



EV charging infrastructure upgrade - rural communities

Chestertown MD
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Outline

- Types of Charging Equipment
- Where EV's are charged
- Revenue Model
- Funding
- Where to place
- How to place
- Lessons learned
- Questions?

Types of EV chargers

J1772 & CCS - non Tesla or CHAdeMO



Where EV's are charged

typical locations

- 80% at home
 - Level 1 & 2
- 30% at work
 - Level 2
- road trips - enroute & return
 - Level 3 DCFC
- Target Destination Travelers
 - Level 2 and DCFC

Revenue Model

Selling Electricity

- EV owners
 - do not expect free charging
 - require reliable charging equipment
 - expect CC transactions or via an app
 - are knowledgeable about types of revenue collection
 - will share experiences both good and bad
- Fee Structure
 - connect fee
 - parking fee
 - rate per kWh or by the minute
 - CC or app or RFID

Funding

Infrastructure Development

- Grant money available \$\$\$
 - federal - many agencies
 - state - many agencies
 - county - tourism
 - utility provider - turn key
 - equipment providers - rebates
- resources to request funding, project manage and monitor operations ???
- ongoing maintenance - Royal Farms disaster
- outsource is the option that Chestertown adopted

Where to place

physical location

- municipal parking lots, park n ride
 - Chestertown, Easton & Stevensville
 - visitors center
 - marinas
 - include EV chargers in local codes
- developers - malls & business parks
- private business
- college campus
- walking distance to venues
- NOT premium parking spots

How to place

outsource

- 1st stop - local utility provider (Delmarva, Pepco, Choptank, etc)
 - Betterton Beach & Delmarva
 - Centreville & Shell
- partner with equipment providers
 - ChargePoint & EVGo
 - NOT ElectrifyAmerica (Walmarts)
- Electric Vehicle Institute of MD
 - local 501.3.c full service provider
 - after market support

Lessons Learned

the hard way!

- site considerations
 - walkable to venues
 - adequate lighting
 - obvious security (CCTV)
 - clear signage and parking orientation
 - \$100 non compliance enforcement
 - ICE'd definition
- promote charging locations on PlugShare

Questions?

- Chestertown locations

