

[Insert Project Title]

Data Management Plan Template

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Data Management Plan Template

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Instructions

Please see the Data Management Plan Instructions document for detailed instructions on how to fill out this template.

Provide a Project Title and date in the red fields on the title page of this document. Fill out all sections and elements in the Data Management Plan (DMP) Template below. Samples of elements may be provided in italics below. Please delete these examples before submitting your DMP.

**The “Urban Connected Vehicle (CV) Demo” project and “Urban Institute of Transportation Planning (UITP)” are fictional and were created as an example for how to complete this document. Some of the information found in this template is adapted from Tampa CV Pilot’s DMP.*

1. Project Overview

Project Title	Project Goals and Objectives	Project Description	Project Lifecycle Phase	Project Performance Measurements
<i>Urban Connected Vehicle (CV) Demo*</i>	<i>This research project is designed to determine what transportation safety, efficiency, cost reduction and other benefits can result from CV technology. This objective aligns with the U.S. DOT’s Intelligent Transportation Systems (ITS) Joint Program Office (JPO) mission to “[c]onduct research, development, and education activities to facilitate the adoption of information and communication technology to enable society to move more safely and efficiently.”¹</i>	<i>The Urban Institute of Transportation Planning (UITP) and its partners are featuring innovative connected vehicle technology in several urban areas across the country.</i> <i>A vehicle equipped with connected vehicle technology communicates wirelessly to other vehicles, traffic signals, crosswalks and other smart city technology. This wireless communication can prevent crashes, improve traffic flows and reduce travel times.</i>	<i>Post-Award</i>	<i>Performance measurements include improvements observed from mobility performance measures such as time at red lights, queue length, and average delay for auto mode. See the Performance Measurement and Evaluation Support Plan document for more details.</i>

1.1 Change Control

<Insert>

¹ <https://www.its.dot.gov/about.htm>

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1.2 Relevant Documents

<Insert>

2. Data Overview

ID	Dataset Title	Description	Type / Scale	Collection Method	Data File Format(s)
ORCHID ID Number - https://orcid.org/000-0001-2345-6789	Urban Connected Vehicle (CV) Demo Basic Safety Message (BSM)	This data consists of Basic Safety Messages (BSMs) generated by participant vehicles onboard units (OBU) and transmitted to road-side units (RSU) located throughout the Project Study areas.	Numerical data, text sequences, positional data (e.g. latitude and longitude)	Observed, experimental data automatically collected through OBUs and RSUs	Newline json

3. Data Stewardship

3.1 Data Owner and Steward

Dataset Title	Data Owner	Data Steward	Federal Sponsor
Urban Connected Vehicle (CV) Demo BSM	U.S. DOT	Urban Institute of Transportation Planning (UITP)	Kate Hartman

3.2 Access Level

3.2.1 Can all data from this project be shared with the public or is controlled-access required for at least some of the data?

☐ All Public Access ☐ Some/All Controlled-Access

3.2.2 Datasets Requiring Controlled-Access

This section is required if "Controlled-Access" is selected above.

Dataset Title	Reason(s) for Controlled-Access	Safeguarding Methods and Processes
Urban Connected Vehicle (CV) Demo BSM	License plate images from the data are considered personally identifiable information (PII), and access to license plate numbers must	The license plate images will be blurred before making the data accessible. The full dataset will be held in an ITS JPO secure data system (e.g. the Secure Data Commons), and a redacted version of the data with the blurred license plate images removed will be made publicly available. Sharing data containing the license plate images poses

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	<i>be restricted to protect the confidentiality of car drivers.</i>	<i>privacy and confidentiality concerns, as this information can be used to identify individuals, which is not the purpose of this research project and violates the privacy of the car drivers.</i>

3.2.3 Informed Consent

<Insert>

3.2.4 Access Requests

<Insert>

3.2.5 Related Tools, Software and/or Code

<Insert>

3.2.6 Relevant Privacy and/or Security Agreements

<Insert>

3.3 Re-Use, Redistribution, and Derivative Products Policies

This section is required for all anticipated datasets of the project.

Dataset Title	License Used	Reason(s) for Non-Open License
<i>Urban Connected Vehicle (CV) Demo BSM</i>	Creative Commons Zero (CC0) 1.0 Universal	N/A

3.4 Data Storage and Retention

3.4.1 Storage Systems

Data Storage System Name	Data Storage System Type	Dataset Title(s)	Initial Storage Date	Frequency of Update	Archiving and Preservation Period
Data.transportation.gov	U.S. DOT-managed – Public System	Urban Connected Vehicle (CV) Demo BSM	Four months after award	Daily	Five years
Secure Data Commons	U.S. DOT-managed - Controlled-Access System	Urban Connected Vehicle (CV) Demo BSM	Four months after award	Daily	Five years

3.4.2 Data Storage System Description

<Insert>

3.4.3 Cybersecurity Policies

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<Insert>

3.4.4 Data Security Policies and Procedures

<Insert>

3.4.5 Back-up and Recovery Policies and Procedures

<Insert>

4. Data Standards

4.1 Data Standards

Dataset Title	Data Standard(s)	Data Standard(s) Digital Object Identifier(s) (DOI[s])	Open or Proprietary?	Data Standard(s) Rationale
Urban Connected Vehicle (CV) Demo BSM	SAE J2735 and J2945/1	https://doi.org/10.4271/J2735_200911 https://doi.org/10.4271/J2945/1_201603	Proprietary	J2745 specifies a message set designed for use by applications using the 5.9 GHz Dedicated Short Range Communications for Wireless Access in Vehicular Environments (DSRC/WAVE), which will likely apply to these data. J2945/1 is an industry standard for on-board vehicle-to-vehicle safety communications system for light vehicles, which applies to this project.

4.2 Versioning

<Insert>

4.3 Metadata and Data Dictionary

Dataset Title	Metadata Standards Used	Metadata Discoverable (Y/N)	Data Dictionary Discoverable (Y/N)	Metadata and Data Dictionary Access
Urban Connected Vehicle (CV) Demo BSM	Project Open Data	Y	Y	https://data.transportation.gov/Automobiles/Urban-CV-Pilot-Basic-Safety-Message-BSM-Sample/nm7w-nvbm

4.3.1 Metadata Description

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5. Glossary of Terms



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