Evaluation of Managed Lane Facilities in a Connected Vehicle Environment Dataset

Dataset available at: https://doi.org/10.7910/DVN/8QHMOF

(This dataset supports report **Evaluation of Managed Lane Facilities in a Connected Vehicle Environment**, <u>http://safersim.nads-sc.uiowa.edu/final_reports/UCF%203%20Y2%20report.pdf</u>)</u>

This U.S. Department of Transportation-funded dataset is preserved by the SAFER-SIM University Transportation Center in the Harvard Dataverse Repository (https://dataverse.harvard.edu/), and is available at https://doi.org/10.7910/DVN/8QHMOF

The related final report **Evaluation of Managed Lane Facilities in a Connected Vehicle Environment**, is available from the National Transportation Library's Digital Repository at https://rosap.ntl.bts.gov/view/dot/43803

Metadata from the Harvard Dataverse Repository record:

Dataset Persistent ID: doi:10.7910/DVN/8QHMOF Publication Date: 2019-09-10 Title: Evaluation of Managed Lane Facilities in a Connected Vehicle Environment Author:

- Abdel-Aty, Mohamed (University of Central Florida) ORCID: https://orcid.org/0000-0002-4838-1573
- Wu, Yina (University of Central Florida) ORCID: https://orcid.org/0000-0001-6516-8144
- Saad, Moatz (University of Central Florida) ORCID: http://orcid.org/0000-0003-1760-5711
- Rahman, Md. Sharikur (University of Central Florida) ORCID: https://orcid.org/0000-0001-7623-5437 Contact: Mohamed Abdel-Aty (University of Central Florida)

Description: The main objective of this study was to investigate the effect of different CV lane configurations and various market penetration rates on the safety and operation of the MLs network. Additionally, work will be done for studying the lower levels of automated vehicles (Level 1/Level 2) in a CV environment in the MLs network and determining the optimal market penetration rates of automated vehicle in the network under CV environment. This ongoing project is composed of four sections. Chapter 2 provides a brief review of previous studies related to connected and automated vehicles. Chapter 3 describes the microsimulation process for the studied corridor, which mainly included network building, calibration and validation, and CV scenario design. It also presents results and findings. Chapter 4 provides a description of the impact of dedicated lanes for CV platooning on expressways. (2019-08-01) Subject: Engineering Depositor: Heiden, Jacob Deposit Date: 2019-09-10

Recommended citation:

Abdel-Aty, Mohamed; Wu, Yina; Saad, Moatz; Rahman, Md. Sharikur, 2019, "EVALUATION OF MANAGED LANE FACILITIES IN A CONNECTED VEHICLE ENVIRONMENT", <u>https://doi.org/10.7910/DVN/8QHMOF</u>, Harvard Dataverse, V1

Dataset description:

This dataset contains 1 .xlsx file described below.

SaferSlm Data_Managed lane.xlsx:

The .xlsx file is a Microsoft Excel file, which can be opened with Excel, and other free available software, such as OpenRefine

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 (<u>https://ntl.bts.gov/public-access</u>) Section 7.4.2 Data, the NTL staff has performed *NO* additional curation actions on this dataset. NTL staff last accessed this dataset at <u>https://doi.org/10.7910/DVN/8QHMOF</u> on 2020-02-06. If, in the future, you have trouble accessing this dataset at the host repository, please email NTLDataCurator@dot.gov describing your problem. NTL staff will do its best to assist you at that time.