Stride Bus Rapid Transit Fleet Propulsion

Rider Experience and Operations Committee 01/19/23



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

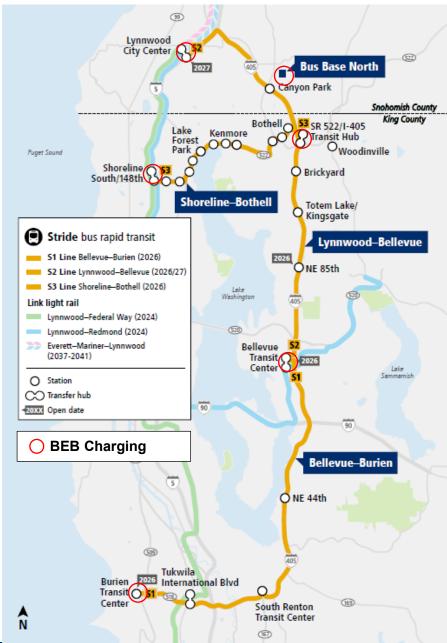




Full Stride Electrification

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







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