



# Regional Multi-Modal Mobility Program (RM3P) Initiative

MWCOG - SYSTEMS PERFORMANCE, OPERATIONS AND TECHNOLOGY SUBCOMMITTEE

# Welcome to RM3P

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## ■ 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

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- 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

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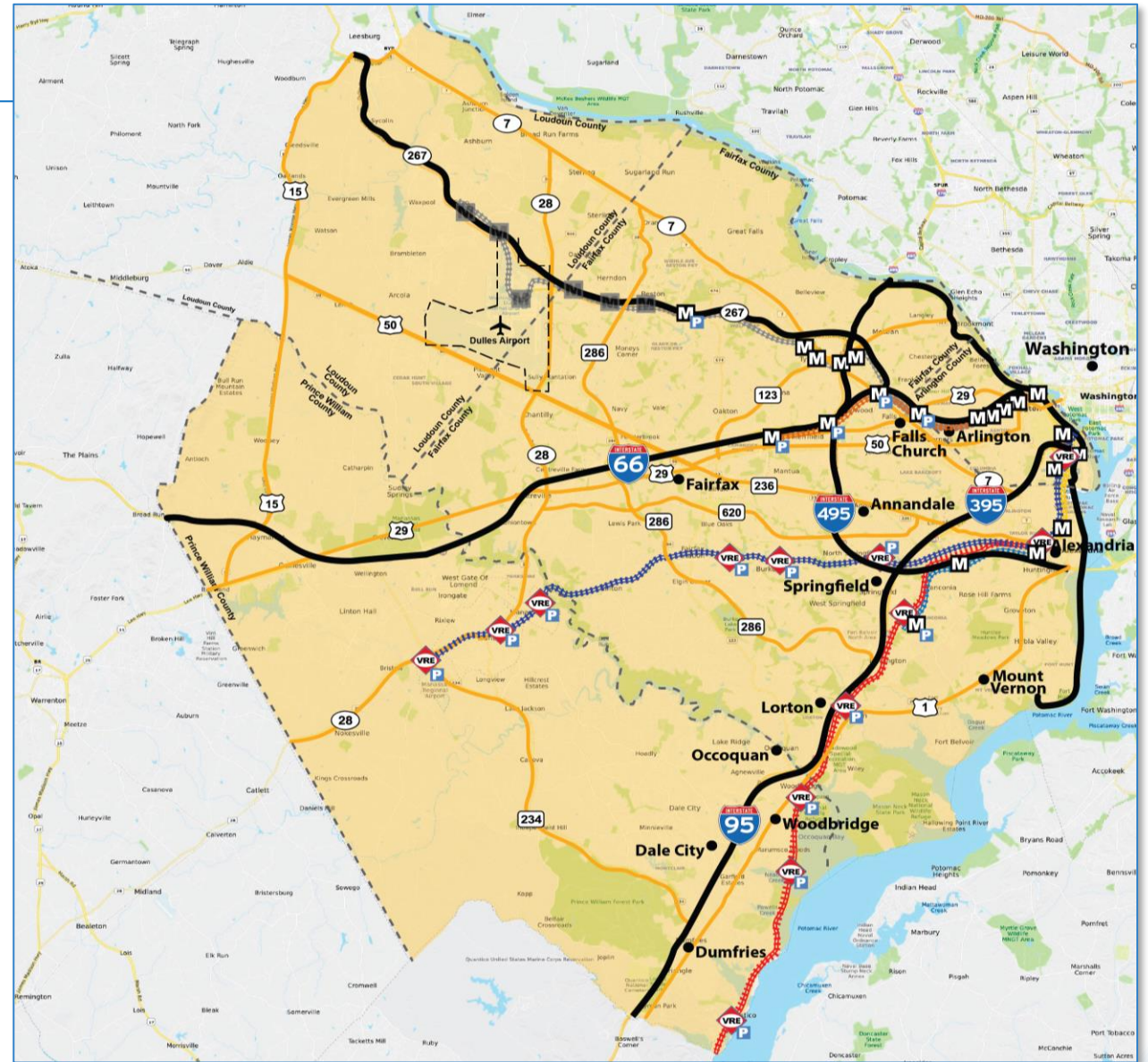
- Collaborative program to **improve safety, reliability, and mobility**.
- Encompasses all modes of travel across Northern Virginia.
- Draws on the operational capabilities and support of stakeholders.
- Support collaborative actions and decision-making by regional partners.
- Engage travelers in sensible 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

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## 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

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- 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.

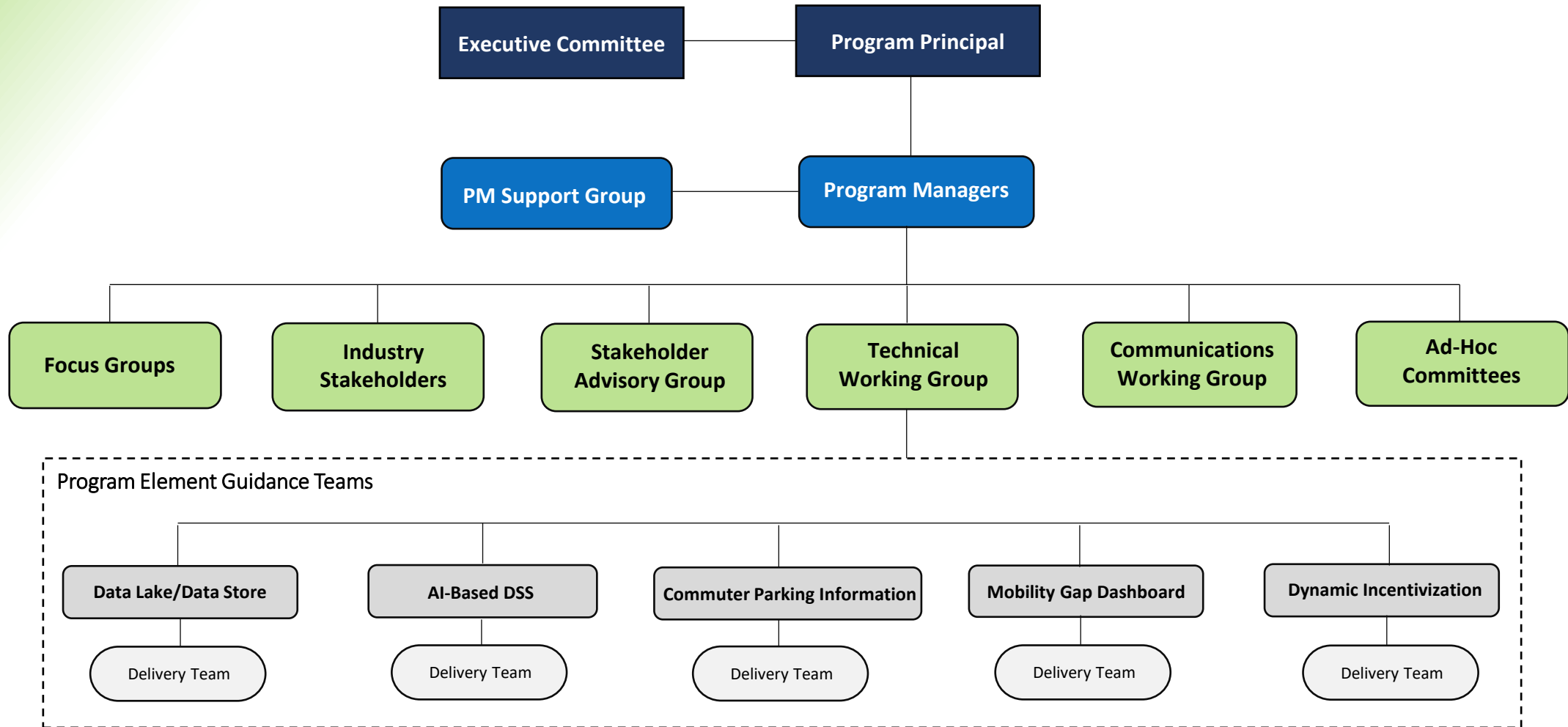
# Architecture

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- **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.

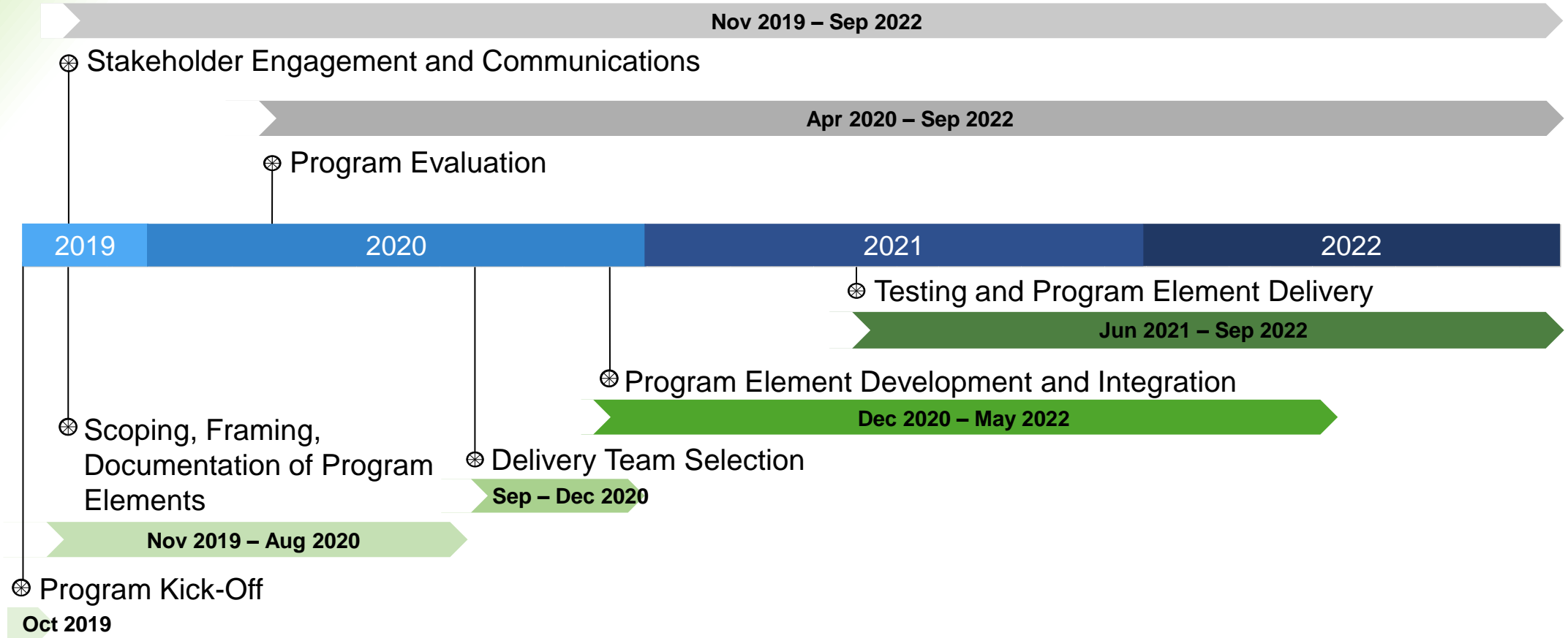


# Program Organization Chart



# RM3P Base-Period Timeline

36 Months (October 2019 – September 2022)



# Next Steps & Getting Involved in RM3P

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## ■ 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

RM3P Management Team

AMY MCELWAIN

Program Manager

[amytang.mcelwain@vdot.virginia.gov](mailto:amytang.mcelwain@vdot.virginia.gov)

CANDICE GIBSON

Deputy Program Manager

[candice.gibson@vdot.virginia.gov](mailto:candice.gibson@vdot.virginia.gov)