ALTERNATIVE FUELS CORRIDOR

Helpful Tools for Alternative Fuel Corridor Planning

Electric Vehicle Infrastructure Projection Tool (EVI-Pro) Lite, National Renewable Energy Lab (NREL) and California Energy Commission (CEC)

EVI-Pro Lite is an online tool for projecting consumer demand for electric vehicle (EV) charging infrastructure. The EVI-Pro Lite tool uses simulations to predict the type and quantity of charging infrastructure required to support different levels of EV adoption. Simulations use data on charging station characteristics, EV attributes, and personal vehicle travel patterns. The EVI-Pro Lite tool gives users the option to change assumptions about vehicle mix and electricity needs, and provides planners with suggested infrastructure priorities. The EVI-Pro Lite tool was developed through a collaboration between NREL



and CEC, with support from the U.S. Department of Energy's (DOE) Vehicle Technologies Office. <u>Link: https://www.afdc.energy.gov/evi-pro-lite</u>



Alternative Fuels Data Center Station Locator, U.S. Department of Energy

The U.S. DOE Alternative Fuels Data Center hosts an Alternative Fueling Station Locator on its website that allows users to enter their postal code to find the nearest alternative fueling station. This tool also allows users to map a travel route, or to filter by fuel type. The Alternative Fueling Station Locator provides downloadable data and results.

Link: https://www.afdc.energy.gov/stations/#/find/nearest

Alternative Fuel Toolkit, Federal Highway Administration (FHWA)

The Alternative Fuel Toolkit is an online platform designed to help state Departments of Transportation (DOTs) learn more about alternative fuels, plan alternative fuel vehicle infrastructure and explore funding sources, and take action to deploy alternative fuels and vehicles using an online action guide, set of facilitation materials, and other resources. The website is the result of an effort led by the Oregon DOT and FHWA, and supported by nine other state DOTs. Link: http://altfueltoolkit.org/



U.S. Department of Transportation Federal Highway Administration











Collablocation, University of Arizona and Arizona State University

Rolling out alternative fuel stations is never a "onesize-fits-all" exercise. Acknowledging this reality, Collablocation is an online, open-source "geodesign" platform that allows multiple stakeholders (e.g., workshop attendees) to collaboratively and iteratively design a refueling station network. Developed by Arizona State University and the University of Arizona, this tool is currently only available for the Southwest United States, but developers have plans for enlarging the platform to a nation-level.

Link: https://collablocation.shinyapps.io/home/

EV Explorer, University of California Davis (UC Davis)

The EV Explorer is an online program designed by UC Davis to help users compare fuel costs of any type of gasoline or plug-in EV. The primary inputs for this tool are a vehicle's destination and frequency of travel, with annual costs produced as an output. The tool allows commuters to compare annual fuel costs based on their own specific geographic location, and allows for customization based on user preferences, with several other input options including regional prices of gasoline and electricity, duration of charging, and the level of charging power, among others.

Link: https://phev.ucdavis.edu/project/ev-explorer/





EV Emissions Tool, Union of Concerned Scientists

This EV Emissions Tool, developed by the Union of Concerned Scientists, is designed to allow users to compare greenhouse gas emissions from gasoline-only vehicles to those of plug-in hybrid electric vehicles and battery electric vehicles. This simple tool calculates grams of carbon dioxide (CO₂)equivalent per mile of travel, comparing across the vehicle types using four inputs: a

user's zip code, and the make, model, and year of the user's car. Link: https://www.ucsusa.org/clean-vehicles/electric-vehicles/ev-emissions-tool#.WwVvgO4vztQ

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