



Regional Multi-Modal Mobility Program (RM3P) Initiative

MWCOG - SYSTEMS PERFORMANCE, OPERATIONS AND TECHNOLOGY SUBCOMMITTEE

Welcome to RM3P

■ What is RM3P?

- *Regional Multi-Modal Mobility Program.*
- A technology- and data-centered program.
- An integrated, multi-modal approach.
- Engages public- and private-sector stakeholders.
- Invites travelers, themselves, to be part of the solution.

■ RM3P is managed jointly by the:

- Virginia Department of Transportation (VDOT).
- Northern Virginia Transportation Authority (NVTA).
- Virginia Department of Rail and Public Transportation (DRPT).

■ The RM3P “Journey” begins in Northern Virginia.

■ We are in the planning phase now.

Program Background

- RM3P builds on prior VDOT studies on *Integrated Corridor Management (ICM)*.
- Key ICM precepts include the following:
 - Manage activities at a corridor level, across jurisdictions and agencies.
 - Operate multi-modally.
 - Focus on moving people and goods, rather than vehicles.
 - Emphasize connectivity and integration.
 - Balance the load.
- ICM planning studies conducted in Northern Virginia:
 - *North-South Corridor* –
 - Anchored by I-95/I-395
 - Completed in 2013
 - *East-West ICM Corridor* –
 - Anchored by I-66
 - Completed in 2017
- Shift from corridor to region

RM3P Overview

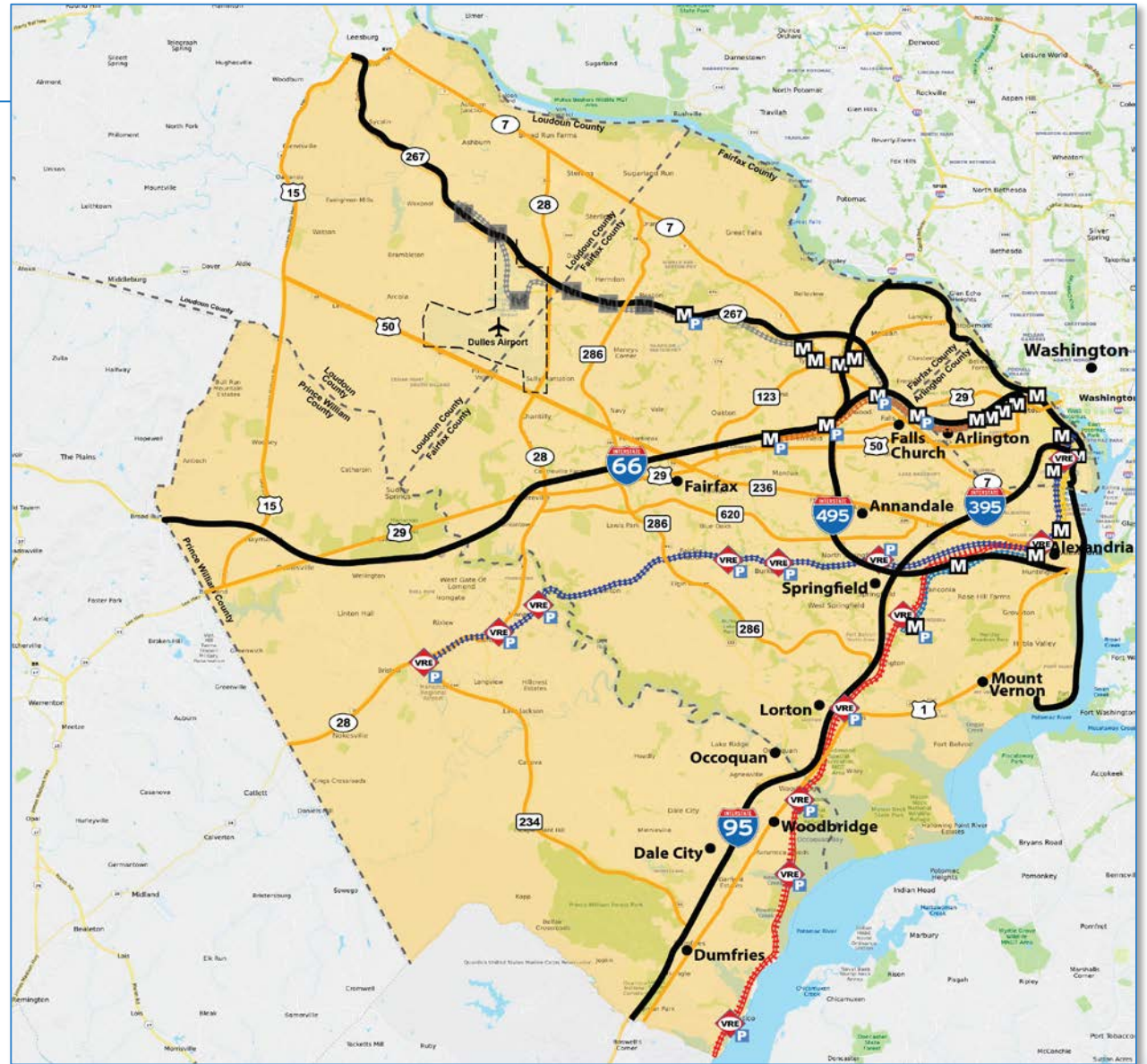
- Collaborative program to **improve safety, reliability, and mobility**.
- Encompasses all modes of travel across Northern Virginia.
- Draws on the operational capabilities and support of stakeholders.
- Support collaborative actions and decision-making by regional partners.
- Engage travelers in sensible transportation decision-making.
- RM3P is a **technology deployment initiative** with these goals:
 - *Optimization* – Optimize performance of the existing infrastructure.
 - *Reliability* – Enhance travel time reliability.
 - *Traveler Choice* – Support on-demand, multi-modal trip options for travelers.



RM3P Overview (Cont'd.)

■ RM3P Region:

- Geographic boundaries
- Freeways, Express Lanes
- Arterials
- Metrorail
- Commuter rail
- Bus
- Commuter parking lots
- Bike infrastructure



Program Elements

AI-Based Decision Support System

Automated tool to predict emerging conditions and recommend plans for coordinated, multi-agency responses to congestion, incidents, and events.

Commuter Parking Information System

Provides commuters with reliable expected parking space availability for lots serving rail, bus, and vanpool/carpool commuters.

Mobility Gap Dashboard

Identifies gaps in the transportation service network and enables mobility providers to better meet demand by highlighting those areas that are overserved or underserved.

Dynamic Incentivization

A data-driven system offering commuters incentives to modify travel choices and behaviors in response to real-time travel conditions.

Data Lake/Data Store

A centralized cloud-based system used by regional partners and third-party providers to capture, process, and exchange information on real-time, multi-modal travel conditions.

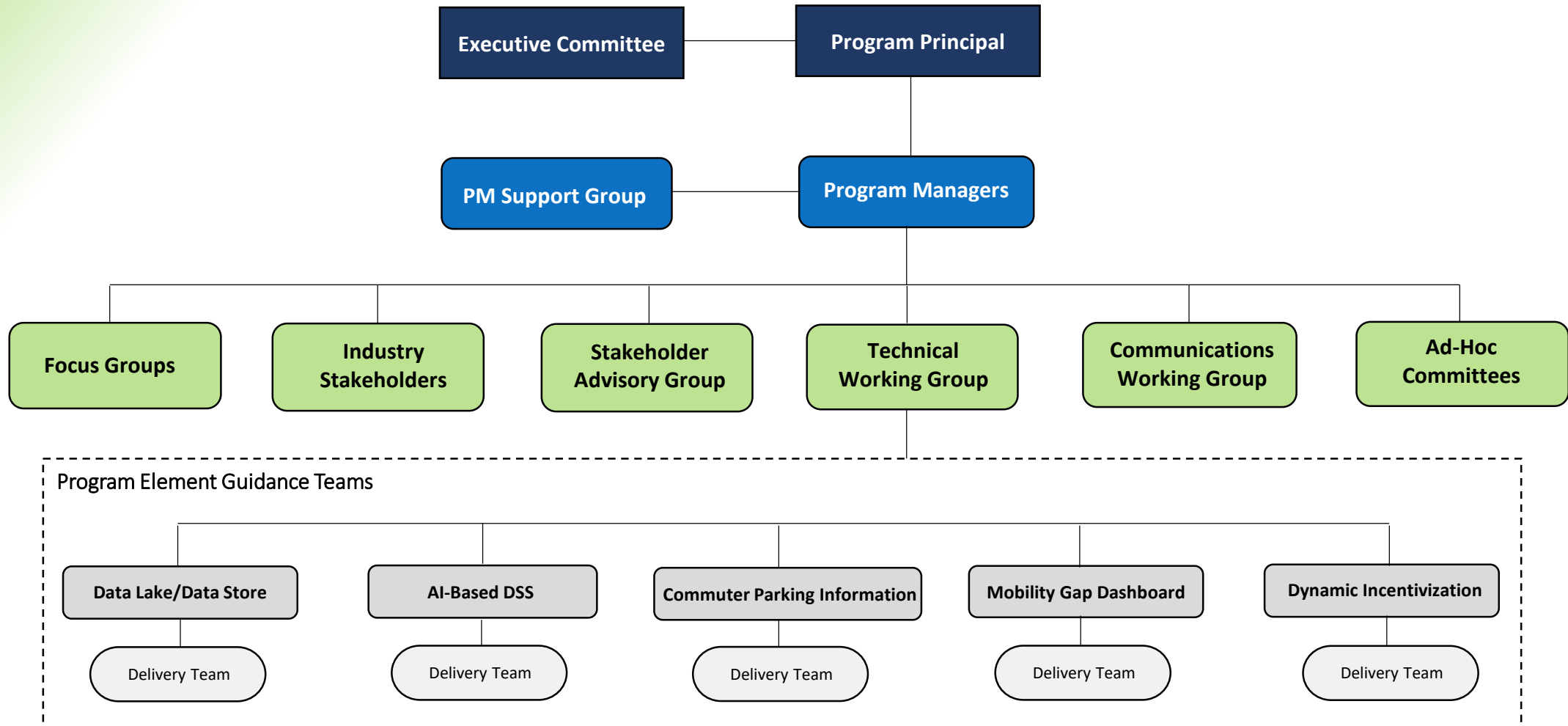
RM3P Process

- Program element *solutioning*:
 - Process used to advance RM3P from initial concepts to the point of procurement.
- Solutions planning carried out in 3 steps:
 - *Scoping* – What is to be accomplished under each program element.
 - *Framing* – Explains how the work will be accomplished; includes needs and requirements.
 - *Documenting* – Presents scopes and framing in the form of a *scope-of-work*.
- These steps are applied to each of the 5 program elements.

Architecture

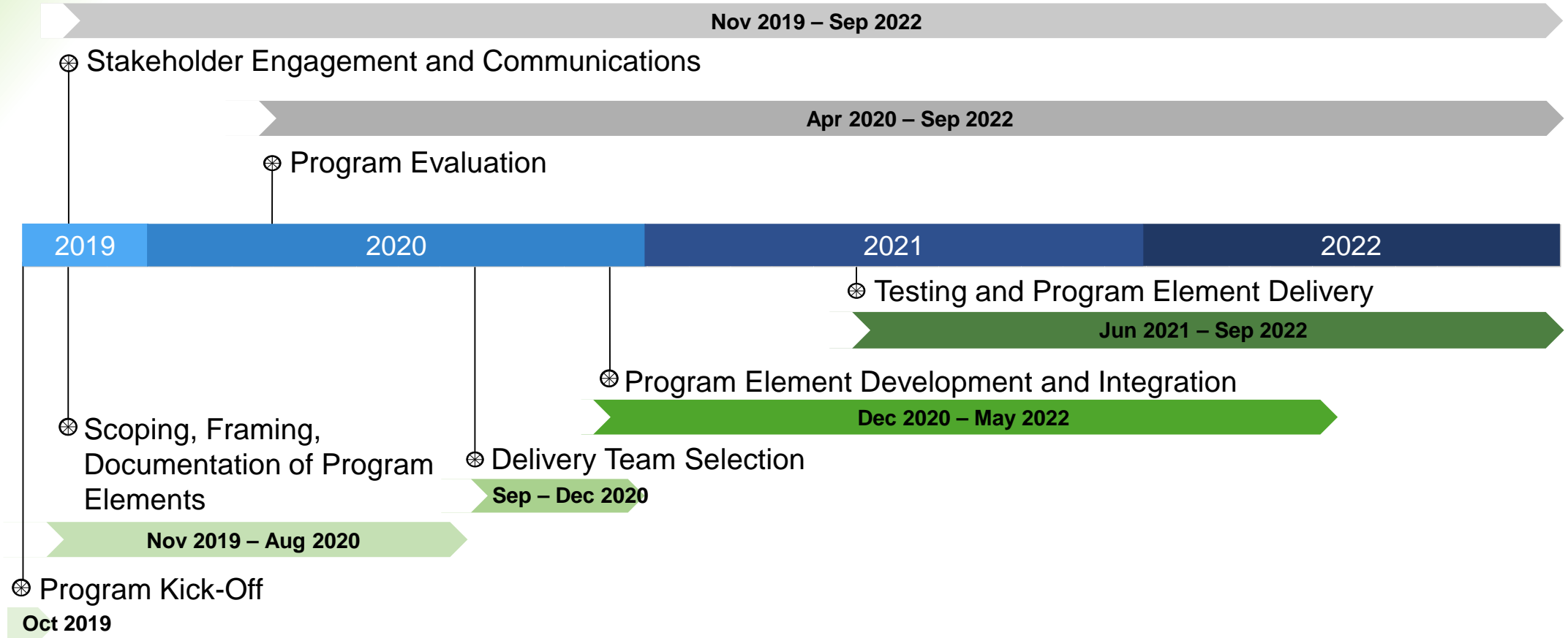
- **Interrelationships** between the program elements.
- The program elements **build on existing systems**, where available.
- **A long-term architecture plan**
The systems expected to be deployed during the RM3P base period and future systems are included in the architecture plan.
- **Data Store for sharing**
 - All processed data from the program elements will be sent to the Data Store and shared with other RM3P program elements.
 - Data consumers via APIs - hosted in the Data Store.

Program Organization Chart



RM3P Base-Period Timeline

36 Months (October 2019 – September 2022)



Next Steps & Getting Involved in RM3P

■ Public agency stakeholders:

- Program element guidance teams
- Near-term upcoming activities:
 - On-demand presentation
 - Stakeholder survey
 - Stakeholder focus group – to validate plans and approach
- Ongoing:
 - Website
 - Newsletter

■ Industry stakeholders:

- Developers, service providers, information distributors
- Industry day

■ Opportunities for everyone; please let us know your interests!



THANK YOU

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Regional Multi-Modal Mobility
Program

