

Plan Overview

A Data Management Plan created using DMP Tool

DMP ID: <https://doi.org/10.48321/D1T674>

Title: Connecticut Integrated Transit Mobility Project (CT-ITMP)

Creator: Ryan Fetchko - **ORCID:** [0009-0004-8649-4394](https://orcid.org/0009-0004-8649-4394)

Affiliation: Vhb

Data Manager: Daniel Baker

Project Administrator: Daniel Baker

Funder: United States Department of Transportation (DOT) ([transportation.gov](https://www.transportation.gov))

Funding opportunity number: DOT-SMART-FY22-01

Grant: <https://www.transportation.gov/grants/smart/2022>

Template: Digital Curation Centre

Project abstract:

The Connecticut Integrated Transit Mobility Project (CT-ITMP) aims to develop a comprehensive strategy for establishing an interconnected, multimodal statewide public transit system. This initiative will enable customers to conveniently use their own contactless credit, debit, or prepaid card or a payment-enabled device to pay for fares. The proposed system grants users access to all transit-related information through a Unified Mobility App (UMA), providing a centralized platform for a seamless mobility experience.

The Connecticut Department of Transportation (CTDOT) is proposing the CT-ITMP to:

1. Develop a roadmap for unifying all transit information in the state under a mobile app solution including upgrading all of the state's transit systems with the hardware and software needed to provide reliable real-time information.
2. Create a phased implementation plan for an integrated, open fare payment system with a focus on financial inclusion of the unbanked and underbanked.
3. Establish an efficient and user-friendly system for implementing statewide fare discount programs and digital eligibility verification.

CT-ITMP initiative aims to digitally connect the entire public transportation system in Connecticut, resulting in an enhanced customer experience and fostering equitable access to transportation. To boost ridership, improve customer satisfaction, and utilize transit as a means to promote financial inclusion, CTDOT will study the prerequisites for implementing open payment options. This encompasses contactless payment methods such as bank cards, credit cards, and mobile wallets (e.g., Apple Pay) statewide. This exploration will be conducted as part of the initial phase of the SMART grant, undertaken in collaboration with the California Integrated Travel Project (Cal-ITP). The primary focus of this research will be to comprehend the needs of underbanked and unbanked customers. CTDOT will examine the feasibility of digitally verifying discounted fares on bank cards, drawing inspiration from the Cal-ITP benefits tool—a novel program dedicated to simplifying and cost-effectively enhancing travel for all.

The project is set to go a pilot/proof of concept demonstration lasting six (6) months within a designated transit district involving the key stakeholders. This trial aims to evaluate the effectiveness and make necessary adjustments to the overarching plan for implementing an integrated payment system across the State of Connecticut.

Start date: 09-15-2023

End date: 03-14-2025

Last modified: 07-08-2024

Copyright information:

The above plan creator(s) have agreed that others may use as much of the text of this plan as they would like in their own plans, and customize it as necessary. You do not need to credit the creator(s) as the source of the language used, but using any of the plan's text does not imply that the creator(s) endorse, or have any relationship to, your project or proposal

Connecticut Integrated Transit Mobility Project (CT-ITMP)

Data Collection

What data will you collect or create?

Data will be collected on the following topics through the study and in conjunction with the technology vendors and service providers including, but not limited to:

- Ridership of existing systems
- Existing fare schedules
- Existing technologies available within each agency
- Transit schedules
- Existing usage of fare systems within the Connecticut public transit system
- Customer Experience Action Plan survey results
- Statewide Unified Fare Project Study analyses and results
- Ridership, trip, and fare revenue data

It is anticipated that the data will be provided in tabular formats capable of being analyzed with standard spreadsheet software or contained within a geodatabase. The data will be provided from existing databases that are regularly updated by trusted parties. It is not yet known the amount or size of data available on these topics.

How will the data be collected or created?

The data will be provided to the project from the project stakeholders, collected from existing CTDOT databases or projects, as well as from statistics and reports from hardware and software that manage the open payment frontend and backend systems. Data will be stored in a logical file structure that supports versioning and named such that the file name of the data indicates the data type and latest date updated. Because the data will be provided through reliable and trusted sources, the project does not anticipate quality issues. However, each set of data received will be reviewed for completeness.

Documentation and Metadata

What documentation and metadata will accompany the data?

Where a geodatabase is provided, metadata indicating the source, latest update, definitions, descriptions of attributes, and other information pertinent to the description and indexing of the data will be requested. Where tabular data is provided, the team will ensure that information indicating the source, latest update and description of the data is recorded within the data spreadsheet.

Ethics and Legal Compliance

How will you manage any ethical issues?

Data collection and storage will be done using methods followed by CTDOT which adhere to both state and federal rules and regulations. Where it is anticipated that data be collected directly from members of the public via online surveys, each survey will be provided in adherence to Title VI and ADA requirements.

Any data collected for the use in this project will be done so in a way that protects the privacy of users. At no point during the study will a user be requested to provide personal identification information for data collection efforts. General demographics information may be collected, but will not be required to participate in community outreach efforts, focus groups, or user surveys.

How will you manage copyright and Intellectual Property Rights (IP/IPR) issues?

Where data is not publicly available, CTDOT will retain ownership of the data collected for the study. It is not anticipated that any proprietary data will be collected or needed for the project. Where data is not classified or confidential, it will be available as public record pursuant to Connecticut state legislation.

Storage and Backup

How will the data be stored and backed up during the research?

Data will be stored within secure database environments within CTDOT. It is not anticipated that any additional storage will be needed to support this project. As the data may be sourced from local stakeholders, live connections to real time data feeds will be utilized where possible. Backups will be performed according to CTDOT IT policy. As the stewards for the data within the project, CTDOT will provide information and data to parties requesting access on an as needed basis to conduct analyses and reporting. Where data is not wholly owned by CTDOT, such as stakeholder information, CTDOT will retain a copy of that data and identify the data as exempt such that requesters will be directed to the steward/owner of that data set.

How will you manage access and security?

It is not anticipated that any data stored for this project will require secure access. However, data will be accessed by known parties who have access through the CTDOT administrative directory, or have been identified as trusted users to analyze the data after shared through an encrypted file sharing platform.

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?

Some of the data used for planning constraints for this project may be considered as long-term value data sets. Any data that may be useful for future efforts, projects or research will be indexed and stored with the project in the CTDOT project database after the project is completed. For example, Origin-Destination based data collected through the open payments pilot, or through a trip planning/unified mobility application, can be substantial for future service planning or network redesign efforts.

What is the long-term preservation plan for the dataset?

The project data and associated files will be stored long term with the project file within CTDOT. It is not anticipated that this will incur any budget needs.

Data Sharing

How will you share the data?

Any data requested, where it is shareable, will be made available to the requestor through a secured and encrypted file sharing application. Data for the project will be identified within the publicly available final report for the project.

Are any restrictions on data sharing required?

Some data analyzed may be confidential at the time of acquisition, or not suitable for public consumption until it has been validated. It is anticipated that during the project, no data will be made available for sharing as active analyses are being performed on the data collected. Additionally, some datasets may retain confidentiality and may only be available to approved parties per CTDOT or USDOT policies, rules, and regulations.

Responsibilities and Resources

Who will be responsible for data management?

CTDOT and the project team will be responsible for the management of the data, this including managing requests data or information relating to any data collected or analyzed for this project. The project consultant will assist CTDOT in reviewing data for quality, completeness and accuracy. Stakeholders and technology vendors may be responsible for providing data to CTDOT.

What resources will you require to deliver your plan?

The CTDOT team consists of subject matter experts who are responsible for the delivery of the plan. No additional charges, hardware or systems are needed to support the delivery of the plan.
