UPDATE TO THE METROPOLITAN WASHINGTON REGIONAL ITS ARCHITECTURE (MWRITSA)

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Transportation Planning Board

Introduction

- 23 CFR § 940.3 Definitions

  - Intelligent Transportation System (ITS) means electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system

  - Regional ITS architecture means a regional framework for ensuring institutional agreement and technical integration for the implementation of ITS projects or groups of projects.

- 23 CFR § 940.9 Regional ITS architecture

  - (a) A regional ITS architecture shall be developed to guide the development of ITS projects and programs and be consistent with ITS strategies and projects contained in applicable transportation plans

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Compliance Requirements

- According to 23 CFR Part 940:

  - All ITS projects funded through the highway trust fund must conform to the Regional ITS Architecture

  - A Regional ITS Architecture must be developed to guide ITS projects and programs

  - The architecture must be consistent with ITS strategies and projects contained in applicable transportation plans

- Because of the linkages to existing planning processes, the states and metropolitan planning organizations are ultimately responsible for ensuring that the TEA-21 Rule's conditions are met for using federal funds

- To illustrate and document regional integration so that planning and deployment can take place in an organized and coordinated fashion

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TPB's ROLE in the Regional ITS Architecture

- TPB develops and maintains the Regional ITS Architecture for the National Capital Region, in compliance with federal laws and U.S. DOT regulations

  - Systems Performance, Operations, and Technology Subcommittee

    - Provide expert advice on the development of MWRITSA

    - Leverage the MWRITSA to a more efficient and resilient transportation network

  - Commuter Connections Subcommittee

    - Leverage the MWRITSA to commuters for informed travel decisions

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Integration with the TPB's Planning Activities

- To enhance the efficiency and effectiveness of the region's transportation network

- Key mechanisms

  - Strategic Framework – to ensure that all ITS projects align with the TPB's long-term transportation goals and objectives

  - Data-Driven Decision Making – to support the TPB's performance-based planning approach

  - Enhanced Coordination – to facilitate coordination among various transportation agencies and stakeholders within the TPB

  - Support for Management and Operations – to ensure that the transportation system is managed efficiently and can respond effectively to traffic events

  - State and Agency Architectures - The MWRITSA is closely linked to

  - Future-Proofing – to ensures that the TPB's planning activities remain relevant and effective in addressing current and future transportation challenges

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Regional ITS Architecture Components

- Regional ITS Architectures across the US share similar components, developed over the past 20 years

- The scope defines what will be included in each of the other components

- Stakeholders are related to the Inventory, Agreements, and the Roles and Responsibilities
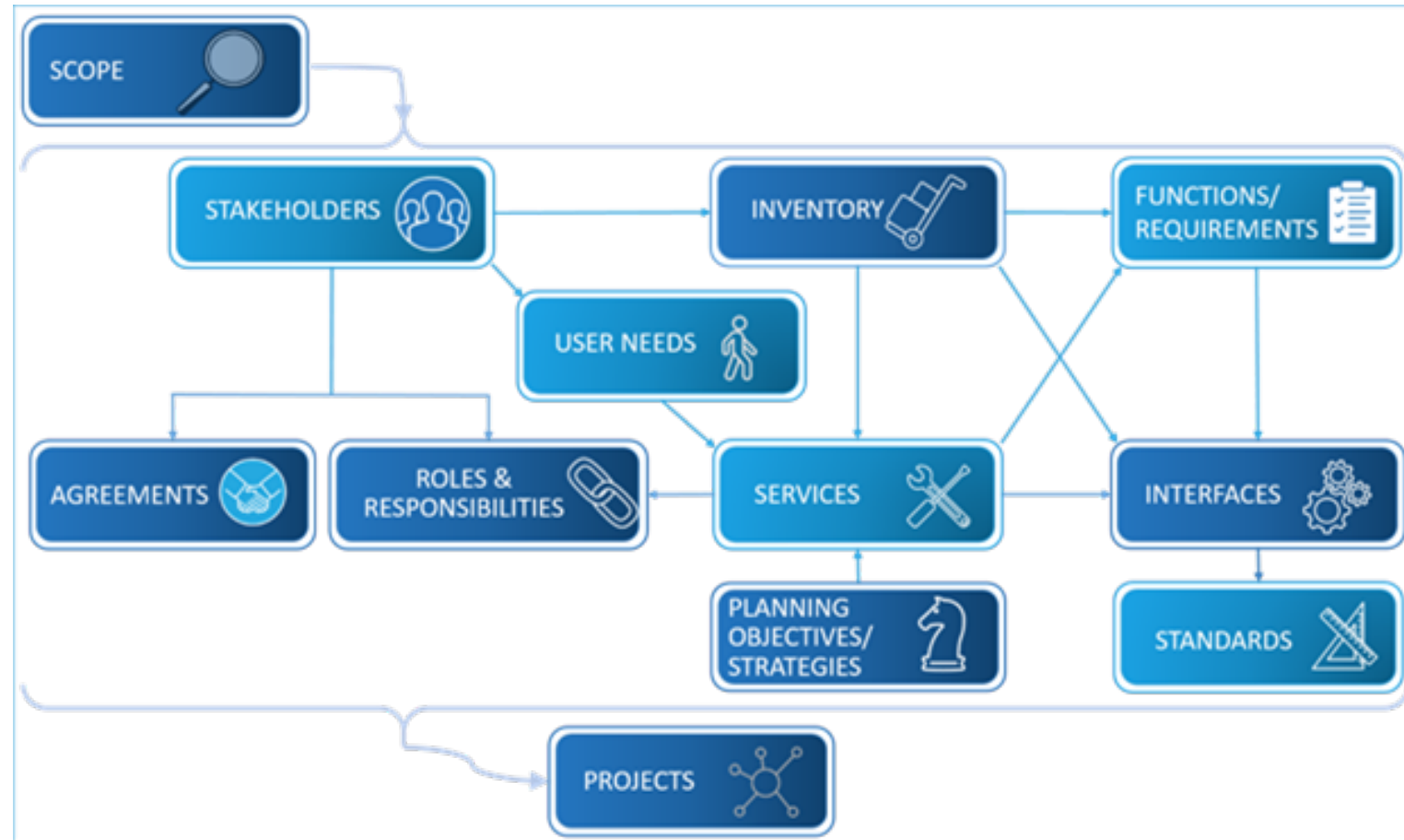
Source: Regional ITS Architecture Guide Document, U.S. Department of Transportation ITS Joint Program Office

Regional Architecture Development for Intelligent Transportation (RAD-IT)

- RAD-IT provides support for the 23 CFR § 940.09 with features like:

  - Stakeholders and associated Inventory

  - Project sequencing support

  - Operational concept (i.e. agency roles and responsibilities)

  - Functional requirements support

  - Support for list of agreements, selected based on interfaces between stakeholders' elements

  - User tailored list of standards-based communications solutions

  - Transferring project information between RAD-IT and the Systems Engineering Tool for Intelligent Transportation (SET-IT)

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Get Access to MWRITSA

https://www1.mwcog.org/itsarch/

MWRITSA Stakeholders

- Transportation agencies, including DDOT, MDOT, VDOT

- Public transit operators, including MTA, WMATA, VRT

- Local governments, including Fairfax County, VA, Montgomery County, MD

- Federal agencies, including FHWA, FTA

- Private sector partners, including Inrix, Metropia, Waze

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A Living Document

- *MWRITSA*

  - *A framework for ensuring institutional agreement and technical integration for the implementation of ITS projects in the national capital region*

  - *A resource for better communications*

    - *Between stakeholders*

    - *Between systems*

- *Your input matters*
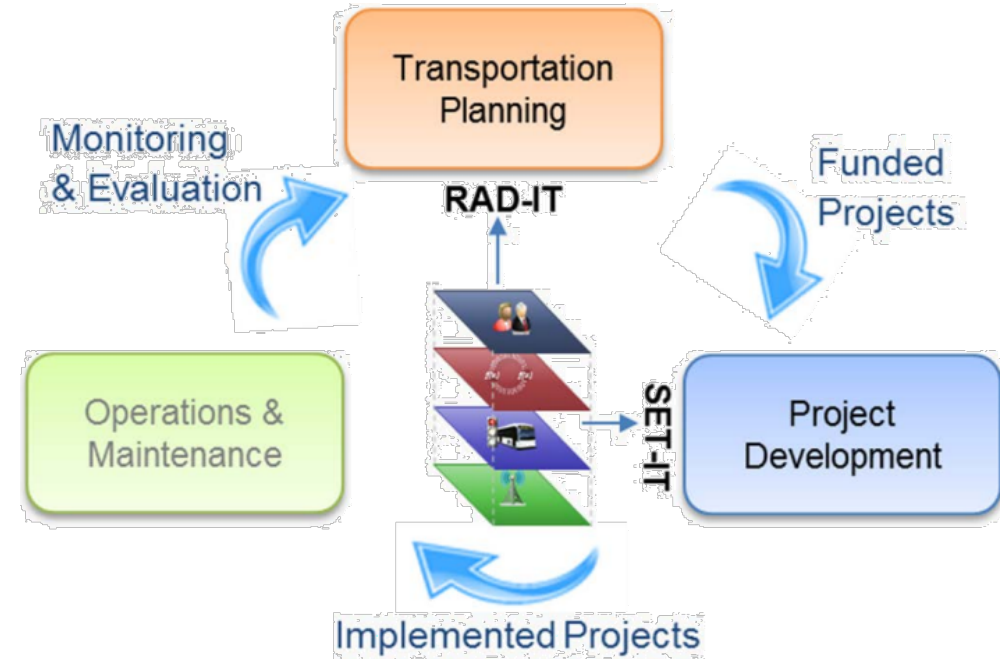
Source: U.S. Department of Transportation ITS Joint Program Office

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