants Inc	R170-RAIL/LRV HVAC	728.39
4500022182	12/12/2018	Westair Gases & Equipment Inc	G140-SHOP SUPPLIES	84.65
4500022183	12/12/2018	OneSource Distributors, LLC	G190-SAFETY/MED SUPPLIES	1,035.67
4500022184	12/12/2018	Ocean Blue Environmental Services	P280-GENERAL SVC AGRMNTS	3,454.00
4500022185	12/12/2018	Matthias Moos	M120-OVRHEAD CATENARY SYS	1,433.19
4500022186	12/12/2018	Ram Industrial Services LLC	R170-RAIL/LRV HVAC	3,717.38
4500022187	12/12/2018	Kaman Industrial Technologies	R240-RAIL/LRV REPR PARTS	3,650.58
4500022188	12/12/2018	ABC Construction Co., Inc.	C130-CONSTRUCTION SVCS	93,430.22
4500022189	12/12/2018	Kenneth Place	G130-SHOP TOOLS	522.54
4500022190	12/12/2018	Nth Generation Computing Inc	I110-INFORMATION TECH	749.94
4500022191	12/13/2018	Cubic Transportation Systems	B190-BUS FARE EQUIP	2,424.38
4500022192	12/13/2018	Freeby Signs	B250-BUS REPAIR PARTS	313.56
4500022193	12/13/2018	Cummins-Allison	G220-OFFICE EQUIPMENT	297.58
4500022194	12/13/2018	Siemens Mobility, Inc.	R190-RAIL/LRV PANTOGRAPH	21,203.43
4500022195	12/13/2018	Knorr Brake Company	R220-RAIL/LRV TRUCKS	34,135.61
4500022196	12/13/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	12,224.71
4500022197	12/13/2018	Citywide Auto Glass Inc	R120-RAIL/LRV CAR BODY	4,762.27
4500022198	12/13/2018	Home Depot USA Inc	F180-BUILDING MATERIALS	117.45
4500022199	12/13/2018	W.W. Grainger Inc	P280-GENERAL SVC AGRMNTS	96.20
4500022200	12/13/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	536.17
4500022201	12/13/2018	TK Services Inc	B110-BUS HVAC SYSTEMS	1,554.59
4500022202	12/13/2018	Cummins Pacific LLC	B250-BUS REPAIR PARTS	102.54
4500022203	12/13/2018	W.W. Grainger Inc	G140-SHOP SUPPLIES	93.52
4500022205	12/13/2018	Waxie's Enterprises Inc.	G140-SHOP SUPPLIES	454.81
4500022206	12/13/2018	United Laboratories Inc	G180-JANITORIAL SUPPLIES	338.38
4500022207	12/13/2018	Knorr Brake Company	R160-RAIL/LRV ELECTRICAL	3,431.47
4500022208	12/13/2018	Acuity Specialty Products Inc	G180-JANITORIAL SUPPLIES	660.07
4500022209	12/13/2018	Muncie Transit Supply	B160-BUS ELECTRICAL	2,189.41
4500022210	12/13/2018	Transit Holdings Inc	B130-BUS BODY	2,996.06
4500022211	12/13/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	745.04
4500022212	12/13/2018	Rush Truck Centers of California	B200-BUS PWR TRAIN EQUIP	407.35
4500022213	12/13/2018	US Mobile Wireless	G120-SECURITY	176.63
4500022214	12/13/2018	Kaman Industrial Technologies	B140-BUS CHASSIS	204.25
4500022215	12/13/2018	Rayne - San Diego Inc	G120-SECURITY	25.00
4500022216	12/13/2018	Allied Gardens Inc	G120-SECURITY	100.00
4500022217	12/13/2018	Vinyard Doors	P120-BLDG/FACILITY REPRS	3,965.00
4500022218	12/14/2018	M Power Truck & Diesel Repair	P210-NON-REV VEH REPAIRS	386.73
4500022219	12/14/2018	Mcmaster-Carr Supply Co	B250-BUS REPAIR PARTS	127.74
4500022220	12/14/2018	Professional Contractors Supplies	G180-JANITORIAL SUPPLIES	740.67

Purchase Orders				
PO Number	PO Date	Name	Material Group	PO Value
4500022221	12/14/2018	BCP Systems Inc	G290-FARE REVENUE EQUIP	919.61
4500022222	12/14/2018	American Battery Corporation	G290-FARE REVENUE EQUIP	197.65
4500022223	12/14/2018	Thompson Building Materials	R230-RAIL/LRV MECHANICAL	3,009.35
4500022224	12/14/2018	Charter Industrial Supply Inc	B120-BUS MECHANICAL PARTS	1,053.31
4500022225	12/14/2018	Knorr Brake Company	R160-RAIL/LRV ELECTRICAL	3,395.26
4500022226	12/14/2018	West-Lite Supply Co Inc	M180-STATION ELECTRICAL	1,189.56
4500022227	12/14/2018	Waxie's Enterprises Inc.	G140-SHOP SUPPLIES	3,236.18
4500022229	12/14/2018	United Refrigeration Inc	B110-BUS HVAC SYSTEMS	1,030.74
4500022230	12/14/2018	Supreme Oil Company	A120-AUTO/TRUCK GASOLINE	22,973.87
4500022231	12/14/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	25.86
4500022232	12/14/2018	TK Services Inc	B250-BUS REPAIR PARTS	2,682.11
4500022233	12/14/2018	Prochem Specialty Products Inc	G180-JANITORIAL SUPPLIES	1,898.77
4500022234	12/17/2018	Shilpark Paint Corp.	G160-PAINTS & CHEMICALS	346.09
4500022235	12/17/2018	Transit Holdings Inc	B120-BUS MECHANICAL PARTS	17,176.07
4500022236	12/17/2018	Gillig LLC	B110-BUS HVAC SYSTEMS	8,088.31
4500022237	12/17/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	754.73
4500022238	12/17/2018	Mouser Electronics Inc	B250-BUS REPAIR PARTS	427.77
4500022239	12/17/2018	Mohawk Mfg & Supply Co	B140-BUS CHASSIS	2,133.75
4500022240	12/17/2018	Harbor Diesel & Equipment	G170-LUBRICANTS	7,431.52
4500022241	12/17/2018	Kidde Technologies Inc	B200-BUS PWR TRAIN EQUIP	3,083.29
4500022242	12/17/2018	W.W. Grainger Inc	G140-SHOP SUPPLIES	195.05
4500022243	12/17/2018	Cembre Inc	M140-WAYSIDE SIGNALS	140.08
4500022244	12/17/2018	Citywide Auto Glass Inc	P210-NON-REV VEH REPAIRS	69.95
4500022245	12/17/2018	Knorr Brake Company	R160-RAIL/LRV ELECTRICAL	31,707.41
4500022246	12/17/2018	Home Depot USA Inc	F180-BUILDING MATERIALS	204.52
4500022247	12/17/2018	West-Lite Supply Co Inc	M180-STATION ELECTRICAL	111.64
4500022248	12/17/2018	San Diego Seal Inc	R230-RAIL/LRV MECHANICAL	673.97
4500022249	12/18/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	333.60
4500022250	12/18/2018	Mcmaster-Carr Supply Co	B250-BUS REPAIR PARTS	127.74
4500022251	12/18/2018	4One LLC	B250-BUS REPAIR PARTS	69.11
4500022252	12/18/2018	Cellco Partnership	I110-INFORMATION TECH	2,416.85
4500022253	12/18/2018	Supreme Oil Company	A120-AUTO/TRUCK GASOLINE	1,948.14
4500022254	12/18/2018	Transit Holdings Inc	B130-BUS BODY	2,569.00
4500022255	12/18/2018	Mohawk Mfg & Supply Co	B160-BUS ELECTRICAL	819.93
4500022256	12/18/2018	Jankovich Company	G170-LUBRICANTS	3,120.18
4500022257	12/18/2018	Cummins Pacific LLC	B250-BUS REPAIR PARTS	328.18
4500022258	12/18/2018	California Sheet Metal Works	R160-RAIL/LRV ELECTRICAL	1,362.40
4500022259	12/18/2018	Brault Inc	I130-IT CAPITAL HARDWARE	941.13
4500022260	12/18/2018	Cembre Inc	M170-IMPEDANCE BOND	735.81
4500022261	12/18/2018	Washington-Lincoln Laurels	G250-NOVELTIES & AWARDS	1,000.00
4500022262	12/18/2018	OneSource Distributors, LLC	M140-WAYSIDE SIGNALS	219.51
4500022263	12/18/2018	Dell Marketing L.P.	I110-INFORMATION TECH	56,880.38
4500022264	12/18/2018	Airgas Inc	G190-SAFETY/MED SUPPLIES	2,222.59
4500022265	12/18/2018	Knorr Brake Company	R160-RAIL/LRV ELECTRICAL	1,658.82
4500022266	12/18/2018	Home Depot USA Inc	F180-BUILDING MATERIALS	3,208.67
4500022267	12/18/2018	Waxie's Enterprises Inc.	G180-JANITORIAL SUPPLIES	274.98
4500022268	12/18/2018	Cummins Pacific LLC	P190-REV VEHICLE REPAIRS	220.00
4500022269	12/18/2018	Professional Contractors Supplies	G190-SAFETY/MED SUPPLIES	766.03
4500022270	12/18/2018	Southcoast Heating & Air	F110-SHOP/BLDG MACHINERY	636.74
4500022271	12/18/2018	Neleco Products Inc	G170-LUBRICANTS	926.58
4500022273	12/18/2018	Gillig LLC	B250-BUS REPAIR PARTS	2,147.89
4500022274	12/18/2018	Harbor Diesel & Equipment	G170-LUBRICANTS	2,477.18
4500022275	12/18/2018	W.W. Grainger Inc	P120-BLDG/FACILITY REPRS	242.44
4500022276	12/18/2018	Transit Holdings Inc	B120-BUS MECHANICAL PARTS	2,808.58
4500022277	12/18/2018	SC Commercial, LLC	A120-AUTO/TRUCK GASOLINE	22,616.30
4500022278	12/18/2018	Merrimac Petroleum Inc	B180-BUS DIESEL	7,079.55
4500022279	12/18/2018	R.S. Hughes Co Inc	G190-SAFETY/MED SUPPLIES	245.97
4500022280	12/18/2018	Sid Tool Co	G180-JANITORIAL SUPPLIES	246.18
4500022281	12/18/2018	Transit Holdings Inc	B120-BUS MECHANICAL PARTS	13,985.76

Purchase Orders				
PO Number	PO Date	Name	Material Group	PO Value
4500022282	12/18/2018	Chromate Industrial Corporation	M180-STATION ELECTRICAL	1,913.81
4500022283	12/18/2018	General Information Systems Ltd	G120-SECURITY	1,122.00
4500022284	12/18/2018	Gillig LLC	B250-BUS REPAIR PARTS	5,152.34
4500022285	12/18/2018	Cummins Pacific LLC	P190-REV VEHICLE REPAIRS	220.00
4500022286	12/18/2018	Gillig LLC	B110-BUS HVAC SYSTEMS	1,874.29
4500022287	12/18/2018	The Gordian Group, Inc.	C130-CONSTRUCTION SVCS	286.57
4500022288	12/19/2018	Allied Refrigeration Inc	F110-SHOP/BLDG MACHINERY	610.95
4500022289	12/19/2018	Muncie Transit Supply	B140-BUS CHASSIS	260.22
4500022290	12/19/2018	Asbury Environmental Services	B200-BUS PWR TRAIN EQUIP	2,456.70
4500022291	12/19/2018	W.W. Grainger Inc	F110-SHOP/BLDG MACHINERY	221.60
4500022292	12/19/2018	Gillig LLC	B250-BUS REPAIR PARTS	531.75
4500022293	12/19/2018	Cummins Pacific LLC	B250-BUS REPAIR PARTS	64.86
4500022294	12/19/2018	Kurt Morgan	G140-SHOP SUPPLIES	751.89
4500022295	12/19/2018	Siemens Mobility, Inc.	R150-RAIL/LRV COMM EQUIP	928.82
4500022296	12/19/2018	Home Depot USA Inc	G140-SHOP SUPPLIES	1,053.98
4500022297	12/19/2018	Knorr Brake Company	R220-RAIL/LRV TRUCKS	3,787.63
4500022298	12/19/2018	Reefco LLC	B110-BUS HVAC SYSTEMS	497.59
4500022299	12/19/2018	Stafford Environmental Services Inc	C130-CONSTRUCTION SVCS	66,672.00
4500022301	12/19/2018	Barrett Engineered Pumps	M160-SUMP PUMP STATIONS	6,174.08
4500022302	12/19/2018	Willy's Electronic Supply Co	G130-SHOP TOOLS	343.73
4500022303	12/19/2018	San Diego Friction Products, Inc.	B140-BUS CHASSIS	1,373.82
4500022304	12/19/2018	Battery Systems Inc	B160-BUS ELECTRICAL	5,341.08
4500022305	12/19/2018	San Diego Friction Products, Inc.	B250-BUS REPAIR PARTS	279.26
4500022306	12/19/2018	W.W. Grainger Inc	G140-SHOP SUPPLIES	109.65
4500022307	12/19/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	5,060.38
4500022308	12/19/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	2,747.09
4500022309	12/19/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	1,378.21
4500022310	12/20/2018	Emergent LLC	I140-IT CAPITAL SOFTWARE	1,041.39
4500022311	12/20/2018	Siemens Mobility, Inc.	R160-RAIL/LRV ELECTRICAL	33,810.88
4500022312	12/20/2018	Dell Marketing L.P.	I110-INFORMATION TECH	12,983.88
4500022313	12/20/2018	SHI International Corp	I110-INFORMATION TECH	7,813.00
4500022314	12/20/2018	HI-TEC Enterprises	R160-RAIL/LRV ELECTRICAL	522.59
4500022315	12/20/2018	Ansaldo Sts Usa Inc	M140-WAYSIDE SIGNALS	19,007.10
4500022316	12/20/2018	Daniels Tire Service	P210-NON-REV VEH REPAIRS	465.87
4500022317	12/20/2018	Knorr Brake Company	R160-RAIL/LRV ELECTRICAL	1,383.81
4500022318	12/20/2018	Gillig LLC	B140-BUS CHASSIS	5,319.22
4500022319	12/20/2018	Siemens Mobility, Inc.	R120-RAIL/LRV CAR BODY	2,515.97
4500022320	12/20/2018	W.W. Grainger Inc	G140-SHOP SUPPLIES	107.47
4500022321	12/20/2018	Industrial Maintenance Supply LLC	G150-FASTENERS	224.28
4500022322	12/20/2018	Robert Michael McKittrick	B250-BUS REPAIR PARTS	172.40
4500022323	12/20/2018	Gillig LLC	B140-BUS CHASSIS	1,962.19
4500022324	12/20/2018	Annex Automotive and	G160-PAINTS & CHEMICALS	5,419.56
4500022325	12/20/2018	Jankovich Company	G170-LUBRICANTS	3,120.18
4500022326	12/20/2018	NASG Holding Inc	R120-RAIL/LRV CAR BODY	5,062.10
4500022327	12/20/2018	Madden Construction Inc	P280-GENERAL SVC AGRMNTS	730.29
4500022328	12/20/2018	Transit Holdings Inc	B120-BUS MECHANICAL PARTS	2,566.21
4500022329	12/20/2018	Dellner Inc	R130-RAIL/LRV COUPLER	21,088.83
4500022330	12/20/2018	West-Lite Supply Co Inc	G270-ELECTRICAL/LIGHTING	144.04
4500022331	12/21/2018	Wayne Harmeier Inc	B160-BUS ELECTRICAL	883.56
4500022332	12/21/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	439.00
4500022333	12/21/2018	Southcoast Heating & Air	F110-SHOP/BLDG MACHINERY	752.17
4500022334	12/21/2018	M Power Truck & Diesel Repair	P130-EQUIP MAINT REPR SVC	285.00
4500022335	12/21/2018	San Diego Plastics Inc	M180-STATION ELECTRICAL	1,610.87
4500022336	12/21/2018	ABC Construction Co., Inc.	C130-CONSTRUCTION SVCS	92,920.98
4500022337	12/21/2018	Home Depot USA Inc	G130-SHOP TOOLS	396.52
4500022338	12/21/2018	The Gordian Group, Inc.	C130-CONSTRUCTION SVCS	2,768.86
4500022339	12/21/2018	The Gordian Group, Inc.	C130-CONSTRUCTION SVCS	2,326.32
4500022340	12/21/2018	R.S. Hughes Co Inc	B250-BUS REPAIR PARTS	72.73
4500022341	12/24/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	2,629.55

Purchase Orders				
PO Number	PO Date	Name	Material Group	PO Value
4500022342	12/24/2018	Citywide Auto Glass Inc	B250-BUS REPAIR PARTS	245.43
4500022343	12/24/2018	CDW LLC	G200-OFFICE SUPPLIES	639.25
4500022344	12/24/2018	Robcar Corporation	G160-PAINTS & CHEMICALS	346.40
4500022345	12/24/2018	San Diego Plastics Inc	G110-BUS/TROLLEY SIGNAGE	510.51
4500022346	12/24/2018	Kidde Technologies Inc	B250-BUS REPAIR PARTS	3,386.17
4500022347	12/24/2018	IPC (USA), Inc.	A120-AUTO/TRUCK GASOLINE	20,649.67
4500022348	12/24/2018	IPC (USA), Inc.	B180-BUS DIESEL	6,949.65
4500022349	12/26/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	4,281.57
4500022350	12/26/2018	Mohawk Mfg & Supply Co	B140-BUS CHASSIS	1,162.23
4500022351	12/26/2018	Waxie's Enterprises Inc.	G140-SHOP SUPPLIES	3,399.25
4500022352	12/26/2018	SC Commercial, LLC	G170-LUBRICANTS	121.54
4500022353	12/26/2018	Southern Counties Lubricants LLC	G170-LUBRICANTS	6,045.50
4500022354	12/26/2018	Mohawk Mfg & Supply Co	B160-BUS ELECTRICAL	1,064.79
4500022355	12/26/2018	Annex Automotive and	F120-BUS/LRV PAINT BOOTHS	2,161.24
4500022356	12/26/2018	Gillig LLC	B130-BUS BODY	1,257.02
4500022357	12/26/2018	Muncie Transit Supply	B130-BUS BODY	2,639.39
4500022358	12/26/2018	Kaman Industrial Technologies	G170-LUBRICANTS	1,494.79
4500022359	12/26/2018	Professional Contractors Supplies	G160-PAINTS & CHEMICALS	393.77
4500022360	12/26/2018	West-Lite Supply Co Inc	M180-STATION ELECTRICAL	324.76
4500022361	12/26/2018	W.W. Grainger Inc	R160-RAIL/LRV ELECTRICAL	290.08
4500022362	12/27/2018	Virginia Electronic & Lighting LLC	M140-WAYSIDE SIGNALS	2,192.13
4500022363	12/27/2018	Total Filtration Services Inc	R230-RAIL/LRV MECHANICAL	331.94
4500022364	12/27/2018	All The King's Flags	M200-YARD FACILITIES	327.77
4500022365	12/27/2018	Newark Corporation	R160-RAIL/LRV ELECTRICAL	380.25
4500022366	12/27/2018	Allied Refrigeration Inc	R170-RAIL/LRV HVAC	1,427.47
4500022367	12/27/2018	Jeyco Products Inc	G140-SHOP SUPPLIES	590.65
4500022368	12/27/2018	David Bueltel	G200-OFFICE SUPPLIES	508.58
4500022369	12/27/2018	The Carpenter Group Inc	M120-OVRHEAD CATENARY SYS	629.48
4500022370	12/27/2018	Gillig LLC	B250-BUS REPAIR PARTS	736.18
4500022371	12/27/2018	Skyhawk Industries Inc	P420-MAIL SERVICES	90,300.00
4500022372	12/27/2018	Chromate Industrial Corporation	G150-FASTENERS	416.38
4500022373	12/27/2018	West-Lite Supply Co Inc	M180-STATION ELECTRICAL	204.35
4500022374	12/27/2018	Bank of New York Mellon	P400-FINANCIAL & AUDIT	6,300.00
4500022375	12/27/2018	Transit Holdings Inc	B140-BUS CHASSIS	3,138.46
4500022376	12/27/2018	Cubic Transportation Systems	G290-FARE REVENUE EQUIP	27,091.44
4500022378	12/28/2018	Cummins-Allison	G290-FARE REVENUE EQUIP	355.00
4500022379	12/28/2018	Sherri Cameron	R120-RAIL/LRV CAR BODY	4,676.35
4500022380	12/28/2018	Home Depot USA Inc	F180-BUILDING MATERIALS	142.95
4500022381	12/28/2018	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	2,175.80
4500022382	12/28/2018	W.W. Grainger Inc	G130-SHOP TOOLS	370.90
4500022383	12/28/2018	West-Lite Supply Co Inc	M180-STATION ELECTRICAL	991.09
4500022384	12/28/2018	Smart Car Care Products Inc	R240-RAIL/LRV REPR PARTS	566.21
4500022385	12/28/2018	Sid Tool Co	G180-JANITORIAL SUPPLIES	265.60
4500022386	12/28/2018	Cable, Pipe & Leak Detection, Inc.	P280-GENERAL SVC AGRMNTS	575.00
4500022387	12/28/2018	Supreme Oil Company	B180-BUS DIESEL	6,657.38
4500022388	12/28/2018	Daley & Heft, LLP	P340-LEGAL	75,000.00
4500022389	12/28/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	1,573.82
4500022390	12/28/2018	Annex Automotive and	F120-BUS/LRV PAINT BOOTHS	29,329.36
4500022391	12/31/2018	Transit Holdings Inc	B250-BUS REPAIR PARTS	2,860.48
4500022392	12/31/2018	W.W. Grainger Inc	G140-SHOP SUPPLIES	102.54
4500022393	12/31/2018	J. Perez Associates Inc.	B250-BUS REPAIR PARTS	484.88
4500022394	12/31/2018	AxleTech International LLC	B140-BUS CHASSIS	3,819.96
4500022395	12/31/2018	American Seating Company	B130-BUS BODY	1,550.67
4500022396	12/31/2018	R.S. Hughes Co Inc	G160-PAINTS & CHEMICALS	309.28
4500022397	12/31/2018	Southern Counties Oil Co, LP	G170-LUBRICANTS	7,994.51
4500022398	1/2/2019	Airgas Inc	G140-SHOP SUPPLIES	64.05
4500022399	1/2/2019	Floyd Skeren Manukian Langevin, LLP	P340-LEGAL	75,000.00
4500022400	1/2/2019	Meyers, Nave, Riback,	P340-LEGAL	75,000.00
4500022401	1/2/2019	Davey Auto Body Inc	G120-SECURITY	1,542.44

Purchase Orders				
PO Number	PO Date	Name	Material Group	PO Value
4500022402	1/2/2019	Transit Holdings Inc	B140-BUS CHASSIS	47,163.80
4500022403	1/2/2019	Gillig LLC	B110-BUS HVAC SYSTEMS	5,644.35
4500022404	1/2/2019	Cubic Transportation Systems	B190-BUS FARE EQUIP	3,232.51
4500022405	1/2/2019	Cubic Transportation Systems	B190-BUS FARE EQUIP	36,839.03
4500022406	1/2/2019	Culligan of San Diego	G140-SHOP SUPPLIES	1,797.77
4500022407	1/2/2019	Airgas Inc	G190-SAFETY/MED SUPPLIES	1,076.74
4500022408	1/2/2019	HD Supply Construction Supply, LTD.	G130-SHOP TOOLS	80.90
4500022409	1/3/2019	Mohawk Mfg & Supply Co	B140-BUS CHASSIS	20.90
4500022410	1/3/2019	Dimensional Silk Screen Inc	P280-GENERAL SVC AGRMNTS	549.53
4500022411	1/3/2019	Louis Sardo Upholstery Inc	B130-BUS BODY	4,993.39
4500022412	1/3/2019	Home Depot USA Inc	F190-LANDSCAPING MAT'LS	1,001.35
4500022413	1/3/2019	Calmat	T110-TRACK, RAIL	2,690.05
4500022414	1/3/2019	Transit Holdings Inc	B250-BUS REPAIR PARTS	773.90
4500022415	1/3/2019	Transit Holdings Inc	B250-BUS REPAIR PARTS	1,689.19
4500022416	1/3/2019	Jamaica Bearings Co Inc	R170-RAIL/LRV HVAC	107.75
4500022417	1/3/2019	R.S. Hughes Co Inc	G140-SHOP SUPPLIES	49.57
4500022418	1/3/2019	W.W. Grainger Inc	F110-SHOP/BLDG MACHINERY	182.95
4500022419	1/3/2019	Mission Janitorial Supplies	G180-JANITORIAL SUPPLIES	1,041.91
4500022420	1/3/2019	Professional Contractors Supplies	G160-PAINTS & CHEMICALS	442.10
4500022421	1/3/2019	Industrial Maintenance Supply LLC	G150-FASTENERS	281.56
4500022422	1/3/2019	B Hepworth & Company Limited	R160-RAIL/LRV ELECTRICAL	724.03
4500022423	1/3/2019	Mcmaster-Carr Supply Co	G140-SHOP SUPPLIES	88.01
4500022424	1/3/2019	Charter Industrial Supply Inc	B200-BUS PWR TRAIN EQUIP	425.86
4500022425	1/3/2019	Thales Consulting Inc	P400-FINANCIAL & AUDIT	1,750.00
4500022426	1/3/2019	Office Depot	G200-OFFICE SUPPLIES	64.94
4500022427	1/3/2019	Transit Holdings Inc	B130-BUS BODY	2,187.95
4500022428	1/3/2019	Cummins Pacific LLC	B200-BUS PWR TRAIN EQUIP	2,982.81
4500022429	1/3/2019	Ansaldo Sts Usa Inc	M150-PWR SWITCHES/LOCKS	9,763.63
4500022430	1/3/2019	W.W. Grainger Inc	G140-SHOP SUPPLIES	1,547.52
4500022431	1/3/2019	Willy's Electronic Supply Co	R160-RAIL/LRV ELECTRICAL	167.62
4500022432	1/3/2019	Beverly Christensen	T140-TRACK, TURNOUTS	1,784.66
4500022433	1/3/2019	JKL Cleaning Systems	P130-EQUIP MAINT REPR SVC	220.04
4500022434	1/3/2019	Annex Automotive and	F120-BUS/LRV PAINT BOOTHS	2,873.31
4500022435	1/4/2019	Transit Holdings Inc	B250-BUS REPAIR PARTS	2,844.24
4500022436	1/4/2019	San Diego Plastics Inc	R170-RAIL/LRV HVAC	2,036.48
4500022437	1/4/2019	West-Lite Supply Co Inc	R160-RAIL/LRV ELECTRICAL	284.47
4500022438	1/4/2019	Wayne Harmeier Inc	B140-BUS CHASSIS	883.56
4500022439	1/4/2019	Mohawk Mfg & Supply Co	B130-BUS BODY	61.65
4500022440	1/4/2019	W.W. Grainger Inc	B250-BUS REPAIR PARTS	470.51
4500022441	1/4/2019	Staples Contract & Commercial Inc	G200-OFFICE SUPPLIES	44.93
4500022442	1/4/2019	Transit Holdings Inc	B250-BUS REPAIR PARTS	4,589.27
4500022443	1/4/2019	W.W. Grainger Inc	G180-JANITORIAL SUPPLIES	152.94
4500022444	1/4/2019	Willy's Electronic Supply Co	B160-BUS ELECTRICAL	496.51
4500022445	1/4/2019	Transit Holdings Inc	B250-BUS REPAIR PARTS	7,510.18
4500022446	1/4/2019	Warren Communications Inc	P310-ADVERTISING SERVICES	900.90
4500022447	1/4/2019	SC Commercial, LLC	A120-AUTO/TRUCK GASOLINE	20,381.49
4500022448	1/4/2019	Merrimac Petroleum Inc	B180-BUS DIESEL	7,121.50
4500022449	1/4/2019	Mcmaster-Carr Supply Co	F110-SHOP/BLDG MACHINERY	76.19
4500022450	1/4/2019	Prochem Specialty Products Inc	G180-JANITORIAL SUPPLIES	1,265.84
4500022451	1/4/2019	Bender CCP, Inc.	G130-SHOP TOOLS	2,898.48
4500022452	1/4/2019	Autolift Services Inc	P130-EQUIP MAINT REPR SVC	3,422.72
4500022453	1/4/2019	Asbury Environmental Services	B200-BUS PWR TRAIN EQUIP	1,001.11
4500022454	1/7/2019	711 Print Enterprises Inc	G120-SECURITY	3,123.68
4500022455	1/7/2019	The Animal Keeper Inc	G120-SECURITY	480.00
4500022456	1/7/2019	Ray Allen Manufacturing LLC	G120-SECURITY	162.93
4500022457	1/7/2019	Kurt Morgan	G200-OFFICE SUPPLIES	2,315.63
4500022458	1/7/2019	Transit Holdings Inc	B250-BUS REPAIR PARTS	1,057.78
4500022459	1/7/2019	W.W. Grainger Inc	F110-SHOP/BLDG MACHINERY	152.09
4500022460	1/7/2019	Wesco Distribution Inc	F110-SHOP/BLDG MACHINERY	222.23

Purchase Orders				
PO Number	PO Date	Name	Material Group	PO Value
4500022461	1/7/2019	A.O. Reed & Co	F110-SHOP/BLDG MACHINERY	500.00
4500022462	1/7/2019	Harbor Diesel & Equipment	B200-BUS PWR TRAIN EQUIP	2,645.81
4500022463	1/7/2019	Gillig LLC	B250-BUS REPAIR PARTS	97.28
4500022465	1/7/2019	Southern Counties Oil Co, LP	G170-LUBRICANTS	15,077.67
4500022466	1/7/2019	Northwest Pump & Equipment Co	G130-SHOP TOOLS	303.18
4500022467	1/7/2019	TK Services Inc	G170-LUBRICANTS	250.49
4500022468	1/7/2019	JKL Cleaning Systems	P130-EQUIP MAINT REPR SVC	789.25
4500022469	1/7/2019	Transit Holdings Inc	B160-BUS ELECTRICAL	7,893.30
4500022470	1/7/2019	Cummins Pacific LLC	B140-BUS CHASSIS	23,985.15
4500022471	1/7/2019	Gillig LLC	B120-BUS MECHANICAL PARTS	6,474.28
4500022472	1/7/2019	Mohawk Mfg & Supply Co	B140-BUS CHASSIS	558.98
4500022473	1/7/2019	Transit Holdings Inc	B250-BUS REPAIR PARTS	2,769.67
4500022474	1/7/2019	Calmat	T110-TRACK, RAIL	2,384.46
4500022475	1/7/2019	BCP Systems Inc	G290-FARE REVENUE EQUIP	1,629.19
4500022476	1/7/2019	Staples Contract & Commercial Inc	G200-OFFICE SUPPLIES	2,529.36
4500022477	1/7/2019	Meeting Services Inc	P160-EQUIPMENT RENTALS	395.51