TOTAL COST OF OWNERSHIP ANALYSIS

Comparison between four of the most popular gasoline powered models in the country and an EV equivalent for purchase in 2022

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Background

Atlas analyzed four vehicle categories to understand the total cost of ownership for some of the most popular internal combustion engine (ICE) vehicles and similarly costed electric vehicles (EV) available for purchase in 2022. The four vehicle categories included:

- **Low-cost sedan (below $30,000)**
  - ICE vehicle: 2022 Toyota Corolla[1]
  - EV: 2022 Chevrolet Bolt
- **Mid-cost sedan (above $40,000)**
  - ICE: 2022 Lexus ES 250[2]
  - EV: 2022 Tesla Model 3
- **Sports Utility Vehicle (SUV)**
  - ICE: 2022 Honda CR-V FWD[3]
  - EV: 2022 Volkswagen ID.4 Pro
- **Pickup**
  - ICE: 2022 Ford F-150 Pickup 2WD[4]
  - EV: 2022 Ford F-150 Lightning

Data Inputs

This analysis was carried out with the Fleet Procurement Analysis Tool using the following inputs:

- The gasoline powered vehicles were selected based on IHS Markit sales data for 2021.
- A potential Build Back Better EV tax credit was not factored into the cost. The existing $7,500 tax credit was factored in where applicable.
- Home charging was assumed to be 88 percent. This was taken as a midpoint of a range provided in a report from the National Renewable Energy Laboratory.
- Public charging costs drew from Electrify America charging prices.
- The manufacturer's suggested retail price (MSRP) of vehicles was drawn from FuelEconomy.gov.

[1] Highest selling compact sedan in 2021 below 30,000.

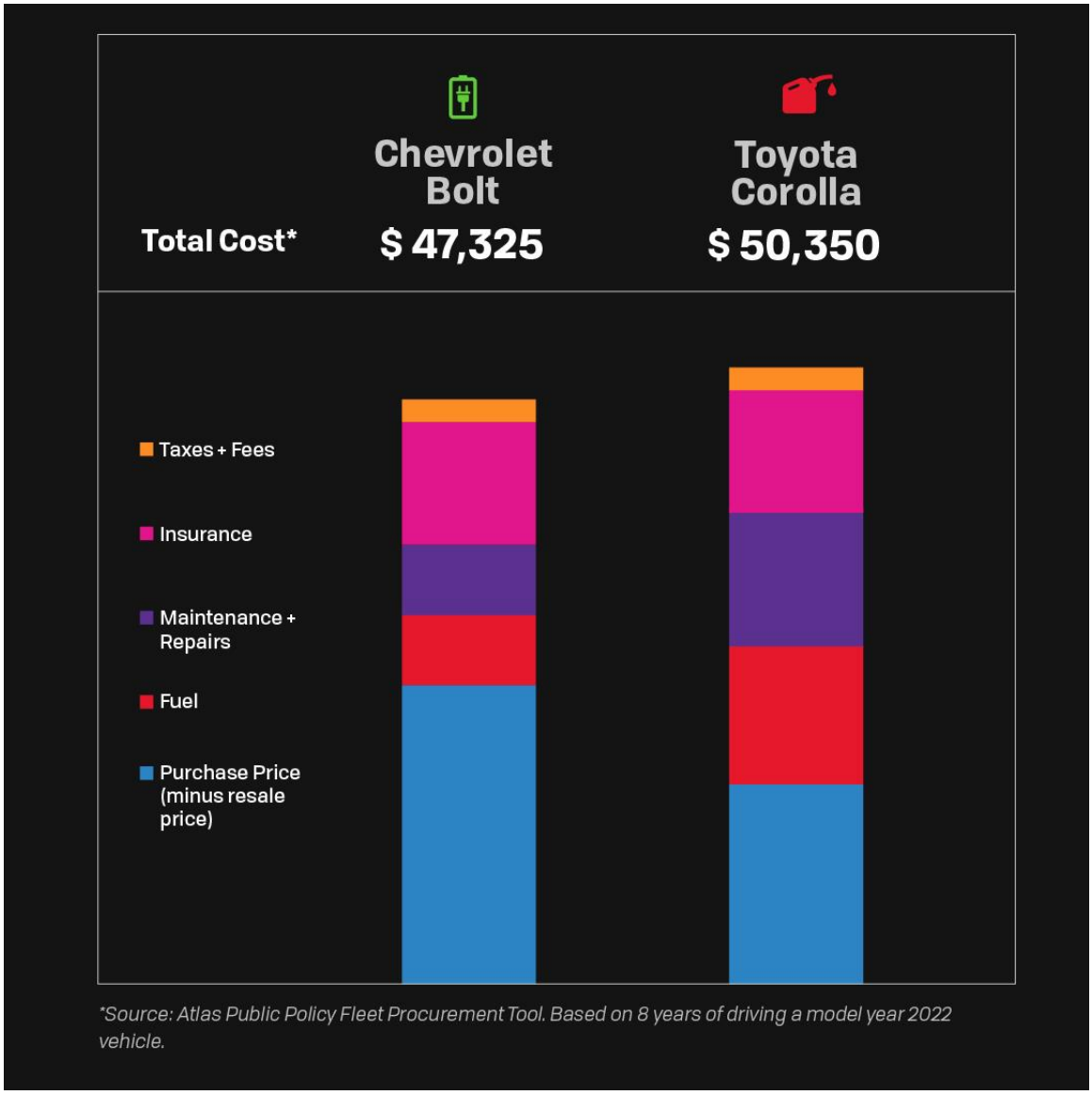
[2] Highest selling sedan over $40,000 in 2021.

[3] Highest selling SUV in 2021.

[4] Second highest selling pickup in 2021 and the most appropriate comparison vehicle for the F-150 Lightning.

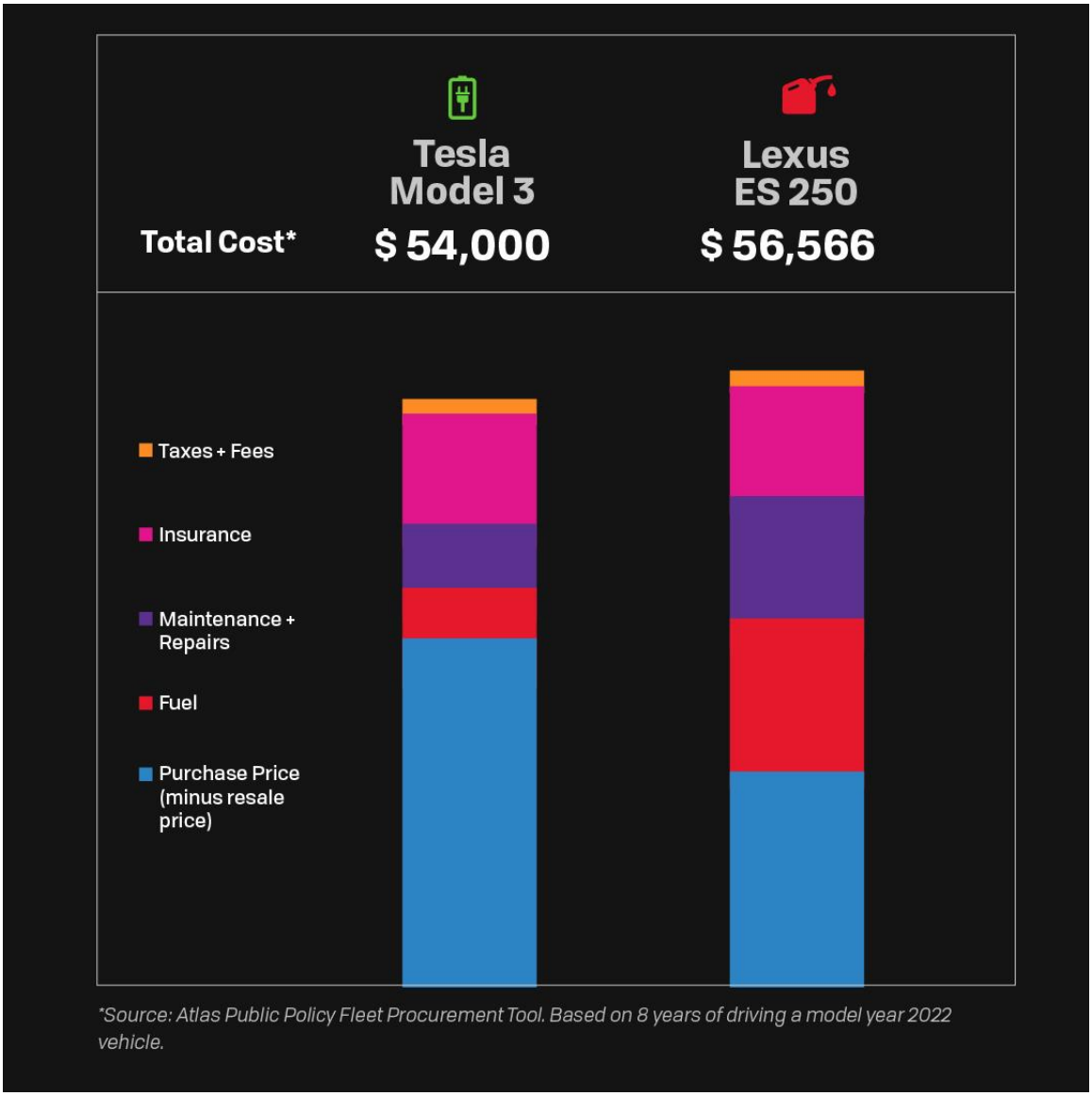
- Expected years of use was assumed to be eight years at an average of 15,000 miles driven per year.
- No charging equipment costs were factored into the calculation.
- No climate costs or benefits were factored into the calculation.

Low-cost sedan



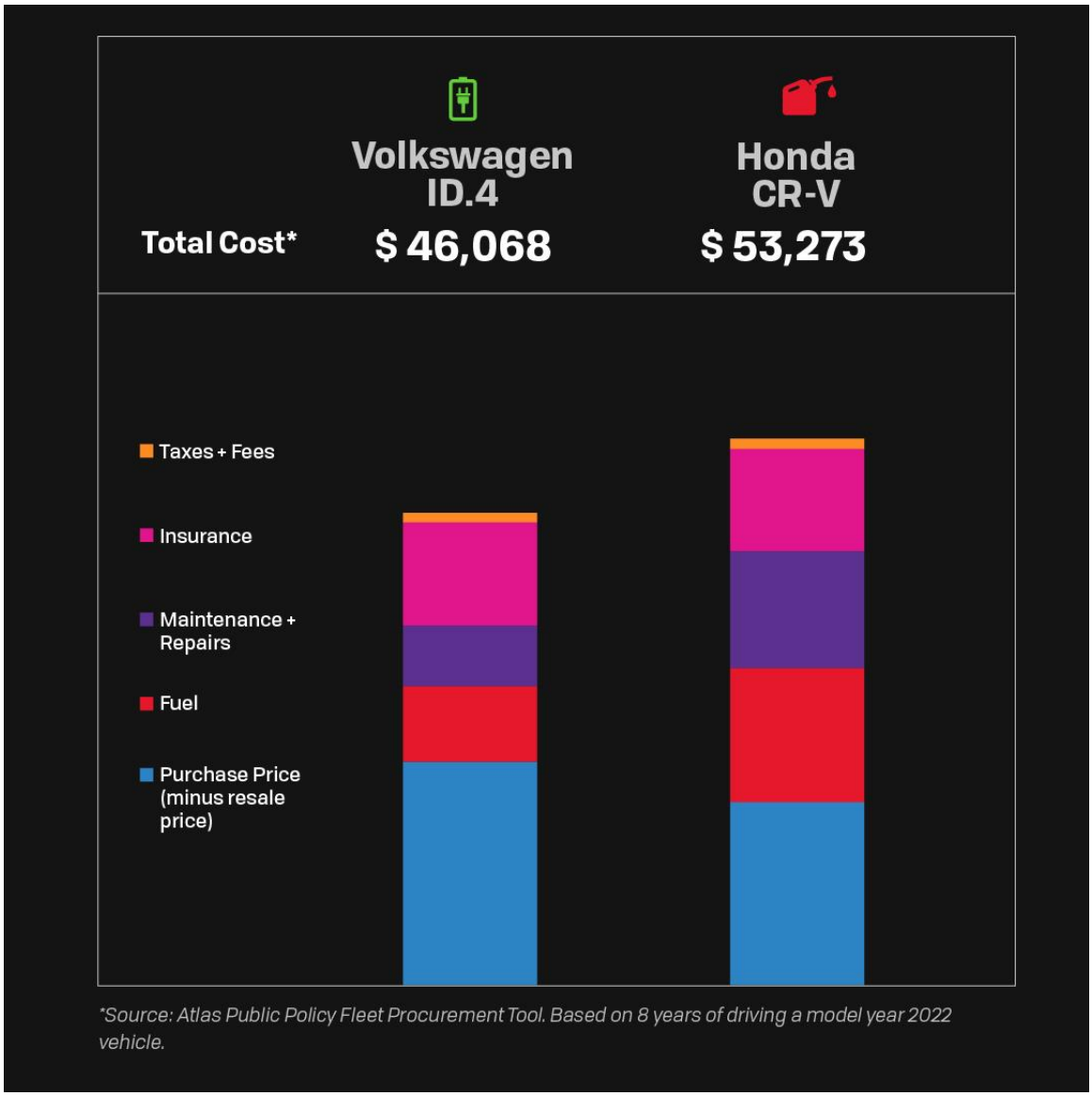
This analysis found that the Chevrolet Bolt is 6.4 percent less expensive than the Toyota Corolla.

Mid-cost sedan



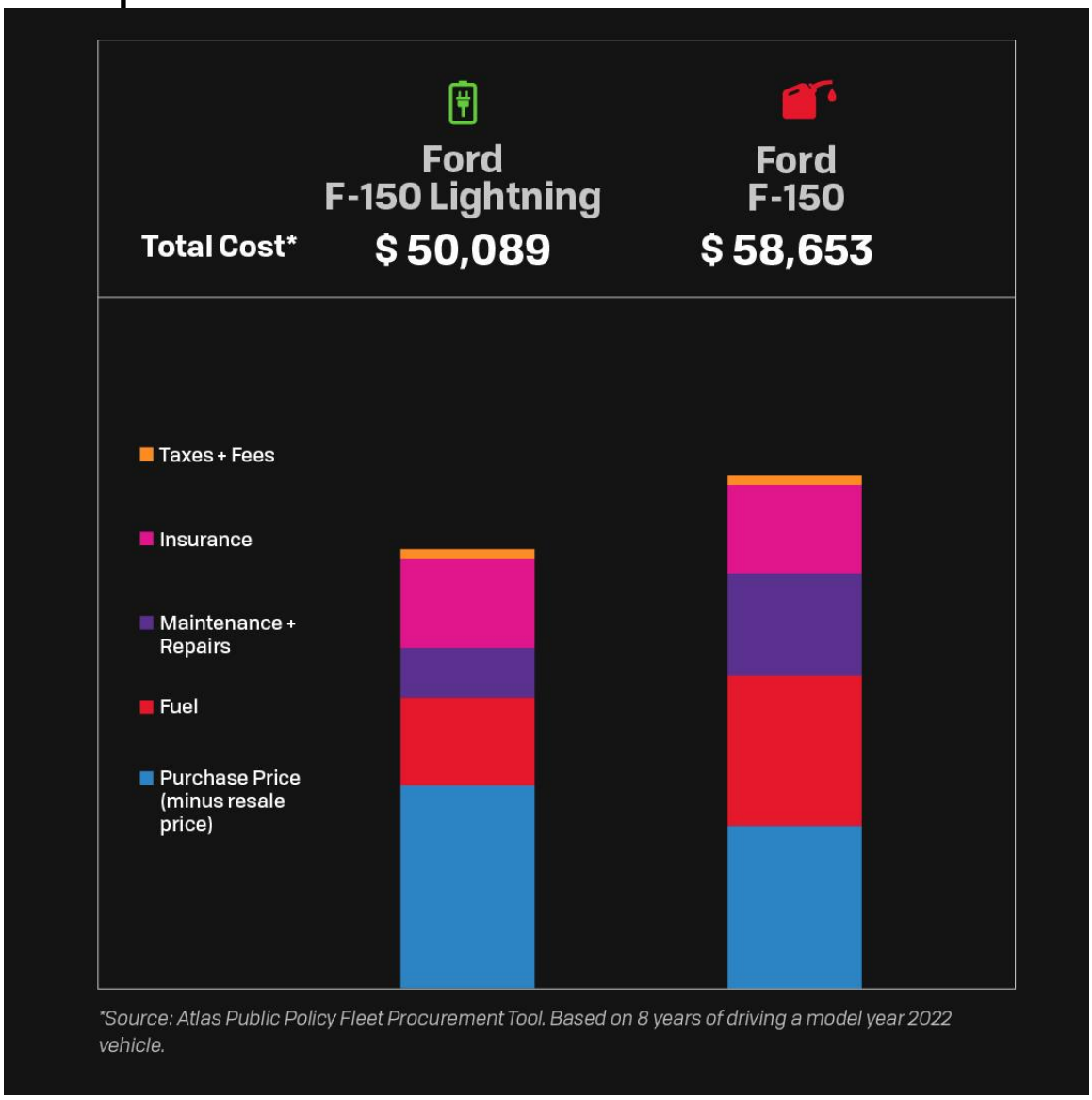
This analysis found that the Tesla Model 3 is 4.8 percent less expensive than the Lexus ES 250.

SUV



This analysis found that the Volkswagen ID.4 is 15.6 percent less expensive than the Honda CR-V.

Pickup



This analysis found that the Ford F-150 Lightning is 17.1 percent less expensive than the Ford F-150.

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