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MOBILITY SERVICES FOR ALL AMERICANS (MSAA)

Getting Started, Getting Help

LIMIT 35 — SAFETY   MOBILITY   ENVIRONMENT

The Mobility Services for All Americans (MSAA) Initiative is encouraging the deployment and use of intelligent transportation systems (ITS) technologies and mobility management systems, such as Travel Management Coordination Centers (TMCCs), to facilitate coordinated transportation and improve transportation services for Americans with mobility challenges. Due to previous TMCC research, there are now resources available to agencies that are considering deployment of TMCCs and related systems. The following provides information about accessing these resources to help plan, design, procure, implement, test, and fully deploy a TMCC or related mobility management system.

Resources for Planning and Developing a TMCC or Mobility Management System

- **MSAA: Transportation Challenges and Benefits**
(https://www.its.dot.gov/research_archives/msaa/pdf/MSAA_Factsheet_TransportationChallengesBenefits_09-20-2018.pdf)
This fact sheet provides an overview of the MSAA Initiative, including the transportation challenges it aims to address, the means it offers to support MSAA goals, and the benefits that can be realized by stakeholders.

- **ITS ePrimer, Module 7: Public Transportation**
(https://www.pcb.its.dot.gov/eprimer/module7.aspx) ITS offers a broad range of applications to enhance efficiency, convenience, safety, and security in public transportation and transit systems management. This module discusses system and fleet management, advanced traveler information, and safety and security applications in transit and public transportation.

- **TMCC Reference Manual**
(https://www.transit.dot.gov/research-innovation/reference-manual-planning-and-design-travel-management-coordination-center-tmcc) The objective of this reference manual is to build on the experience gained from the MSAA Initiative and provide guidance on how to plan and design a TMCC. The manual identifies four major steps: assessment of barriers and key unmet needs; development of the desirable customer experience; development of a TMCC vision among stakeholders; and the use of an ITS systems engineering project process. The manual also outlines key lessons learned from the MSAA Initiative and identifies many resources to assist those planning a TMCC.

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- **MSAA Deployer Presentation: Planning to Overcome Challenges** (https://www.its.dot.gov/presentations/2018/MSAA_KTT_2_PlanningChallenge.pdf) This presentation describes the basic principles of a structured design approach such as identifying needs, developing and valuing alternatives, and developing a Concept of Operations (ConOps). It also identifies resources.

- **Generic TMCC ConOps** (https://www.its.dot.gov/research_archives/msaa/TMCC_ConOps.htm) This document provides a user-oriented vision of the system that can be understood by stakeholders with a broad range of operational and technical experience. The concept provides a method of identifying institutional, operational, and technical aspects of traveler management coordination. It aims to provide guidance in completing a detailed, specific ConOps for a TMCC, and examples to help writers understand the type of material that should be included.

- **Current Grantee ConOps** (https://www.its.dot.gov/research_archives/msaa/msaa_project_overview.htm) Each of the current four grantees (Atlanta, GA; Boulder, CO; San Luis Obispo, CA; and Madison, WI) developed a ConOps. Each ConOps documents the human service transportation needs in the local area, which will be addressed by a proposed TMCC.

- **MSAA Stakeholder Outreach Plan** (http://www.apta.com/resources/reportsandpublications/Documents/msaa_outreach_plan_08.pdf) This plan directly supports the USDOT's effort in stakeholder outreach and knowledge transfer with respect to enhancing human service transportation (HST) utilizing ITS.

- **Utilizing Technology in Coordinated HST Systems** (https://www.pcb.its.dot.gov/t3/s160414_Mobility_Options.aspx) This webinar discusses key MSAA priorities, such as system interoperability and common data formats, and highlights important elements for planning and deploying TMCCs for coordinated HST systems.

- **National Transit Institute (NTI) Advanced Technology Courses** (http://www.ntionline.com/course-listing-program-area-advanced-technology/) These courses include public transit programs and materials available through cooperative partnerships with industry, government, institutions, and associations.

Resources for Designing/Procuring a TMCC or Mobility Management System

- **Systems Engineering Guidebook for ITS** (https://www.fhwa.dot.gov/cadiv/segb/index.cfm) Co-sponsored by the Federal Highway Administration and the California Department of Transportation, this document provides quick and easy access to information that will help you apply a structured approach to your ITS projects. This guide helps in all phases of the system life cycle.

- **MSAA: Tackling the Technology** (https://www.its.dot.gov/research_archives/msaa/pdf/MSAA_Factsheet_Tackling_Technology_09-20-2018.pdf) This fact sheet provides information about how technology can facilitate coordination and best practices in working with technology vendors in MSAA projects.

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- **MSAA Planning Case Study and Analysis**
(https://rosap.ntl.bts.gov/view/dot/36956) This case study provides an evaluation and analysis of MSAA TMCC deployment planning projects in Atlanta, GA; Denver, CO; San Luis Obispo, CA; and Madison, WI.

- **System Requirements Development Overview**
(https://www.its.dot.gov/research_archives/msaa/pdf/System_RequirementsDevelopment_Overview.pdf) The purpose of this presentation from the original MSAA effort is to introduce the thought processes behind system requirements development and to provide increased understanding of producing requirements for system and sub-systems. It also defines the functions, performance, and environment of systems to a level that can be built.

- **Current Grantee System/Functional Requirements**
(https://www.its.dot.gov/research_archives/msaa/msaa_project_overview.htm) Each of the current four grantees developed functional requirements to design and implement TMCC technology and non-technology elements. The functional or system requirements are typically derived from a multifaceted process that starts with the development of stakeholder needs and the creation of the ConOps. Then, the development of preliminary system requirements and documentation takes place. Finally, the requirements analysis and review for accuracy are conducted.

- **System Design Overview**
(https://www.its.dot.gov/research_archives/msaa/pdf/SD_Overview_v1.2.pdf) The purpose of this presentation from the original MSAA effort is to introduce the thought processes behind system design and to provide an increased understanding of developing and evaluating system alternatives, identifying and evaluating connections with internal and external systems, and selecting and documenting high-level design.

- **Standardizing Data for Mobility Management**
(http://www.trb.org/Publications/Blurbs/170080.aspx) This research examines the types of data used in technologies that are part of mobility management systems and the environments in which these software systems function. The recommendations address where data standards provide value for mobility managers, the specific data and related protocols needed for improved functionality, and procurement specification guidelines for agencies purchasing new technology for mobility management.

- **ITS Standards Transit Training Modules**
(https://www.pcb.its.dot.gov/stds_modules_transit.aspx) The USDOT's ITS Professional Capacity Building (PCB) Program provides this free, 21-module training series that gives transportation professionals the skills to help effectively utilize transit-applicable ITS standards to procure, install, test, and operate ITS technologies.

Resources for Implementation, Testing and Full Deployment of a TMCC or Mobility Management System

- **Current Grantee Implementation Plans**
(https://www.its.dot.gov/research_archives/msaa/msaa_project_overview.htm) Each of the current four grantees developed implementation plans defining how the local project team may incrementally build its TMCC system.

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- **System Acceptance Overview** (https://www.its.dot.gov/research_archives/msaa/pdf/SA_Overview_v2.pdf) The purpose of this presentation from the original MSAA effort is to introduce the processes behind system acceptance. It also provides increased understanding of testing stages and what constitutes system acceptance, considerations for installation, training, maintenance and documentation, full deployment, and system evaluation and validation.

- **Technology Exploration and Implementation: Keys to Success** (https://www.its.dot.gov/research_archives/msaa/pdf/MSAA_PlanningDeployment.pdf) Presented at the Community Transportation Association of America EXPO 2017: Manage Track, this presentation covers the basic principles of a structured design approach: such as identifying needs, developing requirements, procuring a system, and implementing a system.

- **MSAA Deployer Presentation: Lessons learned from MSAA/TMCC-Type Projects** (https://www.its.dot.gov/presentations/2018/MSAA_KTT_3_CaseStudy.pdf) This presentation provides an overview of the evaluation and analysis of MSAA TMCC deployment planning projects in Atlanta, GA; Denver, CO; San Luis Obispo, CA; and Madison, WI.

The Future of MSAA – Mobility on Demand (MOD)

The MSAA Initiative is one pillar of the USDOT MOD Program. The program's mission is to enable and leverage advancements in technology and operations to create an environment where all travelers have safe mobility options, ensuring reliable, informed, and efficient travel in a multi-modal network that prioritizes individual, on-demand mobility.

The MSAA Initiative results have and will continue to be of value in that they directly inform MOD in terms of principles such as equity of service delivery, innovative business models, system integration, and partnerships. Practitioners of MSAA will find opportunities for future funding and the continuation of efforts via MOD. For MOD Program contacts, questions, or concerns visit the MOD Sandbox Program web page at https://www.transit.dot.gov/research-innovation/mobility-demand-mod-sandbox-program.html.

For more information about this initiative, please contact:

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