




MEMORANDUM

October 4, 2010

TO: Board of Mayor and Aldermen

FROM: Eric Stuckey, City Administrator 
Vernon Gerth, Assistant City Administrator – Community and Economic Development
Catherine Powers, Planning and Sustainability Director
Andrew Orr, Sustainability and Grant Coordinator

SUBJECT: Franklin and the Electric Vehicle Project

Purpose

The purpose of this memorandum is to provide information to the Board of Mayor and Aldermen (BOMA) regarding Franklin's participation in the Electric Vehicle (EV) Project.

Background

ECotality North America will deploy nearly 15,000 charging stations to support early adoption of electric vehicles in strategic markets in six states and the District of Columbia. The Knoxville, Chattanooga, and Nashville areas serve as the key markets within the State of Tennessee.

The EV Project will collect and analyze data to characterize vehicle use in diverse topographic and climatic conditions, evaluate the effectiveness of charging infrastructure, and conduct trials of various revenue systems for commercial and public charge infrastructure. The ultimate goal of The EV Project is to take the lessons learned from the deployment of these first 5,700 electric vehicles (EVs), and the charging infrastructure supporting them, to enable the streamlined deployment of the next 5,000,000 EVs.

The project area extends twenty-five miles in all directions from the Nashville Central Business District making Franklin a significant contributor to the project. Smaller cities along the I-24 and I-40 corridors will also host chargers to facilitate intra-city travel between Chattanooga, Knoxville, and Nashville. The project area will extend five miles from the central business districts of smaller cities.

The Nashville area will host several hundred electric chargers and can expect to have several hundred electric cars on the road by spring of 2011. Chargers will be located at large shopping centers, restaurants, parking structures, institutions, tourist destinations, park and rides, parks, and other places with high volumes of pedestrian and vehicular traffic where people will likely want to charge.

ECotality established an advisory board in the Nashville area to help plan for an electric vehicle charging infrastructure. The City of Franklin is represented on the Nashville Area Advisory Board. Through this partnership, city staff identified optimal charging locations within city limits during an interactive mapping exercise. The proposed list of optimal charging locations was established and sent to ECotality and Middle Tennessee Electric, also a project partner.

ECotality is currently seeking agreements with commercial, institutional, and municipal entities to serve as host sites. Widespread strategic outreach will commence in the near future.



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Implications for the City of Franklin

The Building and Neighborhood Services Department is aware of the project and prepared to respond to early adopters of electric vehicles. Electrical Contractors will need to pull a permit for home installation of electric vehicle chargers. The turnaround time for a residential permit and inspection will be swift, approximately 1-3 business days. Electrical Contractors will also need to submit plans for the installation of commercial chargers that show the location of chargers along with the requirements for the volts, amps, wire size, and any other requirement for the charging system. This process is expected to take approximately 2-3 weeks.

Furthermore, the City of Franklin will likely have the opportunity to participate and host Level II chargers on municipal property.

The EV Project presents an opportunity to support the market adoption of electric vehicles by strategically providing a charging infrastructure for EV owners. In 2009, the community recognized the benefits of alternative fueled vehicles. The Alternative Fuel and Energy committee set forth the following action in the Sustainable Community Action Plan:

“Replace five percent of the vehicles registered in the City of Franklin with vehicles that use alternative energy sources by 2012.”

Financial Impact

All installations will be overseen by ECOTality and grant funded (up to a certain amount per installation). The Department of Energy will own, operate, and maintain all chargers until December 2012. After this date, all ownership, operation, and maintenance will be the responsibility of the property owner. The City of Franklin will likely have the opportunity to participate and host Level II chargers on municipal property. Minimal, if any capital outlay is expected to install chargers on City property. However, the long-term ownership costs of the charging station are currently unknown.

Recommendation

This memo is informational only with the expectation that the City of Franklin will likely have an opportunity to host chargers on municipal property. The City would likely not pay for the installation of charging infrastructure, but in this event, the Board of Mayor and Aldermen will need to approve the installation of the infrastructure. Electric vehicle charging stations have been proposed in the 4th Ave and 2nd Ave parking garages in downtown Franklin and also in Jim Warren Park and Aspen Grove Park. Additionally, several charging stations will be installed throughout the community on commercial property.