Virginia Department of Rail & Public Transportation

Operating Assistance Performance Metrics

September 7, 2018

Agenda

— Purpose

— Background

— Executive Summary

— Need for Evaluation

— Selecting an Approach

— Possible Metrics

— Rating of Metrics

— Discussion

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Purpose

— Introduce potential metrics for performance-based funding allocation, and receive TSDAC feedback

— Based on feedback, apply metrics to develop scenarios summarizing funding allocation outcomes

3

Executive Summary: Background (Review of August 27 Webinar)

— Currently, operating assistance funds are allocated based on agency:
  — *Operating Cost (traditional funding) and*
  — *Performance (**performance-based funding**)*

— **Performance-based funding** is based on:
  — *2 sizing metrics:*
    — Operating cost
    — Ridership
  — *Adjusted based on 3 performance adjustment metrics:*
    — Passengers per revenue hour
    — Passengers per revenue mile
    — Net cost per passenger

— Sizing metrics have the largest impact on allocations

— Performance adjustment metrics have marginal effect on allocations

4

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Need for Evaluation

— Legislation mandated that funding be allocated on the basis of agency performance

— Goals of performance-based funding allocation
  — Equitably allocate funding based on "size" of transit agency
  — Promote fiscal responsibility
  — Support robust transit service
  — Reward higher transit patronage

— TSDAC will review and select sizing metrics for performance-based allocation of operating funds

— Consider:
  — Cost Measures
  — Transit Service Measures
  — Ridership Measures
  — Service Area Characteristics

5

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Selecting a Performance Measurement Approach

— Principles of Transit Performance Measurement:
  — Performance can be tracked over time and/or in relation to peers
  — Measures can be refined by combining various characteristics to better achieve goals

— Select an approach and metrics that fit the goals

— Difficulty benchmarking among transit agencies to measure performance
  — *"No two transit agencies are the same"*

— Determine agencies' capacity to collect data

— Minimize complexity; support transparency

Key Data Challenges with Performance Measurement

— Data Availability
- — Is the data already collected and reported?
- — If not, where will the data be sourced from?
- — What is the incremental burden of data collection and who bears it?

— Reliability, Consistency, and Timeliness of Data
- — Developing agreed-upon standards for core measures
- — Divergent data collection procedures
- — Obtaining consistent data on a regular basis over time
- — Can data be validated?

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Possible Metrics for Performance Funding Allocation

— Cost Metrics

— Delivered Service Metrics

— Ridership

— Service Area Characteristics

— Characteristics of an agency's service area, such as total size or population growth could be compared, but are not influenced by to transit service performance

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Possible Metrics for Performance Funding Allocation

— Cost Metrics

    — Operating Cost

        —Expenses associated with transit agency operation, classified by function or activity, and goods and services purchased

    — Net Operating Cost

        —Operating Costs minus operating revenues (including fares)

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Possible Metrics for Performance Funding Allocation

— Delivered Service Metrics
  — Revenue Vehicle Hours
    — Hours traveled by revenue vehicles (buses, etc.) while in revenue service
  — Revenue Vehicle Miles
    — Miles traveled by revenue vehicles while in revenue service
  — Peak Vehicles
    — Number of revenue vehicles simultaneously operated to meet the annual maximum service requirement
    — This is the revenue vehicle count during the peak season of the year; on the week and day that maximum service is provided, excluding atypical days and one-time special events
  — Peak Vehicle Seats
    — Total number of seats available on Peak Vehicles as defined above

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Possible Metrics for Performance Funding Allocation

— Ridership

  — Unlinked Passenger Trips

    —Number of passengers who board public transportation vehicles, regardless of whether passenger is transferring from another transit vehicle

  — Passenger Miles Traveled

    —Cumulative sum of the distances traveled by each passenger

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Rating of Metrics

— Metrics can be evaluated by their:

    — Alignment with Objectives
        —Metrics should measure performance in a clear way

    — Availability of Data
        —Measurable given available tools and data and/or with minimal incremental cost

    — Consistency of Data Definition
        —A clear and universal definition of the metric exists
        —Metrics that are compared across agencies should mean the same thing to each agency, and should be measured in the same way

— Ratings for Metrics are as follows:

    — *Good (**G**)*
    — *Average (**A**)*
    — *Poor (**P**)*

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Possible Metrics for Performance Funding Allocation

	Alignment with Objectives	Availability of Data	Consistency of Data Definition	Overall Score
Cost				
Operating Cost	A	G	G	**G**
Net Operating Cost	A	G	G	**G**
Delivered Service Metrics				
Revenue Hours	G	G	G	**G**
Revenue Miles	G	G	G	**G**
Peak Vehicles	A	G	G	**A**
Peak Vehicle Seats	A	G	A	**A**
Ridership				
Unlinked Passenger Trips	G	G	G	**G**
Passenger Miles Traveled	G	A	A	**A**

Good	G
Average	A
Poor	P

Discussion

— Which metrics are most supportive of performance measurement goals?

— In what proportion should the metrics be applied?