Battery electric buses offer zero-emissions, quiet operation, and reduced ongoing operational costs compared to their combustion engine counterparts. Because of these factors, transit agencies are adopting electric bus fleets to replace traditional combustion engine buses.

### Electric Bus Adoption

In the United States as of 2017, electric buses only accounted for 0.5 percent of total public transit buses. At that same time, 9 percent of agencies reported that they were using electric buses as part of their fleets. ([Sustainable-Bus](https://www.sustainable-bus.com))

However, electric bus adoption is moving fast and only expected to accelerate. Cities like New York, Los Angeles, Seattle, and Houston have set aggressive zero-emission bus fleet goals that will push the technology forward, with other municipalities following suit. The FTA’s Low- or No-Emission Vehicle Program provides competitive grants for bus and bus facility projects that support low and zero-emission vehicles. ([FTA](https://www.fta.dot.gov/low-or-no-emission.html))

Lithium-ion batteries are most commonly used in electric buses. These batteries have fallen in cost by over 80 percent since 2010 and are expected to drop another 50 percent by 2025. This trend points to accelerated agency adoption in the near future. ([EESI](https://eesi.org/energy-buses/))

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**A transit agency’s estimated life-cycle costs** for battery electric buses can be up to **23 percent lower than diesel.**

*Source: Transportation Research Part D (2017)*

**Fleet electrification could save $72 billion in healthcare costs,** research on avoided emissions and health impact shows.

*Source: American Lung Association (2020)*

**Battery-electric buses piloted in Seattle reduced maintenance costs per mile by 44.1 percent** compared to diesel.

*Source: National Renewable Energy Lab (2018)*

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**Highlighted ITS Benefits**

Visit ITS Benefits Database: [www.itskrs.its.dot.gov/benefits](http://www.itskrs.its.dot.gov/benefits)