

King County Metro: Moving to Zero Emission Transportation

Regional Transit Committee
April 20, 2022



Today's Topics

- Zero Emissions targets
- Where we are today
- What's next
- Non-bus fleets



Metro Policy and Climate Goals – Metro Operations

Strategic Climate Action Plan Targets for Metro Operations



70%
↓

REDUCTION IN GREENHOUSE GAS
EMISSIONS FROM FLEET BELOW
2017 LEVELS BY 2030



100%

ZERO-EMISSION REVENUE BUS FLEET
BY 2035



100%

LIGHT-DUTY ELECTRIC VEHICLE (EV)
BY 2030



90%
↑

INCREASE IN UTILIZATION OF
TROLLEYS ON WEEKENDS
BY 2025

Metro Connects

Metro Connects will confront climate change by transitioning to zero-emissions vehicles, powered by renewable energy, over the next 20 years.

Metro will use a phased approach to acquire battery-electric buses, convert operations, prepare the workforce, and build the necessary infrastructure to support a 100 percent zero-emissions bus fleet.

Strategic Plan Strategy

Reduce vehicle emissions in all of Metro's fleets through transition to zero-emissions, efficient operations, and other strategies.

Metro's Existing Bus Fleet

- **~1400 Buses Total**
 - Diesel-electric hybrids, trolleys and BEBs
- **195 Zero-Emission Buses**
 - **174** Electric Trolley Buses
 - **21** Battery Electric Buses (BEBs)
 - 11 Short range – on Routes 226 & 241
 - 10 Extended range (40 total to arrive this year; 140 mile range)

The first 10
extended-
range BEBs
have arrived!



South Base Test Facility is Open!



Moving to Zero Emission – Key Bus Fleet Milestones



We
are
here

2022

Open South Base
Test Charging Facility
40 BEBs arrive
Transit system
electrification study

2025

Open Interim Base
to support 120 BEBs

2026-2028

Five layover
charging projects

2028

Open South Annex
Base to support 250
BEBs

South Campus: A Closer Look



South Base Test Facility

South Annex Base

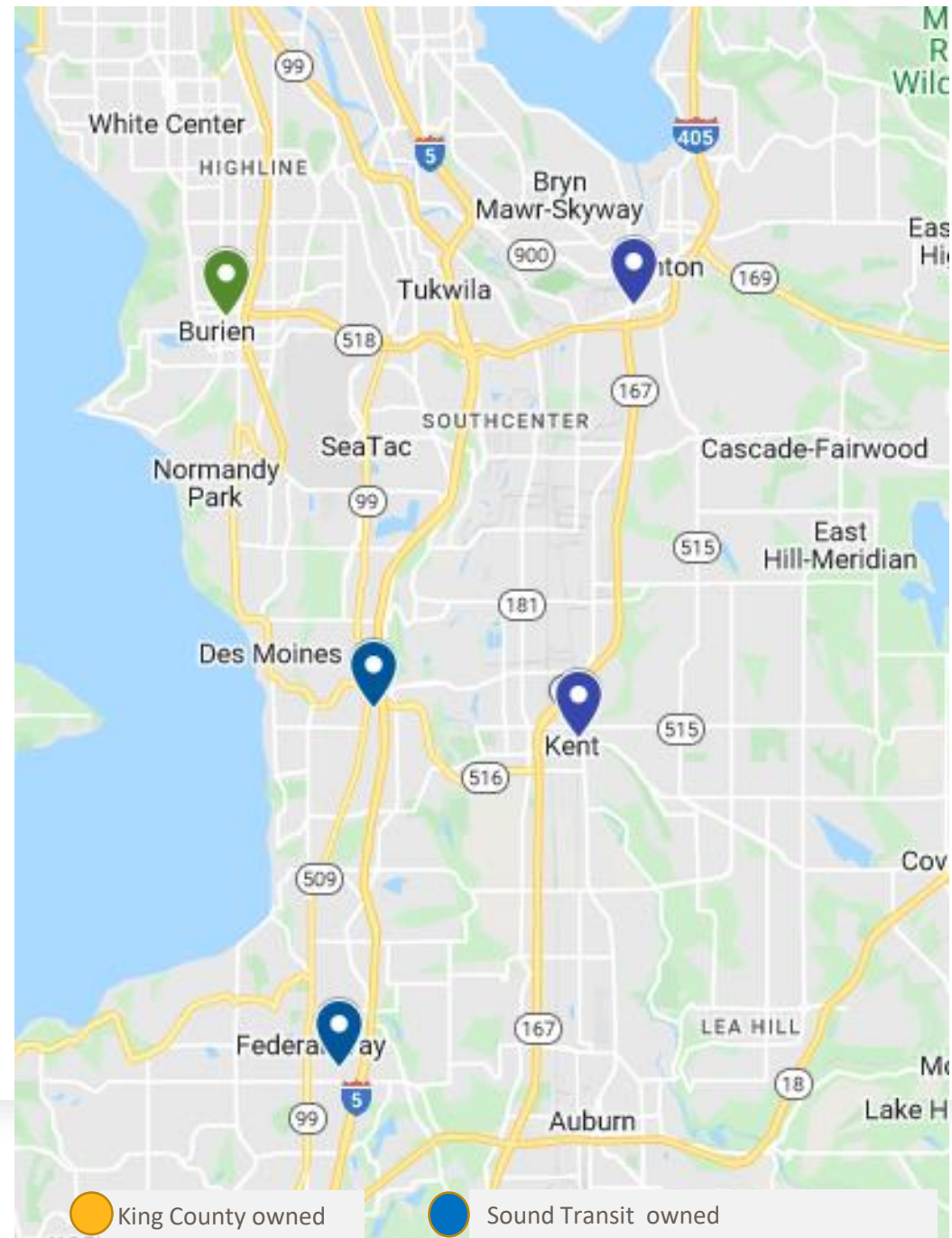


Interim Base



Layover Charging Opportunities

- Leveraging Sound Transit investments
- Five sites being explored
 - Burien Transit Center (KCM)
 - Kent/Des Moines Link Station (ST)
 - Kent Transit Center (ST)
 - South Renton Transit Center (ST)
 - Federal Way Transit Center (ST)



Looking Ahead

- Completion of the Transit System Electrification study
- Conversion of our existing bases
- Additional layover charging
- Trolley fleet and infrastructure optimization
- Zero emission fleet purchases
- Tracking federal and state funding

Metro's Non-Bus Fleets

- Non-revenue vehicles (NRV)
 - Sedans to tow trucks
- Access Paratransit
- Mobility Services
 - Rideshare
 - DART
 - Community Connections
- Water Taxis



Other Steps We're Taking

- Strengthening partnerships with utilities, jurisdictions and private sector
- Continuously learning
- On-going engagement with the industry
- Getting our work force ready
 - operators
 - vehicle maintenance
 - infrastructure

Closing and Questions