Stride Bus Rapid Transit Fleet Propulsion

System Expansion Committee 01/12/23



Why we're here

Stride Bus Rapid Transit fleet propulsion update



Stride Start-up and Operations Structure

- Sound Transit to provide facilities, vehicles, operating systems, and oversight
- Bus Operating Systems RFP: January 2023
- Fleet procurement: mid-2023
- Single contractor for bus operators & mechanics: mid-2023
 - Competitive process
 - Include interested partners in the process
 - Commitment to workers including the right to bargain

SR 522 BRT (S3)

- Incorporated into Project:
- Articulated 60' coaches best suited to urban arterial operations
 - Three doors = faster ingress/egress for more frequent stops
- Battery Electric Buses (BEB)
 - Inductive charging at layovers/terminals: South Shoreline station and I-405/SR 522
 Transit Hub





I-405 BRT (S1 & S2)

- Double-decker coaches best suited to highway operations
 - More seats = fewer standing riders at highway speeds and longer trips
 - Current riders strongly prefer double-deck buses for highway-based services

BEBs recommended

- Maturing technology: improved range and reliability peer agencies
- Inductive charging at layovers/terminals
- Manufacturer support and warranties (12 years)
- Diesel is only other viable propulsion option





Full Stride Electrification

All BEB Stride system

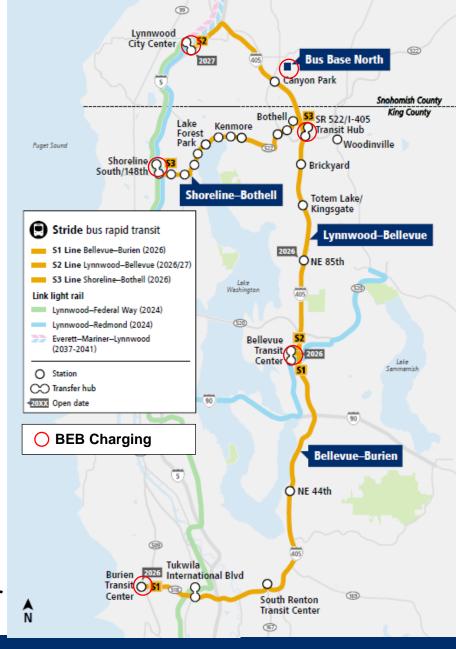
- Minimal expansion of fleet size (+1 coach)
- Inductive charging to "top off" during layovers
- Universal hardware/cord and charge management system

Added scope and cost

- ~ +\$25m for I-405 BEBs: \$8m added fleet cost and \$17m added (permanent) charging infrastructure
- Incorporate into mid-2023 baseline action

Financial considerations:

- Competitive for grants (\$9m secured for S3 BEBs)
- Potential Clean Fuel Standard revenue: \$1.9m/year



Thank you.



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