



DATE: September 11, 2023

TO: Honorable Mayor and Members of the City Council through City Manager

FROM: Jared Hall, Transit Manager, Public Works & Utilities (PW&U)
Christopher J. Bolt, MPA, PE, CPM, ICMA-CM, Director, PW&U

SUBJECT: Resolution Authorizing the Purchase of a Computer-Aided Dispatch- Automatic Vehicle Location (CAD-AVL) System from GMV Synchronatics, Inc.

RECOMMENDATION

It is recommended that the City Council adopt the attached resolution authorizing the purchase of a Computer-Aided Dispatch- Automatic Vehicle Location (CAD-AVL) System from GMV Synchronatics, Inc.

BACKGROUND

Petaluma Transit currently utilizes a Computer-Aided Dispatch-Automatic Vehicle Location (CAD-AVL) system on its buses that has been in operation since 2014. A fully functioning Computer-Aided CAD-AVL system is essential to the Petaluma Transit bus system and allows it to keep current with the technology needs of running a modern bus system.

A CAD-AVL System allows the location of buses to be tracked and allows dispatchers and the public to see the location of the buses in real-time. These systems run actively on the transit dispatcher's computer as they respond to phone calls and radio communications. The system shows the current location of buses, the name of the driver, how many passengers are on board, and the route on-time status. CAD-AVL systems greatly enhance the transit user's experience by integrating the bus with onboard signage and audible announcements to help make the system usable by people of all mental and physical abilities. Planners use the CAD-AVL data to identify productive and unproductive segments of routes by utilizing the automatic passenger counting feature, and segments of the route that need more or less minutes added or subtracted to optimize route scheduling. Additional functions include data communications between bus and dispatch, automatic announcements of approaching bus stops for ADA compliance, counting of passengers by fares and location, interaction with head sign controllers, and sending data to real-time bus arrival systems such as real-time LED signs at bus stops and to customers' smartphones.

The agreement for the current CAD-AVL system was entered into in November 2014 in a joint procurement with Napa Valley Transportation Authority (NVTA) and Solano County Transit (Soltrans) awarding the project to Avail Technologies Inc. Avail installed its system on Petaluma Transit buses in 2015 for \$688,000. Although the Avail system has been utilized for several years, the system has begun to fail given its age. In addition, the City can no longer order replacement parts for the system from Avail as they are proprietary parts and no longer manufactured. As a result, the Avail system has become prone to service interruptions and outages and the support contract ends in 2023, necessitating the need for securing a new CAD-AVL contract.

Over the last few years, many established technology firms and several new providers have entered the CAD-AVL market, and the systems have become significantly more sophisticated. Per the impending expiration of the PSA with Avail technologies, age, and condition of the existing CAD-AVL system and advances in technology, staff partnered with other nearby transit agencies to consider options for an updated CAD-AVL system. Given the number of new vendors in the market and the complexities of such systems, Petaluma Transit staff partnered with Santa Rosa City Bus, NVTA, and Fairfield-Suisun Transit (FAST) on a Request for Information (RFI) to better understand the systems' advanced technology, capabilities, differences, and deficiencies. In response to RFI 2020-07 for CAD-AVL services, twelve (12) information packets were received.

An evaluation committee comprised of staff members from all four agencies short-listed six (6) vendors to participate in the Request for Proposals (RFP). Petaluma Transit, NVTA, and Santa Rosa City Bus (FAST decided to delay their procurement) released RFP 2020-08 on December 18, 2020. Only vendors that submitted information packets during the RFI process were invited to submit RFPs. The agencies received a series of questions and requests for clarification and on January 25, 2021, five (5) responses were received. Each of the agencies reviewed the responses and scored them based on the following factors:

1. Qualifications and Experience of Project Team
2. Project Methodology / Approach to Work
3. System Functionality / Technical Solution
4. Training and Support
5. Presentation & Demo
6. Cost / Cost Effectiveness

While the reviewers collectively rated GMV Synchronomatics higher in all areas, each transit operator will contract separately with one of the final vendors. City staff ranked GMV Synchronomatics as the highest and entered negotiations for the best and final offer. The draft agreement is for a period of three (3) years with an option for an additional two-year extension at the discretion of staff, provided as Exhibit A, bringing the maximum contract lifespan up to five (5) years.

DISCUSSION

Staff recommends awarding a Professional Services Agreement to GMV Synchronomatics. The GMV platform will replace the aging Avail system and should provide a more seamless transit system for the public with minimal service interruptions for riders of Petaluma Transit.

The base agreement would run for 3 years (July 2023 through June 2026) with additional option periods of up to 5 years (through June 2028). Implementation of the system would take a period of approximately 6 months and would take place from September 2023 through February 2024. Rollout of the program will consist of several stages such as designing and building the platform specific to Petaluma Transit and its schedule, staff training, design of the app, and education to the public regarding the new system. The agreement would provide all the hardware, software, training, and support needed for the CAD-AVL system over that time. In addition, the contract will include the installation of over thirty real-time signs at Petaluma bus stops and six 55-inch screens at major transit hubs such as the Copeland Transit Mall and Eastside Transit Center.

The GMV platform has several benefits compared to other products and vendors considered, namely:

- A user-friendly, modern layout—for staff using the system and for the public interacting with it.
- Modern technology and platform.
- A company based out of California with multiple local support staff and multiple agencies located throughout the state utilize GMV including several within the San Francisco Bay Area including Marin Transit and NVRTA.
- Cloud-hosted platform creating fewer technical issues than the current hosted Avail platform.
- Avoidance of proprietary hardware, and flexibility to work holistically with several hardware systems and vendors.
- Ability to integrate with micro-transit services.
- Integration with smartphones – custom agency app available.
- Real-time signs that are easy to read and can integrate with 511 real-time feeds and other data feeds (e.g., bike-share) in the future.
- Integration with Clipper 2.0.

An evaluation committee comprised of staff members from four North Bay transit agencies, including Petaluma Transit, participated in a request for information RFI and short-listed six (6) vendors to participate in the RFP process. The reviewers collectively rated GMV Synchronatics the highest of all the responding vendors. Each transit operator will contract separately with one of the final vendors.

PUBLIC OUTREACH

This item was discussed at the May 11, 2023, Transit Advisory Committee meeting.

This agenda item appeared on the City’s tentative agenda document on August 7, 2023, which was a publicly-noticed meeting.

COUNCIL GOAL ALIGNMENT

The proposed action supports the following City Council Goals, Objectives, and Workplan Items:

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- 24. Provide additional real-time schedule information and infrastructure for Petaluma Transit.
- 215. Update the Transit vision for the City including reviewing transit service levels, alternative delivery models, reducing barriers to use, and increasing ridership

CLIMATE ACTION/SUSTAINABILITY EFFORTS

This item will allow Petaluma Transit to continue to provide a modern, accessible transit system in the present and for the future. In order to meet the goals outlined in the City Climate Emergency Action Framework, the City of Petaluma needs to reduce its transportation emissions by 70% in order to achieve climate neutrality by 2030. Having a modern, effective transit network is a vital component of achieving that goal.

ENVIRONMENTAL REVIEW

The proposed action is exempt from the requirements of the California Environmental Quality Act (CEQA) in accordance with CEQA Guidelines Section 15378, in that the purchase of the CAD-AVL system does not meet CEQA's definition of a "project" because the action does not have the potential for resulting either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment, and because the action constitutes organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment. Relatedly, the proposed action is exempt under the common-sense exemption, CEQA Guidelines Section 15061(b)(3) because it can be seen with certainty that there is no possibility that the proposed action could have a significant impact on the environment. Additionally, if the proposed action were a "project" under CEQA it would be exempt pursuant to CEQA Guidelines Section 15301 (Existing Facilities) as the system would be installed to buses in the City's transportation program.

FINANCIAL IMPACTS

The AVL-CAD project's funding is a mix of funding including funds from the Transit Capital Priorities (TCP), Federal Transit Administration (FTA) funding programmed through MTC as summarized in the table below, and Transportation Development Act (TDA) transit enterprise funds. The Professional Services Agreement with GMV shall have a do not exceed value of \$655,000, which includes five years of all hardware and software, support, and warranty, including free upgrades, bug fixes, and training opportunities.

Table 1 - Project Costs

AVL-CAD Project	Amount
System hardware, software, and install	\$387,215
System support (years 1-5)	\$208,240
Contingency (10%)	\$ 59,545
Total	\$655,000

Table 2 – Project Funding

Fund	Project Budget
FTA 5307 TCP Funds	\$ 80,000
TDA/STA Funds	\$428,084
TDA	\$146,916
Total Funding Sources	\$655,000

A budget adjustment for the second quarter of FY 24 will be brought forth to the Council for approval.

ALTERNATIVES

Council could decide not to authorize staff to enter a contract with GMV Synchronomatics, which would result in one of the following:

1. Continue operations of the existing Avail CAD-AVL system beyond FY 24.
2. Request that staff release a new RFP for a CAD-AVL system independent of other agencies.

These alternatives are not recommended by staff as the existing Avail CAD-AVL system is failing with replacement parts no longer being available for purchase and has reached the end of the agreement timeline. A system upgrade with new hardware is required at this time in order for the system to continue functioning.

Twelve vendors were part of the RFI/RFP process, with GMV being the unanimous vendor selected by multiple agencies with competitive pricing. A new RFP is not expected to provide increased competition or lower pricing than the current RFP and award presented, especially considering recent inflation and cost increases.

ATTACHMENTS

1. Resolution
2. Professional Services Agreement