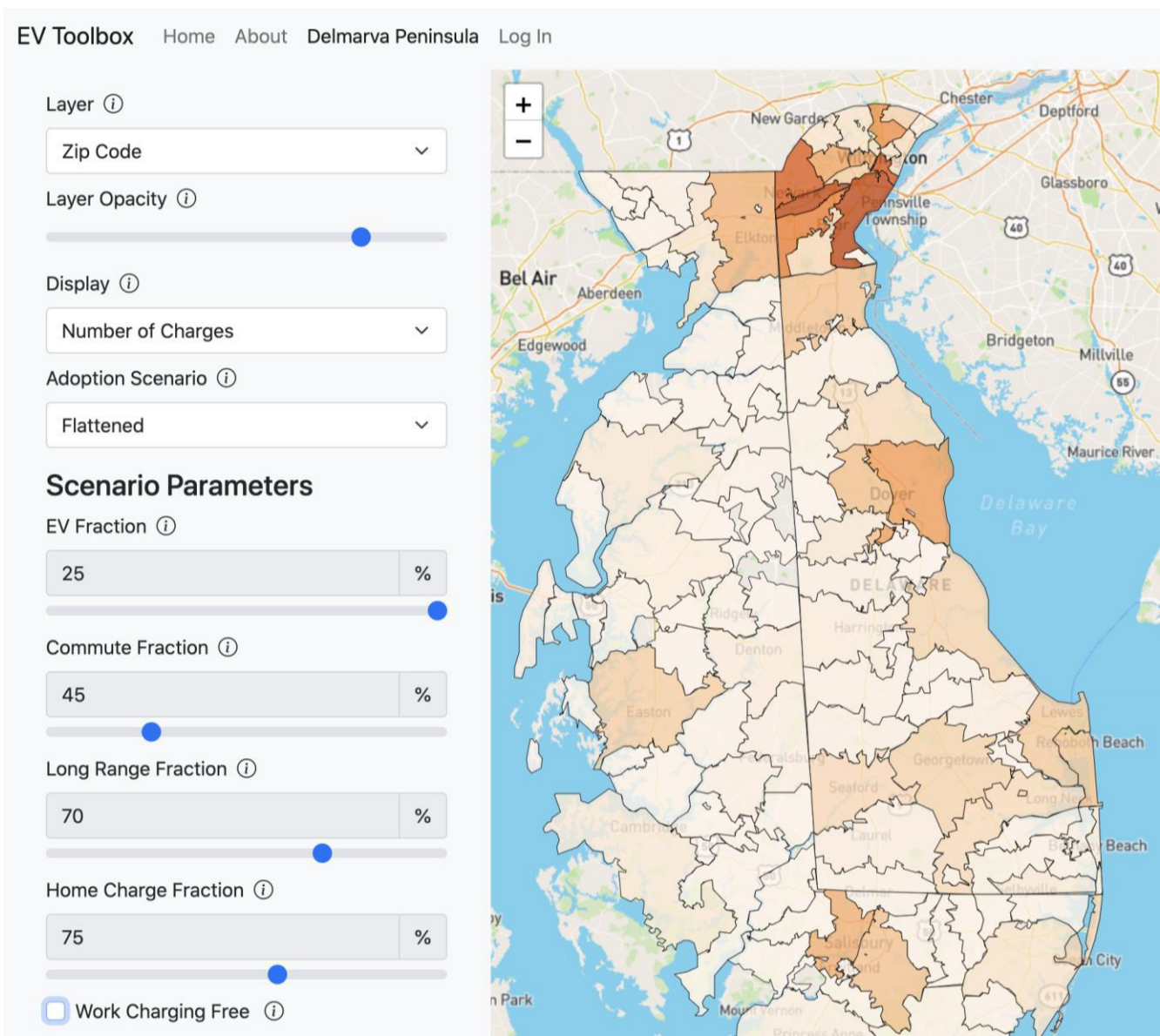


Background / Interface

The UC Davis – NRECA EV Toolbox is an interactive web tool for modeling EV adoption and charging. The toolbox is designed to help rural electrical utilities prepare for the expansion of EV ownership.

EV adoption and charging models are built on census / ACS data, making it easy to develop similar tools for other areas of the US.

Scenarios can be developed at range of spatial scales and exported as .csv files for use with other infrastructure planning tools.



Default scenarios provide baseline values, but users can adjust scenario variables freely

Variable	Low	Medium	High
EV Fraction	2%	10%	25%
Commute Vehicles	60%	55%	45%
Long Range BEVs	40%	50%	70%
Home Charge Access	95%	85%	75%
Work Charging Free	Yes	No	No
Matches California in...	~2017	~2025	~2030

ZIP Code-level Adoption Scenario for Delaware

Adoption Scenarios

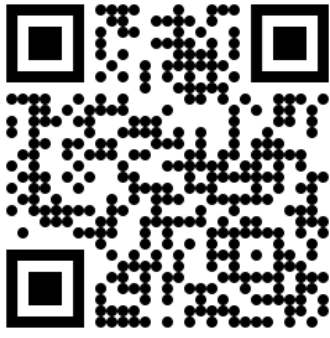
Current EVs primarily used for commuting, expanding range of vehicle types will change this. Long range BEVs charge less frequently than early BEV models. EV adoption has been fastest among households that can easily install chargers. Many workplaces currently provide free access to charging.

Next Steps

- Continue to incorporate results from household-level models into planning tool.
- Detailed charging estimates, broken down into more location types.
- Multi-state adoption and charging model for states with EV sales mandates.



Delmarva



California
(in development)