



## Brawn and Brains: How Ford F-150 Lightning Software Accurately Estimates Range to Give Customers Confidence While Towing

- Ford equipped all-new 2022 Ford F-150<sup>®</sup> Lightning<sup>™</sup> electric pickup with smart technologies to more accurately calculate remaining vehicle range using real time conditions so customers can tow with greater confidence –the more it’s used, the more accurate it gets
- Cloud-connected Intelligent Range compares energy use with data from numerous sources, including Ford electric trucks that have towed on similar roads with similar trailers to more accurately update the battery range gauge on the digital cluster, even while driving
- FordPass<sup>™</sup> Power My Trip creates maps displaying convenient charging locations, while Trailer Profile remembers past trips and integrates them into Intelligent Range to automatically find charge points, if the system determines you’ll reach low range on your trip

**DEARBORN, Mich., May 2, 2022** – The all-new Ford F-150<sup>®</sup> Lightning<sup>™</sup> boasts the Built Ford Tough<sup>™</sup> brawn to tow up to an available 10,000 pounds\* with its 775 lb.-ft. of electric torque\*\*, but it’s the truck’s brains that will give customers the range information they need to tow long distances with the confidence they’re accustomed to.

Ford-exclusive technologies: Intelligent Range and FordPass<sup>™</sup> Power My Trip plus the available class-exclusive<sup>†</sup> Onboard Scales work seamlessly to give F-150 Lightning customers more accurate vehicle range estimates based on actual towing experiences and real-time energy use, while Trailer Profile remembers their trailer specifics so the system can associate energy use for each trailer used.

“We know many F-150 Lightning customers will be first-time electric vehicle owners who expect that familiar Built Ford Tough capability along with robust towing,” said Linda Zhang, chief engineer, F-150 Lightning. “That’s why we created smart technologies to help take the worry out of towing long distances by giving customers more reliable and accurate range calculations, and then automatically locate charge points along the way, if needed.”

### **Intelligent Range, the techno genie behind the scenes**

The magic that enables confident and rewarding towing experiences with F-150 Lightning is Ford-exclusive Intelligent Range, which is enhanced to work specifically with the needs of electric truck owners.

On F-150 Lightning, Intelligent Range collects key vehicle data to determine how much electrical energy drivers are using in real time. This includes traffic speed, ambient temperature, available battery energy, plus driver habits, climate control use and route topography. The system also uses cloud computing to gauge energy use from other similar types of Ford electric vehicles operating in similar situations, resulting in more accurate vehicle range calculations over time<sup>††</sup>.

With F-150 Lightning, Intelligent Range can also sample similar towing and energy use situations to further refine range calculations in real time. This happens automatically through available Ford Onboard Scales, which communicate with Intelligent Range. As range data improves and the system becomes more robust, the system can be further refined via Ford Power-Up over-the-air software updates.

“Whether you’re towing with a gas-powered or electric truck, range degradation as a percentage is basically the same – determined primarily by overall cargo and trailer weight at low speeds and by the aerodynamic profile at higher speeds,” said Zhang. “That’s why we expanded the capabilities of Intelligent Range on the F-150 Lightning with the available Onboard scales to also measure the load effects of trailers and cargo to further refine range calculations when towing.”

### **Power My Trip empowers long-distance towing**

Bringing a more confident electric towing experience to life is FordPass Power My Trip, the online mapping system where drivers can plan-out their trips. Customers simply in-put their trailer information into Trailer Profile, then enter their destination into the SYNC<sup>®</sup> 4/4A navigation system or on their smartphone via the FordPass app. Power My Trip automatically maps their towing route using Intelligent Range – and provides charge points along the way, if needed.

Should an F-150 Lightning customer need to stop for a charge along the way, they can access the Ford BlueOval<sup>™</sup> Charge Network, the nation’s largest public charging network with more than 20,500 charge locations and 70,000+ plugs across North America<sup>†</sup>. That includes more than 7,300 DC fast chargers, some that can deliver up to 150 kW of energy, giving an extended range F-150 Lightning from 15% to 80% of additional estimated battery range in 41 minutes when using the 150 kW Electrify America chargers<sup>‡‡</sup>.

Every F-150 Lightning customer will get a Ford Mobile Power cord charger, which gives them 120- or 240-volt AC charging with easy, portable charge connectivity wherever they go. Extended range F-150 Lightning customers will also receive an 80-amp Ford Charge Station Pro, which they can install at home or work. Standard range customers can purchase the Ford Charge Station Pro for \$1,310 MSRP plus tax.

“By giving customers the most accurate range assessments possible and the charge tools they need to tow reliably, we believe they’ll move past the myths about towing with an electric truck and embrace the value-added benefits F-150 Lightning provides,” said Zhang. “As they get accustomed to how Intelligent Range and Power My Trip work, they’ll naturally adjust their routines – whether that’s stopping for lunch and a DC fast charge or finding a route that simplifies their drive.”

To learn more about Ford electric vehicles and Ford intelligent charging, go to [Ford.com/trucks/f-150-lightning](https://Ford.com/trucks/f-150-lightning). Deliveries of the all-electric F-150 Lightning begin this spring.

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\* Torque calculated via peak performance of the electric motors at peak battery power. Your results may vary.

\*\* Max towing on XLT and LARIAT models with available extended-range battery and Max Trailer Tow Pkg. Max towing varies based on cargo, vehicle configuration, accessories and number of passengers. Towing and torque are independent attributes and may not be achieved simultaneously.

†Class is Full-Size Pickups under 8,500 lbs. GVWR.

†† Actual range varies with conditions such as external elements, driving behaviors, vehicle maintenance, lithium-ion battery age and state of health.

‡ Based on original equipment manufacturers (OEM)/automotive manufacturers that sell all-electric vehicles and have active charging networks. Department of Energy data used. FordPass™, compatible with select smartphone platforms, is available via a download. Message and data rates may apply.

‡‡ Range and charge time based on manufacturer computer engineering simulations and EPA-estimated range calculation methodology. The charging rate decreases as battery reaches full capacity. Your results may vary based on peak charging times and battery state of charge. Actual vehicle range varies with conditions such as external environment, vehicle use, vehicle maintenance, lithium-ion battery age, and state of health.

## About Ford Motor Company

*Ford Motor Company (NYSE: F) is a global company based in Dearborn, Michigan, that is committed to helping build a better world, where every person is free to move and pursue their dreams. The company's Ford+ plan for growth and value creation combines existing strengths, new capabilities and always-on relationships with customers to enrich experiences for and deepen the loyalty of those customers. Ford develops and delivers innovative, must-have Ford trucks, sport utility vehicles, commercial vans and cars and Lincoln luxury vehicles, as well as connected services. Additionally, Ford is establishing leadership positions in mobility solutions, including self-driving technology, and provides financial services through Ford Motor Credit Company. Ford employs about 182,000 people worldwide. More information about the company, its products and Ford Credit is available at [corporate.ford.com](http://corporate.ford.com).*