



County of Fairfax, Virginia

AMENDMENT

December 20, 2022

AMENDMENT NO. 7

CONTRACT TITLE: Operation and Management for the Connector Bus System

CONTRACTOR

Transdev Services, Inc.
720 Butterfield Road, Suite 300
Lombard, IL 60148

SUPPLIER CODE

1000008549

CONTRACT NO.

4400009131

By mutual agreement, Contract No. 4400009131 is hereby amended to add the attached Scope of Work for the Connected Autonomous Vehicle Demonstration Project. This 12-month pilot project will become effective upon the execution of this Amendment and will be terminated at the end of the 12-month period.

All other terms and conditions remain unchanged.

DocuSigned by:

Derrick Breun
50B06325B77B483...
Signature

DocuSigned by:

Matthew Veldt
7BF8A82225E84F9...

RVP of Operations
Title

Controller

Derrick Breun

Matthew Veldt

12/15/2022

12/15/2022

Printed Name

Date

DocuSigned by:

Lee Ann Pender
E239B762E600465...

Lee Ann Pender
Director/County Purchasing Agent

DISTRIBUTION:

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SCOPE OF WORK
CONNECTED AUTONOMOUS VEHICLE DEMONSTRATION PROJECT

[10 PAGES TO FOLLOW]

1.0 Scope of Work

1.1 Overview

Fairfax County is in the process of implementing a Connected Autonomous Vehicle Demonstration Project, with partner Dominion Energy Technologies, Inc. providing an EasyMile Gen 3 vehicle for the County's use on the project. The County has developed the following scope of work (the "Scope of Work") under which Transdev will operate the EasyMile Gen 3 vehicle for the 12-month pilot project, including project management, operation, and light maintenance of the AV. This Scope of Work will become effective upon the execution of an amendment (the "Amendment") to Contract #4400009131 (the "Contract") adding this Scope of Work to the Contract.

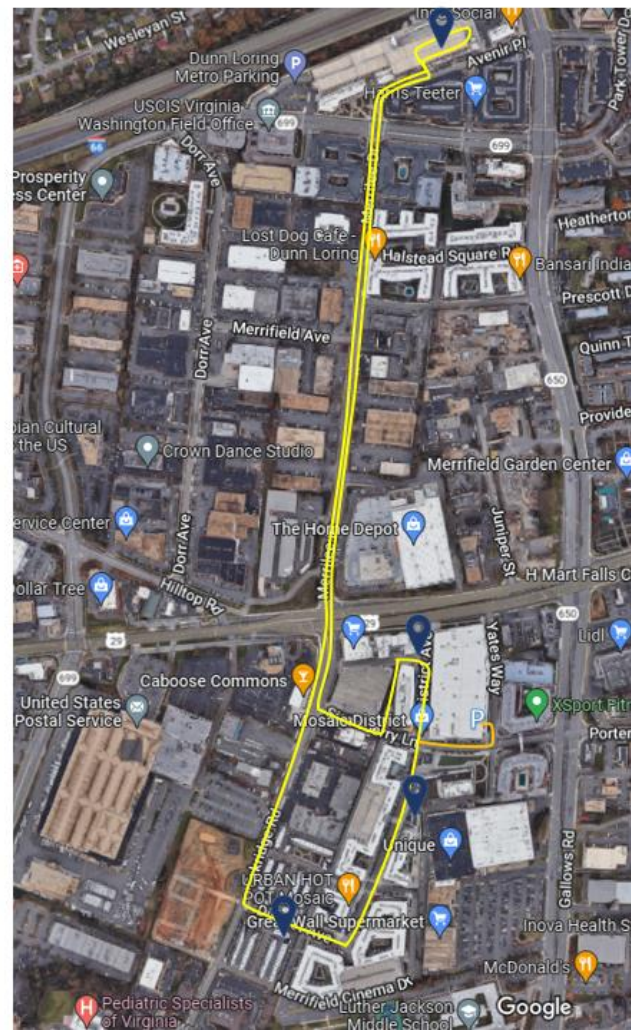
1.2 Route Corridor Details¹

Due to a planned extended street closure on Merrifield Cinema Drive, two routes will be programmed into the EasyMile Gen 3 vehicle along the following streets:

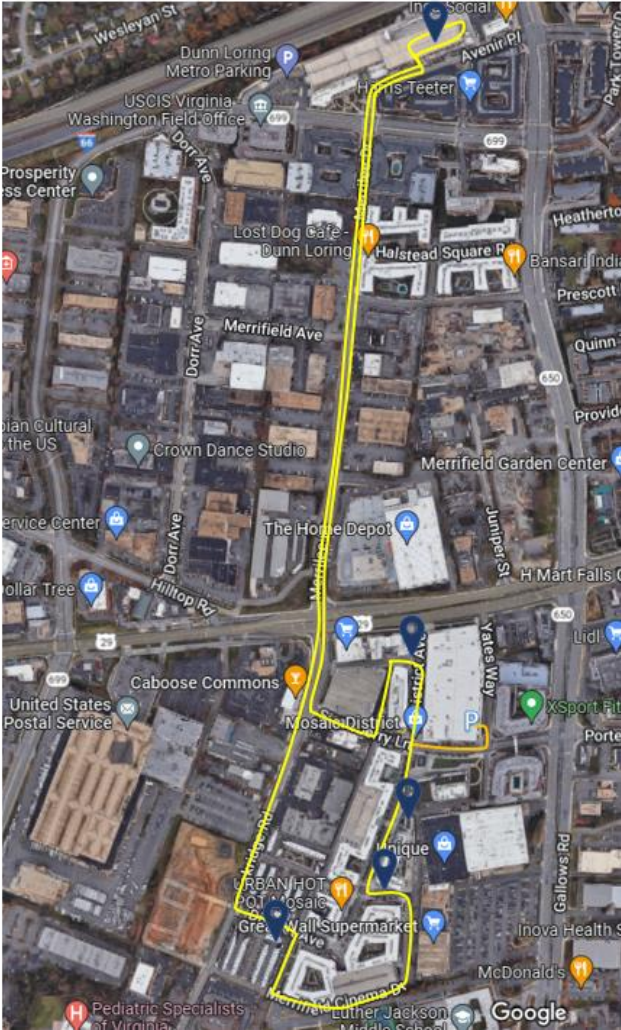
- Avenir Place: Two-lane road with a speed limit of 25 mph. On street parking north side.
- Merilee Drive: Two-lane road with a speed limit of 25 mph. On street parking on both sides until intersection of Halstead Square Street and Merilee Drive, where parking is only on the eastern side.
- Eskridge Road: Four-lane road with a speed limit of 25 mph. No on street parking available.
- District Avenue: Two-lane road with a speed limit of 25 mph. On street parking on both sides.
- Glass Alley: Two-lane road with a speed limit of 25 mph. No on street parking available.
- Unnamed Alley: Two-lane road with a speed limit of 25 mph. No on street parking available.
- Strawberry Lane: Two-to-three-lane road with a speed limit of 25 mph. Some limited on street parking on the eastern side approaching Eskridge Road.
- Merrifield Cinema Drive: Two-lane road with a speed limit of 25 mph. On street parking on the northern side.

¹ If route corridor details change, pricing may change.

Full Route Map, May - October 2022



Full Route Map, October - December 2022



1.3 Operating Days/Hours²

Fairfax County is contemplating whether to provide service for 7 days per week or 5 days per week at the hours outlined below. Further, the County will determine whether to have a “follow” vehicle and duration.

Daily Pre-Trip and Testing Time	9:00 – 10:00
Daily Passenger Service Hours	10:00 – 14:30
Daily Post-Trip, Cleaning Static Display	14:30 – 16:00

1.4 Contractor Responsibilities

1.4.1. Contractor shall provide 1 vehicle operator, who will also be trained in light maintenance of the vehicle. Transdev will schedule breaks for the operator within the service schedule according to state law. During this time the vehicle will be

² If operating days/hours change, pricing may change.

safely parked. Light maintenance includes but is not limited to (1) first level troubleshooting on any problem or alert on the vehicle; (2) tire repair or replacement; (3) internal and external light replacement; (4) fuse replacement and electric testing; (5) installation and maintenance of non-autonomous camera systems; (6) replacement of windshield wipers; (7) upkeep of all lidar covers; (8) light body damage; (9) door adjustments; and (10) ramp issues and adjustments. The AV operator shall monitor signals and controls and be capable of taking over manual control of the vehicle in the event of a system failure and or another emergency. The operator should board and alight passengers safely at predefined stop locations, with level curbside boarding, or another method, to allow mobility impaired individuals to access and egress the vehicle. Further, the operator shall serve in customer service/ambassador duties to assist with customers at stops, explaining the pilot and showing the AV to help with the public education aspect of this pilot project.

- 1.4.2. To serve in backup capacity, Transdev's in-house Trainer will also train a minimum of 4 employees to serve and assist, as needed.
- 1.4.3. Contractor shall provide services from a project manager, deployment manager, deployment engineer, and corporate oversight. Job duties and hours allocated for this project are outlined in the table below.

Position	Description of Work	Estimated No. of Hours Per Year
Project Manager	The Project Manager is responsible for oversight of the project from Amendment execution through end of the pilot period. Jason Perez and Neal Hemenover co-manage work with the deployment and corporate support personnel to ensure all resources are effectively brought to the project in order to remain on schedule, on budget, and compliant with the contract. The Project Manager also ensures all reporting responsibilities are carried out as required.	550-600
Deployment Manager	The Deployment Manager is a certified deployment engineer and will participate in all aspects of the service launch, including personnel training, route programming, technical troubleshooting, and establishing data collection systems. The Deployment Manager will be on-site during the initial set up phase to train AV operators and establish procedures. Ongoing, he/she is responsible for project technical support and data reporting.	400-430

Deployment Engineer	The Deployment Engineer is responsible for managing all technical aspects of the project. Responsibilities include vehicle software updates, map/route publishing, and hardware maintenance.	200-240
Corporate Support/Oversight	Transdev has a dedicated team of corporate support personnel like regional safety and maintenance directors that are assigned to assist and support all Transdev AV operations. This team is led by Neal Hemenover, VP of Innovation who is responsible for maintaining vendor (OEM) relationships, supporting all actively deployed AV programs, and for driving Transdev's global AV roadmap.	160-200

- 1.4.4. Contractor will manage all maintenance elements and for those maintenance issues that require EasyMile assistance, Contractor will open tickets with EasyMile and manage all open tickets with EasyMile until resolution.
- 1.4.5. Contractor shall provide ongoing application modifications, data collection, route adjustments, operator retraining and evaluation, integration and testing of new features.
- 1.4.6. Contractor will coordinate with Easy Mile for route validation activities.
- 1.4.7. Contractor shall be responsible for implementing a formal safety program to encourage safety in the operation and maintenance of the AV program.
- 1.4.8. Contractor shall immediately notify Fairfax County of any accidents, or incidents, and disengagements that always occur in or around the vehicle.
- 1.4.9. Contractor shall fully cooperate with the County's monitoring of AV implementation and daily operations.
- 1.4.10. Contractor shall provide its proprietary Link software for this project. This includes access to the Link Software backend (web platform) which allows the County to track and monitor the vehicle on the map and bookings in real-time. Link also provides a rider application. The application allows riders to view the route on the interactive map, select their Pickup/Drop Off points from a list or directly from the map. As the passenger validates their selection, the system triggers the real-time information and provides the following information:
 - ETA of the AV Shuttle arrival at the Pickup stop point.
 - Live vehicle position on the map.
 - ETA for the Drop Off stop point.
 - Live vehicle position on the map towards the Drop Off stops point.
 - The rider app is a standard product that is available as a native App on iOS/Android platform and as a Web Progressive Application (PWA).

- 1.4.11. The Contractor shall monitor information on the vehicle's fuel or battery level, ensuring the vehicle is sufficiently charged/fueled. The Contractor shall also be responsible for keeping the vehicle charged.
- 1.4.12. Contractor will oversee any training or hiring needed for project personnel, including on board, and off-site operators.
- 1.4.13. Contractor shall hold regularly scheduled meetings to discuss issues, findings and provide progress reports.
- 1.4.14. Data generated from the pilot will be shared by the Contractor and the 'Project Team'.
- 1.4.15. Contractor will work with the County to update or provide GTFS data if there is a desire to identify the vehicle and its schedule route.
- 1.4.16. Contractor will work with the County and the local police and fire departments on how best to handle any emergency situations with the vehicle.

1.5 County Responsibilities

- 1.5.1. The County shall manage and maintain the relationship with Dominion Energy Technologies, Inc. to provide the Easy Mile Gen 3 vehicle for the Contractor's use. All cost associated with vehicle provision shall be the responsibility of Dominion Energy Technologies, Inc.
- 1.5.2. The County or its partner shall provide a secure vehicle storage location.
- 1.5.3. The County or its partner shall be responsible for the cost of charging infrastructure and utilities.
- 1.5.4. The County or its partner shall manage all V2I components of the project, providing the communications infrastructure required for V2I and V2V needs.
- 1.5.5. The County or its partner shall be expected to obtain necessary public agency review and approvals/permits for the project.
- 1.5.6. The County or its partner shall provide any signage to notify the community of the AV pilot operating in the designated area along the route.
- 1.5.7. The County or its partner shall provide any signage for designated stops.
- 1.5.8. The County or its partner shall be responsible for any on-board equipment required for the operation of the service. Should the County require Transdev to include on-board equipment, such as cameras, etc. this will be priced separately.

- 1.5.9. The County shall provide a vehicle to be used as a spare in cases of unexpected breakdowns or incidents. Should the County wish for Transdev to provide a spare vehicle instead, pricing can be provided.

1.6 Insurance Requirements

1.6.1 The Contractor shall, during the continuance of all work under the Contract, provide the following:

- a. Maintain statutory Workers' Compensation and Employer's Liability insurance in limits of not less than \$1,000,000 to protect the Contractor from any liability or damages for any injuries (including death and disability) to any and all of its employees, including any and all liability or damage which may arise by virtue of any statute or law in force within the Commonwealth of Virginia.
- b. The Contractor agrees to maintain Commercial General Liability insurance in the amount of \$1,000,000 per occurrence/ \$2,000,000 in aggregate, to protect the Contractor, its sub-Contractors, resulting from any action or operation under the Contract or in connection with the Scope of Work.
- c. Contractor agrees to maintain Professional Liability Insurance or Errors and Omissions Liability covering wrongful acts, errors and/or omissions in the amount of \$1,000,000 per claim to cover each individual professional staff.
- d. If the Contract provides any services to minors, either the General Liability or the Professional Liability policy shall include an endorsement for Sexual/Physical Abuse and Molestation Coverage with limits at least equal to the minimum requirements of the said policy.
- e. The Contractor agrees to maintain owned, non-owned, and hired Automobile Liability insurance, in the amount of \$5,000,000 combined single limit, including property damage, covering all owned, non-owned, borrowed, leased, or rented vehicles operated by the Contractor.
- f. All mobile equipment used by the Contractor in connection with the contracted work, will be insured under either a standard Automobile Liability policy, or a Commercial General Liability policy. The Garage Keeper's Liability coverage shall also be maintained where appropriate and can be within Automobile Liability policy.
- g. Fidelity Bond or Commercial Crime Insurance in an amount equal to at least twenty-five percent (25%) of the amount of the funds handled or managed annually by the Contractor, or, if no funds were handled during the preceding year, least twenty-five percent (25%) of the amount of funds reasonably estimated to be handled during the current calendar year. In no event will the fidelity bond be less than \$500,000. The bond shall be in favor of the County and insure to the benefit of any person damaged by any fraudulent act or conduct of the Contractor and must be conditioned upon faithful accounting and application of all money coming into the Contractors possession in connection with their activities as an administrator
- h. If the Contractor provides services under this Scope of Work in County owned or leased property or uses County vehicles or equipment, then the Contractor shall execute a License Agreement with the Fairfax County Facilities Management Department for occupancy during the effective period of this Scope of Work which may impose additional insurance requirements to include but not limited to the property insurance on all equipment, to include County owned installed and maintained equipment and vehicles used by the Contractor while in their care, custody and control for use under this contract.

1.6.2. If the liability insurance purchased by the Contractor has been issued on a "claims made" basis, the Contractor must comply with the following additional conditions. The limit of liability and the extensions to be included as described previously in these provisions, remain the same.

The Contractor must either:

- a. Agree to provide certificates of insurance evidencing the above coverage for a period of two years after final payment for the Scope of Work. This certificate shall evidence a "retroactive date" no later than the beginning of the Contractor's or sub contractor's work under this Scope of Work, or
- b. Purchase the extended reporting period endorsement for the policy or policies in force during the term of this Scope of Work and evidence the purchase of this extended reporting period endorsement by means of a certificate of insurance or a copy of the endorsement itself.

1.6.3. Liability insurance may be arranged by a combination of primary and excess or umbrella policies.

1.6.4. Any deductibles and/or self-insured retentions greater than \$50,000 must be disclosed to and approved by the County's Risk manager prior to the commencement of services. Use of large deductibles and/or self-insured retentions will require proof of financial ability as determined by the County.

1.6.5. After a period of five years from the date of the Amendment or upon any changes of the Virginia Financial Responsibility Law or insurance provisions of the Federal Motor Carrier Safety Act, the County may reasonably require higher limits of insurance or additional insurance coverage against other hazards for which insurance is reasonably obtainable and which, at the time, are commonly insured against in the case of similar properties conducting similar activities within the geographic area of the Property, whether or not such additional insurance requirements are otherwise described or contemplated herein.

1.6.6. The Contractor agrees to provide insurance issued by companies admitted within the Commonwealth of Virginia, with the Best's Key Rating of at least A: VII. European markets including those based in London, and the domestic surplus lines markets that operate on a non-admitted basis are exempt from this requirement provided that the Contractor's broker can provide financial data to establish that a market is equal to or exceeds the financial strengths associated with the A.M. Best's rating of A:VII or better.

1.6.7. The Contractor will ensure their insurer shall agree to waive all rights of subrogation against the County, its officers, officials, and employees for losses arising from work performed by Contractor for the County. Proof of waiver of subrogation up to and including copies of blanket endorsements or policy wording will be required.

1.6.8. The Contractor will provide a Certificate of Insurance citing the contract number and such blanket endorsements as prescribed herein including Fairfax County, Virginia, Dominion Energy Technologies, Inc., Eskridge (E&A), LLC, Washington Metropolitan Area Transit Authority, Mosaic District Master Property's Owners Association, Inc., a Virginia corporation, and Mosaic District Community Development Authority, a political subdivision of the Commonwealth of Virginia and their respective officers, employees and agents and other parties as requested by the County an

"additional insured" for all liability policies and it shall be stated on the Insurance Certificate that this coverage "is primary to all other coverage the County may possess.

1.6.9. No cancellation shall be made in any insurance coverage without a 30-day written notice, 10 day for non-payment to the County. The Contractor shall furnish a new certificate upon cancellation or renewal of coverage. The failure of the Contractor to deliver a new and valid certificate will result in suspension of all payments until the new certificate is furnished.

1.6.10. The Contractor will secure and maintain all insurance certificates of its subcontractors, which shall be made available to the County on demand. Compliance by the Contractor and all subcontractors with the foregoing requirements as to carrying insurance shall not relieve the Contractor and all subcontractors of their liability's provisions of the contract.

1.6.11. Insurance provided under the Contract and this Scope of Work shall not contain a supervision, inspection or engineering services exclusion that would preclude the County from supervising and/or inspecting the project as to the result. The Contractor shall assume all on the job responsibilities as to the control of persons directly employed by it and of the subcontractors.

INDEMNIFICATION:

1.6.12 The Contractor shall indemnify, keep and save harmless Dominion Energy Technologies, Inc., Eskridge (E&A), LLC, Washington Metropolitan Area Transit Authority, Mosaic District Master Property's Owners Association, Inc., and Mosaic District Community Development Authority, and the County, and their respective agents, officials, employees and volunteers (collectively, the "Indemnified Parties") against any and all actions, claims, liabilities, assertions of liability, losses, costs and expenses, which in any manner arise or are alleged to have arisen, from the acts, omissions or wrongful conduct of Contractor or Contractor's officers, employees, agents, guests, patrons, licensees, invitees or subcontractors in connection with or related to their operations, activities, occupancy or use of the facilities or property of the County in connection with the performance of this Scope of Work.

1.6.13. The Contractor shall, at their own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising from any and all actions, claims, liabilities, assertions of liability, losses, costs and expenses as described in Section 1.6.12 above or incurred in connection therewith; and if any judgment shall be rendered against the Indemnified Parties in any such matters, the Contractor shall, at their own expense, satisfy and discharge the same.

1.6.14. The Contractor expressly understands and agrees that any performance bond or insurance protection required by this contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the Indemnified Parties as herein provided.

1.6.15. Nothing contained in the Contract or this Scope of Work shall be construed as creating any contractual relationship between any subcontractor and the County. The Contractor shall be as fully responsible to the County for the acts and omissions of the subcontractors and of persons employed by them as it is for acts and omissions of person directly employed by it.

1.6.16. The County warrants and represents that as a sovereign entity, it is self-insured. Contractor and County agree that nothing contained herein shall be construed or interpreted as

- a. the consent of the County or the Commonwealth of Virginia or its agents and agencies to be sued; or
- b. a waiver of sovereign immunity of the County or the Commonwealth.

1.6.17. Dominion Energy Technologies, Inc. is responsible for insurance coverage during the import of the vehicle, and prior to and following the operational contract term with Transdev. It is Transdev's understanding that Transdev is not liable for any losses that occur due to failures of the autonomous technology during operation in Autonomous Mode. These losses are covered by the purchase agreement between Dominion Energy Technologies, Inc. and Easy Mile.

1.7 Tentative Project Schedule

Prior to vehicle delivery and transport to site

- Validate Existing Site Assessment Report
- Recommend site modifications (if applicable)
- Regulatory approval (NHTSA, Virginia DOT, Fairfax County DOT)

Week 1

- Vehicle inspection, configuration, and mechanical testing
- Transport to onsite storage facility

Weeks 2 and 3

- Initial route mapping and vehicle trajectory programming for preliminary testing
- Route signage put along the route

Weeks 3 and 4

- Route testing at increased speeds
- V2X system configuration. (If this is not needed, we may be able to complete in 1 week.)
- Fleet software testing
- Stop signage put up

Weeks 5 and 6

- Training and evaluation of vehicle operators
- Command center setup (Transdev's AVL monitoring system)
- Soft launch of vehicle with existing Transdev staff

Weeks 7 and 8

- Launch of full pilot service
- Programming and testing desired adjustments to the route

1.8 Cost Proposal

Follow Vehicle Pricing (Cost Per Day with Lightbar):	Additional Operator (Cost per Day):	Charter/Special Service Labor Rate (Per Hour):
\$140.77	\$769.86	\$65.23

Cost per month to extend AV program for up to 12 months.
Monday through Thursday: \$17,792.43
Monday through Friday: \$19,305.53
Monday through Sunday: \$20,818.62

- The pricing shown above for the 12-month pilot includes 1 vehicle operator. We propose use of the second operator during the start-up period to operate the follow vehicle as a safety vehicle to follow the AV while the service is mapped and tested. We have included (above) the cost for an additional operator, should the County need to an additional operator after the start-up period.
- We can operate the County's vehicle or provide one for our own use, the cost per day for Transdev to provide the follow vehicle is provided above.
- Should the AV shuttle vehicle or driver be unavailable for more than 3 days (due to an issue within Transdev's control), a pricing adjustment will be provided to deduct labor hours not utilized.
- The Charter/Special Services rate above is for labor only. Any additional costs such as a tow truck to transport the vehicle will be passed through to the County.