

# Reservations, Scheduling and Dispatching (RSD) Subcommittee Meeting

Multimodal and Accessible Travel (MAT)  
Standards Coordination Committee (SCC)

September 27, 2024



## Anti-Trust Guidance

- The Institute of Transportation Engineers is committed to compliance with antitrust laws and all meetings will be conducted in strict compliance with these antitrust guidelines. Further if an item comes up for which you have conflict of interest, please declare that you have a conflict of interest on the matter and recuse yourself from action on that item.
- The following discussions and/or exchanges of information by or among competitors concerning are prohibited:
  - Prices, price changes, price quotations, pricing policies, discounts, payment terms, credit, allowances or terms or conditions of sale;
  - Profits, profit margins or cost data;
  - Market shares, sales territories or markets;
  - The allocation of customer territories;
  - Selection, rejection or termination of customers or suppliers;
  - Restricting the territory or markets in which a company may sell services or products;
  - Restricting the customers to whom a company may sell;
  - Unreasonable restrictions on the development or use of technologies; or
  - Any matter which is inconsistent with the proposition that each company must exercise its independent business judgement in pricing its service or products, dealing with its customers and suppliers and choosing the markets in which it will compete.

# NTCIP Patent Disclosure Policy

## ➤ Intellectual Property and Standards

- Participants in the development of Standards, as well as the users of Standards, may have an interest in knowing whether there are provisions in a Standard incorporating someone's intellectual property, which may require permission to use someone's proprietary technology and possibly pay compensation for that privilege. The policies of NEMA and ANSI, as well as international Standards organizations, recognize that it is permissible to draft a Standard that includes the use of someone's patent claims if technical reasons justify it, but Standards developing committees may prefer to avoid incorporating proprietary technology once they know of it.
- The primary concern of these policies is the identification of essential patent claims. NEMA has defined an essential patent as a claim contained in a patent or published patent application, the use of which is necessary to create a compliant implementation of a mandatory provision in the normative clauses of a NEMA Standard or proposed NEMA Standard when there is no commercially and technically feasible non-infringing alternative. Participants in the NEMA Standards developing process are obligated to disclose essential patent claims of which they have knowledge. A participant may self-disclose any essential patent claims they or their employer own or control, or a participant may ask NEMA to query whether another participant or third-party owns or controls any essential patent claims. The obligation to disclose is a continuing one, both before and after a Standard is published.
- Disclosure must identify the patent or patent application, the part of the NEMA Standard incorporating an essential patent claim, and an assurance that a license to use the essential patent claims will be made available either on reasonable terms and conditions that are demonstrably free of any unfair discrimination or without compensation but with other reasonable terms and conditions that are demonstrably free of unfair discrimination.

# Agenda

## Agenda

ITE Disclaimers (5-10 min)

Introductions (10 min)

**RSD Scope (10 min)**

Use Cases (10 min)

Questions and Discussion (15 min)

Next Meetings (5 min)

Close

# Welcome

RSD Subcommittee Co-Chairs

**Daniel Whitehouse**, Vice President of Paratransit and On-Demand Services, Suburban Mobility Authority for Regional Transportation (SMART)

[dwhitehouse@smartbus.org](mailto:dwhitehouse@smartbus.org)

**Santosh Mishra**, President & CEO, Flexlynqs

[santosh.mishra@flexlynqs.com](mailto:santosh.mishra@flexlynqs.com)

# Introductions

## USDOT / ITE

- Robert Sheehan, Architecture, Standards, and Cybersecurity Program Manager, Intelligent Transportation Systems (ITS), Joint Program Office (JPO), USDOT
- Hendrik (Rik) Opstelten, Transportation Program Specialist, Office of Research, Demonstration and Innovation, Federal Transit Administration (FTA), USDOT
- Siva Narla, Senior Director, Transportation Technology, Institute of Transportation Engineers (ITE)

## Standards Coordination Committee (SCC) Co-Chairs

- Elliott McFadden, Greater Minnesota Shared Mobility Program Coordinator,  
Minnesota Department of Transportation
- Eric Plosky, Executive Director, MobilityData

# Introductions

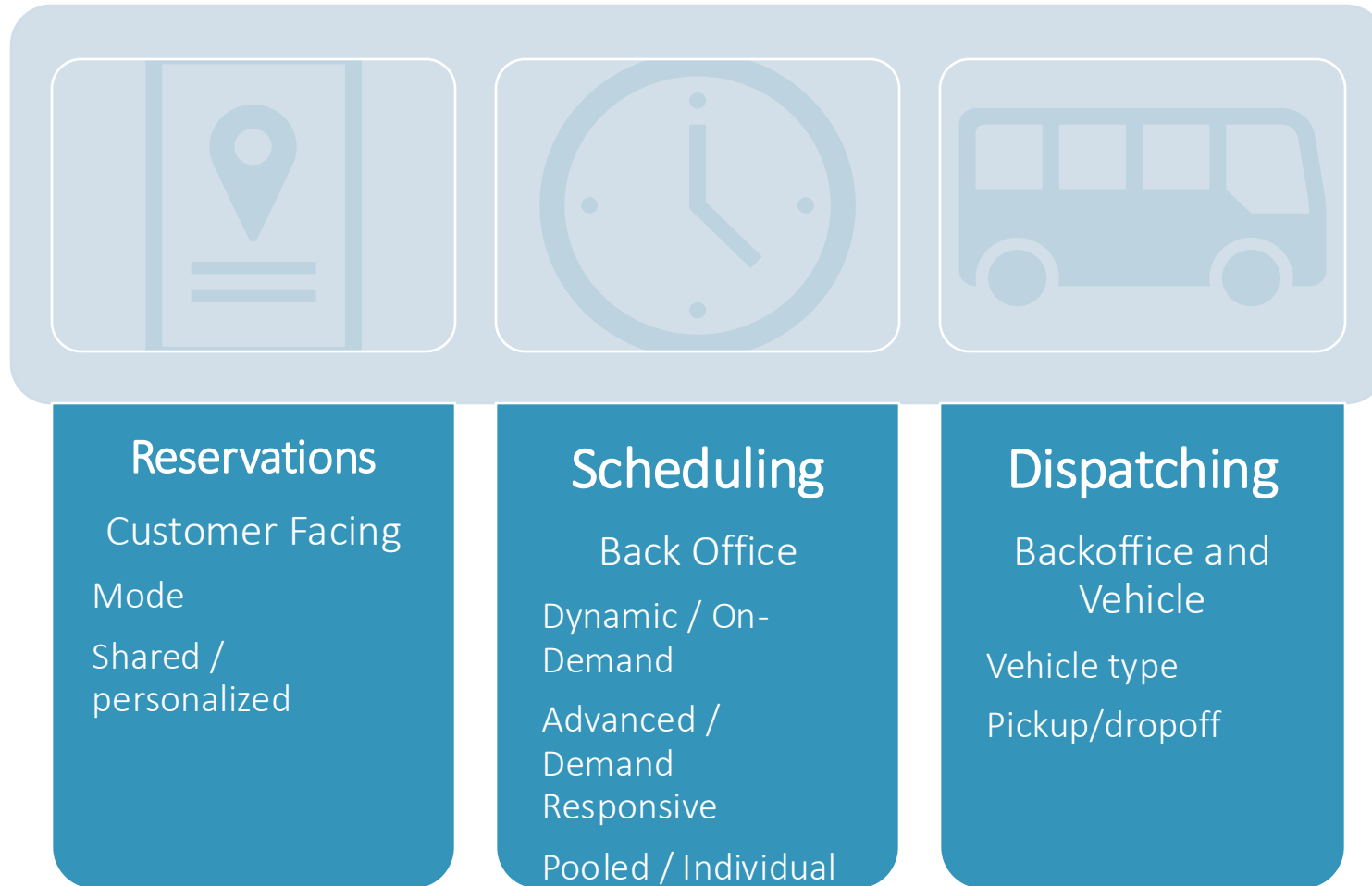
## Participant Introductions.

- Please put in the chat your name, organization, and role.

# RSD Scope



# RSD Scope



## Modes



# RSD Use Cases and Data Flows

## Business to Customer (B2C)



## Business to Business (B2B)



# Use Cases and Data Flows – Scheduling / Dispatching

## Pre-trip

Reservations – discovery, book, cancel

Schedule – pickup/drop-off, pending, accept, cancel

Manifest - vehicle / driver assignment

## En-route

Operations – cancel, non-revenue trip

Trip Monitoring (realtime updates) and Rerouting

## Post-trip

Complete / stats (vehicle to service provider)

Performance information

## Standards

- General On-Demand Feed Specification (GOFS)
- General Bikeshare Feed Specification (GBFS)
- Standardiserat Utbyte av Trafik Information (SUTI)
- Transport Operator to MaaS Provider (TOMP)

- DRT Transactional Data Specification
- SUTI
- TOMP
- GBFS

- SUTI
- TOMP

# Use Cases

Various formats

# Processes

- Reservations
  - Discovery
  - Booking and Confirmation
  - Cancellation
- Scheduling
  - Vehicle assets
  - Operator assets
  - Operational period
  - Add ride / cancel ride
  - Match rider needs with vehicle assets
  - Optimization
  - Generate Manifest

Dispatching / Operations

- Operator / MDT operations
- Dispatcher operations

Performance Management

UC #	Process
Short Description	
Goal	
Constraints	
Actors / Stakeholders	
Illustration (example)	
Preconditions	
Post-conditions	
Information Requirements	

UC #      Process		
Pre-conditions		
Item	Step	Description
Main Flow	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
Alternate Flows		
Exception Flows		
Extensions		

Template (copy and paste this below)

Provide a description of the use case.

What are the user needs (or user stories) associated with this use case?

What are the information needs associated with data content, structure, format, etc.

Provide a list of modes that apply to this use case

Provide a list of stakeholders in your group who have this use case.

Are there any existing data formats or specifications that fulfill this use case? Provide URLs below.

Are the needs associated with this use case in conflict with other use cases?

Are there privacy or security considerations associated with this use case?

Are there accessibility or equity considerations associated with this use case?

Relative to other use cases in your discussion, what level of priority is this use case?

- High/Medium/Low



Questions



# Recurring Meetings

## RSD SC Meetings

Bi-Weekly, Every other 1-hour meeting –

- *Beginning Thursday October 10 from 1:00 – 2:00 pm EST.*
- *Meetings will be on Zoom beginning in October.*

# Contacts

## RSD SC Co-Chairs

- **Daniel Whitehouse**, Vice President of Paratransit and On-Demand Services, Suburban Mobility Authority for Regional Transportation (SMART), [dwhitehouse@smartbus.org](mailto:dwhitehouse@smartbus.org)
- **Santosh Mishra**, President & CEO, Flexlynqs, [santosh.mishra@flexlynqs.com](mailto:santosh.mishra@flexlynqs.com)

## SCC Co-Chairs

- **Elliott McFadden**, Greater Minnesota Shared Mobility Program Coordinator, Minnesota Department of Transportation, [elliott.mcfadden@state.mn.us](mailto:elliott.mcfadden@state.mn.us)
- **Eric Plosky**, Executive Director, MobilityData, [eric@mobilitydata.org](mailto:eric@mobilitydata.org)

## ITE

- **Ashraf Ahmed**, Transportation Technology Project Specialist, ITE, [aahmed@ite.org](mailto:aahmed@ite.org)
- **Siva Narla**, Senior Director, Transportation Technology, ITE, [snarla@ite.org](mailto:snarla@ite.org)

# Resources and Links



## **SCC GitHub site**

<https://github.com/ite-org/MAT-VRU?tab=readme-ov-file>

## **ITE Phase 1 Document Repository**

- <https://www.ite.org/technical-resources/topics/standards/mat-and-vru-cybersecurity/>
- [https://www.ite.org/ITEORG/assets/File/Task%204%20Multimodal%20and%20Accessible%20Coordination%20Plan\\_FINAL\\_2023-08-01.pdf](https://www.ite.org/ITEORG/assets/File/Task%204%20Multimodal%20and%20Accessible%20Coordination%20Plan_FINAL_2023-08-01.pdf)

## **USDOT MATSA Project documents**

<https://rosap.ntl.bts.gov/view/dot/58673>