

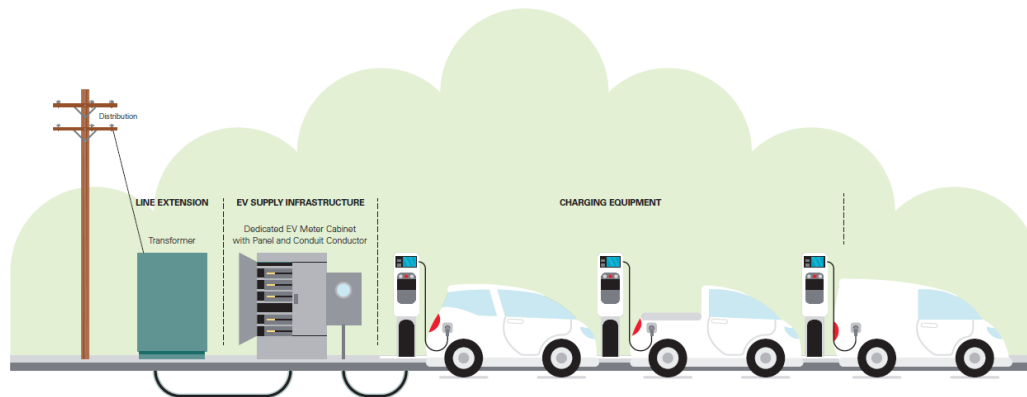
Electric Utility Perspective

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Considerations before the bus arrives

- ▶ Connecting with the utility
- ▶ Charging infrastructure
 - Where will the chargers be located?
 - Is there accessible power at the charger location?
 - Do you need an electric service upgrade?



Information to give your utility



How many buses will be charging
(short-term and long-term plan)



Battery size and range

how battery size and range
meets your route needs



Nameplate kW of charger(s)

How to work with your utility

- ▶ Engage early and often
- ▶ Ask for an assigned point of contact representative if possible
- ▶ September 2017 – BESB pilot launch



Schmitt & Sons

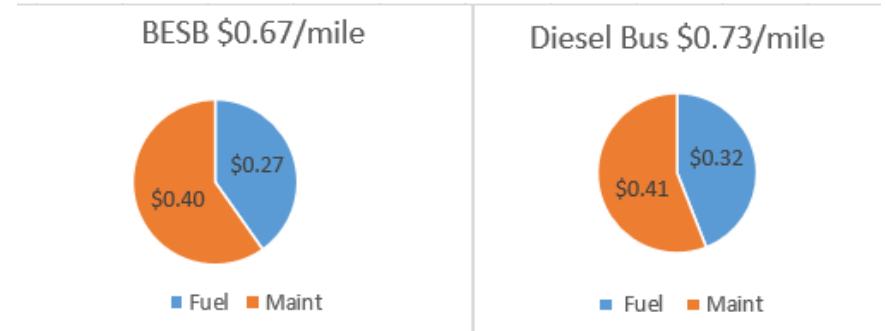


BESB Pilot Objectives

- ▶ Showcase new energy efficient technologies
- ▶ Demonstrate EV school bus performance
 - Cold weather climate (supplemental heating)
 - Longer suburban and rural routes reflecting our member-owner service territories
- ▶ Document the regional economics
 - O&M (energy + maintenance costs) savings
- ▶ Calculate the emission reductions from routes and on-premise idling

Key Findings

- 4th year, 2020-2021 full report
 - COVID year toggled between k-12 and daycare service
 - 8.5 outage days – minor repairs and service
 - Combined fuel + maintenance cost/mile
 - Saved approx. 25,000 lbs CO₂_e compared to diesel



Thank You
