

Transportation Committee

Meeting date: March 11, 2019

For the Metropolitan Council meeting of March 27, 2019

Subject: Type 2 Light Rail Vehicle Motor Trucks and Axle Sets

District(s), Member(s): All

Policy/Legal Reference: Council Expenditure Policy 3-3

Staff Prepared/Presented: Chris Royston, Manager Light Rail Vehicle Overhaul (612) 341-5698

Division/Department: Metro Transit / Rail Vehicle Maintenance

Proposed Action

That the Metropolitan Council authorizes the purchase of four motor trucks and four axles sets for the Type 2 Light Rail Vehicles (LRV's) in an amount not to exceed \$2,500,000.

Background

Metro Transit runs two Light Rail Vehicle lines, the Green Line, which opened in 2014, and the Blue Line, which opened in 2004. These lines have been very popular, and ridership has been higher than originally projected. As a result, the lines and the rail cars have experienced higher than average wear and tear.

Metro Transit currently operates two types of LRV's; Bombardier (Type 1) and Siemens (Type 2.) Both LRVs have a 30-year life expectancy. A scheduled maintenance program based on the Original Equipment Manufacturers (OEM) recommendations along with ongoing equipment assessment and evaluation will keep these LRVs in good repair, so these critical assets can remain in service. A big part of that maintenance program is vehicle overhaul. We are currently getting started on the first overhaul of the newer Type 2 vehicles.

Each LRV has two motor trucks, which are the steel frames under the LRV's that contain the primary suspension system, braking system and two axles each. Each axle consists of a gear box, traction motor and two tires.

During the three-year overhaul program, four motor trucks and eight axles will be serviced and conditioned each month for the next three years. This business item requests authorization for the purchase of four new motor trucks and eight new axles, which will allow for the overhaul of those components while maintaining the needed spares in case of a maintenance issue with one of the LRV's in service.

Rationale

To maintain fleet reliability, a set number of LRV spare parts is kept in stock. This helps to limit the amount of time a vehicle is out of service for repairs. As the overhaul program takes four motor trucks and eight axles out of service each month, these additional trucks and axles are needed to have the necessary spares in stock.

Thrive Lens Analysis

The LRV Type 2, Overhaul 1 rebuild program supports Thrive Outcomes by maintaining the LRV fleet and providing reliable, affordable, environmental friendly and safe mass transportation to our customers.

Funding

The purchase is fully funded with federal and local funds via projects 64401 and 65703.

Known Support / Opposition

No known opposition.