

TPM Workshop

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# ***Component 4: Performance-Based Programming***

Philadelphia, PA

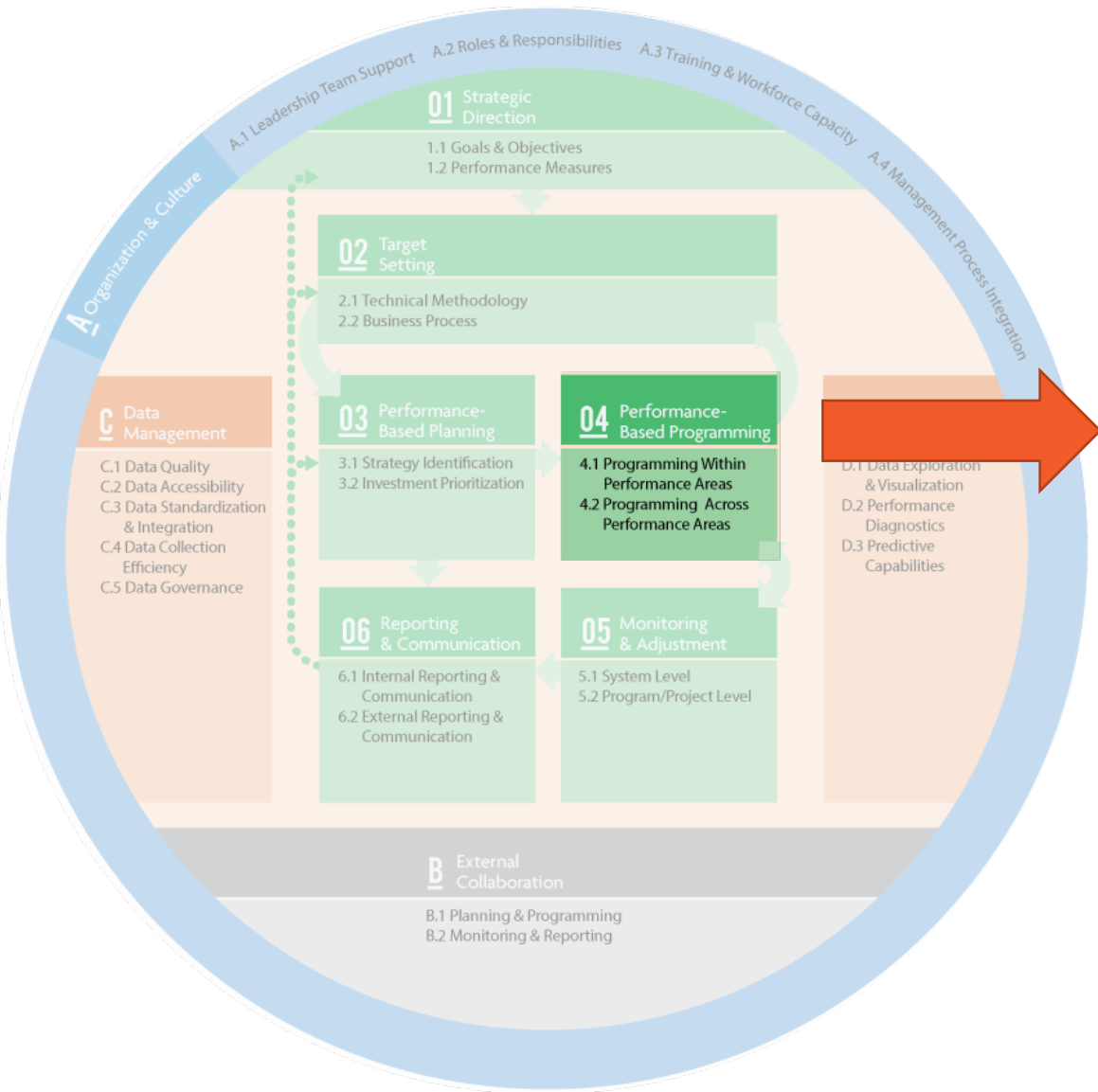
November 29 & 30, 2017



U.S. Department of Transportation  
Federal Highway Administration



# Component 4: Performance-Based Programming



**04 Performance-Based Programming**

4.1 Programming Within Performance Areas

4.2 Programming Across Performance Areas

# Performance-Based Programming

- Definition: *The use of strategies and priorities to guide the allocation of resources to projects that are selected to achieve goals, objectives, and targets. Performance-Based Programming establishes clear linkages between investments made and expected outputs and outcomes.*



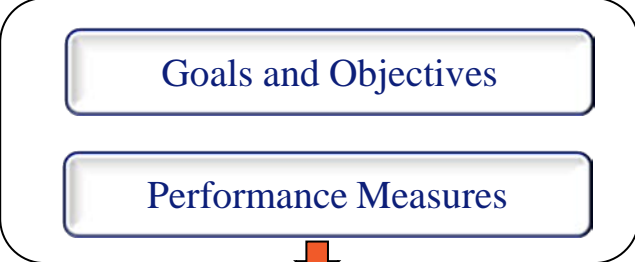
# Performance-Based Planning and Programming



## PLANNING

### Strategic Direction

*Where do we want to go?*

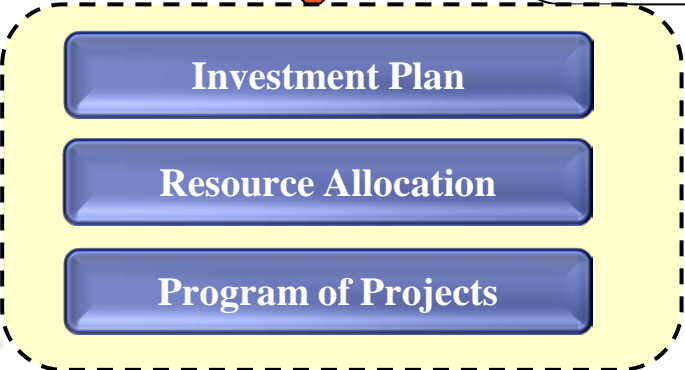


### Analysis

*How are we going to get there?*

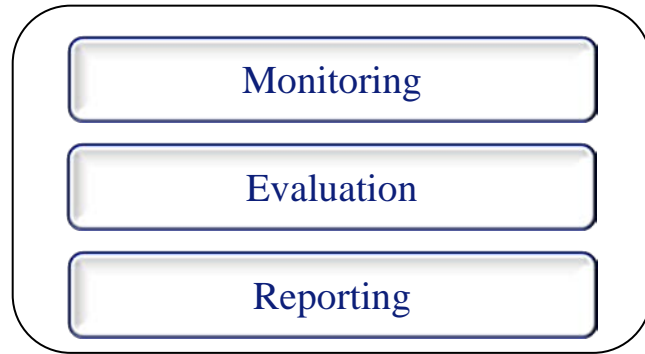


Quality Data and Public Involvement



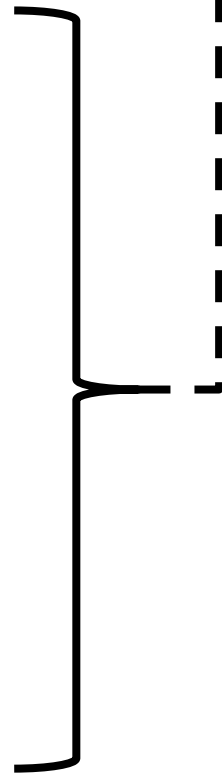
### Programming

*What will it take?*



### Implementation and Evaluation

*How did we do?*



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# *Linking Performance-Based Planning to Programming*

## Transportation Plan

- Goals
- Objectives
- Targets

## TIP/STIP

- Develop program
- Assess its effects

## ***Linking Performance-Based Planning to Programming (cont.)***

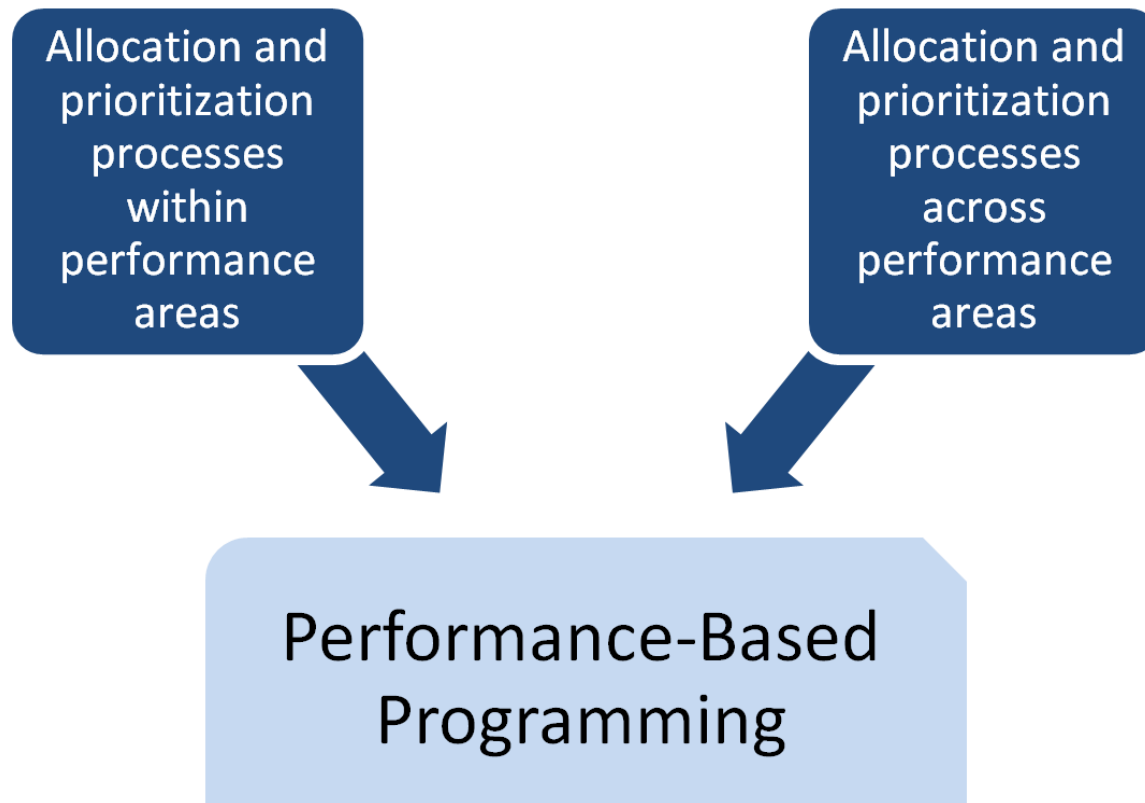
- Overall goals
  - Advance projects/strategies that best support performance targets/goals
  - Identify top priority projects/strategies and match these with available funds
- Challenge is how to prioritize projects/strategies identified in plans as the short-term TIP/STIP(s) are developed



# *Performance-Based Programming: Subcomponents*



- 4.1 Within Performance Areas
- 4.2 Across Performance Areas



## ***Performance-Based Programming: Key Phases***

- Performance elements
  - Projects (or groups of projects) prioritized based on ability to meet desired outcomes
  - Project selection criteria based on performance targets
- Key process steps:





# *Evaluation and Prioritization Methods*

- Technical methods
  - Scoring methods
  - Economic impact
  - Cost benefit
  - Cost effectiveness
- Other considerations
  - Trade-offs among targets
  - Jurisdictional equity
  - Public involvement



## ***Example: Baltimore Metropolitan Council Project Evaluation Criteria***

Each project assigned:

- Technical score (up to 50 points) assigned based on a project's expected contribution to six regional MTP goal areas
- Policy score (up to 40 points) determined based on how highly the sponsoring jurisdiction values the project



## ***Example: PennDOT Project Evaluation***

### ***Criteria***

PennDOT implemented performance-based evaluation criteria for funding decisions to support its commitment to preservation

- Includes seven key areas of performance
- Defines funding scenarios to examine trade-offs



# ***Example: Detroit MPO – Program Areas and Performance Measures***

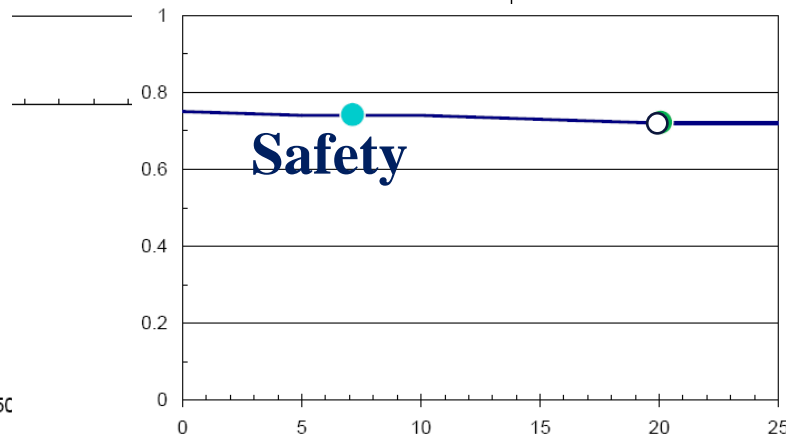
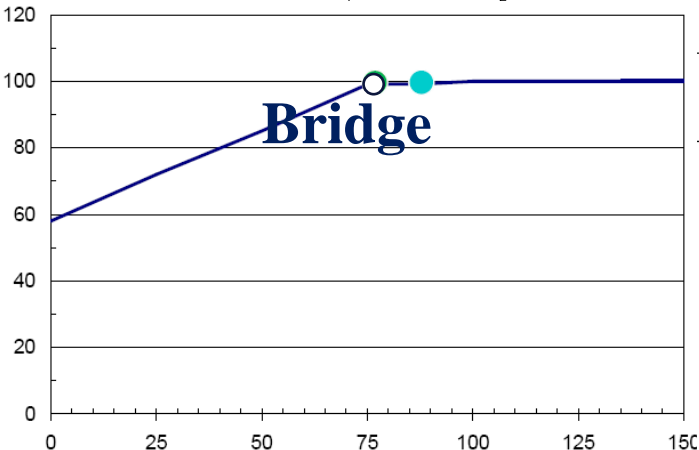
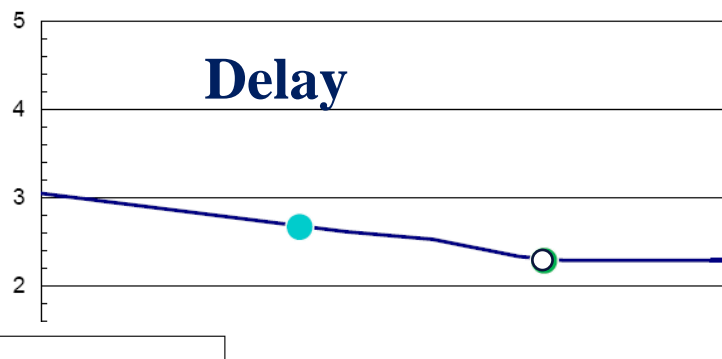
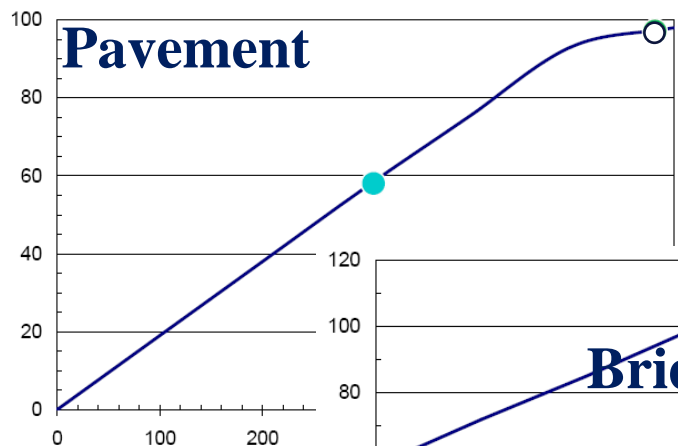
Program Area	Performance Measure
Pavement Preservation	% of pavement in good or fair condition
Highway Capacity	Hours of delay per 1,000 vehicle miles
Bridge Preservation	% of bridges in good or fair condition
Safety	Fatalities per 100 million vehicle miles
Transit	Extent of transit network
Nonmotorized	Population % within ½ mile of a facility



# Example: Detroit MPO – Investments and Performance



Examine the relationship between program-level investment and performance



# *Example: Detroit MPO – Tracking Investments against Adopted Scenario*



Track performance over time; track investments against the adopted scenario

<b>Project Type</b>	<b>Planned Funding</b>	<b>Actual Funding</b>
Bridge	5%	5.2%
Nonmotorized	1%	1.1%
Pavement	24%	14.5%
Road Expansion	8%	3.5%
Safety	1%	0.6%
Transit Capital	8%	7.0%
Operating	53%	68.1%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>



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## ***Monitoring, Evaluation and Reporting – How Did We Do?***

- Critical to the PBPP and TPM processes because it provides information on:
  - Current challenges which inform development of goals and objectives
  - Performance and trends which inform development of realistic targets
  - Strategies implemented which help to assess their effectiveness

# ***Breakouts: Performance-Based Programming***





# *Breakout Exercise*

- Discuss **Performance-Based Programming** maturity level
  - Questions in handout (Exercise A)
  - Use Capability Maturity Model table (Exercise A)
- Select facilitator, note taker, and presenter
- Mixed agency groups
  
- Report out: share highlights of discussion



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# *Report Out*

- Share highlights of discussion
- 3 min per group

