Council Agenda Report

Item 5i

Department: Public Works
Cost Center: 5201
For Agenda of: 12/2/2025
Placement: Consent
Estimated Time: N/A

FROM: Aaron Floyd, Publics Works & Utilities Director
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SUBJECT: AUTHORIZATION TO REPLACE COMPUTER-AIDED DISPATCH AND AUTOMATED VEHICLE LOCATION SYSTEM FOR SLO TRANSIT BUSES VIA COOPERATIVE AGREEMENT

RECOMMENDATION

Authorize the Replacement of Computer-Aided Dispatch and Automated Vehicle Location System via Cooperative Agreement between Connexionz, Ltd. and The Interlocal Purchasing System (TIPS)

REPORT-IN-BRIEF

The Transit Innovation Study identifies replacing SLO Transit's existing Computer-Aided Dispatch and Automated Vehicle Location (CAD/AVL) system as a high priority. The CAD/AVL system connects with other technologies such as onboard voice annunciators, passenger counters, security cameras, and real-time passenger information displays. The current system is malfunctioning and lacks essential features, resulting in inaccurate vehicle location data, unreliable real-time passenger information, and incomplete ridership reporting. These issues diminish service reliability and require inefficient manual data collection. Replacing the CAD/AVL system will enhance scheduling accuracy, service monitoring, reporting, and rider communication.

Under San Luis Obispo Municipal Code Section 3.24.060(E), cooperative purchasing allows the City to procure the system without conducting its own formal bid process. Connexionz Ltd. offers CAD/AVL hardware and software through The Interlocal Purchasing System (TIPS) at a discounted rate. This fully integrated solution meets SLO Transit's operational and data needs. Sufficient federal and state funding is available to fully replace the existing system. Staff recommend authorizing replacement of the CAD/AVL system through a cooperative purchasing agreement between TIPS and Connexionz Ltd.

POLICY CONTEXT

The Transit Innovation Study identifies replacement of the current Computer-Aided Dispatch and Automated Vehicle Location (CAD/AVL) system on all fixed-route buses as the fourth-highest priority (see pages 8-9). The CAD/AVL system connects with other technologies such as onboard voice annunciators, passenger counters, security cameras, and real-time passenger information displays. Because of these integrations, the CAD/AVL system is a critical component to public transit operations.

Under San Luis Obispo Municipal Code Section 3.24.060(E), bidding procedures may be waived when a purchase is made cooperatively with other government agencies that offer the same products and/or services at equal or lower cost under the same terms. CAD/AVL hardware and software from Connexionz, Ltd. are available through The Interlocal Purchasing System (TIPS), a national purchasing cooperative, at a substantial discount compared to retail pricing. Connexionz's solutions meet SLO Transit's needs for data communication, GPS tracking, and real-time passenger information and have a demonstrated track record serving multiple agencies throughout California.

DISCUSSION

Background

The current CAD/AVL system was purchased in 2018 and installed shortly thereafter. The CAD/AVL system service agreement is through the City's transit operation and maintenance services contractor, Transdev, whom the City pays as a pass-through cost on the monthly invoices. Replacement of the CAD/AVL system does not affect delivery of services provided through the transit operation and maintenance services contract.

The system was designed to integrate with multiple onboard systems to provide the public with real-time service information and to provide staff with accurate operational data. However, the system lacks key features needed for fixed-route operations, which SLO Transit operates. As a result, wrong location data is transmitted, which causes inaccurate communication of arrival times and next stop announcements to riders. This reduces the reliability of real-time information, negatively affects rider experience, and makes system performance difficult to evaluate.

In addition, the current system does not accurately record passenger boardings and alightings. This requires staff to manually count ridership, which is a time-consuming and outdated process. Replacing the CAD/AVL system would significantly improve service scheduling, reporting accuracy, and customer information. Addressing these technology and data issues would improve service quality for SLO Transit riders.

The Transit Innovation Study, finalized in February 2024, identified replacement of the CAD/AVL system as the fourth-highest priority recommendation based the critical role the system plays in communicating reliable and accurate data.

In December 2023, San Luis Obispo Council of Governments (SLOCOG) issued a call for projects for Senate Bill (SB) 125 program funding. The SB 125 program provides a one-time infusion of funding to help transit providers with both operating costs and capital improvements. Staff applied for and was awarded $130,000 in funding to replace the CAD/AVL system. In January 2025, Council adopted Resolution No. 11538 authorizing an agreement between SLOCOG and the City for SB 125 funding including for the CAD/AVL system replacement project. After reviewing industry vendors and costs, staff determined that the $130,000 allocation was insufficient to procure all components needed to fully replace the CAD/AVL system.

In March 2025, staff applied for and was awarded an additional $300,000 in Federal Transit Administration (FTA) 5307 program funds to fully fund the CAD/AVL system replacement project. In June 2025, Council adopted Resolution No. 11575 appropriating the additional federal funds to the associated Capital Improvement Project (Project No. 2000404).

Evaluation of Procurement Options

The State of California offers Master Service Agreements (MSAs) with three vendors for CAD/AVL systems. Like purchasing cooperatives, MSAs allow agencies to purchase products and services from a vendor that responded to a competitive bidding process and meet the scope of work requirements. The MSAs also offer better pricing for the same products and services compared to retail pricing. Staff prepared a scope of work and requested proposals under these agreements.

The CAD/AVL systems offered through these MSAs focus on providing real-time vehicle location information but lack hardware needed to integrate with essential systems like voice annunciators, passenger counters, and security cameras. Staff concluded that using the MSA associated vendors was not recommended, as additional hardware and software would still be required to meet the City's needs. During this process, staff also explored utilizing The Interlocal Purchasing System (TIPS). TIPS is a national purchasing cooperative that provides the same or better pricing, depending on the item, compared to the MSA and would allow the City to procure all required hardware and software from a single source.

Purchasing Cooperative – The Interlocal Purchasing System (TIPS)

TIPS helps public agencies procure products and services efficiently and in compliance with competitive purchasing requirements. TIPS issues thousands of competitively bid contracts with vendors for a wide range of goods and services, including technology, vehicles, construction, and professional services. Once a vendor contract is awarded, member agencies, including the City of San Luis Obispo, can piggyback[1] off those contracts to make purchases without conducting their own formal procurement process. Section 3.24.060E of the City's Municipal Code expressly allows for this type of cooperative purchase.

[1] When an organization uses an existing, competitively awarded contract from another entity to make its own purchase.

Using TIPS offers several advantages for public agencies. It saves time and reduces costs by eliminating the need to conduct separate competitive solicitations while still meeting procurement requirements including federal and state procurement standards. The TIPS procurement process ensures transparent, pre-negotiated rates that allows smaller agencies to benefit from lower per unit pricing. TIPS has an executed vendor agreement with Connexionz, Ltd. (Attachment A) through which their full suite of products and services are available to member agencies at a 20 percent discount compared to retail pricing.

Selected CAD/AVL System Vendor – Connexionz, Ltd.

Connexionz, Ltd. (Connexionz) has nearly 30 years of experience providing integrated transit technology solutions with a focus on small- and medium-sized transit agencies. The San Luis Obispo Regional Transit Authority (RTA) has been a client of Connexionz since 2016 and is satisfied with their products and services. Connexionz offers both hardware and software to provide real-time passenger information, reliable operational data, and integrations with other systems (as shown in Figure 1). Connexionz prepared a proposal tailored to the City's existing and future needs (Attachment B). Because Connexionz offers both the hardware and software components, selecting them as a vendor means the City can procure a full system from a single vendor.

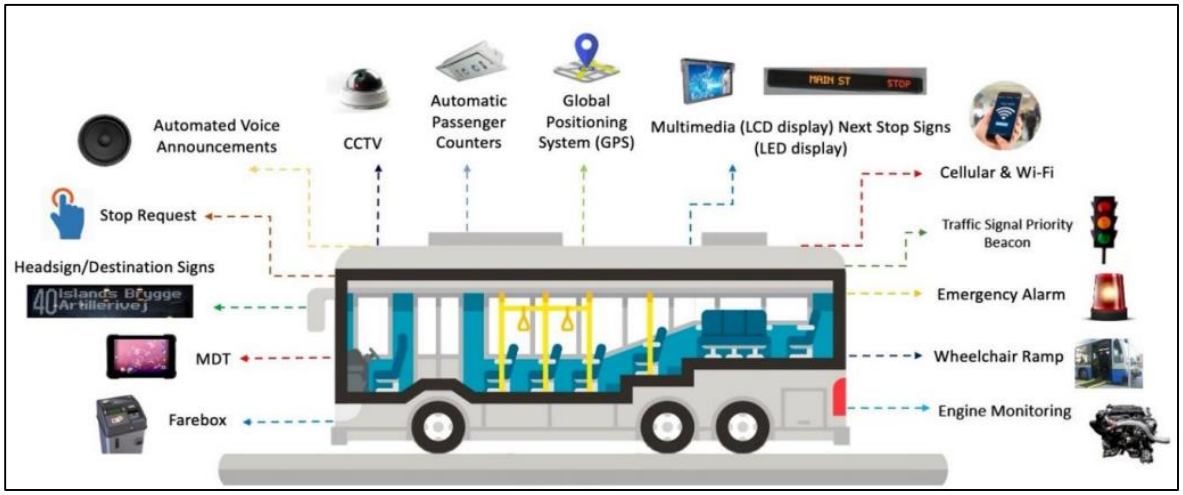

Figure 1 - Connexionz System Integrations

Discontinuation of the "SLO Transit" Mobile Application

The current "SLO Transit" bus tracking mobile application is through Peak Transit and is proprietary to the current CAD/AVL provider. Replacement of the system means that this application will no longer be supported. Connexionz offers its own proprietary application that, for a fee, agencies can use to provide the public with real time service information. However, there are also free third-party transit-dedicated mobile applications like Transit App and Moovit that already integrate and work with SLO Transit's real-time service information generated by the CAD/AVL system (Figure 2).

If approved, staff would recommend utilization of these established transit apps rather than offering another proprietary system. These apps are widely used by riders and offer reliable trip planning and real-time bus tracking without additional cost to the City. By maintaining accurate data feeds, the City can ensure up-to-date service information is available to users while benefiting from the continual improvements, regional connectivity, and multimodal trip options provided by these platforms. This approach enhances rider convenience and system visibility while avoiding the significant expense and maintenance demands of a custom app.

If the recommended action is approved, as part of the implementation process, staff will create education and outreach materials notifying the public that the current SLO Transit application provided by Peak Transit will no longer be supported. The outreach materials will include QR Codes to other applications like the Transit App and Moovit that users can chose to use instead. Outreach efforts will include but not be limited to flyers on the buses and at highly used stops, communication with Cal Poly, Laguna Middle School, Downtown SLO, and other community partner organizations. Social Media posts, website updates, and other digital outlets will be used. This information will also be provided at future community events attended by Mobility Services staff.

The City currently offers digital bus passes through an application called Token Transit. The bus tracking application is a separate application from the Token Transit application and the recommended action in this report does not affect the use of Token Transit application.

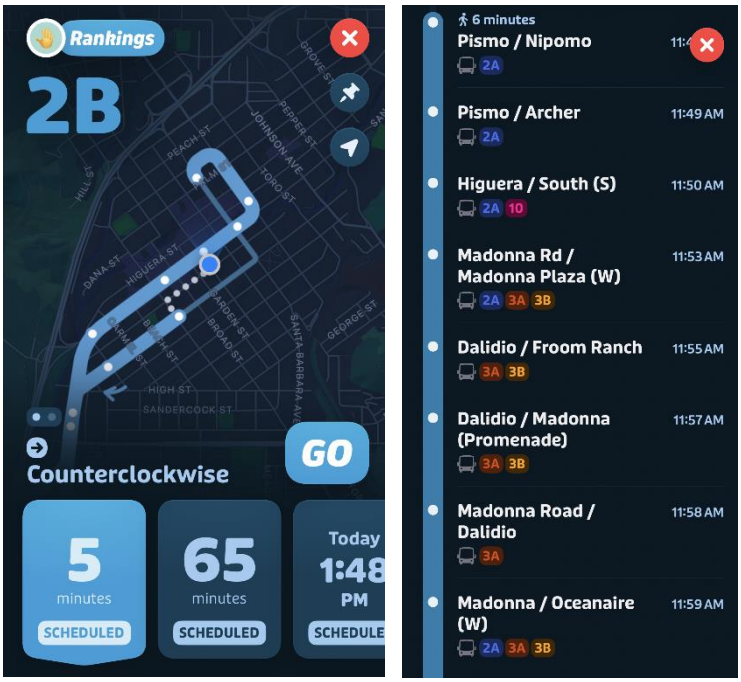

Figure 2 - Transit App Interface

Next Steps
Staff would issue a Purchase Order to Connexionz, which incorporates the City's general contract terms, and submit a copy to TIPS for compliance with their purchasing requirements. Staff would also begin work with Connexionz representatives to schedule a site visit to verify the types and quantities of hardware and auxiliary components needed per bus. The schedule included in the proposal estimates that the project will be completed by mid-March 2026. The schedule provides staff sufficient time to prepare outreach materials notifying the public of the change in bus tracking application providers.

Previous Council or Advisory Body Action

1. January 23, 2024 – Council held a Study Session on the draft Transit Innovation Study report and directed staff to finalize the report and begin implementation.
2. January 14, 2025 – Council adopted Resolution No. 11538 (2025 Series) authorizing the Mayor to execute a cooperative agreement with SLOCOG for Senate Bill 125 funds and the appropriation of funds to associated capital projects.
3. June 17, 2025 – Council adopted Resolution No. 11575 (2025 Series) appropriating federal and state funds to Transit program projects including $300,000 in FTA 5307 program funds for Automated Vehicle Location system replacement.

Public Engagement and Feedback
Throughout the development of the Transit Innovation Study, staff and the consultant solicited feedback from internal and external stakeholders. External stakeholders consisted of representatives from Cal Poly, Downtown SLO, San Luis Obispo Chamber of Commerce, RTA, SLOCOG, Mass Transportation Committee members, and Active Transportation Committee members. During a stakeholder workshop held in September 2023, attendees were asked to rank the preliminary recommendations of the Transit Innovation Study in order of their ability to increase SLO Transit's ridership. Replacement of the CAD/AVL system was the ranked third highest overall.

During the Short-Range Transit Plan update process, riders were surveyed and asked what improvements they would like to see on SLO Transit's system. Of the 425 rider responses, 24 stated that the Peak Transit application is not accurate, that the application needs to be updated, or that the application does not provide enough information. Additionally, a community survey was completed and asked respondents how likely is it that they would use public transit more often if certain improvements were made. Of the 114 respondents, 74 indicated that they would ride more often if better information about transit services were available.

CONCURRENCE

The City Attorney's Office has reviewed the TIPS Vendor Agreement with Connexionz and approves as to the form. The City's Finance Department also reviewed the TIPS Vendor Agreement and agrees that it satisfies the Municipal Code section for cooperative purchasing requirements. The Information Technology (IT) Department concurs that the new devices will function with the City's overall IT infrastructure. Transdev, the City's transit operations and maintenance contractor, concurs with the recommended action in this report.

ENVIRONMENTAL REVIEW

The recommended actions are not considered a "Project" under California Environmental Quality Act (CEQA) Guidelines Section 15378.

FISCAL IMPACT

Budgeted: Yes Budget Year: 2024-25
Funding Identified: Yes

Fiscal Analysis:

Project No. 2000404 (Auto Vehicle Locator System Replacement)				
Funding Sources	**Total Budget Available**	**Current Funding Request**	**Remaining Balance**	**Annual Ongoing Cost[1]**
General Fund	$ 0	$ 0	$ 0	$ 0
Transit Fund	$ 0	$ 0	$ 0	$ 0
Federal (FTA 5307 Funds)	$ 300,000	$ 111,571.76	$ 188,428.24	$ 46,984.10
State (SB 125 Funds)	$ 130,000	$ 48,347.86	$ 81,652.14	$ 20,359.81
Total	**$ 430,000**	**$ 159,919.62**	**$ 270,080.38**	**$ 67,343.91**
1 – Average annual cost of support and maintenance services over a four-year period				

On December 6, 2023, SLOCOG's board approved submittal of the SB 125 allocation package to the California State Transportation Agency. The allocation package included $130,000 in funding for the replacement of SLO Transit's CAD/AVL system.

On January 14, 2025, Council adopted Resolution No. 11538 authorizing an agreement with SLOCOG for Senate Bill 125 funds and the appropriation of funds to associated capital projects. The action included appropriating $130,000 in funding to Project No. 2000404 for the CAD/AVL system replacement.

On June 17, 2025, Council adopted Resolution No. 11575 appropriating federal and state funds to Transit program projects including $300,000 in FTA 5307 program funds to Project No. 2000404 for the CAD/AVL system replacement. The additional funds were needed based on the costs estimates included in the Transit Innovation Study.

The total project cost of $429,295.27 includes four years of support and maintenance services (Attachment C). After the initial four-year period, these annual service costs will be budgeted as part of the Transit Program's operating budget.

Currently, the Transit Program budgets $45,000 annually for CAD/AVL services that is paid to Transdev as a pass-through cost. If the purchase of a new CAD/AVL system is approved, then staff will recommend, as part of the 2026-27 Supplement Budget adoption, reducing the Transit Program's operating budget to account for these costs being covered by the project account for the initial four-year period.

ALTERNATIVES

Council could decide not to authorize purchase of a CAD/AVL system from Connexionz through the TIPS cooperative agreement and, instead, direct staff to conduct a formal procurement process. Should Council pursue this option, it will delay the replacement of the existing CAD/AVL system.

ATTACHMENTS

A - TIPS Vendor Agreement with Connexionz, Ltd.
B - Connexionz, Ltd. Proposal
C - Connexionz, Ltd. Cost Quote