Ashley Asmus and Russ Owen, MTS

Transportation Data Management Plan

Presented to TAC Planning on February 11, 2021

The problem

- MTS uses data from many sources, both internal and external
- Data are stored in many kinds of formats and in many locations
- Methods for tracking transportation performance not well-documented
- Mismatch between TPP Goals & Objectives and performance measurement
- Performance measures are usually reported in static reports

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The solution: a whole-division initiative

- Organization of frequently-used data into databases
- Formal documentation on data sourcing & methodology
- Staff training on data management
- Better understanding of what we are tracking and why
- Development of internal & external dashboards to view, filter and download transportation data

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Work Plan

Task Outline

- Strategic data assessment
- Peer research
- Identify data sources and methods
- Policymaker review of key performance measures
- Develop a data management plan
- Build cohesive database
- Data management training
- Dashboard scoping and design
- Dashboard development

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Task 1: Strategic data assessment

- Exhaustive inventory of reports produced by MTS that present transportation performance measures
- Transportation System Performance Evaluation (TSPE), TPP, Olmstead Report, Regional Ridership Analysis
- Reports and performance measures are being tracked in a shared database

- Timeframe: August 2020 – February 2021

Task 2: Peer Research

- Goal: help us plan our transportation dashboard
- What other MPOs have effective data management strategies?
- What makes an effective transportation measure dashboard?

- Timeframe: January 2021-May 2021

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Task 3: Data Sources and Methods

- Identify canonical source of each transportation measure
- Scope out methods to automate data handling, including download, extraction, transformation and upload to our database

- Time frame: February 2021 – June 2021

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Task 4: Policymaker review of key performance measures

- Re-iterate our TPP goals and objectives
- Link performance measures to corresponding goals
- Identify goals that need
- Identify and explain our highest-priority transportation measures

- Timeframe: July 2021-March 2022

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Task 5: Data Management Plan

- Plan will include a schematic of data that gives structure to the entire data management approach
- Include both a list of elements that will be included in the database as well as products will be developed and how they will be produced.
- Living Document
- Also address goals of the Council's Data Management Strategy

- Timeframe: July 2021-September 2021

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Task 6: Build Database

- Staff will build a database that will contain all necessary data for the storage of performance measure data.

- Database architecture will be flexible to accommodate potential changes in future data needs.

- Formats that are easy for everyone to work with

- IS governance process will need to be followed.

- Timeframe: July 2021-March 2022

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Task 7: Training

- MTS staff will need different levels of training
- Staff will develop a training plan for the different levels of training.
- External vendor may be used to develop training materials or to conduct training

- Timeframe: October 2021-December 2021
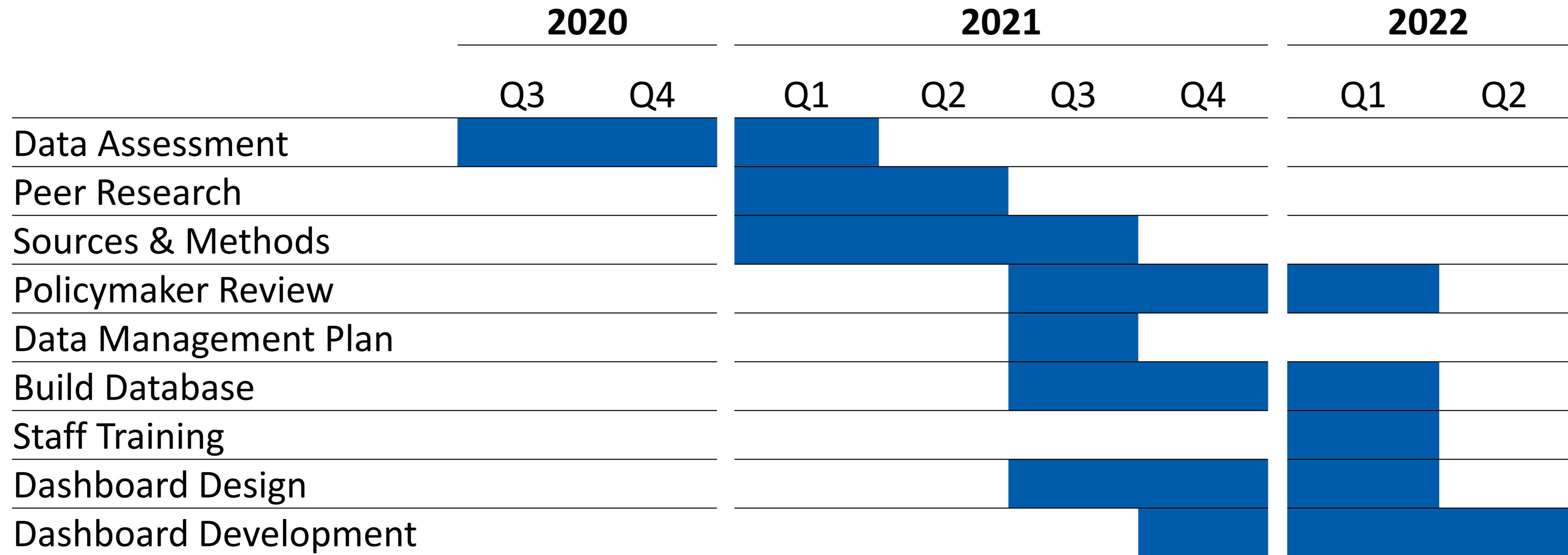
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Task 8: Dashboard Scoping and Design

- Staff will consult with policymakers and technical advisors to determine which elements of the overall universe of data will be included in an online dashboard or set of dashboards.

- Dashboard technology will be reviewed and a visualization platform will be selected.

- Timeframe: July 2021- December 2021

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Task 9: Dashboard Development

- MTS staff will build an online dashboard or set of dashboards for tracking transportation performance
- Coordination with Council Communications department and IS
- Process will be iterative and incorporate feedback from staff, policymakers, partners and other data users

- Timeframe: September 2021- April 2022

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Timeline

	2020		2021				2022	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Data Assessment	███	███	███					
Peer Research			███	███				
Sources & Methods			███	███	███			
Policymaker Review					███	███	███	
Data Management Plan					███			
Build Database					███	███	███	
Staff Training							███	
Dashboard Design					███	███	███	
Dashboard Development						███	███	███

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Questions or Thoughts

- Regional solicitation database really needs some better organization. Next Phase?
- Financial types of data & reporting.
- What other departments do this kind of data management? E.g., Metro Transit.
- Better incorporate people from contract services.
- Identify key staff within our planning group that interface with other departments and agencies.

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