

## Roadmap to Revenue

As EV ownership ramps up, so does the need for charging infrastructure. That means plenty of major immediate and long-term business opportunities for electrical contractors.



If the electrical vehicle (EV) market can be described in a single word, it's "speed." Case in point: a DC fast charger (DCFC) has a charge rate of up to 350kW — enough to juice up a typical EV to 80% in as little as 20 minutes.

The only thing faster than DCFCs is the speed at which they're being deployed across North America. The research firm Wood Mackenzie expects the number to grow [more than sixtyfold through 2050](#). Level 2 chargers, which max out at 19kW, will increase thirtyfold in the same timeframe.

Speed also describes the growth of investments in public charging. Currently, there are 73 charging networks serving North America, with more on the way. That will mean plenty of new, long-term business opportunities for electrical contractors as charging operators seek help to build out their networks quickly and widely to stay ahead of demand.

Tesla and [Ford](#) are two examples of how some automakers are building out their own public charging networks, while others are partnering with charging infrastructure providers.

"For instance, General Motors partnered with EVgo to install 3,250 DCFCs in cities and suburbs," Wood Mackenzie says. "The company also announced plans to deploy 2,000 EVgo charging ports along Pilot and Flying J travel centers. In collaboration with ChargePoint and MN8 Energy, Mercedes has committed to installing over 2,500 charging ports at over 400 locations in North America."

Automakers are spending big on public charging to help assuage range anxiety, which consistently ranks as a top concern in surveys of both [existing](#) and potential EV buyers. But there's a host of additional business reasons, such as new revenue streams from selling charger-based services, starting with the electricity itself.

"Since the public EV charging space is highly fractionalized, EV automakers are aiming to own the customer relationship

after the point of sale and play a larger role in public EV charging,” [says Nick Esch](#), Wood Mackenzie research analyst, grid edge. “Many are taking on the e-mobility service provider role, facilitating payments and navigation to chargers while also curating charging networks for their customers through integrations with public charging networks.”



### A Charger in Every Parking Lot?

Even with DCFC, charging takes longer than fueling — a difference that creates revenue and market-differentiation opportunities for commercial real estate developers and their tenants. For example, by installing a bank of chargers in its parking lot, a shopping center could attract EV owners who want a convenient place to charge while getting groceries or lunch. For EV owners and prospective tenants alike, that shopping center also could be more attractive than one down the street that doesn't have chargers.

“Gas stations, quick service restaurants, and convenience stores with existing locations are in the early stages of deploying public charging infrastructure as they look to capitalize on their existing retail footprint, as well as EV adoption,” [says Amaiya Khardenavis](#), a Wood Mackenzie analyst who covers EV charging infrastructure. “The growth strategy of charging networks is focused on building their footprint in high-traffic locations, setting up roaming agreements with other networks, and installing high-power charging infrastructure to future-proof their sites.”

Residential developers and landlords also increasingly see chargers as a must-have to attract and retain tenants — including retirees. For example, many senior living communities are scrambling to meet demand from residents who expect to be able to charge more than just a golf cart.

“We used to get calls from people who wanted to cosmetically provide EV charging as an amenity,” Tracy Price, CEO and founder of Qmerit, which partners with electrical

contractors to provide charging station buildouts, [told EC&M](#). “They said, ‘We want to put two chargers out front.’ Now they're calling and saying, ‘We need 40.’ It's starting to be a requested feature as opposed to a nice-to-have.” Fleet owners such as trucking companies also will need big banks of chargers — both at their depots and along highways. For example, there are currently over 1,200 medium- and heavy-duty electric trucks in operation, with another 140,000 on order, [according to the American Trucking Associations](#). They'll need DCFC stations to charge their batteries quickly so they can get back on the road, which will drive revenue. That's a plus for electrical contractors because installing dozens of chargers at a single depot or truck stop is more lucrative and profitable than dozens of individual ones at single-family homes.

### Help Wanted

Electric utilities also are upgrading their generation, transmission and distribution infrastructure to stay ahead of the additional demand that EVs are producing. Like charging network providers, many electric utilities will look to electrical contractors to shoulder some of that work.

For example, at least \$13 billion worth of transmission line projects is planned or underway coast to coast, such as [the 800-mile Grain Belt Express that spans four Midwest states](#). And as impressive as that sounds, it's a mere 13% of the \$100 billion-plus that electric utilities, charging network operators, and other ecosystem members will spend on grid-to-charger hardware by 2030, [according to The Brattle Group](#). Many of them also will need help once it's installed to ensure that EV owners can depend on it for years to come, such as with maintenance and upgrades.

“As our industry is growing so quickly, we rely on our electrical contractor partners in those markets and throughout other markets in North America to complete our installation and commissioning, civil work, and maintenance services,” Terry O'Day, COO of In-Charge Energy, which provides engineering, O&M, and other services, [told EC&M](#).

For a deeper dive into these and other EV charging infrastructure trends, and the business opportunities they create for electrical contractors, check out this [“Ask The Expert”](#) Q&A with Matthew Young, EV Grid-to-Charger Leader at ABB.