How Do You Measure Success?
A Look at Performance Measures
September 13, 2021
NASAO 2021
Agenda

• Introductions
• Project Overview
• Findings from Report 223
• Open Discussion with Case Study States
• Questions

• Q/A along the way
Introductions

- Stephanie Ward, Manager, Aviation Planning
  - Mead & Hunt

- Scott Storie, Aviation Planner
  - Division of Aeronautics
  - Colorado Department of Transportation

- Denise Garcia, Director of Aviation Planning
  - Aeronautics Division
  - Massachusetts Department of Transportation

- Amy Ludwig, Administrator of Aviation
  - Missouri Department of Transportation

- Bobby Walston, PE, Aviation Director
  - Division of Aviation
  - North Carolina Department of Transportation

- Jim Halley, AAE, ACE, Director, Airport Planning and Programming
  - Aviation Division
  - Texas Department of Transportation
## Snapshot of Case Study States

<table>
<thead>
<tr>
<th>State</th>
<th>Total including Seaplane bases</th>
<th>NPIAS</th>
<th>System Users</th>
<th>Employment &amp; Economy</th>
<th>Agency Status</th>
<th>FAA Region</th>
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<tbody>
<tr>
<td>Colorado</td>
<td>74</td>
<td>49</td>
<td>6,785</td>
<td>19,433</td>
<td>345,661</td>
<td>$48.6</td>
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<tr>
<td>Massachusetts</td>
<td>38</td>
<td>25</td>
<td>2,970</td>
<td>9,834</td>
<td>199,237</td>
<td>$24.7</td>
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<td>Missouri</td>
<td>107</td>
<td>69</td>
<td>5,189</td>
<td>12,014</td>
<td>100,621</td>
<td>$11.1</td>
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<td>North Carolina</td>
<td>72</td>
<td>72</td>
<td>6,605</td>
<td>19,947</td>
<td>307,000</td>
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<tr>
<td>Texas</td>
<td>394</td>
<td>210</td>
<td>26,357</td>
<td>57,668</td>
<td>778,955</td>
<td>$94.3</td>
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</tbody>
</table>

Source: ACRP Report 223 and 2021 state updates
Basis of Findings

• 2016 ACRP/NASAO problem statement effort
• FY 2018 Project 01-37
  – Performance Measures (PMs) for State Aviation Agencies
• Outcomes requested by NASAO members:
  – Menu of options so it wasn’t overwhelming
  – Flexibility in the application of the research
  – Insight on metrics they may want to measure
A PM is any metric being used to objectively evaluate a parameter of the airport system or agency overseeing the airport system.
Numerous Terms Exist

• Performance measure
• Performance metric
• Key performance indicator
• Key performance measure
• Others...

**Key Takeaway:**
The specific term that is used is not really the important issue—the measurement of performance that is important to the specific Agency is.
Panel Discussion

• What terms are you using?
  – Performance measure
  – Performance metric
  – Key performance indicator
  – Key performance measure
  – Others...
Connection to Strategic Planning

• PMs should be linked to the Strategic Plan
• The PM should support an Agency’s:
  − Mission
  − Vision
  − Goals
  − Objectives

Strategic Planning looks at how the organization functions and the goals it wants to achieve, while performance measurement assesses its success in those areas.
Panel Discussion

• How closely are your PMs linked to the Agency:
  – Strategic Plan
  – Mission
  – Vision
  – Goals
Where Do PMs Typically Originate?

- Current PMs are most often selected from:
  - State Aviation System Plans
  - Legislative Requests/Requirements
  - Department Based Activities
Panel Discussion

• Where do your PMS originate?
  – State Aviation System Plans
  – Legislative Requests/Requirements
  – Department Based Activities
  – Other?
Two Styles of PMs

Performance Measure

Reporting Measure
Agency cannot control or influence this metric

Influencing Measure
Agency can control or influence this metric and may have set a target for it
Examples of the Two PM Styles

• Reporting Metric:
  – Number of based aircraft
  – Number of enplanements
  – Amount of Federal funding received

Key Takeaway:
These in some instances were described as key indicators.
Examples of the Two PM Styles

• Influencing Metric
  – Number of weather reporting systems installed/maintained
  – Number of flights flown by State owned aircraft
  – Number of grants processed by the Agency
• Briefly describe your PMs and the role they play in your organization

• Where do most of your PMs fall?
  – Reporting Measures
  – Influencing Measures
  – Combination of both

• Would you like to see that ratio change?
  – If yes, in what way?
Primary Challenges to Implementing PMs

• Limited:
Panel Discussion

• Which of the three items impact your PM activities most?
  – time
  – money
  – staff/labor

• How are you addressing those issues?

• Is there something else inhibiting your development/use/reporting of PMs?
Performance Measurement Process

1. Define Measurements
2. Create Targets
3. Take Measures
4. Manage Performance Measurement
Panel Discussion

• Do you have a defined process for evaluating your PMs?
  – If yes, how often and what is the process?
  – If no, why not?
Considerations in Selecting/Defining a PM

- Connection to Agency Goals
- Data Source
- Defining a Specific Measure
- Frequency of Reporting or Assessing a PM
- Reporting Method
- Responsibility to Monitor

**Key Takeaway**
Measuring something just for the sake of measuring it should not be a basis for selecting the measure.
Considerations in Defining a PM

• Connection to Agency Goals
  – Does the PM support the Agency:
    • Mission
    • Vision
    • Goals
    • Objectives

<table>
<thead>
<tr>
<th>Strategic Plan Element</th>
<th>Measure Example</th>
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<tbody>
<tr>
<td>Mission</td>
<td>Plan, build, and maintain a superior transportation system</td>
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<tr>
<td>Goal</td>
<td>Facilitate the timely development of airports</td>
</tr>
<tr>
<td>Objective</td>
<td>Provide grants for airport improvement projects</td>
</tr>
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</table>
Considerations in Defining a PM

• Data Source
  − Where will the data come from to support the PM?
    • Internal Agency Sources (already collected or new)
    • Internal DOT Sources
    • Internal State Sources
    • External Sources
      • FAA, Airports, Others
  − Does it already exist, or must it be collected?
Panel Discussion

• What challenges, if any, do you have with data collection to support your PMs and their assessment?

• How are you working to address those challenges?
Considerations in Defining a PM

• Defining a Specific Measure
  – Classifications or categories
    • NPIAS vs Whole System
    • GA vs Commercial
    • State Categories/Roles
    • Other
  – Targets
    • Whole system
    • Individual airport/department, etc.
    • Specific type of item
    • Etc.

Example of Targets for Instrument Approach Procedure (IAP) PM

Variations of a target for IAPs:
- Total number of IAPs in state;
- Average number of IAPs per airport across the system;
- An average of one IAP per runway end;
- At least one IAP per system airport;
- At least one IAP per runway end;
- A specific type of IAP based on the airport’s system classification; and
- Specific cloud ceiling and visibility minimums based on the airport’s system classification.
Panel Discussion

• How are your PMs generally organized?
  − Department/Agency Targets
  − System Planning Based Targets
  − Other

• How do you select the specific target measure(s)?
Considerations in Defining a PM

• Frequency of Reporting or Assessing a PM
  – Annually
  – Quarterly
  – Monthly
  – Weekly
  – Other
Panel Discussion

- What is the frequency with which you address your PMs?
  - Annually
  - Quarterly
  - Monthly
  - Weekly
  - Other
Considerations in Defining a PM

• Reporting Method
  – Consider who needs/wants/uses the information
    • Internal staff
    • Legislature
    • General public
  – How it will be disseminated
    • Weekly/monthly staff meetings
    • Annual reports (internal and external)
    • Briefings
Panel Discussion

• Who are you reporting your PM information to and why?
• How do you communicate the information?
Considerations in Defining a PM

• Responsibility to Monitor
  – Define “who” on broad level
    • Individuals
    • Departments
    • Agency
  – Define specific POC if appropriate
Panel Discussion

• Who oversees monitoring your PMs?

• How do you assign responsibility?

• How do you hold them accountable?
Sample Functional Area/Sub-Topics

- Many of these sub-topics may align with system planning PMs
- Many sub-topics fall under definition of Reporting PMs, depending upon the individual state program

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<thead>
<tr>
<th>Inspections</th>
<th>Tall Structures and Zoning</th>
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<tr>
<td>• FAA 5010 Airport Inspections</td>
<td>• Height Zoning</td>
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<tr>
<td>• FAA 5010 Corrective Actions</td>
<td>• Land Use Zoning</td>
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<tr>
<td>• Staffing Concerns for State Airport Inspections</td>
<td>• Method of Zoning</td>
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<td>• State Airport Operating Certificates</td>
<td>• Permits Received</td>
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<td>Plans</td>
<td>Airport Security</td>
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<td>• Airport Business Plans</td>
<td>• Perimeter Fencing</td>
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<td>• Airport Emergency Response Plans</td>
<td>• U.S. Customs and Border Protection</td>
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<td>• Airport Layout Plans</td>
<td>• Wildlife Fencing</td>
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<td>• Airport Marketing Plans</td>
<td>Airport Pavement Condition</td>
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<td>• Airport Master Plans</td>
<td>• Annual Maintenance</td>
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<td>• Airport Minimum Standards</td>
<td>• Benchmark</td>
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<td>• Airport Rules and Regulations</td>
<td>• PCI Studies</td>
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<td>• Airport Security Plans</td>
<td>Enplanements/Cargo</td>
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<td>• DOT Transportation Plans</td>
<td>• Passenger Enplanements</td>
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<td>• Snow Removal Plans</td>
<td>• Cargo Tonnage</td>
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<td>• Statewide System Planning</td>
<td>Air Service</td>
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<td>• Wildlife Hazard Management Plans</td>
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<td>• Effectiveness of Funds</td>
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<td>• Aircraft Fuel Options</td>
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<td>• Annual Aircraft Operations</td>
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<td>• Back-up Generators for Airfield Movement Area Surfaces</td>
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<td>• Clear Approaches</td>
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<td>• Collection of Traffic Counts</td>
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<td>• Emergency Disaster Relief</td>
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<td>• Precision and Non-Precision Approaches</td>
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<tr>
<td>• Weather Reporting Capabilities</td>
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Mead&Hunt
Panel Discussion

• Are there topics that you’d like to address for PMs but aren’t doing today?
  – If yes, what are they and what is holding you back?

• Is there a single PM that you currently evaluate that you couldn’t live without?
  – If yes, what is it and why is it critical?

• Are there PMs you report that you’d like to remove, or do you have too many PMs?
  – If yes, what and why?
Panel Discussion

- What words of wisdom would you have for your peers if they are considering doing more PM assessment?
  - Pros
  - Cons
  - Cautions
  - Other
Final Takeaways

- Align the PMs with the Agency mission, vision, and goals
- Remember – there are no “right” or “wrong” measures
- Develop a cycle
- DO something with the results – DON’T measure just to measure
Questions for our Panel?