

The Impacts of Increased Adverse Weather Events on Freight Movement Dataset

Dataset available at: <https://doi.org/10.5281/zenodo.4273248>

(This dataset supports report **The Impacts of Increased Adverse Weather Events on Freight Movement**, <https://doi.org/10.5281/zenodo.4273246>)

This U.S. Department of Transportation-funded dataset is preserved in the Zenodo Repository (<https://zenodo.org/>), and is available at <https://doi.org/10.5281/zenodo.4273248>

The related final report **The Impacts of Increased Adverse Weather Events on Freight Movement**, is available from the National Transportation Library's Digital Repository at <https://rosap.ntl.bts.gov/view/dot/58944>.

Metadata from the Zenodo Repository record:

Title: The Impacts of Increased Adverse Weather Events on Freight Movement

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Description: Freight transportation is a major economic backbone of the United States and is vital to sustaining the nation's economic growth. Ports, as one of the primary components of freight transportation and important means of integrating into the global economic system, have experienced significant growth and increased capacity during the past two decades. The study addresses an important national freight mobility goal to enhance the resilience of the port transportation operations in the event of extreme weather events. This study develops an adaptable resilience assessment framework that evaluates the impact of a disruptive event on transportation operations. The framework identifies dynamic performance levels over an extended period of an event including five distinct phases of responses- staging, reduction, peak, restoration, and overloading. This study applies the framework to the port complex in Houston, Texas, during a major hurricane event, Harvey, and two holiday events in 2017. The framework evaluates proactive and reactive responses of port truck activities during the disruptions and provides a comprehensive assessment of resilience and adaptability in port truck operations. Evaluating response systems and resilience of port truck activities during severe weather events such as Hurricane Harvey represents the first step for designing plans that support a fast system recovery that minimizes the economic, social, and human impacts.

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Keywords: Freight transportation, Resilience, Ports, Hurricane Harvey, Performance Measures

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Dataset description:

This dataset contains 1 file described below.

19ITSUTA02_Data.xlsx:

The .xlsx and .xls file types are Microsoft Excel files, 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 (<https://ntl.bts.gov/public-access>) 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/10.5281/zenodo.4273248> on 2022-05-10. 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.