

# Performance Measures

MVFC Workshop

April 14, 2009

# Agenda

| Time       | Task  |
|------------|---|
| 5 minutes  | Review Agenda   |
| 10 minutes | Introductions <ul style="list-style-type: none"><li>•Name</li><li>•Agency</li><li>•Role</li></ul> |
| 20 minutes | Presentation/discussion of performance measures   |
| 30 minutes | Workgroups  |
| 25 minutes | Reports and discussion  |
|            | Adjourn   |

# Performance Measures 101

## Definition

*“The use of statistical evidence to determine progress toward specific defined organizational objectives. This includes both evidence of actual fact, such as measurements of pavement surface smoothness, and measurement of customer perception such as would be accomplished through a customer satisfaction survey. In a service industry such as transportation, the performance measurement process starts by defining precisely the services the organization promises to provide, including the quality or level of service (LOS) (e.g., timeliness, reliability, etc.) that is to be delivered. There are often good opportunities for collecting feedback from system users in “real time,” since the transportation service is often “consumed” at the same time it is “produced.” Performance measures provide information to managers about how well that bundle of services is being provided. Performance measures should reflect the satisfaction of the transportation service user in addition to those concerns of the system owner or operator.”*

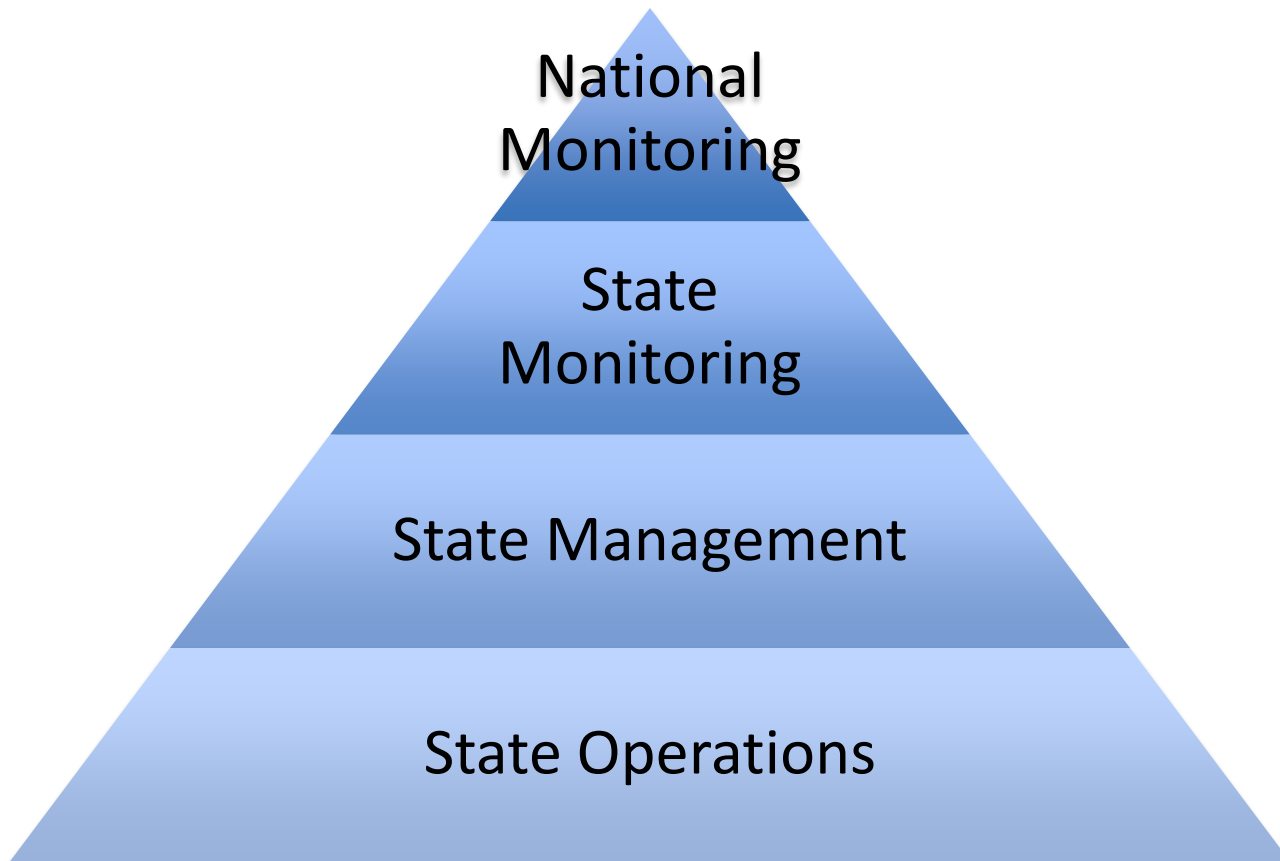
# 101 Continued

## Types of Measures



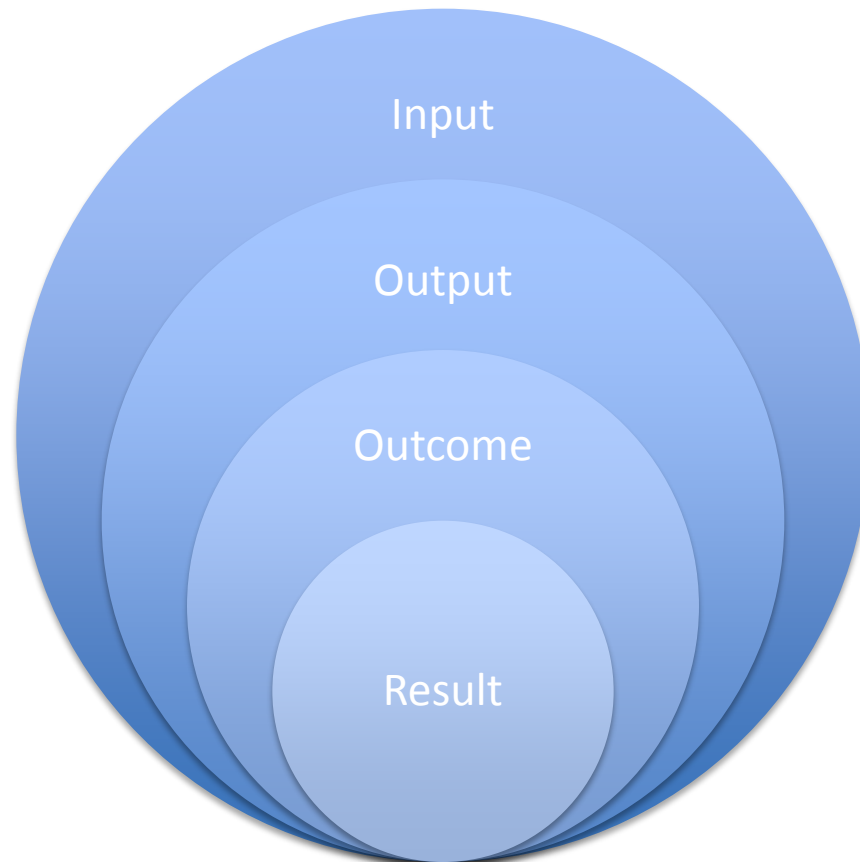
# 101 Continued

## Numbers and Levels of Measurement



# 101 Continued

## Nesting of Measures



# 101 Continued

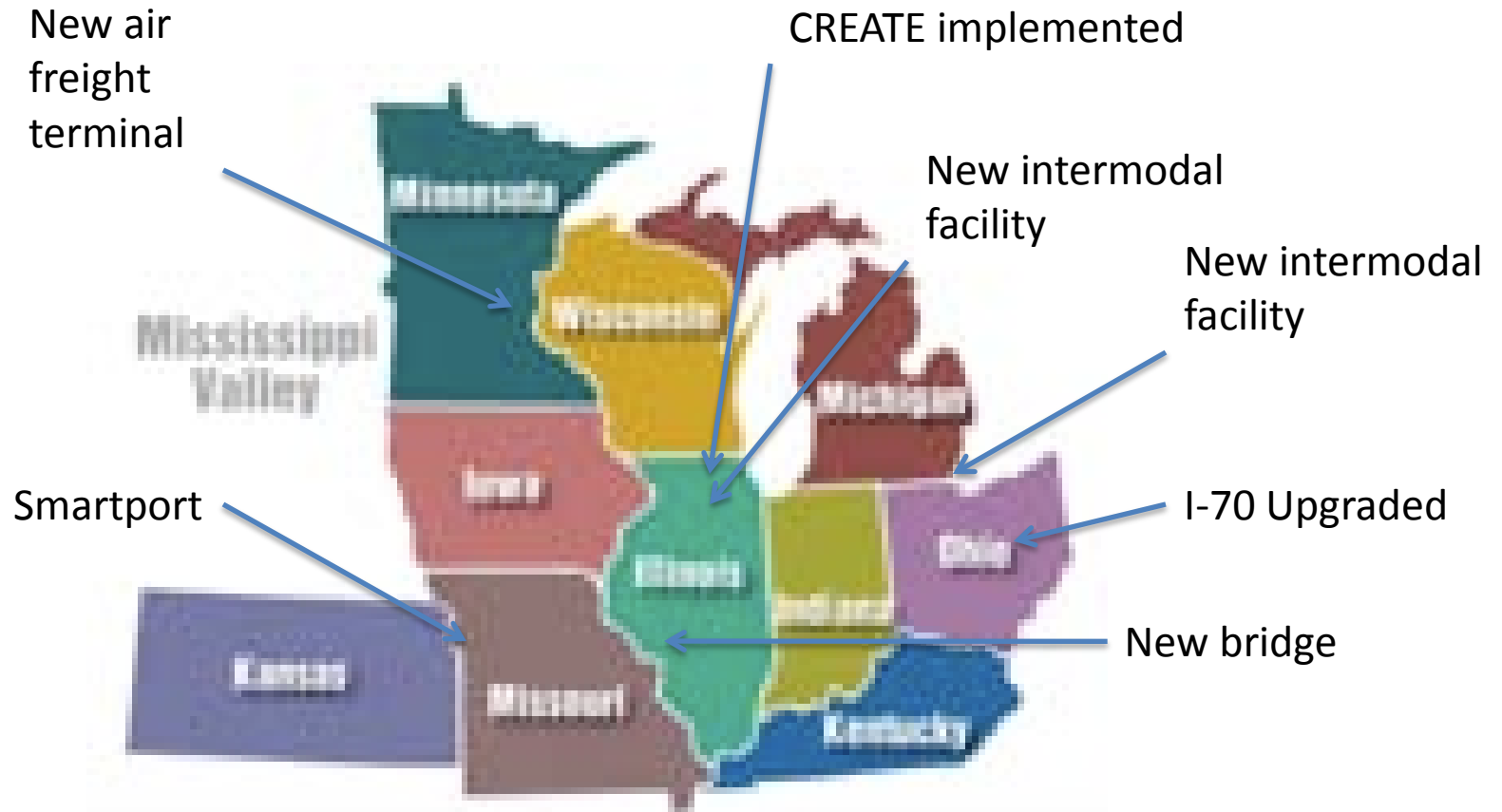
| <b>Area</b>                | <b>State</b>   | <b>Regional</b>   | <b>Federal</b>   |
|----------------------------|--|---|--|
| <b>Economic Efficiency</b> | Percent of state product required for transportation and warehousing.  | Percent of regional product required for transportation and warehousing.  | Percent of Gross Domestic Product required for transportation and warehousing. |
|                            | Travel time on major corridors across the state or between major origins and destinations within the state.              | Travel time between major regional origins and destinations.              | Travel time between major national origins and destinations.                   |
|                            | Variation in travel time on major corridors across the state or between major origins and destinations within the state. | Variation in travel time between major regional origins and destinations. | Variation in travel time between major national origins and destinations.      |
|                            | Average time required for weight and safety enforcement  | Number of weight stations with full CVISN capability.                     | Number of weight stations with full CVISN capability.                          |

# Changes in Infrastructure

- Business
  - New or expanded business
- Transportation
  - New or expanded highway
  - Changed rail service
  - Changed distribution pattern
  - Changed water service



# What's the Impact?



# Why Measure These Impacts?

- To support investment decisions
- To be more active in responding to changes in transportation demand
- To understand economic impact

# How do you measure the impact?

- Traffic volume
- Truck counts
- Freight tonnage
- Ton miles
- Economic impact
- Modal splits
- Projected service impacts
- Other

# Where do you get information?

- Traffic impact analysis
  - Agency done
  - Company done
- Project impact analysis
  - Agency done
  - Company done
- Environmental analysis
- Other

# How Broadly Do You Measure?

- Adjacent to project
- Immediate urban area
- Host state
- Neighboring state
- Region

# What Do You Do With the Information?

- ?????
- ?????
- ?????

# If You Had the Information, You'd ...

- Change plans
- Be more responsive
- Wait until the problem was apparent
- Try to coordinate with other states
- ??????

# What Thresholds Should be Used?

- Traffic generation levels
- Freight projection levels
- Economic impact criteria
- Other



# What Information do you have?

- Traffic impact studies
  - When?
  - Done by whom?
  - What do they include?
  - When are they available
- Project impact studies
  - When?
  - Done by whom?
  - What do they include?
  - When are they available

# What Information do you have?

- Regional economic models
- Air quality analyses
- Other

# Tasks--Group One

- What are good measures of impact?
- Where will you find the data?

# Tasks—Group Two

- How often should this analysis be done?
- How widely should the impact be estimated?
- How should it be shared?

# Tasks—Group Three

- If you had information, what would you do with it?
- Is there a regional “action” that should be considered? What is it?

# Tasks—Group Four

- Design a process to:
  - Gather impact information
  - Analyze that information
  - Use that information
  - Share it