Fleet

Cutting-edge vehicles designed for customer comfort and safety as well as efficient and green operations.

Metro would need to expand its fleet of buses, vans, and support vehicles to provide the higher levels of service envisioned in METRO CONNECTS. We estimate that we would need about 625 additional buses by 2040. With these additional buses, and the replacement of our existing fleet of about 1,400 vehicles, METRO CONNECTS envisions a Metro fleet of entirely zero-emissions, low-floor vehicles.

What would the Metro fleet look like?

As of 2015, Metro's fleet had about 1,400 fuel-efficient buses, including hybrid diesel-electric and clean-diesel coaches, electric trolleys, and several battery buses. Our fleet also includes paratransit and DART vehicles, Vanpool vans, and electric cars for the Metropool commute program. A large additional "non-revenue" fleet used to support service has tow trucks, supervisor vans, maintenance trucks, and more.

METRO CONNECTS would require expansion throughout the fleet, including 625 new buses by 2040. Replacement vehicles would also be needed as current vehicles reach the end of their useful lives—usually after 12 to 15 years of service.

Compared to the current network, more of the new service proposed in METRO CONNECTS would be in non-peak hours, when we use fewer buses. This means buses would be used more efficiently in the future network, operating for more hours a day. As a result, we could purchase relatively fewer buses compared to the increase in service hours.

METRO CONNECTS also envisions moderate expansion of our electric trolley bus network, which in 2015 carried about 20 percent of Metro riders. METRO CONNECTS proposes that Metro would invest strategically in the trolley network, focusing first on places where a relatively small expansion of wire could allow new service concepts to operate successfully. These include places that have frequent service, common overhead wires with existing trolley bus routes, steep hills, and dense urban service areas.

Smart design

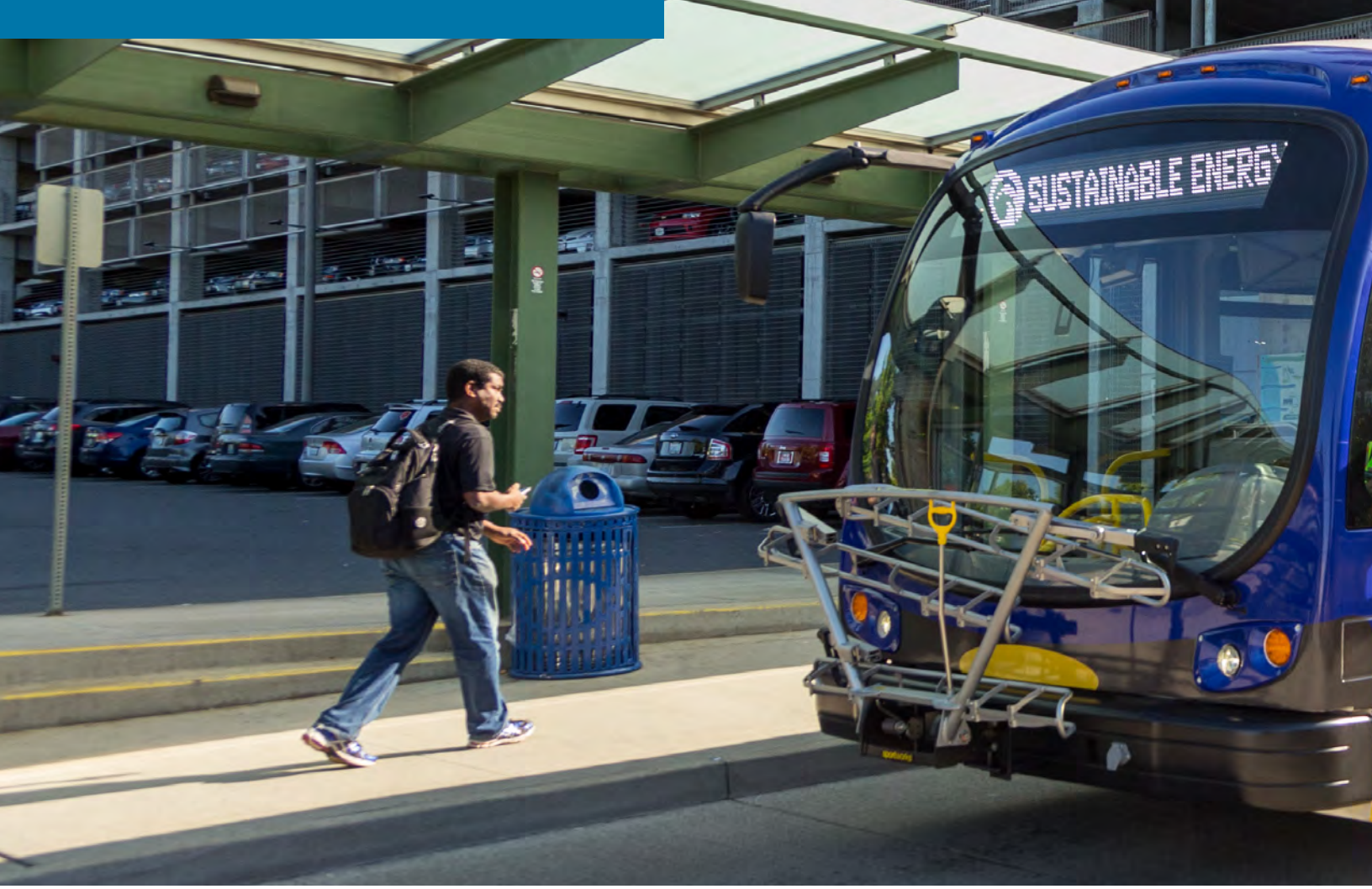
As we purchase new fleet vehicles, we would continually improve their design with the ease, comfort, and safety of customers and operators in mind. We would ensure that vehicles support fair treatment and access for everyone we serve. We would continue to emphasize features that make bus boarding speedy and easy and that keep maintenance costs down.

We would also proactively include systems that support developing technology. Bus real-time intelligence systems provide immediate access to useful information about operations and conditions, and could support features like these:

- Real-time information for customers about the availability of seats, bike storage space, and space for wheelchairs or other mobility aids.
- Telematics—vehicle systems that use telecommunications to send, receive, and store computer-based engine data—for proactive identification of mechanical problems.
- Surveillance video that uses license plate readers and object recognition to identify vehicles parked in bus-only lanes.
- On-board environmental monitors for weather conditions and air pollution.
- Traffic control that goes beyond transit signal priority, such as remote activation of pedestrian crossing buttons at intersections to encourage patrons not to jaywalk to catch the bus.
- Secondary uses of a vehicle, such as an emergency communications hub or power generator.
- Safety features including audible signals to pedestrians.

For more information

See Appendix F for more detail on the topics in the Critical Services Supports section.



Fleet, continued

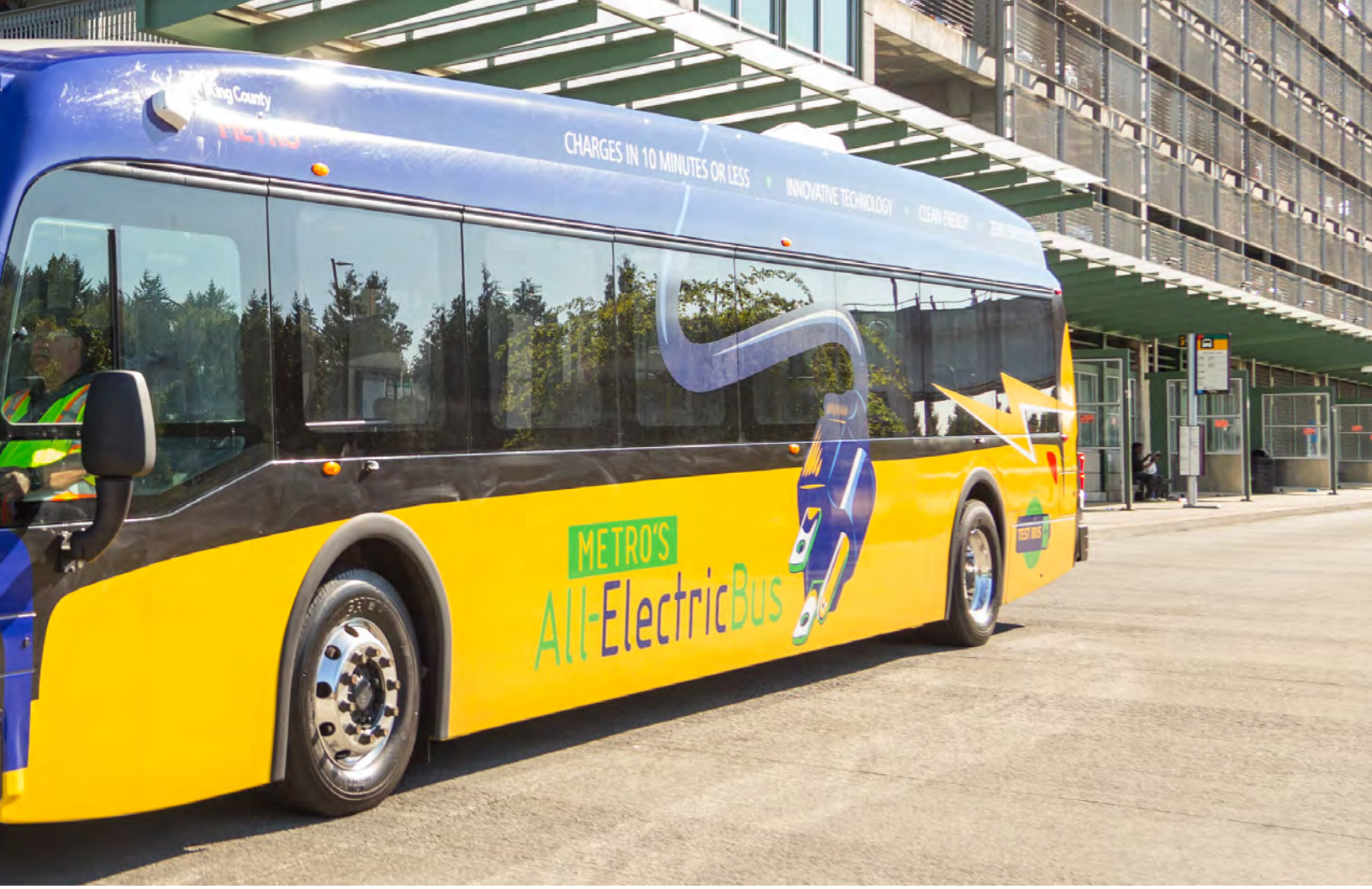
Going green

Metro is committed to having the greenest fleet possible. Our agency was a national leader in adopting diesel-electric hybrid bus technology, and we are replacing our aged trolley bus fleet with zero-emission trolley buses that can use battery power to travel short distances off-wire. We're moving toward a fleet of all hybrid or electric coaches, and we're preparing for rapidly evolving electric vehicle technology to keep our fleet on the cutting edge of environmental improvements and to move toward a zero-emissions fleet.

The King County Strategic Climate Action Plan (SCAP) calls for a 10 percent reduction in normalized energy use in Metro operations by 2020, compared to a 2014 baseline. Metro is already making progress toward this target.

The SCAP also calls for a 10 percent increase in alternative fuel use across King County fleet fuel purchases. Alternative fuel sources include electricity, biofuels, compressed natural gas, liquefied natural gas, hybrid, plug-in hybrid, battery drive, or propane.

Metro is already beginning to evaluate how we can achieve our vision of a zero-emissions fleet. Initial recommendations will be developed in 2017, and we will continue to study emerging and cutting-edge technologies.



2020 SCAP Targets

10% REDUCTION IN ENERGY USE BELOW 2014 RATES

10% INCREASE IN ALTERNATIVE FUEL USE

Metro Targets

100% HYBRID OR ELECTRIC BY 2018

What would it take?

- **Procure state-of-the-art vehicles** to support expanded service and replace vehicles at the end of their useful lives.
- **Use fleet design criteria that focus on customer and driver needs.**
- **Support and expand the trolley network by:**
  - Filling gaps in the network to allow flexibility.
  - Working with partners to extend wire to new streets so routes could be converted to trolley bus service.
  - Keep the trolley system infrastructure in a state of good repair through regular maintenance and planned replacement cycles.
- **Meet SCAP targets by moving toward a zero-emissions fleet.**