



ELECTRIC VEHICLE CHARGING STATIONS:

Two or three Level 2 stations per site at multiple stores

LOCATION: Lake Placid, Latham, Niskayuna, Plattsburgh, Queensbury, Saratoga Springs, Slingerlands, and Warwick, NY

VENUE: Grocery store/supermarket; stations are available to all visitors and patrons

Charging Stations at Price Chopper Supermarkets

This project was initiated by an enthusiastic local planning board, which represented a progressive and inquisitive community. The board believed the technology could “come into the community and advance a green agenda and differentiate the community.” Price Chopper is seeking to build “the most densely networked electric vehicle (EV) charging station ecosystem on the East Coast, providing free charge to users until such a time as sustainable EV proliferation has been achieved.”

The EV charging stations were installed at different store locations starting in early 2014, with further installations planned. Their stores tend to be near transportation corridors and are typically spaced based on population density, which makes them logical locations to establish a network of charging stations. Price Chopper also has many shopping plaza locations that include other retail businesses, indicating an opportunity for shared charging strategies.

The stations are maintained by Price Chopper as they typically own and control their parking lots, giving the company the ability to test different priority strategies. For example, the chain has tried “new mom with baby” parking, as well as fuel-efficient vehicle (FEV) spaces. While Price Chopper received Leadership in Energy and Environmental Design (LEED) sustainable site credits for the FEV spaces, consumers pushed back against this initiative, stating that premium spots designated for Americans with Disabilities Act (ADA) and “new mom” patrons were already being underutilized. Nearly all parking at Price Chopper locations is provided free of charge in surface lots.

Lessons learned from this project included a better understanding of factors that effect the location, use, and benefits of charging station installations. Turnover rates in retail parking lots affect a store’s viability and profitability. The layout and dimensions of lots affect feasibility, and to a degree, a balance between long dwell times and higher turnover rates is weighed. Some stores feature cafes or bank locations, lengthening dwell time. Price Chopper felt their supermarket in Niskayuna could benefit from EV charging stations to differentiate them from competitors while bringing new development in a way that feels dynamic while embracing core community values. Price Chopper’s initial charging station installation design included a solar panel array to offset electricity usage and draw attention to the charging stations, but management ultimately decided that it was more valuable to install stations at more locations, which was more cost-effective without the solar panel array. Supermarkets are considered critical infrastructure by the Federal Emergency Management Agency, and as such, the agency requires that stores be regionally deployed in a strategic manner similar to fire stations. The regularity created by this designation, combined with the known location strategy/business model for the stores themselves, could make food stores key in placing accessible and visible EVSE in locations that relate to both population centers and transportation corridors.



New York State has a goal of having over 3,000 public and workplace charging stations statewide by 2018 through ChargeNY. New York State Energy Research and Development Authority (NYSERDA) supports several charging station projects across the State.