

EV Fleet Calculator Ownership Comparison: BEV F-150 versus ICE F-150

Assumptions:	Ford F-150 F-150 Lightning		
Base Unit Cost	\$43,000	\$43,000	<----- Purchased demo vehicle under full warranty, with 3,900 miles
Less: Incentive		-\$7,500	
Net Price	\$43,000	\$35,500	
Miles per year	6,000	6,000	
Fuel Efficiency	19	2.6	
	miles per gallon	Miles per KWhr	
Fuel Cost	\$3.50	\$0.12	
	per Gallon	per KWhr	
Annual Fuel Cost	\$1,105	\$279	
Expected Life	17 years		<----- Trucks being replaced are 17 years old

Cumulative Cost of Ownership - 15 Year Analysis

	1	2	3	4	5	6	7	8	9	10
F-150 Lightning										
Acquisition	\$35,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance*	\$0	\$0	\$0	\$0	\$0	\$424	\$437	\$450	\$464	\$478
Fuel	<u>\$279</u>	<u>\$287</u>	<u>\$296</u>	<u>\$305</u>	<u>\$314</u>	<u>\$323</u>	<u>\$333</u>	<u>\$343</u>	<u>\$353</u>	<u>\$364</u>
Total	\$35,779	\$287	\$296	\$305	\$314	\$748	\$770	\$793	\$817	\$841
Cumulative	\$35,779	\$36,066	\$36,362	\$36,667	\$36,981	\$37,728	\$38,498	\$39,291	\$40,108	\$40,950
F-150 Standard										
Acquisition	\$43,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance*	\$100	\$100	\$100	\$100	\$100	\$703	\$724	\$745	\$768	\$791
Fuel	<u>\$1,105</u>	<u>\$1,138</u>	<u>\$1,173</u>	<u>\$1,208</u>	<u>\$1,244</u>	<u>\$1,281</u>	<u>\$1,320</u>	<u>\$1,359</u>	<u>\$1,400</u>	<u>\$1,442</u>
Total	\$44,205	\$1,238	\$1,273	\$1,308	\$1,344	\$1,984	\$2,043	\$2,105	\$2,168	\$2,233
Cumulative	\$44,205	\$45,444	\$46,716	\$48,024	\$49,368	\$51,352	\$53,395	\$55,500	\$57,668	\$59,900

* Maintenance costs based on 2021 Nickel Institute survey of long-term ownership costs showing costs of maintenance as \$0.101 per mile for ICE vs \$0.061 per mile for BE