

ITS JPO High-Priority Research Areas

- Automation
- Data Access and Exchanges
- Emerging and Enabling Technologies
- Cybersecurity for ITS
- Complete Trip – ITS4US
- Accelerating ITS Deployment

Alignment with U.S. DOT Strategic Goals

- Racial/Social Equity
- Climate Change
- Economic Recovery
- COVID-19

Vision

Innovative and integrated complete trip deployments support seamless travel for all users across all modes, regardless of location, income, or disability.

Goals

- Spur high-impact integrated complete trip deployments nationwide
- Identify needs and challenges by populations
- Develop and deploy mobility solutions that meet user needs
- Measure the impact of integrated deployments
- Identify replicable solutions and disseminate lessons learned

COMPLETE TRIP ITS4US

COMPLETE TRIP – ITS4US DEPLOYMENT PROGRAM

The Complete Trip – ITS4US Deployment Program is a \$40 million multimodal deployment effort, led by the U.S. Department of Transportation (U.S. DOT) Intelligent Transportation Systems Joint Program Office (ITS JPO), with support from the Office of the Secretary, the Federal Highway Administration, and the Federal Transit Administration. The program will identify ways to provide more efficient, affordable, and accessible transportation options for underserved communities, including people with disabilities, older adults, low-income individuals, rural residents, veterans, and limited English proficiency travelers. By bringing publicly and privately sponsored research together, the program will enable large-scale, replicable deployments to address the challenges of planning and executing all segments of a complete trip for all travelers regardless of location, income, or disability.

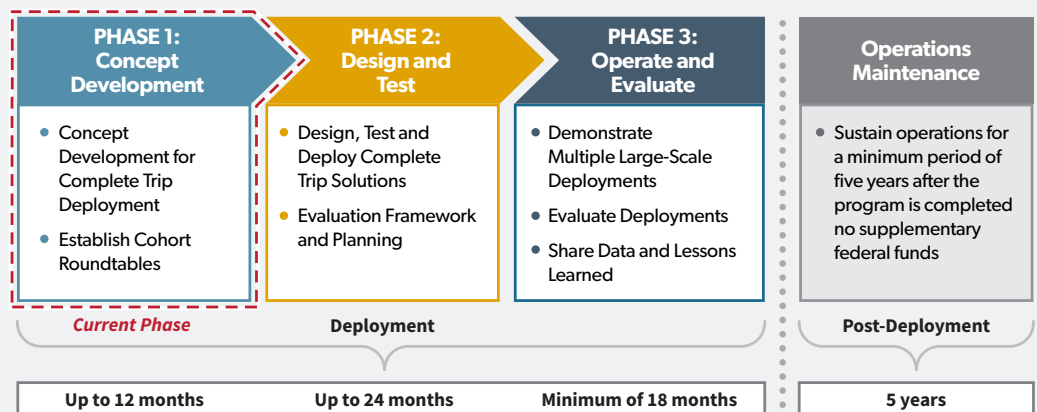


COMPLETE TRIP CONCEPT

The concept of a complete trip is that an individual can travel from origin to destination without gaps in the travel chain. A complete trip includes multiple links or trip segments. If one segment of the trip is inaccessible, unreliable, or inefficient, then the trip cannot be completed.

THE COMPLETE TRIP – ITS4US DEPLOYMENT PROGRAM

The Complete Trip – ITS4US Program has procured and awarded multiple large-scale, replicable, real-world deployments of integrated innovative technologies to address the challenges of planning and executing complete trips. The program includes three phases.



COMPLETE TRIP – ITS4US DEPLOYMENT PROGRAM PHASE 1 PROJECTS

Project Sponser	Project Description
 <p>Heart of Iowa Regional Transit Agency</p>	<p>This project will develop an open source/open data application for smart devices (e.g., smartphone, smartwatch) called the Unified Health Connector App. The technology developed will enable users to schedule and manage medical appointments and transportation services all in one localized application. The proposed deployment aims to enhance access to healthcare options for all travelers in Dallas County, Iowa, with a specific focus on underserved communities.</p>
 <p>Atlanta Regional Commission</p>	<p>The project will address multiple aspects of the complete trip through the development of the Safe Trips in a Connected Transportation Network (ST-CTN) system, which plans to merge multiple technological innovations. The ST-CTN system will integrate connected vehicle data with an open-sourced web-based and mobile application. The application will provide users with the ability to create a personalized trip plan with information on navigating physical infrastructure and to resolve unexpected obstacles and will ensure users have visibility throughout the trip. The deployment aims to provide targeted users with the ability to dynamically plan and navigate trips.</p>
 <p>California Association of Coordinated Transportation</p>	<p>The project, led by the California Association of Coordinated Transport, will span three states—California, Oregon, and Washington. The project will develop extensions to the General Transit Feed Specification data specification, new data standards related to booking and payment integration, and new open-source software applications tailored to provide easy tools for small transit agencies and their regulators to provide real-time booking, exchange service information, and track changes to the transportation network. The project’s target populations will potentially be able to plan their trip, book their seat, and coordinate payment for their ride.</p>
 <p>University of Washington</p>	<p>The project will be led by the University of Washington and will span three states—Washington, Oregon, and Maryland. A key aspect of this project is the coordination and standardization of open-source data standards and the development of scalable data infrastructure. The project will develop (with Microsoft and other partners) three unique accessible mobility applications consuming standardized data that demonstrate the versatility and scalability of the data infrastructure.</p>
 <p>ICF International, Inc.</p>	<p>ICF will lead this pilot project during Phase 1, while Niagara Frontier Transportation Authority will lead Phases 2 and 3. The project will be located within neighborhoods surrounding Buffalo Niagara Medical Campus (BNMC) in downtown Buffalo, New York. The project will develop an Open Trip Planner (OTP) based transit trip planning application that is customized for accessible travel, providing turn-by-turn directions, integration with various transit services providers, and active trip making support. An electric self-driving feeder shuttle service will also be integrated with the OTP application, providing transit service between the various partners and parking facilities within the medical campus. The project will also deploy wayfinding technologies, such as indoor navigation maps, RFID beacons, and Bluetooth readers around BMNC. Additionally, two intersections on campus will be fitted with mobile communications connectivity and interactive physical roadside units, which are intended to help visually impaired pedestrians locate the crosswalk, align themselves, and safety navigate to their desired destinations.</p>

To learn more about this program, visit: <https://its.dot.gov/its4us>

Elina Zlotchenko, Program Manager
 U.S. DOT ITS Joint Program Office
 (202) 366-1697 | Elina.Zlotchenko@dot.gov

