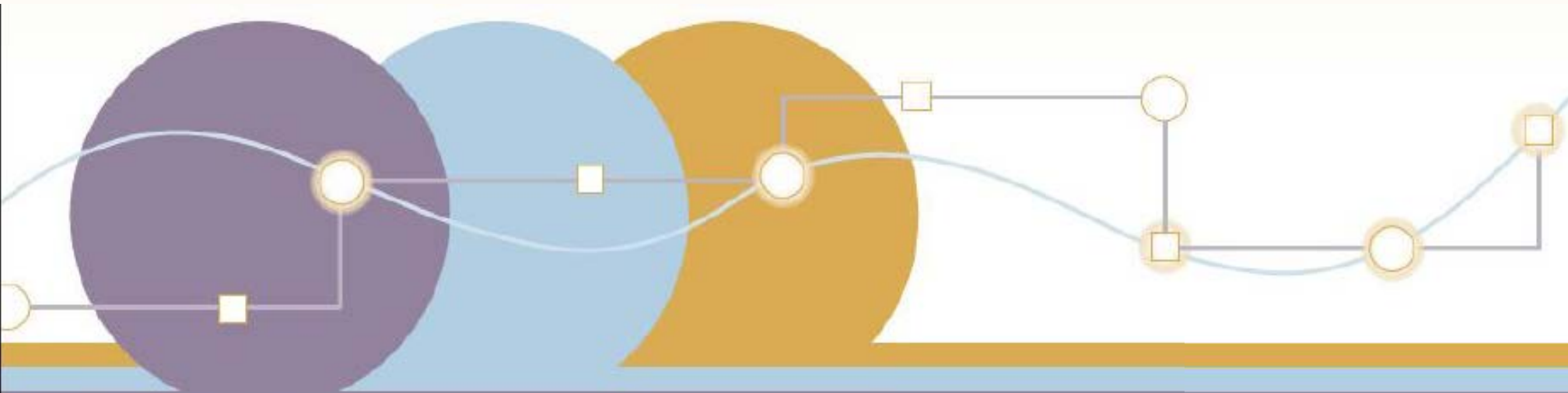


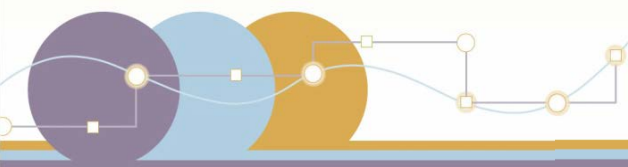
# TPM State Workshop Pilot

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## Action Planning: Component C

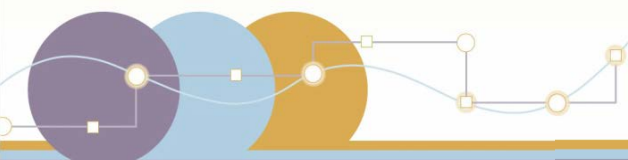
August 24 & 25, 2016  
Jefferson City, MO





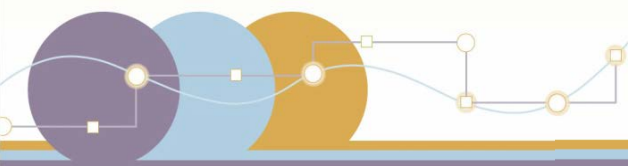
## *Purpose*

- Work with your colleagues to determine actions that will improve your agency's ability to manage performance data



# *Action Planning*

1. Record median agency maturity level
2. Adapt actions to your agency
3. Identify priority actions for improvement
4. Complete detailed action plan form for each action (finish as many as you can)



## Handouts: Exercise



### Action Planning Exercise: Component C

In this exercise you will identify 2-3 high priority improvements and develop a plan for implementation.

#### Step 1: Record level of maturity

Record the median from your agency's assessment results for Component C in the box below.

#### Step 2: Adapt actions to your agency

Reference the CMM tables handout under your agency's median maturity level for a list of generic action items. Adapt these potential actions for Component C to your agency's specific context. Write them down below.

Overall Component C maturity level:

#### Actions

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_



### Step 3: Identify priority actions for improvement

Select 2-3 actions from Step 2 and list below.

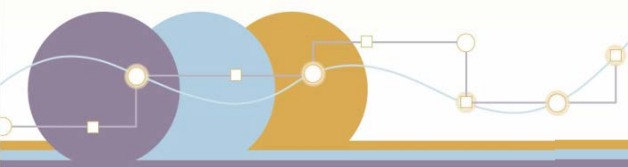
#### Action

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

### Step 4: Complete detailed action plan form for each priority action

See following pages.



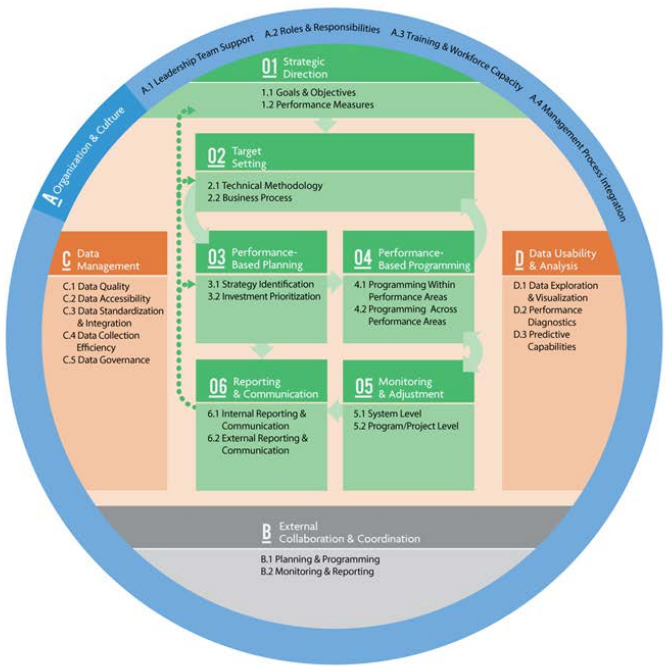


## Handouts: Exercise

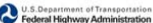
Action Item #1
<b>Action Item:</b>
What is the problem we are trying to solve? How will this action help?
How will you know if your action is successful? (e.g. tangible results, progress milestones)
<b>Responsibilities:</b> Who should take the lead in implementing this action item?  Who else should be involved?
<b>Key issues to be resolved for implementation:</b>

## Handouts: CMM Tables

### Capability Maturity Model Tables



Contact:  
 Michael Nesbitt, Sr. Transportation Specialist  
 Office of Transportation Performance Management, FHWA  
 (202)366-1179, michael.nesbitt@dot.gov



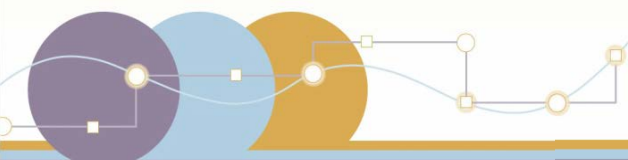
### Data Component Maturity Levels and Actions

#### Component C. Data Management

**Definition:** A set of coordinated activities for maximizing the value of data to an organization. It includes data collection, creation, processing, storage, backup, organization, documentation, protection, integration, dissemination, archiving and disposal. Well-managed data are essential for a robust TPM practice.

Level	Description	ACTIONS to move to next level:
<b>INITIAL (Level 1)</b>	The agency has not established metrics for performance data quality; issues are identified and addressed on an ad-hoc basis rather than through a systematic process. Agency data sets cannot be integrated due to lack of standardization in location referencing or other link or coded fields. Ownership and accountability for data sets is unclear and business units do not coordinate on data collection, use or reporting.	<ul style="list-style-type: none"> <li>Initiate an effort to develop data quality standards based on anticipated uses for each performance data set.</li> <li>Initiate an effort to improve agency performance reporting and query capabilities.</li> <li>Initiate an effort to define data integration needs and standards required to support these needs.</li> <li>Identify opportunities for reducing duplication of data within the agency, and for leveraging externally available data sources.</li> <li>Identify business owners for each data set. Gather input from data users on improvement needs for performance management.</li> </ul>
<b>DEVELOPING (Level 2)</b>	The agency is developing data quality metrics, quality assurance, and validation methods. Efforts are underway to identify key integration points across data sets and define standards that will enable integration, data sharing, and cross-silo analysis. Access to data in visual form is limited and snapshot in time views are available but not repeatable. Staff data leads have been assigned, but responsibilities are unclear.	<ul style="list-style-type: none"> <li>Define and document data quality standards and protocols for data quality assurance and certification.</li> <li>Meet with different users of performance data to understand and document data views that would be useful to them.</li> <li>Identify and implement tools and technologies for improved data access as needed.</li> <li>Get agreement on common data definitions, standards, and aggregation units.</li> <li>Identify single source systems for each key performance data element.</li> <li>Develop and document processes for combining data sets to produce snapshot and trend views required for performance management.</li> <li>Develop internal and external data sharing agreements. Identify system changes needed to facilitate data sharing.</li> <li>Define roles for data governance and stewardship.</li> <li>Develop a systematic process for evaluating and moving forward on data improvements and changes.</li> </ul>
<b>DEFINED (Level 3)</b>	The agency has data quality metrics and standards for performance data sets, and has assembled a plan for making needed improvements. Opportunities for	<ul style="list-style-type: none"> <li>Share information about the quality of performance data sets with data users.</li> <li>Implement data quality assurance and certification</li> </ul>





## CMM: Capability Maturity Model

### Component C. Data Management

Definition →

**Definition:** A set of coordinated activities for maximizing the value of data to an organization. It includes data collection, creation, processing, storage, backup, organization, documentation, protection, integration, dissemination, archiving and disposal. Well-managed data are essential for a robust TPM practice.

Level	Description	ACTIONS to move to next level:
<b>INITIAL (Level 1)</b>	The agency has not established metrics for performance data quality; issues are identified and addressed on an ad-hoc basis rather than through a systematic process. Agency data sets cannot be integrated due to lack of standardization in location referencing or other link or coded fields. Ownership and accountability for data sets is unclear and business units do not coordinate on data collection, use or reporting.	<ul style="list-style-type: none"> <li>Initiate an effort to develop data quality standards based on anticipated uses for each performance data set.</li> <li>Initiate an effort to improve agency performance reporting and query capabilities.</li> <li>Initiate an effort to define data integration needs and standards required to support these needs.</li> <li>Identify opportunities for reducing duplication of data within the agency, and for leveraging externally available data sources.</li> <li>Identify business owners for each data set. Gather input from data users on improvement needs for performance management.</li> </ul>
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<b>DEFINED (Level 3)</b>	The agency has data quality metrics and standards for performance data sets, and has assembled a plan for making needed improvements. Opportunities for	<ul style="list-style-type: none"> <li>Share information about the quality of performance data sets with data users.</li> <li>Implement data quality assurance and certification</li> </ul>

5 maturity level descriptions

Actions to move to the next level (for levels 1-4)

## Example

### Action Planning Exercise: Component C

In this exercise you will identify 2-3 high priority improvements and develop a plan for implementation.

#### Step 1: Record level of maturity

Record the median from your agency's assessment results for Component C in the box below.

#### Step 2: Adapt actions to your agency

Reference the CMM tables handout under your agency's median maturity level for a list of generic action items. Adapt these potential actions for Component C to your agency's specific context. Write them down below.

Overall Component C maturity level:

#### Actions

1. Establish working group to define data quality standards to promote standardization and integration. Group should include all divisions.
2. Seek out resources and individuals from other agencies to gather information about tools to improve access to data for both technical and non-technical users.
3. Develop and document processes for combining data sets to produce trend views that will enhance decision making.
4. Identify potential data sharing opportunities with both internal and external groups. Consider how sharing could fulfill multiple needs and reduce costs.
5. Define roles for data governance, possibly through working group or by seeking out training related to data governance.
6. Develop a repeatable process for evaluating data improvements to ensure that improvements are focused on the most critical agency needs.
- 7.
- 8.

### Step 3: Identify priority actions for improvement

Select 2-3 actions from Step 2 and list below.

#### Action

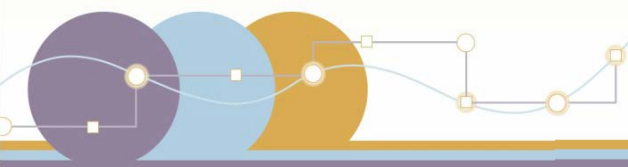
1. Develop a repeatable process for evaluating data improvements to ensure that improvements are focused on the most critical agency needs.
2. Establish working group to define data quality standards to promote standardization and integration. Group should include all divisions.
- 3.

### Step 4: Complete detailed action plan form for each priority action

See following pages.






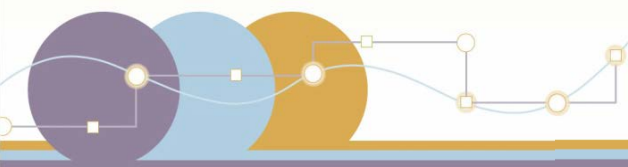


# Transportation Performance Management

## Example

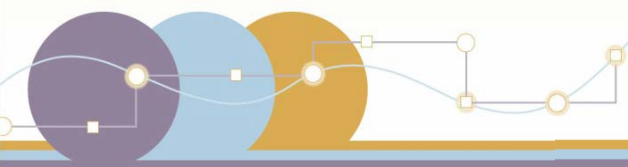


Action Item #1
<b>Action Item:</b> Develop a repeatable process for evaluating data improvements to ensure that improvements are focused on the most critical agency needs.
<b>What is the problem we are trying to solve? How will this action help?</b>  Need to decide which data improvements are the most important, or should happen first because other planned actions depend on a certain improvement. Creating a documented process for evaluating various improvements will allow the agency to determine these dependencies or importance, and then have a clear plan.
<b>How will you know if your action is successful? (e.g. tangible results, progress milestones)</b>  When a list of evaluation criteria is agreed-upon, and once the criteria are used to determine the first priority
<b>Responsibilities:</b> Who should take the lead in implementing this action item?  Data specialists  Who else should be involved?  Various users of data, both technical and nontechnical, to ensure a wide range of criteria are included
<b>Key issues to be resolved for implementation:</b>  Criteria must reflect needs from a number of different divisions and levels of staff; selecting criteria could be contentious.



## ***Breakout***

- Complete the exercise
- Report out: share your priority action items



## ***Report Out***

- 3 min per group
- Share your priority action items
- Prioritize as a group