

Subject: EV Bus Pilots
Related Department: DES

FY 2027 Proposed Budget
Budget Work Session Follow-up

4/14/2026

The following information is provided in response to a request made by Ms. Cunningham received by email on April 3, 2026, regarding the following question:

What results from the APS Electric bus pilot? Learnings from Montg Co Schools who recently moved away from EVs? Given Arlington's compact size, can we move faster to EV buses? What is status of charging network to support? Can schools and our public chargers support, rather than building out more charging at Trades? Are we maximizing grant support for this and/or can we purchase some of the Montg Co fleet at discount? (Also recap the learnings from the ART BEB pilot and study that were presented in worksession)

Below are lessons learned and data related to the APS Electric bus pilot. The County will support APS' transition if they determine operationally they support moving forward with further expansion of electric school bus conversions.

Performance: Arlington Public Schools currently has 8 electric school buses and they report a 67% uptime during the pilot. The buses have been largely successful for regular APS bus routes. It is County staff's understanding that APS has not used them on extended trips, such as field trips.

Charging: Electric school buses require Level 3 chargers, which cost between \$85k to \$135k depending on installation costs. Currently APS has 4 dedicated Level 3 chargers for their 8 vehicles. Expanding the number of chargers will require upgrades to the Dominion infrastructure and space to locate the chargers. EV buses cannot charge at public chargers as they require a Level 3 charger. County staff cannot speak to the operational impact (parking capacity at specific schools and operational dispatch approach) or infrastructure capacity (e.g., upgrades & associated costs needed from Dominion) to support Level 3 chargers at APS facility locations.

Purchase Price: Electric school buses carry a premium of approximately \$200k over a regular diesel bus, which was previously covered through the EPA's Clean School Bus Rebate Program that the current administration is not extending. DES is unaware of any similar programs or opportunities.

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Lessons Learned from other Programs:

Montgomery County: DES reached out to Montgomery County fleet personnel who confirmed that Montgomery County does not intend to sell any of their existing fleet. Their experience with EV school buses has been similar to Arlington's - they perform well when assigned to appropriate routes but have several drawbacks similar to what we have experienced.

ART BEB Pilot: Analysis of the BEB Pilot is ongoing now to include modeling and simulations, operational and service assessments to evaluate BEB energy requirements on all routes and blocks and impacts related to outdoor temperatures, passenger loads, etc. The analysis is projected to be completed in the fall of 2026. Staff will present an interim analysis as part of or before the upcoming CIP process.