AFV Charging / Fueling Information

**HOW COULD THIS HELP?**

- Informs drivers of electric/alternative fuel vehicles as to locations and availability of fueling/charging

**HOW DOES THIS WORK?**

- An application informs travelers of locations and availability of alternative fuel vehicle charging and fueling stations and inductive/resonance charging infrastructure, thereby alleviating “range anxiety.”

**INVESTMENT**

- V2X ROADSIDE UNIT COST PER MILE-FREeways
  - $52,000
- V2X ROADSIDE UNIT COST PER INTERSECTION-SIGNALIZED CORRIDORS
  - $26,000
- V2X SIGNAL CONTROLLER COST PER INTERSECTION-SIGNALIZED CORRIDORS
  - $10,000
- FIBER OPTICS COST PER MILE
  - $158,000

**TRANSPORTATION NEEDS AddressED**

- ENVIRONMENT
  - V2I

**SOLUTION IMPROVEMENTS**

- Electric vehicles experiencing short range
- Excessive emissions
- Excessive electricity consumption

**SOLUTION PITFALLS**

- Inductive charging technology still emerging and not mainstream

Disclaimer: all content is for planning purposes only and published as of Summer 2020. Contact the author at shacav@mdot.maryland.gov with any questions or comments.