



Board Report

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Agenda Number: 28.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE JUNE 18, 2025

SUBJECT: ADVANCED TRANSPORTATION MANAGEMENT SYSTEM (ATMS) II

ACTION: AWARD CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer (CEO) to:

- A. AWARD a four-year Contract No. PS122845000 to Clever Devices Ltd. to upgrade the ATMS II Computer Aided Dispatch / Automated Vehicle Location (CAD/AVL) System in the amount of \$129,760,941, subject to the resolution of any properly submitted protest(s), if any; and
- B. EXECUTE individual contract modifications within the Board-approved contract modification authority.

ISSUE

Metro's current ATMS bus fleet management system is over 25 years old and has reached its useful life. The system does not have the capability to meet the technology, security and/or functional needs required to meet Metro's Nextgen operational demands. The ATMS II upgrade will provide the necessary enhancements to better position Metro to support the 2028 Games and the future technology needs for Metro's fleet operation.

BACKGROUND

The ATMS II Program is the evolution of Metro's Computer Aided Dispatch and Automated Vehicle Location (CAD/AVL) bus fleet system that was initially awarded in 2001. The actual ATMS bus fleet system became operational in 2004, with incremental enhancements made to support operational integration milestones. Since the original implementation, a series of impactful changes occurred that affected the capabilities of the ATMS system, including:

- Increasing competitive and impacted communications frequency environment in the greater Los Angeles County area
- The demand for video surveillance with live stream capabilities has become a critical part of real-time fleet management and provides clarity of responsibility as a key supplement to every incident evidence package
- The evolution of the zero-emission bus fleet, which Metro is transitioning to over the coming

years, requires new strategies for operations, charge management, operator/fleet scheduling, and new customer-focused tools

As the need for an improved and updated system began to evolve, a strategic plan was developed in 2016 to establish the requirements for the updated system. The primary goal of the Strategic Plan was to improve Metro's operational efficiency and reliability, along with customer satisfaction. These goals were supported by a series of fleet and communication system upgrades to achieve enhanced functionality, as well as overcome the operational and communication constraints the ATMS system was experiencing near the end of its useful life. For example, the fleet software and hardware are no longer in production or supported, and the enhancements needed can no longer be achieved within the current system configuration.

To define a set of achievable projects that would support Metro's overall bus and rail fleet systems program, a series of needs assessment workshops and interviews were conducted to identify the bus/rail needs, assess existing fleet and communication system capabilities, as well as identify program development efforts that directly affect the ATMS system. Following the completion of the needs assessment, an alternatives assessment was completed to evaluate a series of fleet and communication alternatives to meet the broad range of goals. The highest rated alternatives were reviewed with Metro's key stakeholders over a series of workshops and finalized.

Following the completion of the Strategic Plan, a capital project was established, which initiated the development of the ATMS II Program Update. A scope development effort was conducted that defined each system, as well as established operational and functional requirements for the recommended scope of the contract award.

DISCUSSION

The CAD/AVL system is the primary tool used by controllers in the Bus Operations Center (BOC) to communicate with bus operators. The controllers use the performance queue to help manage operators with schedule adherence, detours, and ensure the fleet stays as close to the posted schedule as possible for consistent service reliability. Controllers use a similar incident queue to capture detailed incident information and coordinate with first responders, law enforcement, fleet maintenance, and other resources (e.g., Haz-mat). Controllers also use the CAD/AVL system to oversee fleet location information, including the location of available maintenance and supervisory resources to better manage the incidents for a quick and complete response.

ATMS II fundamentally incorporates a voice radio as well as a complementary data system component for on-board bus communications and information. The program update also offers service quality improvements, safety enhancements, and a much-needed technology upgrade to manage large transit fleets for continued service improvements. The ATMS II Program Upgrade intends to develop state-of-the-art Computer-Aided Dispatch (CAD) and Automatic Vehicle Location (AVL) technologies that leverage best practices, as well as establish operational capabilities through emerging technologies.

The ATMS II Program will use CAD/AVL technologies to manage its fixed-route bus fleet. This will completely replace the current ATMS CAD/AVL system and modernize the existing radio subsystem,

which were both installed in 2004.

The recommended contractor proposes a solution that achieves or exceeds current system requirements while minimizing custom development or over-reliance on proprietary hardware. The goal of this partnership is to deploy a solution that can be upgraded in a modular or phased manner over time. This integration with other third-party solutions will support operational applications, such as gating, signal priority, as well as tools that enhance customer experience. The recommended contract award includes the following functionalities that will be implemented over phases:

- Base: CAD/AVL and voice radio upgrade for Bus
- Phase 1: Cloud hosting, vehicle health monitoring, and turn-by turn navigation;
- Phase 2: Multimedia displays, digital camera upgrade, and bus yard management;
- Phase 3: CAD/AVL for Rail

A project schedule has been proposed that will provide the base and phase 1 and 2 functionalities by July 2028. A detailed schedule will be developed that will include strategies by Metro Operations to help streamline the installation process such as a centralized installation location operating 7 days/week with multiple shifts.

CAD/AVL for Bus Overview

The ATMS II implementation aims to reestablish a baseline for the automated passenger counting system that will increase accuracy and provide real-time information to our riders. This will allow customers to access space availability information on their arriving bus. The upgraded system will also improve detour management, automated stop annunciation capabilities, and bus bridges to support service disruptions with local bus, rail, and Metrolink service when necessary. In addition, mobile routers will be upgraded to the latest 5G network for enhanced WiFi access to Metro's operational systems and the bus fleet. Integrations with other Metro systems will be updated as well, such as customer information, Enterprise Asset Management (EAM), and daily operations.

Voice Radio Replacement

The voice radio complements the CAD/AVL operation that is used to communicate between BOC controllers and bus operators. The radio component includes a silent alarm to assist with monitoring incidents where operators may be in a sensitive situation, but need BOC assistance. The voice radio is the primary safety tool used for communication throughout the entire LA County boundaries, and will be transitioned from a 25-year-old analog system to a technologically improved digital radio that is expected to improve radio quality.

DETERMINATION OF SAFETY IMPACT

The ATMS II Program Update enables fleet operation and coordination between fleet operators, Divisions, and the Bus Operations Center. This is a core system function that provides critical voice, video, and data communications to improve incident and performance management. ATMS II also provides on-board covert alarm activation for operators with monitoring and associated vehicle tracking at the BOC. The voice and data elements are also central to measure performance

supporting Metro's collective bargaining agreement. Additionally, the video component is used to validate operator performance and determine legal claim responsibility. For these reasons, upgrading the ATMS system is a necessary and critical safety measure.

FINANCIAL IMPACT

Funding for this contract is in the Life of Project (LOP) Budget for projects 207168 ATMS Bus System Replacement, LOP \$117,000,000 and 207185 ATMS System Integration, LOP Pending. Since this is a multi-year program, the project manager and the Chief Operations Officer shall be responsible for future fiscal year budgeting.

Impact to Budget

The current funding source for this action is TDA 4, which is eligible for bus and rail operations and capital projects. Ongoing operating funds are required to support and maintain this system once the upgrade is complete and will be included in future annual operating budgets.

EQUITY PLATFORM

The ATMS II system is used to support the day-to-day operation of all bus and rail vehicles, fleet systems, and operators across Metro's entire core function. Because Metro service is countywide, the proposed ATMS II system upgrade supports all modes across all service lines, including in areas with Equity Focus Communities (EFC). The proposed upgrade will improve customer wi-fi capabilities and real-time passenger information, which benefits all transit riders.

The Diversity and Economic Opportunity Department (DEOD) established a 15% Disadvantaged Business Enterprise (DBE) goal for this procurement. Clever Devices Ltd. met the goal by making a 15% DBE commitment.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles County are lower than national averages, the lowest in the SCAG region, and on the lower end of VMT per capita statewide, with these declining VMT trends due in part to Metro's significant investment in rail and bus transit. * Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

This item supports Metro's systemwide strategy to reduce VMT through operational, equipment purchases, and customer experience activities that will improve and further encourage transit ridership, ridesharing, and active transportation. Metro's Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

This Board action supports Strategic Goal 2: Deliver outstanding trip experiences for all transportation system users, as we are committed to providing attractive, affordable, efficient, and safe service. Improved Customer Information also supports Metro Vision 2028.

ALTERNATIVES CONSIDERED

A strategic assessment of Metro's preferred operational system solution considered several alternatives and options, including the use of leased wireless communication infrastructure for voice communications as well as moving to a Software-as-a-Service (SaaS) solution. These alternatives were rejected based on life cycle costs and the inability of these systems to provide the required level of functionality suitable for Metro operations.

The Board may also choose not to approve this contract award, which would postpone upgrading a vital system and increase the readiness risk to support Metro's role in the 2028 Olympics. However, this is not recommended as this mission-critical application will continue to fall behind other technological advances and also risks incompatibility with new operating systems, database software, advanced cybersecurity software, as well as related software maintenance tools and transit applications.

NEXT STEPS

Upon approval by the Board, staff will execute Contract No. PS122845000 with Clever Devices Ltd. and establish a plan and schedule for the implementation of the ATMS II CAD/AVL system.

ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - DEOD Summary

Prepared by: Al Martinez, Deputy Executive Officer, Operations (213) 276-0117
 Dan Nguyen, Senior Executive Officer, Operations, (213) 418-3233
 Carolina Coppolo, Deputy Chief Vendor/Contract Management Officer (213) 922-4471

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034


Stephanie Wiggins
Chief Executive Officer

**PROCUREMENT SUMMARY
ATMS II / PS122845000**

1.	Contract Number: P122845000	
2.	Recommended Vendor: Clever Devices Ltd.	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: May 30, 2024	
	B. Advertised/Publicized: May 29 and 30, 2024	
	C. Pre-Proposal Conference: June 13, 2024	
	D. Proposals Due: September 26, 2024	
	E. Pre-Qualification Completed: December 20, 2024	
	F. Ethics Declaration Forms submitted to Ethics: September 30, 2024	
	G. Protest Period End Date: June 24, 2025	
5.	Solicitations Picked up/Downloaded: 148	Bids/Proposals Received: 7
6.	Contract Administrator: Victor Zepeda	Telephone Number: 213-922-1458
7.	Project Manager: Al Martinez	Telephone Number: 213-922-2956

A. Procurement Background

This Board Action is to approve Contract No. PS122845000 issued to upgrade Metro's Advanced Transportation Management System (ATMS) II Computer Aided Dispatch/Automated Vehicle Location (CAD/AVL) system. The Board approval of a contract award is subject to resolution of any properly submitted protest(s).

Prior to the release of the solicitation, a virtual Metro Connect Industry Forum was conducted for the ATMS II project on April 8, 2024. The event was attended by 134 individuals. The event was held to inform the SBE community of the upcoming opportunity.

The RFP was issued in accordance with Metro's Acquisition Policy and the contract type is a firm fixed price. The Diversity & Economic Opportunity Department recommended a Disadvantaged Business Enterprise (DBE) goal of 15%.

Six amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on June 13, 2024, clarified the site visit schedule;
- Amendment No. 2, issued on June 26, 2024, clarified the site visit process, submittal requirements, and extended the due date from July 23, 2024, to September 6, 2024;
- Amendment No. 3, issued on July 17, 2024, clarified sections of the Scope of Services (removed non-revenue vehicles from Yard Management System and revised the requirements matrix);

- Amendment No. 4, issued on August 14, 2024, clarified sections of the Statement of Services (updated workstation counts, added training details, and revised the requirements matrix based on questions received);
- Amendment No. 5 issued on August 23, 2024, extended the due date from September 6, 2024, to September 26, 2024; and,
- Amendment No. 6, issued on August 29, 2024, clarified sections of the Statement of Services (updated timeframe for oral presentations, and updated the requirements matrix based on questions received).

A total of 52 firms downloaded the RFP and were recorded in the planholder's list. A virtual pre-proposal conference was held on June 13, 2024, and was attended by 60 participants representing 22 companies. There were 488 questions received and responses were provided prior to the proposal due date.

A total of seven proposals were received on September 26, 2024, and are listed below in alphabetical order:

1. Clever Devices Ltd.
2. Clever Devices Ltd. (alternate proposal)
3. Conduent Transport Solutions, Inc.
4. Conduent Transport Solutions, Inc. (alternate proposal)
5. INIT Innovations in Transportation, Inc. (INIT)
6. Los Angeles Regional Interoperable Communications System Authority (LARICS)
7. Trapeze Software Group, Inc. dba Vontas (Vontas)

Two firms submitted alternate proposals for the Land Mobile Radio options.

B. Evaluation of Proposals

A diverse Proposal Evaluation Team (PET) consisting of staff from Bus Maintenance, Bus Operations, Voice Radio (Wayside), IT Infrastructure, Project Management/Finance, Project Management/Operations was convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria:

Minimum Qualifications Requirements (Pass/Fail): To be responsive to the RFP minimum qualifications requirements, proposers must meet all of the following:

- Deployment and have in operation of at least one CAD/AVL system with 1,000+ vehicles;
- Deployment and have in operation three or more CAD/AVL systems;
- Integration of LMR/DMR systems with their CAD/AVL solution; and,
- Demonstrate ability to deploy a Voice over IP based voice communications solution.

From October 15, 2024 to February 12, 2025, the PET independently evaluated and scored the technical proposals. The PET determined that LARICS did not meet the Minimum Qualifications Requirements. The remaining six proposals were further evaluated based on the following Weighted Evaluation Criteria:

• Qualifications of the Firm	20 percent
• Staffing and Project Organization	8 percent
• Software Functionality	25 percent
• Work Plan/Project Understanding	15 percent
• DBE Contracting and Mentor Protégé Approach	4 percent
• Maintenance and Support	8 percent
• Cost	20 percent

Several factors were considered when developing these weights, giving the greatest importance to software functionality.

INIT was determined by DEOD to be non-responsive for failure to meet the DBE goal. Clever Devices Ltd. (alternate proposal), Conduent Transport Solutions, Inc. (alternate proposal) and Vontas were determined to be outside the competitive range and were excluded from further consideration.

Clever Devices Ltd. and Conduent Transport Solutions, Inc. were determined to be within the competitive range and were invited for a 3-day in person interview and system demonstration from November 18, 2024 through December 12, 2024. The firm's project managers and key team members had an opportunity to present each team's proposed system, qualifications, approach, schedule, and respond to PET questions. In general, each team's presentation addressed the requirements of the RFP, experience with all aspects of the required tasks, and stressed each firm's commitment to the success of the project.

On January 8, 2025, clarification questions and a request for an additional option (Cloud-based Hosting) were requested of the two firms. Responses were received on January 31, 2025. At the conclusion of the evaluation, the PET determined Clever Devices to be the top ranked firm.

Qualifications Summary of Firms within the Competitive Range:

Clever Devices Ltd.

Clever Devices Ltd.'s (Clever Devices) proposal demonstrated that its staff and organization have the required experience to successfully deliver the project, presenting a well laid out approach to the project.

The proposed Program Manager possesses more than 35 years of experience in IT and engineering projects, and recently completed similar projects for New York City

Transit, Toronto Transit Commission, and Washington Metropolitan Area Transit Authority.

The proposed Deputy Project Director possesses over 36 years in intelligent transportation systems, including over three decades with Motorola specializing in engineering systems design and radio systems, and has completed projects with similar requirement with LA-RICS (land mobile radio project in LA County), Pierce Transit deploying the CAD/AVL including LMR systems, and Metro implementing transit CAD Systems.

Clever Devices' clients include Washington Metropolitan Area Transit Authority, New York City Transit, Pittsburgh Regional Transit, Toronto Transit Commission, and Chicago Transit Authority.

During the interview and system demonstration, Clever Devices displayed a clear understanding of the Scope of Services and Metro's needs and provided a detailed for delivery of the program.

Conduent Transport Solutions, Inc.

Conduent Transport Solutions, Inc.'s (Conduent) proposal provides a detailed narrative on each staff member's role and program responsibilities. Its proposed implementation plan requires little to no downtime and a seamless transition. However, Conduent's proposal is not clear as to who is leading the efforts (Conduent or its subcontractor). While Conduent focused on similar projects, Conduent did not provide details on how their systems were improving operations and they stated many systems have not yet been implemented. During the interview and system demonstration, Conduent appeared to lack preparation and cohesiveness as a team.

A summary of the PET scores is provided below:

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	Clever Devices Ltd.				
3	Qualifications of the Firm	92.50	20.00%	18.50	
4	Staffing and Project Organization	90.00	8.00%	7.20	
5	Software Functionality	81.67	25.00%	20.42	
6	Work Plan/Project Understanding	83.67	15.00%	12.55	
7	DBE Contracting and Mentor Protégé Approach	50.00	4.00%	2.00	
8	Maintenance and Support	84.98	8.00%	6.80	
9	Cost	100.00	20.00%	20.00	

10	Total		100.00%	87.47	1
11	Conduent Transport Solutions, Inc.				
12	Qualifications of the Firm	77.92	20.00%	15.58	
13	Staffing and Project Organization	71.10	8.00%	5.69	
14	Software Functionality	70.67	25.00%	17.67	
15	Work Plan/Project Understanding	71.00	15.00%	10.65	
16	DBE Contracting and Mentor Protégé Approach	50.00	4.00%	2.00	
17	Maintenance and Support	76.13	8.00%	6.09	
18	Cost	98.35	20.00%	19.67	
19	Total		100.00%	77.35	2

C. Price Analysis

The recommended price has been determined to be fair and reasonable based upon an Independent Cost Estimate (ICE), price analysis, technical evaluation, fact finding, and negotiations.

	Proposer Name	Proposal Amount	Metro ICE	Negotiated Amount
1.	Clever Devices Ltd.	\$144,153,463	\$151,741,836	\$129,760,941
2.	Conduent Transport Solutions, Inc.	\$146,584,511		

The final amount is lower than Metro's original ICE as a result of the following factors:

- Metro's ICE does not consider a streamlined installation schedule with multiple shifts and seven days a week, and it was based on limited access to Divisions, work hours, and days available for installation;
- The decision to implement a cloud-based hosted solution rather than an in-house Metro procured and installed arrangement; and,
- By negotiating a full program at once rather than by individual options provided substantial savings.

Staff successfully negotiated \$14,866,231 in cost savings from Clever Devices' proposal.

D. Background on Recommended Contractor

Clever Devices Ltd. (Clever Devices), located in the State of New York, has been in business for 30 years in the field of Intelligent Transportation Systems (ITS) for public transit agencies.

The Clever Devices team includes six subcontractors that will provide the land mobile radio system, yard management software services, quality assurance control services, systems support, material logistics, and that will install the system hardware on Metro vehicles. Five subcontractors are DBE firms.

DEOD SUMMARY

ATMS II / PS122845000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 15% Disadvantaged Business Enterprise (DBE) goal for this solicitation. Clever Devices Ltd. met the goal by making a 15.06% DBE commitment.

Small Business Goal	15% DBE	Small Business Commitment	15.06% DBE
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	DBE Subcontractors	Ethnicity	% Committed
1.	123 Installs, Corp.	Caucasian Female	2.77%
2.	Axis Installation, Inc.	Caucasian Female	1.95%
3.	ESP Enterprises, Inc.	Hispanic American	1.14%
4.	Niti Systems Consultants Inc	Subcontinent Asian American	1.96%
5.	TransSight LLC	Subcontinent Asian American	2.57%
6.	Galaxy Wire and Cable, Inc.	Caucasian Female	4.67%
Total Commitment			15.06%

B. Local Small Business Enterprise (LSBE) Preference:

The LSBE preference is not applicable to federally funded procurements. Federal law (49 CFR § 661.21) prohibits the use of local procurement preferences on FTA-funded projects.

C. Contracting Outreach and Mentoring Plan (COMP)

The Contractor Outreach and Mentoring Plan (COMP) is applicable to this procurement. Clever Devices Ltd. identified (2) DBE firms for protégé development: Niti Systems Consultants Inc., and ESP Enterprises, Inc.

D. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy is not applicable to this contract.

E. Prevailing Wage Applicability

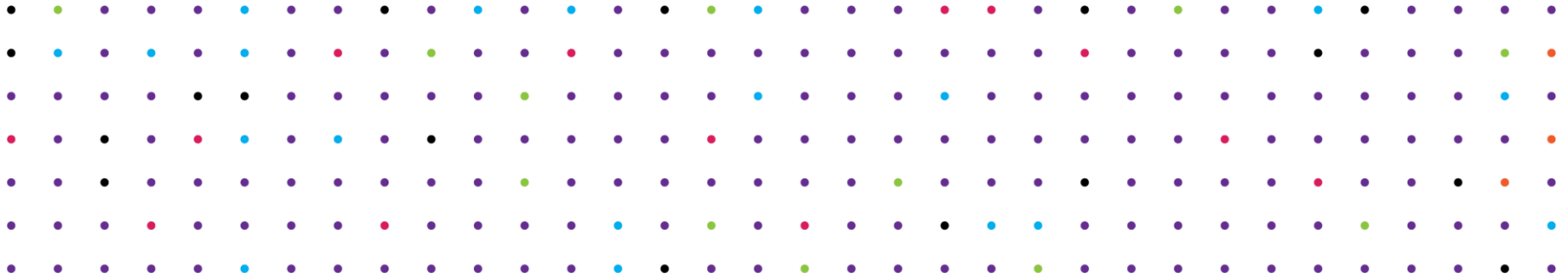
Prevailing Wage requirements are applicable to this contract. DEOD will monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

F. Project Labor Agreement/Construction Careers Policy (PLA/CCP)

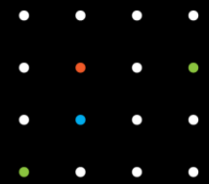
Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. PLA/CCP is applicable only to construction contracts that have a construction related value in excess of \$2.5 million.

STRATEGIC INITIATIVES

ADVANCED TRANSPORTATION MANAGEMENT SYSTEM (ATMS II)



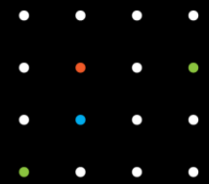
RECOMMENDATION



AUTHORIZE the Chief Executive Officer (CEO) to:

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ISSUE & DISCUSSION



ISSUE

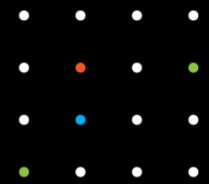
The goal of this partnership is to deploy a solution that can be upgraded in a modular or phased manner over time. This integration with other third-party solutions will support operational applications, such as gating, signal priority, as well as tools that enhance customer experience.

DISCUSSION

ATMS is the core fleet system (e.g., radio, software, hardware) used to manage Metro's bus fleet communications and navigation. The ATMS II upgrade will provide the following improved functionalities:

- Base: CAD/AVL for Bus and Voice Radio Replacement
- Phase 1: Voice over Internet Protocol (VoIP)
 - Cloud Hosting
 - Vehicle Health Monitoring
 - Turn-by-Turn Navigation
- Phase 2: Multimedia Displays for Articulated fleet (180 vehicles)
 - Digital Camera upgrade for on remaining Analog Camera fleet
 - Bus Yard Management
- Phase 3: CAD/AVL for Rail

PROCUREMENT EVALUATION



EVALUATION CRITERIA	MAXIMUM POINTS	CLEVER DEVICES LTD.	CONDUENT TRANSPORT SOLUTIONS
Qualifications of the Firm	20	18.50	15.58
Staffing and Project Organization	8	7.20	5.69
Software Functionality	25	20.42	17.67
Work Plan/Project Understanding	15	12.55	10.65
DBE Contracting and Mentor Protégé Approach	4	2.00	2.00
Maintenance and Support	8	6.80	6.09
Cost	20	20.00	19.67
Total Score	100	87.47	77.35



DEOD Goal: 15% DBE

Clever Devices Ltd. Commitment: 15.06% DBE