



Vehicle Total Cost of Ownership Comparisons

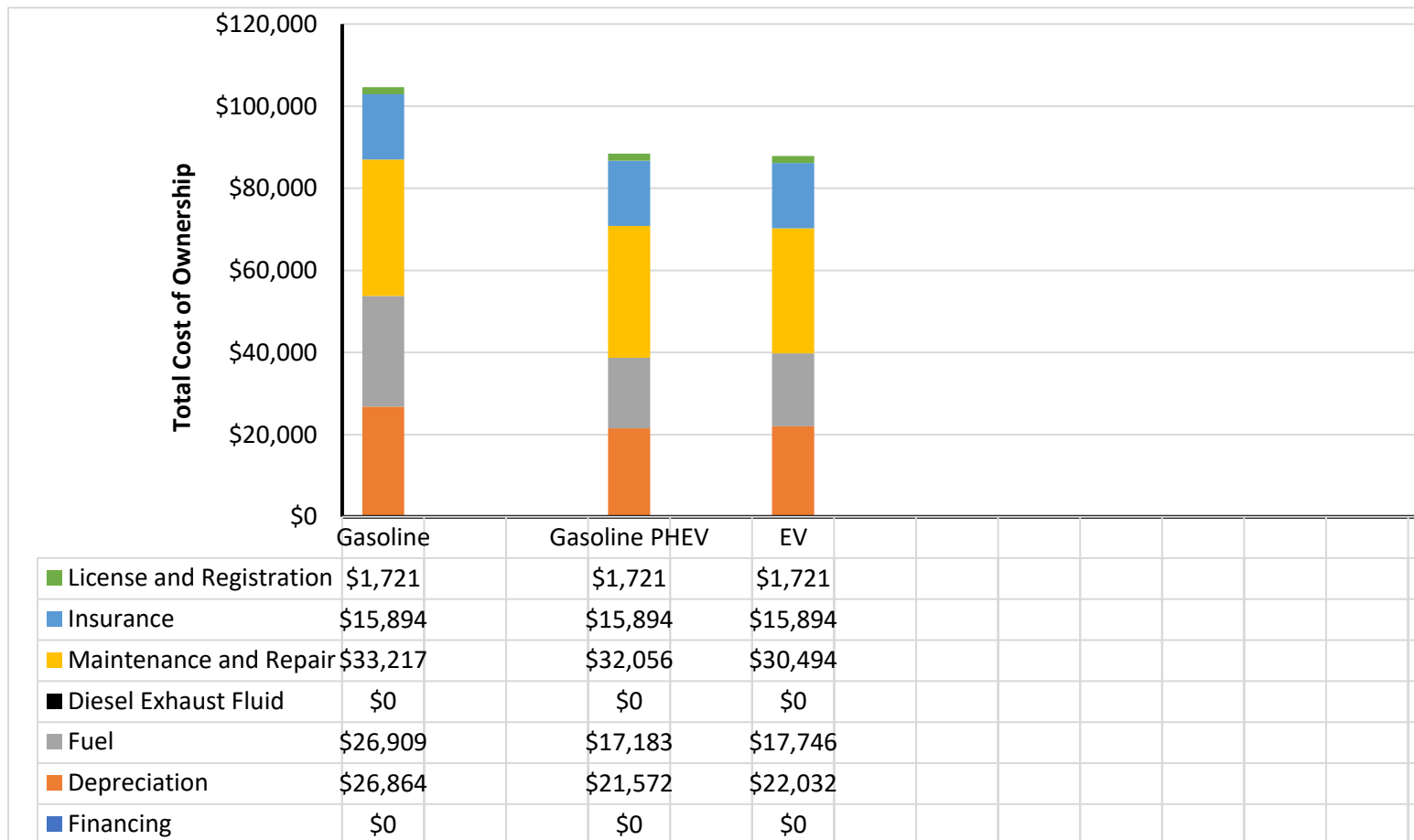
Total Cost of Ownership- F-150 (Gasoline) v. Prius Prime (PHEV) v. Nissan Leaf (EV)

Results

F-150: \$104,605

Prius Prime: \$88,426

Nissan Leaf: \$87,887





Vehicle Total Cost of Ownership Comparisons

Assumptions

State: Hawaii

County: Honolulu

Vehicle Type: Passenger Car

Three Vehicles for Comparison:

Light Duty Fuel Type: Gasoline (2020 Ford F-150)

Number of Vehicles: 1

Annual Vehicle Mileage: 10,000

Fuel Economy (MPGGE): 21

Purchase Price: \$28,745

Light Duty Fuel Type: Gasoline Plug-in Hybrid Electric Vehicle (PHEV) (2020 Prius Prime PHEV)

Number of Vehicles: 1

Annual Vehicle Mileage: 10,000

Fuel Economy (MPGGE): 133 MPGGE, 25 all-electric miles, 1.9 GGE/100 miles, 25 kwh/100 miles

Purchase Price: \$27,900

Federal Incentive: \$4,502

Light Duty Fuel Type: All-Electric Vehicle (PHEV) (2020 Nissan Leaf)

Number of Vehicles: 1

Annual Vehicle Mileage: 10,000

Fuel Economy (MPGGE): 99.0

Purchase Price: \$31,600

Federal Incentive: \$7,500

Fuel Prices

	Public Station (\$/fuel unit)	Private Station (\$/fuel unit)
Gasoline (gallon)	\$3.22	\$3.22
Diesel (gallon)	\$4.27	\$3.50
Electricity (kWh)	\$0.32	\$0.32

Years of Planned Ownership: 15 years

Financial Assumptions: No Loan



Vehicle Total Cost of Ownership Comparisons

Assumptions (cont'd)

Level of Analysis: Well-to-Wheels and Vehicle Production, Petroleum Use, GHGs, Air Pollutants

EV Chargers: Not built into analysis because they are shared infrastructure

Maintenance and repair of current vehicles: \$0.163/mile (\$.076/mile first year)

Maintenance and repair of PHEV: \$0.156/mile (\$.073/mile first year)

Maintenance and repair of BEV: \$0.146/mile (\$.070/mile first year)