

LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

STAFF REPORT

SUBJECT: Contract Award for Transit Signal Priority Upgrade and Expansion Project
#2019-04

FROM: Jennifer Yeamans, Senior Grants & Management Specialist

DATE: January 6, 2020

Action Requested

Staff requests that the Board of Directors approve Resolution 01-2020 (Attachment 1), authorizing the award of an Agreement between LAVTA and DC Electric Group, Inc., to perform field installations of agency-furnished equipment to upgrade and expand the existing Transit Signal Priority (TSP) system that is currently operating under the Rapid Bus Transit service in the Cities of Dublin, Pleasanton, and Livermore, and that the Board authorize the LAVTA Executive Director to finalize all details and execute said Agreement between LAVTA and DC Electric Group, Inc.

Background

In August 2016, LAVTA implemented changes to the original Rapid route based on the results of the Comprehensive Operational Analysis (COA) in 2016. The COA brought a realigned route 30R to Dublin and Livermore and new Rapid service to Pleasanton with the 10R. The original Rapid project implemented in 2010 included deployment of an optical infrared-based Transit Signal Priority (TSP) system to reduce delay and travel times on the new premium Rapid service in hopes of increasing reliability and attracting new riders to the system.

In September 2017, LAVTA approved a Memorandum of Understanding with the City of Dublin (Attachment 2) for use of \$1.14 million in Tri-Valley Transportation Council (TVTC) funds for the Transit Signal Priority (TSP) Upgrade and Expansion project approved by TVTC in July 2017 (Attachment 3). The City of Dublin is a signatory agency to TVTC and as such is the project sponsor for the project (as described in Attachment 4), also known as Express Bus Phase 2, and LAVTA serves as Lead Agency.

In addition to providing more reliable performance and lower maintenance requirements than the existing optical system, the GPS-based system will also provide improved accuracy of queue-jump signal requests and reporting of TSP utilization and its impacts on on-time performance of LAVTA's two Rapid routes, which together carry about 55% of LAVTA's fixed-route ridership. Networked GPS software will only turn the TSP "on" when the buses run three or more minutes behind their published schedule, but keep the TSP "off" when the buses are on-time. The new technology will be installed in parallel to the legacy infrared technology LAVTA currently uses for TSP and which is also utilized for Emergency Vehicle Priority (EVP) systems in Livermore,

Dublin, and Pleasanton. The legacy technology was furnished by Opticom, which is now owned by Global Traffic Technologies (GTT). Similar GPS-based TSP systems have been deployed in the Bay Area by SFMTA and AC Transit with near-immediate improvements in operating performance reported.

In October 2017, LAVTA's Board of Directors authorized the Executive Director to execute a task-order contract with Kimley-Horn and Associates, Inc. to perform project management, design, and construction management services for the TSP Upgrade Project pursuant to the terms of LAVTA's existing on-call engineering services contract (RFP #2016-14). This work included data collection and field reviews, preparation of detailed installation designs, and extensive coordination with each of the cities of Livermore, Pleasanton, and Dublin, and was substantially completed in May 2019. The intersection locations included in the project are included as Attachment 5. Of the 67 total intersections included in the project, 26 are in Dublin, 33 are in Livermore, and 8 are in Pleasanton.

In July 2019, the Board of Directors authorized LAVTA to purchase from GTT the necessary GPS-based TSP equipment to be installed at all 67 intersections and on 24 Rapid buses to complete the project. Field equipment to be installed as part of this contract award include enhanced phase-selector cards in traffic-signal cabinets and mast-mounted GPS-enabled radio antennas at each intersection, as well as related support equipment and software. Installation of new TSP equipment on LAVTA's buses will be performed under the existing GTT contract later this winter/spring.

LAVTA's Procurement Policy mandates the Authority follow a competitive procurement process for award of major contracts. On October 24, 2019, LAVTA released an Invitation for Bids (IFB) for the LAVTA Transit Signal Priority Upgrade and Expansion Project #2019-04, for qualified contractors to bid on the project plans and specifications developed by LAVTA's project engineer. The project was posted on LAVTA's website, sent to various Bay Area and Northern California plan rooms, and advertised in both *Transit Talent* and the *East Bay Times*. An optional pre-bid conference was held at the Authority's Administrative Offices on November 7, 2019, at 10:00 a.m. Written Questions or Requests were due on November 14, 2019, at 4:00 p.m., and one Addendum was issued on November 19, 2019, with answers to questions received. Sealed bids in response to the IFB were due on December 6, 2019, at 2:00 p.m.

Discussion

Seven bids were received prior to the deadline established in the IFB. The responding firms were:

Company Name	Location	Grand Total Amount
Econolite Systems, Inc.	Fremont, CA	\$447,552.67
DC Electric Group, Inc.	Pacheco, CA	\$455,760.00
W. Bradley Electric, Inc.	Novato, CA	\$515,085.00
Columbia Electric, Inc.	San Leandro, CA	\$626,350.00
Ray's Electric	Oakland, CA	\$640,000.00
St. Francis Electric LLC	San Leandro, CA	\$846,867.00
Tennyson Electric, Inc.	Livermore, CA	\$852,590.00

Econolite Systems, Inc., submitted the apparent lowest bid, however the bid was found by LAVTA's Legal Counsel to be non-responsive to the requirements set forth in the IFB. The second-lowest bid was submitted by DC Electric Group, Inc., and was found to be responsive and responsible by LAVTA's Legal Counsel and staff. This project is due to be completed within 120 calendar days from LAVTA's issuance of the Notice to Proceed (NTP).

Fiscal Impact

A cost analysis was conducted by staff and staff has determined that the low responsive bid is both reasonable and fair. The engineer's estimate for the project was \$490,400. The project budget is \$501,336 and consists of the contract award of \$455,760 and a 10% project contingency of \$45,576. Funding for this project is identified in LAVTA's FY19-20 budget and consists of the following fund sources:

Funding Source	Amount	%
TVTC	\$425,872.70	85%
FTA 5307 (TPI Dublin Blvd. Project Cost Savings)	\$75,463.30	15%
Total	\$501,336.00	100%

Next Steps

Upon execution of the agreement with DC Electric Group, Inc., LAVTA will issue the NTP.

Recommendation

Staff recommends that the Board of Directors: (1) award a contract to DC Electric Group, Inc., the lowest responsive and responsible bidder for the LAVTA Transit Signal Priority Upgrade and Expansion Project #2019-04, for a total contract award of \$455,760.00; (2) authorize the Executive Director to sign the contract and issue an NTP to DC Electric Group, Inc.; and (3) approve a 10% project contingency of \$45,576.00 to be used at the discretion of the Executive Director.

Attachments:

1. Resolution 01-2020
2. MOU with the City of Dublin
3. TVTC Resolution #2017-07
4. TVTC Strategic Expenditure Plan Project A-11 Description
5. Map of Project Locations

Approved: _____

RESOLUTION NO. 01-2020

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY
AWARDING THE CONTRACT FOR THE TRANSIT SIGNAL PRIORITY
UPGRADE AND EXPANSION PROJECT TO DC ELECTRIC GROUP, INC.**

WHEREAS, the Livermore Amador Valley Transit Authority (LAVTA) requires the services of a third-party contractor to perform the installation of equipment necessary to carry out the Transit Signal Priority Upgrade and Expansion Project as described in LAVTA Invitation for Bids (IFB) #2019-04; and

WHEREAS, staff released IFB #2017-04 to solicit bids for the project; and

WHEREAS, seven bids were received, six of which were deemed responsive to the requirements set forth in the IFB, and DC Electric Group, Inc., was determined to be the lowest responsive and responsible bidder based on their submitted bid in the amount of \$455,760.00; and

WHEREAS, staff recommends that the Board of Directors award the contract for the installation of equipment necessary to carry out the Transit Signal Priority Upgrade and Expansion Project to DC Electric Group, Inc., in the not-to-exceed amount of \$455,760.00;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors hereby awards the contract for the installation of equipment necessary to carry out the Transit Signal Priority Upgrade and Expansion Project to DC Electric Group, Inc., in the not-to-exceed amount of \$455,760.00; and

BE IT FURTHER RESOLVED that the Executive Director is authorized to execute a contract with DC Electric Group, Inc., in a form approved by LAVTA's Legal Counsel; and

BE IT FURTHER RESOLVED that the Board of Directors authorizes the Executive Director to expend a 10% contingency amount not to exceed \$45,576.00.

PASSED AND ADOPTED this 6th day of January 2020.

David Haubert, Chair

ATTEST:

Michael Tree, Executive Director

APPROVED AS TO FORM:

Michael Conneran, Legal Counsel

EXHIBIT 1

**MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF DUBLIN
AND THE LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY FOR THE
IMPLEMENTATION OF EXPRESS BUS/RAPID BUS TRANSIT PAHSE 2 PROJECT**

This Memorandum of Understanding (MOU) is entered into as of September 5, 2017 between the City of Dublin, a municipal corporation (DUBLIN) and the Livermore Amador Valley Transit Authority, a joint powers authority (LAVTA).

RECITALS

- A. WHEREAS, DUBLIN, as one of the members of the Tri-Valley Transportation Council ("TVTC") is a signatory to the Joint Exercise of Powers Agreement pertaining to the Tri-Valley Transportation Development Fee (TVTDF) for Traffic Mitigation; and
- B. WHEREAS, DUBLIN has cooperatively participated in the development and adoption of the TVTC Strategic Expenditure Plan (SEP) and the TVTDF Funding Plan, which provide guidance for expenditure of the TVTDF on 22 projects (List A and List B); and
- C. WHEREAS, the Express Bus/BRT Phase 2 Project ("PROJECT") is one of the "List A" projects in the SEP (Project A-11); and
- D. WHEREAS, DUBLIN serves as the TVTC Project Sponsor of the PROJECT identified in the TVTC SEP 2017 Update; and
- E. WHEREAS, LAVTA is the lead agency responsible for management and implementation of the PROJECT; and
- F. WHEREAS, the PROJECT is listed in the TVTC SEP 2017 update with \$1.14 million from TVTDF in fiscal years 2016/17 and 2017/18; and
- G. WHEREAS, using TVTDF funds, LAVTA wishes to fund part of the PROJECT construction in accordance with the terms and conditions set forth herein; and
- H. WHEREAS, as a member of the TVTC, DUBLIN intends to ensure that funds set aside for PROJECT in the TVTDF Funding Plan are appropriated as expeditiously as feasible for the PROJECT;

EXHIBIT 1

- I. NOW, THEREFORE, in consideration of the promises herein, the parties agree as follows:

SECTION I

DUBLIN AGREES:

- A. To initiate a request from the TVTC for the disbursement of TVTDF funds in the amount of \$1.14 million in accordance with the TVTDF funding plan.
- B. To, upon receipt of the funds from the TVTC, pass the funds through to LAVTA, the party responsible for the management and construction of the PROJECT.

SECTION II

LAVTA AGREES:

- A. To receive TVTC pass-through funds from DUBLIN in the amount of \$1.14 million.
- B. To oversee the construction of the PROJECT, in accordance with LAVTA policy.

SECTION III

IT IS MUTUALLY AGREED:

- A. This MOU constitutes the entire agreement between the parties regarding the subject matter hereof and any oral discussions or written or oral agreements with respect thereto preceding the effective date of this MOU are superseded hereby. No amendment, alteration, or variation of the terms of the MOU shall be valid unless made in writing and signed by the parties hereto, and no oral understanding or agreement not incorporated herein shall be binding on any of the parties hereto.
- B. DUBLIN and LAVTA each render their services under this MOU as independent agencies. None of the agents or employees of either shall be deemed agents or employees of the other.
- C. Any notice given under this MOU shall be in writing and shall be deemed given if delivered personally or mailed by registered or certified mail or commercial overnight courier, return receipt or confirmation of delivery requested, or by facsimile transmission with voice confirmation of receipt, the parties at the following addresses (or at such other address for a party as shall be specified by like notice):

EXHIBIT 1

If to DUBLIN:

Obaid Khan, P.E.
Public Works
100 Civic Plaza, Dublin ca 94568
Obaid.khan@dublin.ca.gov
Fax: 925-829-9248

If to LAVTA:

Christy Wegener
1362 Rutan Court, Suite 100
Livermore, CA 94551
cwegener@lavta.org
Fax: 925-443-1375

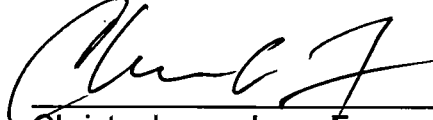
EXHIBIT 1

THIS AGREEMENT executed the date and year first above written.

LIVERMORE AMADOR VALLEY
TRANSPORTATION AUTHORITY

Michael Tree, Executive Director

CITY OF DUBLIN



Christopher L. Foss, City
Manager

ATTEST:

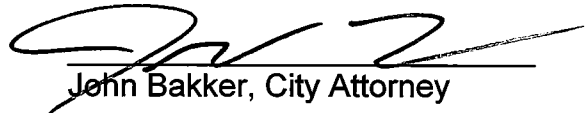


Caroline Soto, City Clerk

APPROVED AS TO FORM:

Michael Conneran
Legal Counsel to LAVTA

APPROVED AS TO FORM:



John Bakker, City Attorney

THIS AGREEMENT executed the date and year first above written.

LIVERMORE AMADOR VALLEY
TRANSPORTATION AUTHORITY



Michael Tree, Executive Director

CITY OF DUBLIN

Christopher L. Foss, City Manager

ATTEST:

Caroline Soto, City Clerk

APPROVED AS TO FORM:



Michael Conneran
Legal Counsel to LAVTA

APPROVED AS TO FORM:

John Bakker, City Attorney

**TRI-VALLEY TRANSPORTATION COUNCIL
RESOLUTION NO. 2017-07**

**A RESOLUTION OF THE TRI-VALLEY TRANSPORTATION COUNCIL
APPROPRIATING \$1,140,000 IN TRI-VALLEY TRANSPORTATION
DEVELOPMENT FEE (TVTDF) FUNDS FOR THE PURPOSES OF FUNDING
ADVANCED TECHNOLOGY EXPRESS BUS/BRT PHASE 2**

WHEREAS, in 1995, the Tri-Valley Transportation Council (TVTC) adopted the "Tri-Valley Transportation Plan/Action Plan (TVTP/AP) for Routes of Regional Significance; and

WHEREAS, the TVTP/AP identified 11 specific transportation improvements to be given high priority for funding; and

WHEREAS, in 1998, the TVTC, and entered into a Joint Exercise Powers of Agreement (JEPA) to provide authority to collect a Tri-Valley Transportation Development Fee (TVTDF) to collect impact fees for the traffic mitigation to be applied to the 11 high priority projects; and

WHEREAS, in 1999, the TVTC prepared and approved a Strategic Expenditure Plan (SEP), which guides the expenditure of revenue collected from TVTDF; and

WHEREAS, the SEP identifies priorities, project sponsors, and funding for TVTDF projects; and

WHEREAS, in 2004, the TVTC adopted an update to the SEP that reflected an update to the regional and sub-regional transportation outlook for the Tri-Valley; and

WHEREAS, in 2011, the TVTC prepared and approved the 2011 TVTDF Funding Plan that provides guidance for expenditure of the TVTDF on 22 projects (List A and List B) including Express Bus/BRT Phase 2 (Project A-11); and

WHEREAS, in 2017, the TVTC prepared and approved an update of the 2011 SEP, and provided a funding plan for the remaining projects; and

WHEREAS, the 2017 update of the SEP programmed \$1.00 million in fiscal year 17/18 and \$0.140 million in fiscal year 16/17 for a total of \$1.140 million to Express Bus/BRT Phase 2 (Project A-11); and

WHEREAS, the City of Dublin ("Dublin") a signatory agency to the 1991 Joint Powers Agreement governing the TVTC and is the TVTC-member sponsor Agency for the purposes of administering the appropriation of TVTD Fees to the Express Bus/BRT Phase 2 Project; and

WHEREAS, the Livermore Amador Valley Transit Authority ("LAVTA") is the Lead Agency for the implementation of Express Bus/BRT Phase 2 Project; and

WHEREAS, Dublin and LAVTA will enter into a Memorandum of Understanding (2017 MOU), which outlines how the funds will flow from TVTC through the City of Dublin to LAVTA, who will be managing the Express Bus/BRT Phase 2 Project; and

WHEREAS, sufficient revenue in the Joint TVTDF Fee Account is available for the FY 17/18 drawdown of \$1,140,000 for the Express Bus/BRT Phase 2 Project.

NOW THEREFORE BE IT RESOLVED THAT the Tri-Valley Transportation Council adopts:

1. The Tri-Valley Transportation Council authorizes an appropriation from the Tri-Valley Transportation Development Fee Account for the Express Bus/BRT Phase 2 TSP Upgrade (Project No. A-11) of \$1,140,000, as programmed in the Strategic Expenditure Plan for fiscal years 2017/18 and 16/17, subject to Dublin and LAVTA's approval and execution of the 2017 MOU. Funds are to be dispersed in accordance with the TVTC Strategic Expenditure Plan.
2. Upon confirmation of Dublin and LAVTA's approval and execution of the 2017 MOU, the Tri-Valley Transportation Council authorizes the TVTC Treasurer to transmit \$1,140,000 in funds in the Tri-Valley Transportation Development Fee Account to the City of Dublin, which will, in turn, pass the funds through to the Livermore Amador Valley Transit Authority, the party responsible for the management and construction of the Express Bus/BRT Phase 2 Project.
3. The Tri-Valley Transportation Council authorizes any related action to further the intent of this Resolution.

PASSED, APPROVED, AND ADOPTED at the meeting of July 17, 2017 by the following votes:

AYES: 6 (Spedowfski, Perkins, Biddle, Stepper, Haggerty, Anderson)

NOES: 0

ABSENT: 1 (Olson)

ABSTAIN: 0



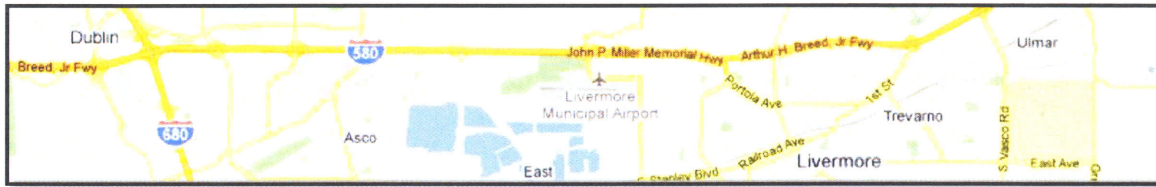
Steven Spedowski, Chair
Tri-Valley Transportation Council

ATTEST:



Debbie Bell, TVTC Administrative Staff

A-11. EXPRESS BUS/BUS RAPID TRANSIT (BRT) – PHASE 2



TVTC PROJECT SPONSOR

City of Dublin

LEAD AGENCY

Livermore Amador Valley Transit Authority (LAVTA)

OTHER INVOLVED PARTIES

City of Livermore, City of Pleasanton

PROJECT DESCRIPTION *(UPDATED FALL 2015)*

Project A-11 is Phase 2 of the Express Bus/BRT, which consists of two phases. The express bus route associated with Phase 1 of the project has been operating since January 2011.

Phase 2 includes upgrades to and expansion of the initial Rapid Project, as well as some project refinements, updates, and maintenance/replacement of original project elements and equipment based on evaluation of the existing components and conditions at the time of funding. The transit system priorities include the following elements:

- A technologically advanced transit system
- A multi-modal transportation system that supports the local economy
- Prioritized regional transfers and connections
- Reliability and efficiency that maximizes value to taxpayers and the community

Phase 2 will consist of five key potential elements (based upon conditions at time of funding):

1. **Advanced Technology** – Design and installation of advanced technologies and road features allowing rapid transit to operate quickly and efficiently, and help to mitigate delay in dwell times, boardings, and travel times. Some of the advanced technologies and road features that LAVTA is considering for Phase 2 are: transit signal priority, enhanced stations, queue jumps, environmentally friendly coaches and advanced onboard technology, advanced fare collection systems, level boarding, dedicated travel lanes, and better integrated park and ride facilities and transit centers. Element 1 is currently budgeted at \$2 Million.
2. **North/South Express Bus/Rapid Service** – In keeping with the Alameda Countywide Transit Plan, and in order to provide a strong foundation for LAVTA's System, I-680 service expansion, North/South Express Bus/BRT service, and other Express/Rapid service options, will be explored and considered. Element 2 is currently budgeted at \$6.5 Million.
3. **Dublin Extension** – Continued study and planning will be done on how best to integrate the planned extension of Dublin Boulevard and the planned Livermore BART Extension into LAVTA's Express Bus/BRT service. Element 3 is currently budgeted at \$6.5 Million.

4. **Pleasanton Alignment** – Complete “Rapidization,” of the Livermore to Pleasanton alignment will be evaluated, with advanced technology and improved service elements planned for the south side of I-580, and possible connection to the existing Rapid service. Element 4 is currently budgeted at \$1.5 Million.
5. **Park and Ride Lots** – In working with local cities and Alameda County, LAVTA will consider improved park and ride elements to support bus, biking, and walking access in the Tri-Valley, and to improve the accessibility of transportation alternatives that would ease congestion on I-580. These options might include: construction of new lots, smart signage, improved bicycle storage, increased pedestrian accessibility and safety, enhanced multi-modal elements on coaches, and increased or revised bus service to rail stations and regional transit connections. Element 5 is currently budgeted at \$2 Million.

STATUS

Phase 1 is fully completed and operational, as of January 2011.

Phase 2 is in the research, design, and planning stage. In August 2016, LAVTA realigned the Express Bus/BRT Route (Route 30R) to serve Las Positas College, and transformed existing Route 10 into an Express Bus/BRT (Route 10R) operating through Pleasanton to BART. The transformation of Route 10 into Route 10R was the first step in implementation of the Phase 2 Pleasanton Alignment. LAVTA intends to implement additional items from Phase 2 (Advanced Technology) to both Routes 10R and 30R in 2017, which includes upgrading the traffic signal priority onboard the buses and at key intersections along both Rapid routes.

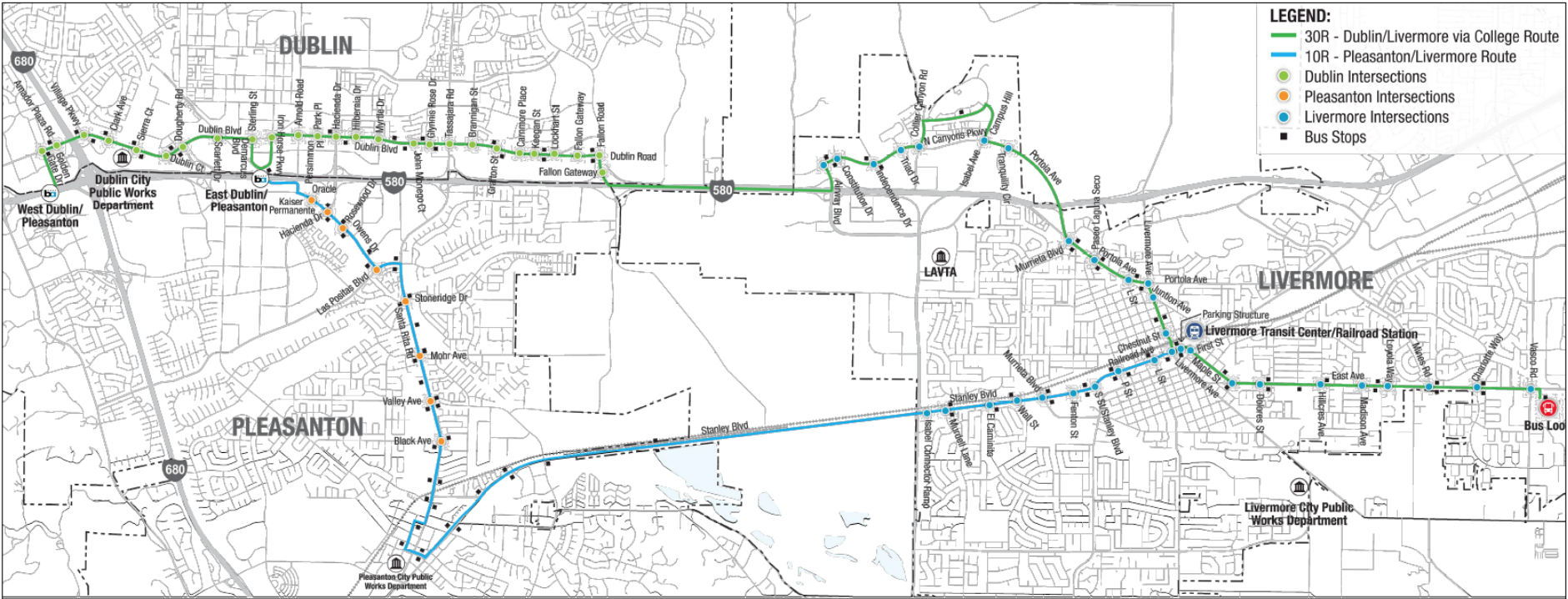
PHASING AND SCHEDULE

Costs for Phase 2 have been updated to reflect current pricing for the project elements listed above. Phase 2 Scope of work, schedule, and full funding parameters are not known at this time.

COST ESTIMATE AND FUNDING SOURCES

Phase 2:	
Cost (Millions, 2015)	\$18.50
Funding (Millions, 2015)	
TVTDF	\$1.14
Total Funding (Millions, 2015)	\$1.14
Total Funding Shortfall (Millions, 2015)	\$17.36

LAVTA TSP Upgrade and Expansion Project Locations May 2019



*Locations for reference only;
map not to scale*