

## 2019 EV infrastructure and purchase choice survey Dataset

Dataset available at: <https://doi.org/10.7910/DVN/MOT6PN>

(This dataset supports report **Effects of Charging Infrastructure Characteristics on Electric Vehicle Preferences of New and Used Car Buyers in the United States**, <https://doi.org/10.1177/0361198120952792>)

This U.S. Department of Transportation-funded dataset is preserved by the Pacific Northwest Transportation Consortium (PacTrans) in the digital repository Harvard Dataverse (<https://dataverse.harvard.edu>), and is available at <https://doi.org/10.7910/DVN/MOT6PN>

The related final report **Effects of Charging Infrastructure Characteristics on Electric Vehicle Preferences of New and Used Car Buyers in the United States**, is available from the National Transportation Library's Digital Repository at <https://rosap.ntl.bts.gov/view/dot/59895>.

### Metadata from the Harvard Dataverse Repository record:

Dataset Persistent ID: doi:10.7910/DVN/MOT6PN

Publication Date: 2020-07-15

Title: 2019 EV infrastructure and purchase choice survey

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Description: This dataset contains results from a stated choice experiment set in a context where respondents are buying their next personal car. Before the choice experiment, respondents answered questions about their socio-economic background and were asked about their preferences for a new car or a used car for next car purchase, and then were directed to scenarios of new car options or used car options accordingly. The choice tasks were generated using an orthogonal design with 240 fractional factorial scenarios extracted from the full factorial combinations. Each respondent was randomly assigned to 6 of the 240 tasks. Each task provided two purchase options: a conventional car powered by gasoline; and an electric version of the conventional car, which runs solely on electricity but is otherwise identical to the conventional car. Key attributes that varied between choice tasks were purchase price, driving range, walking distance of the nearest slow charging options from home and to work, fast charging time, fast charging availability in town, and fast charging availability on highway. The gasoline car option is the reference alternative with all attribute levels fixed throughout the entire experiment. The survey was designed and implemented in SurveyMonkey, an online survey platform, and respondents were recruited and paid through Amazon Mechanical Turk (MTurk). Respondents were recruited from among car owners who have completed at least 100 tasks on MTurk with a minimum 95% acceptance rate. (2019-07-09)

Subject: Engineering; Social Sciences

Keyword: Transportation, Economics, Discreet choice, Electric vehicle, Charging infrastructure, Used Car Market,

Related Publication: Zou, Tianqi, Moein Khaloee, and Don MacKenzie. "Effects of Charging Infrastructure Characteristics on Electric Vehicle Preferences of US Private Car Owners: A Comparative Analysis between New and Used Car Buyers." TRB Paper No. 20-05154, Transportation Research Board 99th Annual Meeting. Washington, DC. January, 2020.

Notes: Given that (1) consumer choice surveys from the 1970s continue to be of interest today (2020), for understanding how preferences have evolved over time; and (2) the modest size of this data set; it is recommended that these data be retained indefinitely.

<http://hdl.handle.net/1773/45596>

Depositor: Yarbrough, Christina

Deposit Date: 2020-07-15

**Recommended citation:**

MacKenzie, Don, 2020, "2019 EV infrastructure and purchase choice survey", <https://doi.org/10.7910/DVN/MOT6PN>, Harvard Dataverse, V2

**Dataset description:**

This dataset contains 1 file collection, described below.

**Effects of Charging Infrastructure Characteristics on Electric Vehicle\_Data.zip**

- Dictionary - 2019 EV infrastructure and purchase choice survey data.xlsx
- Data - 2019 EV infrastructure and purchase choice survey.csv

File Type Descriptions:

- The .xlsx and .xls file types are Microsoft Excel files, which can be opened with Excel, and other free available software, such as OpenRefine.
- The .csv, Comma Separated Value, file is a simple format that is designed for a database table and supported by many applications. The .csv file is often used for moving tabular data between two different computer programs, due to its open format. The most common software used to open .csv files are Microsoft Excel and RecordEditor, (for more information on .csv files and software, please visit <https://www.file-extensions.org/csv-file-extension>).

**National Transportation Library (NTL) Curation Note:**

As this dataset is preserved in a repository outside U.S. DOT control, as allowed by the U.S. DOT's Public Access Plan (<https://doi.org/10.21949/1503647>) Section 7.4.2 Data, the NTL staff has performed **NO** additional curation actions on this dataset. NTL staff last accessed this dataset at <https://doi.org/10.7910/DVN/MOT6PN> on 2022-05-04 If, in the future, you have trouble accessing this dataset at the host repository, please email [NTLDataCurator@dot.gov](mailto:NTLDataCurator@dot.gov) describing your problem. NTL staff will do its best to assist you at that time.