This chapter provides assistance to transportation agencies with the “Organization and Culture” component of Transportation Performance Management (TPM). It discusses where organization and culture occurs within the TPM Framework, describes how it interrelates with the other nine components, presents definitions for associated terminology, provides links to regulatory resources, and includes an action plan exercise. Key implementation steps are the focus of the chapter. Guidebook users should take the TPM Capability Maturity Self-Assessment (located in the TPM Toolbox at www.tpmtools.org) as a starting point for enhancing TPM activities. It is important to note that federal regulations for organization and culture may differ from what is included in this chapter.

Organization and Culture refers to the institutionalization of a transportation performance management culture within the organization, as evidenced by leadership support, employee buy-in, and embedded organizational structures and processes that support transportation performance management.
INTRODUCTION

For transportation performance management (TPM) to take hold within an agency, the organization and culture must be supportive. Changes to an established organizational structure and processes can be difficult for staff to accept. But when managed properly, the reward for an agency can be substantial. If the instituted changes are able to provide benefit to a broader group within the organization, the new way of conducting business will gain employee buy-in.

Transportation performance management can become a core agency activity when assimilated thoughtfully among staff, and adoption of TPM principles can contribute to improved results for the agency, system users, external partners, and funders. The discipline of adapting individuals within an organization to a different business culture and new business processes is often called change management. Change management is practiced today in different ways by different transportation agencies, but the key principles remain the same and provide several benefits.

Benefits include:

- Staff work as a cohesive unit rather than within silos
- Leadership can better justify activities from a data-driven perspective
- Policymakers see the agency as responsible, transparent, and accountable
- Employees discover efficiencies that reduce overall workload and expense

Note how the Organization and Culture component is depicted in the TPM Framework; it encompasses each of the other nine components because it impacts each component. Building a TPM culture is critical to the sustainability of processes established in other components. Without a supportive culture that has embedded structures and processes for TPM, newly implemented activities may fall by the wayside after only one or two performance cycles. This chapter provides implementation steps that, using a change management approach, will help an agency adjust its own structure and culture to better support TPM.

This change in structure and culture often occurs amidst a shift in other organizational priorities. Managing by performance results is rarely as simple as quantifying organizational and individual performance within existing goals. Rather, it frequently entails an affirmation—if not a complete reassessment—of agency vision and mission. Whether driven by a change in agency administration or by new legislation that prescribes performance metrics, leadership must not only align staff performance expectations with its management philosophies, but it should also foster an environment where change is embraced.

Component 01 of this guidebook details the importance of developing strategic goals for the organization that serve as the overall guiding force for agency decisions. All TPM activities tie back to agency goals, and staff should be focused on these goals as much as possible. Agencies often craft vision and mission statements before developing goals. A vision statement concisely and broadly describes desired outcomes and provides a basis for developing goals that more specifically spell out what the agency wants to achieve. Vision statements should serve as rallying

“We are focused on having an organization made up of people who are motivated and responsible for improving their work, while humble and helpful to those around them.”

- Jerry Benson, Utah Transit Authority

points for staff. Mission statements reflect the core functional purpose of the agency. The Federal Highway Administration’s vision and mission are listed below as examples:2

- **Vision:** Our agency and our transportation system are the best in the world.
- **Mission:** To improve mobility on our Nation’s highways through national leadership, innovation, and program delivery.

As discussed above, pairing TPM with change management becomes critical to TPM implementation. A successful pairing involves elements of both **performance** and **change** management philosophies.

Two examples of **performance** management philosophies include:

- **The Shingo Model:** This model, as illustrated in Figure A-1 below, is depicted as a pyramid with four levels, the foundation of which is Cultural Enablers such as “Lead with humility” and “Respect every individual,” and ascending levels being Continuous Improvement, Enterprise Alignment, and Results.3

  ![Figure A-1: Shingo Pyramid Model](image)

  **Source:** Shingo Institute4

- **Model of High Performing Organizations:** Created by the Center for Innovative Cultures at Westminster College and includes elements such as “Distribute and use existing knowledge and new learning throughout the organization,” “Walk the talk, especially leaders,” and “Offer a strategic narrative that allows all organizational members to understand the impact of their contributions.”5

The Center points out that the vast majority of the American workforce is not actively engaged in its work, and therefore unable to reach their full potential. Citing a Gallup poll that estimates the cost to American corporations of “active disengagement” at $450 to $550 billion annually, the Center suggests that “the complexity and speed of change that organizations now face is stressing their capacity to adapt.” It

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suggests that performance can be approved and strategic competitive advantage achieved by strengthening an organization’s ability to change and adapt.\textsuperscript{6}

The ability to adapt to a performance-driven culture should not be underestimated. Quantifying organizational performance can represent a new way of thinking. Applying metrics to individual performance can feel threatening, as if challenging staff to justify their position within the organization. A change management approach helps employees better understand the purpose of changes in their job roles, processes, and even use of technology. Select examples of change management philosophies include:

- The ADKAR model was developed by Prosci to represent five levels an individual must achieve for change management to be successful:\textsuperscript{7}
  - **Awareness.** Employees must recognize the business reasons for change. Awareness occurs as the result of early communications related to an organizational change and helps individuals understand the impact change will have on them.
  - **Desire.** Once an employee recognizes the business reasons for change, it falls to leadership to help cultivate desire and ownership of change among key staff. By managing resistance to change through active listening and sincere appreciation for staff concerns, leaders can better encourage engagement and participation by employees in the change process.
  - **Knowledge.** The first two levels established a readiness for and acceptance of change. Knowledge teaches the individual how to change. It is the outcome of training and coaching and enables employees to realize or implement the change themselves at the required performance level.
  - **Ability.** The ability of a single individual or of a team to effect change in an organization is nurtured through coaching, practice, and patience. Knowing how to change is important, but learning how to drive change is essential.
  - **Reinforcement.** Not all levels of ADKAR are achieved in an initial pass by all individuals. Acknowledging and celebrating successful behavior or performance helps demonstrate what successful change management looks like, not only to the change agent but to the groups in which he or she operates. Both positive reinforcement and corrective action can help ensure change sticks.

- Colorado DOT leveraged Prosci’s ADKAR and other change management practices in creating a Change Agent Network (Figure A-2) within the DOT. Individuals throughout the DOT, all with existing operational responsibilities, fill three key roles within the Change Agent Network:
  - **Change Agents.** These individuals are located strategically throughout the organization to geographically represent a group of CDOT staff. Headquarters frequently deployed two change agents while each of CDOT’s five engineering regions hosted at least one.
  - **Change Leaders.** Change leads are usually assigned for a specific, large change initiative and help ensure open and frequent communication about the initiative through the change agents and thus to a broader audience. Members of the project team usually feel invested in the change, but a far greater number of staff would be impacted by the change without directly influencing it. Change leaders, therefore, are tasked with collaborating with change agents to develop newsletters, web pages, and other communication devices for the benefit of the entire organization.
  - **Sponsors.** Supervisors and senior executives who oversee project managers or champions of change initiatives are called upon as sponsors to assign change priorities, allocate resources to support those priorities, and keep change moving forward. Their purpose is not to enforce change but rather to foster an environment that readily accepts it.

The successful pairing of TPM with change management obviously requires more than a revision to the organizational chart or a refining of employee job descriptions. To truly drive performance in an organization, the agency must understand how to prioritize its goals and how to manage any constraints that might prevent it from achieving them. The Organization and Culture component is broken down into four subcomponents as illustrated in Figure A-3:

- **Leadership Team Support:** Demonstrated support by senior management and executive leadership for transportation performance management.
- **Roles and Responsibilities:** Clearly designated and resourced positions to support transportation performance management activities. Employees are held accountable for performance results.
- **Training and Workforce Capacity:** Implementation of activities that build workforce capabilities required for transportation performance management.
- **Management Process Integration:** Integration of performance data with management processes as the basis of accountability for performance results.

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Implementation steps, listed in Table A-1, for each of the subcomponents will help an agency create a transportation performance management culture by 1) building support among leaders by making the case for why transportation performance management is important, 2) assessing changes needed in the agency’s organizational structure and positions, 3) identifying and closing gaps in employee skills required for transportation performance management success, and 4) linking employee activities to strategic goals and objectives to improve performance results.

Table A-1: Organization and Culture Implementation Steps
Source: Federal Highway Administration

<table>
<thead>
<tr>
<th>Leadership Team Support</th>
<th>Roles and Responsibilities</th>
<th>Training and Workforce Capacity</th>
<th>Management Process Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Evaluate how new agency processes have been implemented previously</td>
<td>1. Assess current organizational structure</td>
<td>1. Identify gaps in employee skillsets</td>
<td>1. Incorporate performance discussions into regular management meetings</td>
</tr>
<tr>
<td>2. Develop TPM pitch</td>
<td>2. Define and document TPM roles and responsibilities</td>
<td>2. Design, conduct, and refine training program</td>
<td>2. Link employee actions to strategic direction</td>
</tr>
<tr>
<td>3. Clarify role of senior and executive management</td>
<td>3. Identify and implement changes to organizational structure</td>
<td>3. Build agency-wide support for TPM</td>
<td>3. Regularly set expectations for employees through measures and targets</td>
</tr>
</tbody>
</table>
CLARIFYING TERMINOLOGY

Table A-2 presents definitions for the organization and culture terms used in this guidebook. A full list of common TPM terminology and definitions is included in Appendix C: Glossary.

Table A-2: Organization and Culture: Defining Common TPM Terms
Source: Federal Highway Administration

<table>
<thead>
<tr>
<th>Common Terms</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>Refers to actions taken by transportation agencies, such as projects, related to strategy implementation.</td>
<td>Paving key locations, adding new guardrail, rehabilitating a bridge, purchasing new buses.</td>
</tr>
<tr>
<td>Change Management$^9$</td>
<td>The discipline that guides how we prepare, equip and support individuals to successfully adopt change in order to drive organizational success and outcomes.</td>
<td>Individual change management requires understanding how people experience change and what they need to change successfully. Organizational change management provides steps and actions to take at the project level to support the hundreds or thousands of individuals who are impacted by a project. Enterprise change management is an organizational core competency that provides competitive differentiation and the ability to effectively adapt to the ever-changing world.</td>
</tr>
<tr>
<td>Goal</td>
<td>A broad statement of a desired end condition or outcome; a unique piece of the agency's vision.</td>
<td>A safe transportation system.</td>
</tr>
<tr>
<td>Mission</td>
<td>Statement that reflects the core functional purpose of an agency.</td>
<td>Plan, build, operate, and maintain a safe, accessible, efficient, and reliable multimodal transportation system that connects people to destinations and markets throughout the state, regionally, and around the world.$^{10}$</td>
</tr>
<tr>
<td>Objective</td>
<td>A specific, measurable statement that supports achievement of a goal.</td>
<td>Reduce the number of motor vehicle fatalities.</td>
</tr>
<tr>
<td>Outcome</td>
<td>Results or impacts of a particular activity that are of most interest to system users. Focus of subcomponent 5.1 System Level Monitoring and Adjustment.</td>
<td>Transit travel time reliability, fatality rate, percent of assets within useful life.</td>
</tr>
</tbody>
</table>


### Common Terms

<table>
<thead>
<tr>
<th>Common Terms</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>Quantity of activity delivered through a project or program. Focus of subcomponent 5.2 Program/Project Level Monitoring and Adjustment.</td>
<td>Miles of pavement repaved, miles of new guardrail put into place, the number of bridges rehabilitated, the number of new buses purchased.</td>
</tr>
<tr>
<td>Performance Measure</td>
<td>Performances measures are based on a metric that is used to track progress toward goals, objectives, and achievement of established targets. They should be manageable, sustainable, and based on collaboration with partners. Measures provide an effective basis for evaluating strategies for performance improvement.</td>
<td>Transit passenger trips per revenue hour.</td>
</tr>
<tr>
<td>Target</td>
<td>Level of performance that is desired to be achieved within a specific time frame.</td>
<td>Two % reduction in fatality rate in the next calendar year.</td>
</tr>
<tr>
<td>Transportation</td>
<td>A strategic approach that uses system information to make investment and policy decisions to achieve performance goals.</td>
<td>Determining what results are to be pursued and using information from past performance levels and forecasted conditions to guide investments.</td>
</tr>
<tr>
<td>Performance Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision statement</td>
<td>An overarching statement of desired outcomes that is concisely written, but broad in scope; a vision statement is intended to be compelling and inspiring.</td>
<td>Minnesota’s multimodal transportation system maximizes the health of people, the environment, and our economy.</td>
</tr>
</tbody>
</table>

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**RELATIONSHIP TO TPM COMPONENTS**

The ten TPM components are interconnected and often interdependent. Table A-3 summarizes how each of the nine other components relate to the organization and culture component.

**Table A-3: Organization and Culture Relationship to TPM Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>Summary Definition</th>
<th>Relationship to Organization and Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. Strategic Direction</td>
<td>The establishment of an agency's focus through well-defined goals/objectives and a set of aligned performance measures.</td>
<td>The strategic direction drives employee activities by defining agency priorities that should be focused upon in day-to-day work.</td>
</tr>
<tr>
<td>02. Target Setting</td>
<td>The use of baseline data, information on possible strategies, resource constraints and forecasting tools to collaboratively set targets.</td>
<td>Agency targets define success for the agency, and lay the foundation for setting work group and individual employee targets.</td>
</tr>
<tr>
<td>03. Performance-Based Planning</td>
<td>Use of a strategic direction to drive development and documentation of agency strategies and priorities in the long-range transportation plan and other plans.</td>
<td>A shift in organizational structure, workforce training, and change management at the agency enable performance-based planning processes to be completed sustainably.</td>
</tr>
<tr>
<td>04. Performance-Based Programming</td>
<td>Allocation of resources to projects to achieve strategic goals, objectives and performance targets. Clear linkages established between investments made and their expected performance outputs and outcomes.</td>
<td>A shift in agency culture allows performance-based processes to be integrated into existing programming activities; the elements of the organization and culture component support this integration.</td>
</tr>
<tr>
<td>05. Monitoring and Adjustment</td>
<td>Processes to monitor and assess actions taken and outcomes achieved. Establishes a feedback loop to adjust programming, planning, and benchmarking/target setting decisions. Provides key insight into the efficacy of investments.</td>
<td>Because this component is newly called out by the TPM framework, skill development and training related to Monitoring and Adjustment will be especially important.</td>
</tr>
<tr>
<td>06. Reporting and Communication</td>
<td>Products, techniques, and processes to communicate performance information to different audiences for maximum impact.</td>
<td>This component promotes skill development and leadership support for improved performance reporting.</td>
</tr>
<tr>
<td>B. External Collaboration and Coordination</td>
<td>Established processes to collaborate and coordinate with agency partners and stakeholders on planning/visioning, target setting, programming, data sharing, and reporting.</td>
<td>To be successful in external collaboration activities in support of transportation performance management, agency staff must be successful at internal TPM activities; subcomponents of this component enable effective integration.</td>
</tr>
<tr>
<td>C. Data Management</td>
<td>Established processes to ensure data quality and accessibility, and to maximize efficiency of data acquisition and integration for TPM.</td>
<td>Similarly, staff must have the capability to manage data effectively for use in transportation performance management and integrate data into TPM processes.</td>
</tr>
<tr>
<td>D. Data Usability and Analysis</td>
<td>Existence of useful and valuable data sets and analysis capabilities, provided in usable, convenient forms to support TPM.</td>
<td>Staff must have access to usable data and have the skills necessary to analyze it; this component enables skill development.</td>
</tr>
</tbody>
</table>
REGULATORY RESOURCES

This Guidebook is intended only to assist agencies with implementing transportation performance management in a general sense and not to provide guidance on compliance and fulfillment of Federal regulations. However, it is important to consider legislative requirements and regulations when using the Guidebook. In many cases, use of this Guidebook will bring an agency in alignment with Federal requirements; however, the following sources should be considered the authority on such requirements:

Federal Highway Administration

- Transportation Performance Management: http://www.fhwa.dot.gov/tpm/links_fhwa.cfm
- Fact Sheets on Fixing America’s Surface Transportation (FAST) Act: https://www.fhwa.dot.gov/fastact/factsheets/
- Resources on MAP-21 Rulemaking: https://www.fhwa.dot.gov/tpm/rule.cfm

Federal Transit Administration

- Fact Sheets on FAST Act: https://www.transit.dot.gov/funding/grants/fta-program-fact-sheets-under-fast-act
IMPLEMENTATION STEPS

A.1 LEADERSHIP TEAM SUPPORT

This section will help an agency build leadership support for transportation performance management and communicate to leaders their roles and the benefits of TPM.

1. Evaluate how new agency processes have been implemented previously
2. Develop TPM pitch
3. Clarify role of senior and executive management

“Strong leadership from a DOT’s chief executive or senior management is almost always a defining factor in the success of any DOT’s performance management initiative... agency leaders must set the tone.”

Source: NCHRP 660, TPM: Insight from Practitioners

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STEP A.1.1 Evaluate how new agency processes have been implemented previously

<table>
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<tr>
<th>Description</th>
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| To improve the chances of positive reception by leadership, it is important to approach them with a clear plan and support for why transportation performance management is necessary for the organization to be successful. A good way to do this is to consider how new initiatives and processes have been implemented in the past and adopt techniques that were successful to implement transportation performance management processes. Conversely, past failures in implementation can give staff an idea of techniques to avoid. In surveying past successes and failures, the agency can begin to assess its readiness to accept future change. Readiness assessments can target the organization or enterprise, the work unit, the individual, the sponsor capacity, and even existing tools and processes. By asking the following questions, it can even address the magnitude of the change and its potential impact on the organization: 12
| How big is this change?
| How many people are affected?
| Is it a gradual or radical change?

While the most appropriate techniques will vary by agency, some ideas include:

**Identify and enlist champions/sponsors with access to leadership:** Accessing leadership is sometimes difficult so it is important to identify champions who already have access to leadership who are willing to sponsor transportation performance management initiatives. While these champions are often one or two levels removed from the highest levels of leadership, they are experienced at moving and gathering support for new initiatives within the organization.

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“We live in a world of constant change. Many times that change is driven by political turnover. Elections can bring in a new Governor who in turn changes transportation agency leadership. When you get new leadership in, it’s like you are starting the performance management cycle all over again.”

- Christos Xenophontos, RiDOT
### STEP A.1.1 Evaluate how new agency processes have been implemented previously

| **Opportunistically communicate about TPM:** | Competition for time with leadership can be intense. Therefore, when reasonable, use other meetings with leadership to make the case for TPM. Transportation performance management can bring benefits to all aspects of the agency so it may make sense to continually relate back to these benefits in seemingly unrelated requests. Make the connection to between current issues and how TPM could address them. |
| **Use Federal or state compliance as support:** | Federal and state requirements often include provisions for performance measurement, reporting, or other TPM activities. Leadership must comply with these requirements; use the requirements as opportunities to communicate the benefits of a broader TPM practice to obtain support. |
| **Demonstrate benefit over cost:** | Break down the costs and benefits expected from transportation performance management to show monetary savings, improved performance results, or other benefits that will outweigh costs associated with implementation and transition. |
| **Prepare for leadership change:** | Elections occur frequently and often result in shifts of political leadership, which affect agency leadership and priorities. Agencies must prepare for this because it will happen. By preparing, staff documents standard operating procedures that transition TPM activities into standard practices. These documented standard operating procedures can then be used to brief new leadership and staff, thus institutionalizing TPM practices within the organization’s business processes. |

### Examples

**Utah Transit Authority (UTA): Highlighting Past Successes**

Staff at UTA has found that championing past success is a proven tool for building support for transportation performance management processes. Often staff is undertaking transportation performance management practices in small ways but does not realize it or call it by that name. These practices often lead to positive results, which can then be used to make the connection to why those results occurred, i.e., because TPM practices were employed.

UTA, through examination of its transit vehicle crash data, found that new operators and right-side clearance in downtown construction zones resulted in a large number of crashes. To improve results, the agency addressed these problems by instituting new training procedures. Staff was then able to make the connection between the data collected, the adjustments made, and the improvement that resulted. UTA used this example to further promote TPM within the agency. When leadership realizes that TPM is already being practiced and it is producing results, they are more likely to embrace TPM.

**RiDOT: Celebrate Early Wins to Promote TPM**

When the Rhode Island Department of Transportation (RiDOT) first began to integrate transportation performance management processes, the agency was able to celebrate a major milestone: a member of the executive leadership team requested a quarterly performance report to use in a new meeting to review performance trends. In the meetings, the executive used the performance report to discuss with managers ways to use the results to improve. This
Component A: Organization and Culture

STEP A.1.1 Evaluate how new agency processes have been implemented previously

was a clear demonstration of support by leadership. As a result, the managers understood the wealth of information available to them because it was included in the report. By celebrating this early win of executive support, RiDOT was able to make clear to staff that leadership saw the benefits of connecting performance information to daily activities.

Figure A-4: RiDOT Performance Report
Source: RiDOT

Linkages to Other TPM Components
Component 01: Strategic Direction
Component B: External Collaboration and Coordination

STEP A.1.2 Develop TPM pitch

Description

Once the change agents, leaders, and sponsors for TPM have helped determined readiness for the new initiative, the benefits of implementation, and the potential barriers to success, they must develop a communication plan or “TPM Pitch.”

A common trap for change leaders at any level of the organization is the belief that their work is complete once they have delivered a compelling argument for change. Rather, the job has only started. Not only must their argument or message be repeated consistently and clearly to those impacted, but the feedback must be openly accepted and managed. Prosci offers three key components to an effective change communication pitch/plan:

- The audience
- What is communicated
- When it is communicated

The pitch should be tailored to each audience based on its area of responsibility and the performance challenges faced within that area of responsibility. This is a great way to make the direct benefits clear to the organization and demonstrate how transportation performance management processes can lead to improved results within each leader’s area of

<table>
<thead>
<tr>
<th>Component A: Organization and Culture</th>
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<tbody>
<tr>
<td><strong>STEP A.1.2</strong> Develop TPM pitch</td>
</tr>
<tr>
<td>responsibility. It is advantageous to identify champions among the leadership who will promote the idea to other leaders. If no champion exists, focus the pitch on leaders who seem open to new ideas and develop them into champions. Keep the pitch short and focused on the most important elements of transportation performance management and the resulting benefits to the individual you are targeting. These are often called elevator pitches because they should take no more time than an elevator ride.</td>
</tr>
</tbody>
</table>
| • Make the case for the most critical and doable processes/integration:  
  o Some changes should be implemented together to achieve the full benefits of the change; consider connections across strategic changes to take full advantage.  
  o Which change will provide the greatest benefit for the least amount of resources?  
| • Prioritize what is most likely to be supported by the individual or leadership as a whole:  
  o Who are the opinion leaders among the executive team?  
  o Consider who will be directly involved with implementing the change—they must be supportive and willing to commit resources. |
| “Our first attempt to implement 4 or 5 years ago didn’t succeed because the information wasn’t perceived as valuable by the decision makers and therefore nobody paid any attention to it even though there was a good structure in place. This time we are determined to change TPM from a management exercise to the way TxDOT does business.” |
| - Tonia Norman, TxDOT |
| Even after initial TPM processes have been implemented, staff will likely need support to encourage wider adoption. Make leadership aware of successes that can be traced back to transportation performance management processes to promote further progress. |
| Sometimes leadership will support the idea of transportation performance management but be unable to provide resources to actually implement changes. Be persistent and persuasive, and work to implement reforms using existing resources. |
| **Examples** |
| **FHWA: Talking Points for FHWA Leadership** |
| When the Federal Highway Administration (FHWA) began to roll out its strategy for implementing transportation performance management, they provided a set of talking points to senior leadership to champion the message and pitch TPM to FHWA’s partner agencies. Below is an excerpt taken from those talking points: |
| **The FHWA Role:**  
  • “Stewardship Heavy – Oversight Light”: Our emphasis should be on providing |

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STEP A.1.2: Develop TPM pitch

effective stewardship and not focused on the “stick” we can wield through compliance oversight. We should be engaged in helping our partners through this evolution, making sure they understand what the rulemaking requires and how to implement and accomplish this. It will require much collaboration and learning, both by our partners and by FHWA.

- **Success = 100 Percent Compliance:** We will build on our successful experience with the American Recovery and Reinvestment Act (ARRA) in working hard with our partners on the front end. While this will not be a rubber stamp process, our goal is for all our partners to be able to fully comply.

**How We Get There:**

- **States and Metropolitan Planning Organizations (MPOs) are Our Partners:** We need to understand where they are regarding transportation performance management, what their capabilities are, and how what is being proposed is different from what State DOTs and MPOs are doing today. Divisions play a key role, with assistance from Headquarters and the resource center.

- **Deliver in a Consistent Manner:** Communication and coordination between the divisions and Headquarters is critical. FHWA must bring transportation performance management together as a whole, not just safety performance or infrastructure performance or system performance. The MAP-21 performance elements are cross cutting and pulled together through a collaborative planning and programming process. Communication within FHWA across disciplines and units will be critical to our success in implementation.

- **Get a Seat at the Table at the Local Level:** Divisions should strive to be a partner at the table to work with our partners as they make good, results-oriented, investment decisions that will maximize the return of the public investment in our transportation system. This is a prime opportunity for FHWA to bring technological and programmatic leadership to the discussion as the State DOTs and MPOs work through the decisions they must make. We need to build our strength so that they look to us as a resource and as a partner. We will be a broker of knowledge.

**Top Five Implementation Opportunities:**

**Optimizing Investments of Public Funds**

- Transportation funding is limited, so we must maximize the return on the investment of the public dollars entrusted to transportation agencies and planning organizations.

- Better decisions, made with the overall system performance in mind, will result in the best “mix” of investments that will collectively maximize the performance gains of the system.

**Improving Consistency Across the Country**

- Many states already are involved in decision-making transportation performance management today. Consistency in terminology, standards, and metrics will result in an easier transfer of knowledge so that we can hold an effective national conversation on transportation performance and develop valuable national performance reports. We will strive for measures that can be implemented and that are meaningful rather than the lowest common denominator. The easiest measure is not necessarily the best.
STEP A.1.2  Develop TPM pitch

**Increasing Coordination of Decision-Makers**
- State DOTs, MPOs, transit agencies, local governments, and others all share in the responsibility to support national performance needs through their local decision-making.
- The planning process, a tool that already exists, is a key part of successful coordination. We will build on what is already working there.

**Increasing Our Understanding of What Works**
- This is a critical role for FHWA: What investment strategies are useful in achieving the targets set and the desired outcomes?
- While we have some knowledge today though our existing data tools, the transportation performance management process provides us with an opportunity to develop that knowledge base even further with our partners.

**Communicating Federal Investment Returns**
- Without a common set of metrics and national reporting, we are challenged today in being able to effectively report on the outcomes of transportation investments and the impact of the $40B annual Federal investment on our nation’s highways.
- The story we need to tell is not only what we are able to do but also what we are unable to do with existing resource constraints. This will inform discussions on future authorizations and Federal funding levels.

**Linkages to Other TPM Components**
Component 06: Reporting and Communication  (See TPM Framework)

STEP A.1.3  Clarify role of senior and executive management

**Description**
While developing the communication pitch/plan can be accomplished by the change management team’s agents and leads, executives play a critical sponsor role in times of change. The supervisor of a work group can, in fact, have the greatest influence over his or her subordinates’ approach to change. The change management team must therefore also develop a plan for sponsor activities so that executive management can effectively carry out these plans. Research shows that sponsorship is the most important success factor in change management.\(^\text{17}\)

Staff should be prepared to help define what senior management and leadership should do to promote transportation performance management. Without specifics concerning what is

STEP A.1.3 Clarify role of senior and executive management

expected from them, many on the leadership team will not commit to a change agenda. Effective sponsorship may involve the following activities:

- Active and visible participation in the implementation of TPM
- Demonstrated leadership support at agency meetings and presentations to key audiences
- Strong coordination among other leaders to help ensure message consistency among employees
- Consistent and regular use of performance information and language, including impactful graphics that clearly demonstrate performance
- Incorporation of performance data and reports within presentations on other topics
- Alignment of resources including funding and staffing to best support TPM implementation

Examples

Utah DOT: Leadership's Role

The Utah Department of Transportation (UDOT) has successfully implemented many aspects of transportation performance management. Implementation was a byproduct of the UDOT Transportation Asset Management Plan (TAMP), which included a roadmap for integrating programs, tracking performance data, and organizing and making such data accessible.

Implementation included identifying high-level risks to certain assets, developing a framework around those risks to improve the economy of a specific asset, and then setting a prioritized funding structure. However, full implementation of the TPM procedures will not be complete until UDOT has reached the end of its first five-year period within its overarching TAMP. Because risks may not be immediately identifiable, using a five-year period to monitor the performance of roads and pavement will better allow UDOT to make informed funding decisions with regard to risk.

UDOT credits its success in part to leadership support including the following:

- Executive level leadership articulated a strategic direction. Management set goals and targets aligned with the strategic direction.
- Leadership at all levels laid a cultural foundation by demonstrating a clear vision for the agency.
- TPM has been integrated into decision making by all managers.
- Past DOT leadership has encouraged a culture where employees fully understood strategic goals and had the flexibility to innovate to pursue the goals.

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<table>
<thead>
<tr>
<th>Step A.1.3</th>
<th>Clarify role of senior and executive management</th>
</tr>
</thead>
</table>

**Figure A-5: Utah DOT Logo**
Source: Utah DOT

**Michigan DOT: Building Political Support**

A key role or activity of senior executives is the alignment of resources, including funding and staffing, to best support TPM implementation. Michigan state legislators have strict term limits, which means elected officials are often new and not familiar with the needs of the DOT. To educate them about the major backlog of projects and the need for increased funding to complete them, the CEO and his staff meet with each new legislator and make presentations at town hall meetings statewide. Agency staff also built a simplified funding model that allows the CEO to quickly show the impact of a legislator’s ideas and funding levels on system performance. All of these efforts have been effective at moving the dialogue with legislators from *whether* the state’s transportation system needs more funding to *how much more* it needs and where to find the money. As an interim solution, the legislature invested $350 M in general fund revenue, an unprecedented amount.

**Linkages to Other TPM Components**

- Component 06: Reporting and Communication
- Component B: External Collaboration and Coordination

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24 Utah Department of Transportation. (2016). Logo. Taylorsville, UT.
A.2 ROLES AND RESPONSIBILITIES

The steps in this section focus on identifying and making changes to the agency’s organizational structure to better support transportation performance management and to ensure TPM practices are sustainable.

1. Assess current organizational structure
2. Define and document TPM roles and responsibilities
3. Identify and implement changes to organizational structure

“Organizational change is really about communicating new expectations for how work should be done and holding people accountable for implementing those new expectations. Change only occurs when the people who are responsible for executing the day-to-day processes actually implement new procedures.”

Source: NCHRP 798, The Role of Planning in a 21st Century State DOT—Supporting Strategic Decisionmaking

<table>
<thead>
<tr>
<th>STEP A.2.1</th>
<th>Assess current organizational structure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Transportation performance management will be most successful if the organizational structure of the agency is conducive, and it is likely that changes will need to be made to better align with new roles and responsibilities required by transportation performance management processes. Many agencies operate within departmental and modal silos, which limit the chances for transportation performance management to take hold, or spread from within the confines of a silo. Making progress toward strategic goals is easier when information is shared and strategies are coordinated to capitalize on efficiencies and take advantage of synergy between projects. It’s also easier when the organization understands the importance of broader organizational change rather than merely individual change. Organizational change management identifies the groups and people who will need to initiate, embrace, or simply accept TPM. It also clarifies in what ways those groups will need to change. Organizational change management helps to ensure that impacted employees receive the support they need to change successfully. Successful implementation of TPM can be achieved even if all performance targets are not. Accepting a new practice of target setting for project delivery, for example, may signify a significant shift toward transportation performance management even if the actual project delivery target is not initially achieved. Organizational change management, therefore, is complementary to instilling TPM. The TPM leads ensure the initiative is properly tailored for and delivered to the organization while change agents and leads enable TPM to be effectively embraced, adopted, and used. The first step in making these changes is assessing the agency’s current organizational structure:</td>
</tr>
<tr>
<td><strong>Does the current organizational structure support a transportation performance management framework?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Does staff have the ability to use performance data in their daily activities? Often, these data are only accessible by finance office staff.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Do they have the capacity to integrate transportation performance management activities into their existing workload, or will new staff be needed?</strong></td>
<td></td>
</tr>
</tbody>
</table>
Assess current organizational structure

**North Carolina Department of Transportation**

The DOT underwent a wholesale assessment by McKinsey and Company to determine how to function more like a private company in terms of efficiency and performance. This process was supported by management, the Governor, and the Legislature. The assessment included town hall meetings with and surveys of employees. One category of findings included issues with organizational elements, and organizational silos were specifically called out: key processes such as project delivery were too siloed, and lacked the units needed to support others such as intermodal and strategic planning. The assessment also found that operational processes lacked metrics-based management that cascaded to all levels of staff.  

To address these issues and others, the DOT developed five initiatives to implement improvements:

- Strategic direction
- Planning and prioritization
- Program and project delivery
- Human resource management
- Performance and accountability

These initiatives were completed in order; identifying a strategic direction involved crafting vision and mission statements and developing strategic goals. In the second initiative, the DOT created a strategic planning office to ensure investments were data-driven. The office has developed a method for scoring and prioritizing projects. Other improvements include a streamlined hiring process and implementation of mentoring programs to retain high-performing employees. Additionally, the agency reduced data sets from 1000 to 400 in two years, partly by integrating data that applied to more than one business unit.

Results of the initiatives include improved:

- Employee performance ratings: 75-80% now meeting expectations.
- Project delivery: delivering 75% of programmed projects as of 2012.
- Asset condition: in 2012, 66.2% of bridges were in good condition, and the average highway feature condition score was 89.7 (target was 84).

Lessons learned include:

- Don’t move too quickly. Major change is stressful and employees need time to adapt.
- Building relationships across divisions and tying success to employee performance were critical to making staff feel valued.
- Encourage employee feedback. NCDOT amended performance evaluations based on employee feedback.

---


### Component A: Organization and Culture

**STEP A.2.1** Assess current organizational structure

| Linkages to Other TPM Components | All | (See TPM Framework) |

**STEP A.2.2** Define and document TPM roles and responsibilities

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff should define what roles and responsibilities will be necessary for transportation performance management processes and clearly document them. This should include not only those required for completion of transportation performance management activities, but also those required for initial creation and integration of TPM processes as well as ongoing support to ensure sustainability and long-term staying power.</td>
</tr>
</tbody>
</table>

Agency approaches to organizational structures vary. Some create standalone transportation performance management offices with dedicated staff that work with other staff throughout the organization. Others use a matrix structure, where a transportation performance management staff member is located within departments or offices and works closely with staff there but also with other transportation performance management staff in other work groups. Yet another approach is to integrate transportation performance management activities across existing staff, though possibly with adjusted relationships. Some agencies find that the more individuals are involved in TPM, the more ownership they have, which produces positive results.

Documentation of these roles and responsibilities will ensure the agency can reevaluate changes at intervals, as transportation performance management matures. It will also assist staff in identifying what changes to make in step A.2.3, by comparing to the assessment of the existing organizational structure completed in step A.2.1.

<table>
<thead>
<tr>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hampton Roads Transportation Planning Organization (HRTPO)</strong></td>
</tr>
</tbody>
</table>

HRTPO has set up a schedule to clearly identify which employees are responsible for which activities. The image below shows a part of this work schedule, which includes project tasks on the left, cycle (annual, quarterly, etc.), which employee serves as principal, and which employees assist. The final columns are a schedule of work by quarter and the month in which all work on the particular project should be completed.

HRTPO leadership sought to simplify agency work by clearly documenting it for staff to see, which also enables collaboration and coordination. Leadership meets with principals each Monday to discuss work to be done that week and to review progress; in turn, principals meet with their staff. Accountability for results is maintained through this weekly set of meetings. Principals are typically planners or engineers and lead teams for public involvement, congestion management, development of the LRTP, programming, and others.

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STEP A.2.2 Define and document TPM roles and responsibilities

The schedule is linked to the Unified Planning Work Program\textsuperscript{30} that further documents tasks to be completed and how transportation performance management is woven into these tasks.

Figure A-7: HRTPO Unified Planning Work Program Schedule
Source: Unified Planning Works Program\textsuperscript{31}

Missouri DOT Tracker

The Tracker report is a much-lauded performance reporting product that also serves as documentation of transportation performance management responsibilities within the agency. The report includes a significant number of performance measures and each one is clearly linked to particular employees called Result Drivers and Measurement Drivers. This is a simple way to document important responsibilities for performance data collection and reporting, as well as accountability for results.


STEP A.2.2 Define and document TPM roles and responsibilities

**Figure A-8: Missouri DOT Tracker**
Source: MoDOT

**Figures**

Linkages to Other TPM Components

All

(See TPM Framework)

STEP A.2.3 Identify and implement changes to organizational structure

**Description**
Using the assessment of the current organizational structure and the documented roles and responsibilities needed for transportation performance management, identify changes to make and implement them. A critical aspect of this process is communicating changes to staff who will be impacted. They will be concerned about increases in workload, changes in their activities, and their job security.

**Leadership should clearly communicate:**
- What is changing
- Why it’s changing
- What it means for the individual, including expectations, responsibilities, and benefits
- What impact it will have on performance, the agency, and outcomes
- What things will look like when the dust has settled

There will be resistance among some staff simply because many have been doing things one way for a long time and adapting to change will take time and effort. Others will resist because they see an increase in work or cannot see the importance of the change or fear a loss of

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“Sometimes the job requires you to be an amateur psychologist.”
-David King, GM, Triangle Transit
**STEP A.2.3**

Identify and implement changes to organizational structure

control of data or a process. Leadership should try to address these concerns in a reasonable way, while also making clear that changes will come regardless. However, leadership has a responsibility to listen to concerns of staff to ensure that changes are reasonable. Early adopters within work groups can be highlighted to encourage others during this time of culture shift.

Consider the following changes:

- Improve coordination for short-, mid-, and long-range planning and decision-making by facilitating discussions among DOT offices and divisions
- Work to remove silos by facilitating a holistic performance-based planning approach that coordinates asset management, operational improvements, targeted construction improvements, and funding for all modes
- Identify duplicative efforts in data collection and analysis that can be consolidated to save limited funding and staff resources. Consider giving all employees direct access to performance data.

Planning for skills transfer and training should follow soon after the establishment of TPM processes (see subcomponent A.4). The agency should also periodically refine roles and responsibilities as transportation performance management processes are improved or as new processes and noteworthy practices are developed.

**Examples**

**Georgia DOT: Instituting Changes**

The Georgia DOT’s transportation performance management office created a public dashboard that included measures and targets. Because this was a new product and a new way of doing things at the agency, there was a need to educate staff on transportation performance management terminology and practices. Weekly meetings were held to discuss measure and target pairs one by one; this method ensured that staff understood the changes that were taking place. With weekly meetings complete, the transportation performance management office was able to then hold group meetings with program offices to sort 40 overall agency measures into 14 global measures that drive decision-making and funding allocations.

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STEP A.2.3 Identify and implement changes to organizational structure

**Figure A-9: Georgia DOT Dashboard**
Source: GDOT Performance Dashboard

### Number of Fatalities Annually on Georgia’s Roadways

**Description**
GDOT considers safety in every stage of a project and in every investment decision. The American Association of State Highway and Transportation Officials (AASHTO) have adopted a national goal of reducing fatalities by 1000 each year. To assist in achieving this national goal, Georgia has set a target of reducing fatalities by 41 or more each year. This is based on our roadway types as well as the number of cars and trucks using our roadway system. This measure evaluates GDOT’s efforts to reduce fatalities on Georgia’s roads.

**Strategic Objective**
Reduce the number of fatalities by 41 each year.

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**Utah DOT: Cross-Department Collaboration**

The Asset Management Steering Committee at the Utah Department of Transportation shows how the organizational structure of an agency can be less rigid, promoting inter-division coordination and improving results. Committee members meet bimonthly and are responsible for setting the direction of UDOT’s asset management programs, including approval of safety, capacity, and preservation funding. Where before staff worked on related tasks independently within silos, this new structure has broken down some of the silos within the organization, reduced duplicative efforts, and aligned project spending with agency goals.

The committee is chaired by the DOT’s deputy director; voting members report directly to the deputy and include all four region directors, the engineer for operations, and the directors of programming and planning. Division managers are nonvoting members.

Committee responsibilities also include review of the program, division performance targets, measures, and objectives and recommendation of funding levels to the state’s Transportation Commission, which is responsible for approving funding. Performance data are used to prioritize projects across divisions.

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<table>
<thead>
<tr>
<th>STEP A.2.3</th>
<th>Identify and implement changes to organizational structure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maricopa Association of Governments: Addressing Resistance</strong></td>
<td></td>
</tr>
<tr>
<td>MAG wanted to take transportation performance management practices further by developing and using evaluative tools to prioritize investments in the region. Instead of developing these tools at the executive level or purchasing a tool from a vendor, the agency encouraged offices to create their own. While some staff were still resistant, this decentralized and semi-autonomous development built buy-in and did help to reduce resistance to this transportation performance management process. After some time using the evaluative tools, staff now hesitates to allocate funding without using them. Leadership is very supportive of the current situation because offices are working well together, with a common understanding that all projects will be subject to the prioritization tools. This has been a significant cultural shift at MAG and demonstrates how important it is to understand what concerns may arise and to have a plan to address those concerns.</td>
<td></td>
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</tbody>
</table>

| Linkages to Other TPM Components | All (See TPM Framework) |
A.3 TRAINING AND WORKFORCE CAPACITY

Employees must have the skills required to undertake transportation performance management activities. The agency should identify what skills should be included in training programs to ensure staff has the support needed to succeed in integrating transportation performance management processes into their activities.

1. Identify gaps in employee skillsets
2. Design, conduct, and refine training program
3. Build agency-wide support for TPM

**STEP A.3.1** Identify gaps in employee skillsets

| Description | Because transportation performance management processes are new, they will require skills that staff may not have. The agency should undertake an assessment of what skills currently exist among staff, and separately identify what skills will be needed for transportation performance management, based on agency goals as defined in the Strategic Direction (Component 01). These assessments will enable the agency to determine what skills will need to be developed.

Once gaps in TPM skills and knowledge are identified, an agency must determine which gaps to close and how to close them. Prioritizing can be accomplished by first determining which skills are most instrumental in fulfilling the agency’s strategic direction or mission. A transportation agency that places mobility above all other agency goals, for example, must not employ only traffic engineers. It will need to understand how to measure and communicate mobility within and outside the organization. To do this, employees will need skills in researching traffic data and patterns, in projecting demographic trends and user needs, and in analyzing and explaining concepts such as indexes for travel time, buffer time, and planning time.

Some of these skills may exist within the organization, yet are underutilized. The tasks they support may need to be added to job descriptions to underscore their importance to staff. Some staff may possess these skills but do not regularly use them because their day-to-day activities do not require them. An organization may have to search for the right individuals with the right skills and knowledge to excel in TPM.

When needed skills cannot be tapped from the existing workforce, the organization must search for them, often re-writing job descriptions as positions become vacant.

Practitioners have identified the following skills, characteristics, and conditions as supportive of TPM:

- Multimodal understanding
- Multidisciplinary background
- Creative
- Consensus-oriented

“When I come back to the office from a training or peer exchange, I’m a different person because I’ve learned something new. My immediate focus is on how to apply what I have learned to making our system even better. There is always room for improvement.”

- Camelia Ravanbakht, Hampton Roads TPO
## STEP A.3.1 Identify gaps in employee skillsets

- Technologically savvy
- Data analysis, especially seeing the larger picture
- Translate data for legislators, executives
- Willing to continually learn
- Social media
- GIS
- Graphics/design
- Communication to variety of audiences including nontechnical
- Mix of engineers, planners, etc.
- Customer-service oriented
- Willing to learn by doing
- Meeting facilitation skills
- Ability to work across silos
- Data management, especially for quality

Whether altering the job responsibilities of existing staff or hiring staff from outside the organization to perform new tasks, the organization will need to communicate to the current workforce the rationale for this change. Individual change management requires that leaders of the organization understand how people successfully deal with change. Change agents and change leaders can assist individuals in making a successful transition either into a new TPM responsibility or in working with new staff assigned this responsibility. And whether teaching a new skill to a current staff member or hiring that skill from outside the organization, leadership must understand how to best to convey the “change” message to each individual. Not all individuals receive the message the same way. Some will be very supportive and eager to participate. Some will become defensive, and even plot to reduce the probability of success. Often the most difficult part of the change agent or change leader’s assignment is to make changes “stick” in an individual’s work, especially when that individual has a long history with the organization and the organization had not previously embraced TPM. As Prosci notes, “individual change management draws on disciplines like psychology and neuroscience to apply actionable frameworks to individual change.”

It is important that management provides the necessary support for skill development on an ongoing basis and if possible, for additional staff to fill roles as needed to support transportation performance management processes. This step should feed into subcomponent A.2 to help identify changes to the organizational structure discovered through the gap analysis.

### Examples

#### NCDOT Assessment

As outlined in step A.2.1, the North Carolina DOT (NCDOT) underwent an agency-wide assessment by McKinsey and Company to identify ways to improve business processes. Along with the organizational issues already discussed, the assessment highlighted the DOT’s failure to sufficiently recruit and retain talent critical to the operation of the agency. In addition,

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<table>
<thead>
<tr>
<th><strong>STEP A.3.1</strong></th>
<th><strong>Identify gaps in employee skillsets</strong></th>
</tr>
</thead>
</table>
| **Description** | Leadership was not effectively driving employee performance or developing top managers’ skillsets. <sup>39</sup>  
Many of these problems were a derivative of poor communication among management. NCDOT took this information and used it to make sweeping changes throughout the department that provided positive results. These changes enabled NCDOT to better address immediate needs, in addition to less immediate priorities, using data-driven methodology. This data-driven approach consolidated information so management could access vital information, in one place, to develop policies that were accessible to the entirety of the NCDOT management team. <sup>40</sup> |

**Ohio DOT:**

Instead of assuming that all employees will stay in their current positions as new TPM processes are introduced, the Ohio DOT (ODOT) encouraged flexibility among its staff to move into positions that better match their skillset. This approach reduces the resources necessary to train staff for new processes by allowing those who already have the needed skills to fill the position. While this may cause additional organizational shifts that are difficult to accommodate amidst so much other change, it should be considered. Over the past decade, ODOT employees have moved to new functions and overall agency hiring requirements have been strengthened to ensure that new hires fit the needs of the agency as it furthers its TPM program. <sup>42</sup>

| **Linkages to Other TPM Components** | All | (See TPM Framework) |

<table>
<thead>
<tr>
<th><strong>STEP A.3.2</strong></th>
<th><strong>Design, conduct, and refine training program</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Once needed skills are identified, a training program should be developed to close gaps in employee skillsets. This is critical to strengthening capabilities of the agency in achieving strategic goals. Training should be ongoing, and be improved each round using feedback from</td>
</tr>
</tbody>
</table>

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<sup>41</sup> North Carolina Department of Transportation. (2016). Logo. Raleigh, NC.

**STEP A.3.2 Design, conduct, and refine training program**

Employees. All training materials and feedback should be clearly documented to ensure that the effort is streamlined in future cycles and can provide the most skill improvement for the least cost to the agency. Additionally, training should be revised based on new developments and innovations in TPM, as well as lessons learned through agency experience.

A proactive training program is hugely beneficial to reducing resistance to change among staff. Employees will easily become frustrated with their work if they lack the skills to do it; preventing this situation through proper and proactive training will produce better results.

**Training can include:**

- Seminars on transportation performance management
- Attendance at conferences
- Participation in peer exchanges

Training can also be opportunistic. If the agency has a transportation performance management role that needs to be filled temporarily, use that opportunity to train the person who will fill that position. Once they return to their regular position, they will see things from a transportation performance management perspective, promoting adoption in a new area of the agency. Staff appreciates variety and will likely enjoy the change in routine for a short time.

**Examples**

**RiDOT Performance Management Training Course**

The Rhode Island Department of Transportation (RiDOT) created a TPM training course for employees. Development of the course began after staff participated in a FHWA peer exchange on transportation performance management. The agency partnered with a professor at the University of Rhode Island Transportation Center to create the one-and-a-half day course that included a welcome given by the RiDOT Director, an overview of TPM in general and in particular in Rhode Island, the Federal perspective on TPM provided by a national FHWA representative, and a series of breakout sessions to engage staff in TPM activities. By including a broad array of representatives, it was made clear to staff that TPM is an important initiative that is endorsed nationally and at the highest level within the state organization. Activities related to alignment of goals, performance measure selection, and target setting. An exercise was included to develop employee skills relating to data, making clear that both statistics and interpretation are necessary to understand and use data to manage. The course also included a Moneyball analogy, referencing how transportation performance management in baseball led to major improvement for the Oakland Athletics despite a constrained budget. Putting TPM into a context staff could easily understand was a key part of the training course while activities were important to reinforce lessons and promote adoption of new practices, which has been successful as TPM practices continue to expand at RiDOT.

**Linkages to Other TPM Components**

| All | (See TPM Framework) |
### Build agency-wide support for TPM

| Description | While champions and early adopters within the agency help in promoting transportation performance management early on, eventually TPM needs to be institutionalized within the culture and day-to-day business processes. It is critical that transportation performance management takes hold throughout the organization and among all staff to ensure new processes actually have an impact on the way things are done, and on results.

In stating that “[c]ulture is to humans what water is to fish,” Prosci explains that, “[t]he fish lives its entire life swimming through the water. The slightest variance in purity or temperature, and there would be a profound impact on the fish. We humans also live our lives moving through culture, which impacts us in thousands of tiny ways, and like the fish in water we are not always aware of what we are swimming through.”

Prosci sequences organizational change management into three phases, each phase with separate actionable steps, as listed below:

### Phase I – Prepare for Change
- Define your change management strategy
- Prepare your change management team
- Develop your sponsorship model

### Phase II – Manage Change
- Develop change management plans
- Take action and implement plans

### Phase III – Reinforce Change
- Collect and analyze feedback
- Diagnose gaps and manage resistance
- Implement corrective actions and celebrate success

The American Association of State Highway and Transportation Officials’ (AASHTO) work has recognized that agencies can face challenges in building such support; these and some possible solutions are listed in the table below:

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“Every time you have someone new come into the organization you have to convince them of the value of TPM.”
- Daniela Bremmer, Washington State DOT
### Build agency-wide support for TPM

#### Table A-4: Challenges and Solutions in Implementing TPM

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where staff is unionized, changes to the review process must be negotiated into a new labor agreement.</td>
<td>Plan for negotiation and ensure union leaders and rank and file members are included in process from the beginning.</td>
</tr>
<tr>
<td>Risk of creating a penalty-based performance-based employee evaluation system.</td>
<td>Ensure good communication throughout the process. Create advisory committee of staff when developing evaluations to gain credibility and buy-in, and adapt noteworthy practices from peer agencies. See step A.3.2.</td>
</tr>
<tr>
<td>With limited budgets, there may be no funding for bonuses that staff formerly received for exceptional performance.</td>
<td>Develop other creative incentives, including programs that provide an extra day of administrative leave or a premium parking space, or division level events such as pizza parties and barbeques.</td>
</tr>
</tbody>
</table>

#### Examples

**Washington State DOT: Coloring Contest**

WSDOT held a coloring contest in conjunction with take your daughter/son to work day. Employees’ children could draw a picture that represented the agency and a group within the agency selected a winning drawing to be featured on the cover of its quarterly performance reporting publication, The Gray Notebook. Drawings considered honorable mentions were featured inside the report along with the winning artist and their parent. Staff and even the Secretary of Transportation were very engaged and excited about the contest and, while seemingly small, it brought people together with a feeling of community. This is an important “soft” aspect of transportation performance management; good morale and a feeling of “we’re all in this together” are critical elements of a successful transportation performance management practice. The contest also helped to highlight The Gray Notebook among employees, which reinforced the agency’s emphasis on TPM.  

“TPM is built on a foundation of little things. Over time, TPM has become part of what we do, who we are, our culture.”

- Daniela Bremmer, Washington State DOT

**Caltrans: Goal Teams**

The California Department of Transportation (Caltrans) is involving different staff in developing measures, strategies, and data sources to promote culture change within the organization. Leadership has put together goal teams that are co-led by district directors and program-level...
STEP A.3.3 | Build agency-wide support for TPM
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staff. Some teams have external partners, and executive involvement varies considerably across the teams; leadership has provided the teams with a lot of autonomy. By decentralizing these particular aspects of TPM, Caltrans leadership has sought to promote TPM throughout various parts of the agency, many of which would not have been closely involved with selecting measures or evaluating data sources. This is an innovative way to help employees embrace performance measures and management. Because of relative success in developing measures, the agency has recommended continued use of goal teams in the future.

**TxDOT: Peer Evaluations**

The Strategic Planning Office at the Texas Department of Transportation (TxDOT) sought to spread TPM practices and improve agency results by initiating a peer evaluation program. District staff scores other districts on pavement condition using a consistent set of criteria. Through this initiative, district staff essentially participates in mini peer exchanges as they try to evaluate how other districts conduct business. By understanding how their practices impact performance, the evaluating staff can bring lessons back to their own district to improve results.

**Utah Transit Authority (UTA): Lean Team**

Budget constraints from the recession coupled with major expansion of UTA light rail, commuter rail, and streetcar service led UTA to adopt Lean principles and practices in 2012 to preserve transit service through operational efficiencies. Without these new practices, frequency and hours of service would have been reduced. As a result, service has been maintained and even increased in 2014 and 2015.

The Lean Team is a group of staff willing to go above and beyond to support transportation performance management that will improve operational efficiencies. Members include managers and supervisors from Operations, Maintenance, and Maintenance of Way and analysts, planners, and staff from other departments such as Customer Service.

The Team has advanced TPM at UTA by:
- Developing and delivering training modules to explain Lean concepts and tools to all Operations supervisors and managers using UTA-specific examples
- Presenting Lean project case studies to all managers at UTA
- Facilitating a variety of continuous improvement projects at the request of Operations and other departments

Key results include:
- Installing transmission software on all buses 2007 and newer to regulate acceleration and improve miles per gallon
- Placing operator restroom trailers at key end-of-line locations to increase operator comfort and eliminate costly mid-route layovers for restroom breaks
- Improving miles per service interruption by placing mechanics at key end-of-line locations and keeping buses in service until they reach the end of line if possible
- Major cleaning and reorganizing of maintenance shops, leading to reductions in duplicate part orders and wasted time looking for parts (20% reduction in parts cost per mile)
## Build agency-wide support for TPM

- Improved ratio of paid time to platform time and decreased number of split shifts by 47% through restructured employee shifts
- Supplier analysis to determine most cost-effective material suppliers, saving $19K per engine
- New web-based analytics platform combining multiple data sources into one unified report

While some time is provided during work hours for Lean Team training, much of the learning group members complete occurs on their own time; however, these individuals receive a lot of attention from leadership and other staff. Their role in helping other divisions within the agency improve their business processes is critical in promoting culture change at UTA. Lean Champions are ambassadors, spreading TPM from parts of the agency where it is successful and mature to others where it is just getting started. Often Lean Champions are promoted before other staff, not because it is required, but because they have gained an understanding of TPM and of various parts of the agency. The program has successfully expanded TPM practices while training staff in needed skills.

### Victoria Transport Policy Institute: Developing Support for Innovation

In “Change Management: Developing Support for Innovation,” the Victoria Transport Policy Institute notes:

*Change Management* refers to activities that support organizational innovation and reform....It recognizes that organizations often have inertia that must be overcome to create more efficient, responsive and resilient organizations. Special effort is often required to overcome the normal inertia of people and organizations to new approaches and practices, even if they are significantly better overall in the long run. This inertia reflects *path dependency*, the tendency of existing systems to perpetuate themselves...due to the high costs of changing equipment and people’s habits.

The Institute recommends these noteworthy practices for shifting to Transportation Demand Management (TDM):

- Work to create a climate that values innovation and supports appropriate risk taking.
- Establish a vision with clear goals, objectives and performance indicators (Transport Planning). This vision provides a reference for describing to stakeholders why change must occur and evaluating progress. Establish a long-range plan, which identifies how individual policy and program reforms support overall goals.
- Develop a team to support change. No single person can implement change alone.
- Communicate a sense of urgency. Most stakeholders will consider change uncomfortable and risky. Without a sense of urgency people tend to avoid change. To motivate change it is necessary to make existing conditions seem more dangerous than the proposed changes. Failure should be defined as continuing with the status quo.
- Educate stakeholders about new policies and programs. Opposition often reflects misunderstandings.
- Don’t be deterred by setbacks. An innovation often fails to be accepted the first time it is introduced, but succeeds with persistence. Do not abandon TDM if a proposal is rejected the first time it is introduced. Instead, continue to educate stakeholders of
### Build agency-wide support for TPM

- Accept risks. Change requires risk. Accept the change [sic] that a plan will not turn out as expected. Learn from the experience and try again.
- Emphasize (but don’t exaggerate) benefits. TDM tends to provide multiple benefits, so let stakeholders know about all of them.
- Emphasize different types of benefits to different interest groups. For example, to transportation professionals and businesses, emphasize the economic justifications for TDM, since it is often a cost effective way to address parking and traffic problems. To community groups, emphasize benefits to neighborhood environmental quality, and benefits to non-drivers. To designers and planners, emphasize increased flexibility and support for strategic development objectives.
- Work with stakeholders to identify and address points of opposition.
- Look for small victories. Small victories are the fuel that will keep your team energized for ongoing efforts. Find reasons to celebrate successes whenever you can. Use small victories to build team confidence and momentum.
- Be willing to negotiate and compromise. For example, if there is opposition to priced parking on the grounds that this would impose an excessive financial burden on some lower-income people, offer a certain number of need-based discounts or exemptions.\(^{48}\)

### Linkages to Other TPM Components

<table>
<thead>
<tr>
<th>All</th>
</tr>
</thead>
</table>

A.4 MANAGEMENT PROCESS INTEGRATION

By linking employee actions to the agency’s goals and objectives, the organization will be more highly focused on performance results as the driver of agency activities, integrating transportation performance management into day-to-day tasks.

1. Incorporate performance discussions into regular management meetings
2. Link employee actions to strategic direction
3. Regularly set expectations for employees through measures and targets

“An organization that does not adequately communicate its strategic goals to employees on the front lines has failed to complete its mission. A strong performance management environment allows employees at every level to make choices, take actions, and measure results in accordance with defined strategic goals.”

- Carlos Braceras, Executive Director, Utah DOT

<table>
<thead>
<tr>
<th>STEP A.4.1</th>
<th>Incorporate performance discussions into regular management meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Throughout the steps taken to implement TPM at an agency, it should be clearly communicated that performance information is not intended as a way to punish employees; rather this information provides insight into why results are what they are and therefore how to adjust strategies to improve. This information is especially important to highlight in regular management meetings when TPM is just beginning to take shape at an agency. As TPM matures, performance discussions should become an integral part of management meetings and managers should use performance language to frame discussions of how to improve. Start by using such language with executives, and it will cascade through the agency. Typically the “big picture” vision is provided by the agency’s CEO or another top-level executive while a more pragmatic operational focus on results, challenges, and specific measures is needed to turn the vision into a management framework and action plan. This happens at the division head level because they understand the unique needs and attributes of their area.⁴⁹</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>Maryland Transportation Authority</td>
</tr>
<tr>
<td>The MDTA is a modal administration within the Maryland Department of Transportation and is responsible for eight tolling facilities across the state. It also finances new revenue-producing transportation projects. All of its operations and projects are funded through toll revenue paid by users. The authority created a transportation performance management team with one member from each of the 10 Divisions, with members rotating every 18 months. The team was created to establish more regular internal transportation performance management</td>
<td></td>
</tr>
</tbody>
</table>

Incorporate performance discussions into regular management meetings; the team meets monthly to monitor performance measures and targets included in MDTA’s Business Plan. One of the team’s responsibilities was to change the employee annual evaluation process to link personnel reviews to performance. Since 2008, the team has been reporting during quarterly meetings of MDTA’s Management Committee. By establishing a standalone group that could focus on transportation performance management, the authority was able to integrate transportation performance management in a step-wise manner. Once the team was well established, it took on a more important role by incorporating TPM discussions into regular MDTA meetings.  

**TriMet: Portland, OR**

TriMet, the transit agency for the Portland area, has embraced the use of performance data in management meetings. Managers hold monthly meetings with their staff to go over performance results and discuss why trends are occurring and what can be done to improve. The meetings are conversational rather than confrontational, which makes performance data and transportation performance management more attractive to employees who may be wary of it. Monthly meetings have made an impact within the organization and have enabled managers to zero in on areas where adjustments will make the most impact. Rather than being used to punish individual operators, performance data are being used to determine if routes as a whole need to be restructured because all operators are demonstrating low performance. If only individual operators are struggling, managers approach them seeking to provide support or training to help the operator improve.

**Figure A-11: TriMet Performance Report**

Source: Monthly Performance Report

---


### STEP A.4.1 Incorporate performance discussions into regular management meetings

**Linkages to Other TPM Components**

Component 01: Strategic Direction  
(See TPM Framework)

### STEP A.4.2 Link employee actions to strategic direction

**Description**

To drive progress toward strategic goals, employees must first know what the agency’s goals are, and then be able to link their daily activities to attaining targets and meeting goals and objectives. The goals and objectives contained within the Strategic Direction (Component 01) are the driving force behind all agency activities, from CEO to the front line. Employees must also maintain focus on targets (Component 02) to identify how their work can be adjusted to push progress toward attainment. By maintaining focus on the goals, objectives, and targets, the agency will continue to move in the desired direction and this will be reflected in performance results.

Create a strong link to the strategic direction in internal communications to build internal buy-in and shift the organization’s culture toward transportation performance management. Remind employees of their involvement in developing goals to ensure that goals are not seen only as the leadership’s goals. Make it real for front line staff: how does repainting a bridge impact system users? By improving bridge condition, the employee is ensuring a safer trip for someone getting to a doctor’s appointment, or children being driven to school. Employees should understand how their activities impact others.

Because of requirements initiated by MAP-21, the agency is already undertaking transportation performance management activities such as the Transportation Asset Management Plan. These serve as the foundation of TPM and further integration of transportation performance management processes can build from them.\(^5\) A formal linkage should only be created after employees have been educated about goals, objectives, measures and targets and they have been well established within the agency.\(^3\)

### Examples

**WMATA Business Plans**

The Washington Metropolitan Area Transit Authority (WMATA) created Business Plans to clearly link day-to-day activities of employees to the agency’s strategic direction. Their function is outlined in Figure A-12, below:

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STEP A.4.2  
Link employee actions to strategic direction

**Figure A-12: WMATA Business Plans**  
Source: Link Day-to-Day Work to Strategic Goals Presentation

<table>
<thead>
<tr>
<th>What you Do</th>
<th>Strategic Goals</th>
<th>Business Plans</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>Actions</td>
<td>Who</td>
<td>IMPROVE performance</td>
</tr>
<tr>
<td>Quality Service</td>
<td>Performance Measures</td>
<td>Data Source</td>
<td>SHOW what you do</td>
</tr>
<tr>
<td>Connect Communities</td>
<td>Performance Targets</td>
<td>Dependencies</td>
<td>ARGUE for support/resources</td>
</tr>
<tr>
<td>People And Assets</td>
<td>Performance Targets</td>
<td>Dependencies</td>
<td>MOVE from reactive to strategic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FOSTER unity around goals</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FOCUS staff and resources</td>
</tr>
</tbody>
</table>

Page one of the plans describes the responsibilities of the work group, provides an overview of activities undertaken by employees in that work group, and lists accomplishments of the group from the previous calendar year.

The following pages list performance measures by agency goal. For each measure, the plan includes:

**Table A-5: Information Included within Business Plans**  
Source: Federal Highway Administration

<table>
<thead>
<tr>
<th>Information</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance target</td>
<td>Five % below Previous CY</td>
</tr>
<tr>
<td>Key actions for employees to take</td>
<td>Pilot test DAS lights, due to the high number of rear-end collisions where buses are being hit. Assess value of lights in reduction of such collisions.</td>
</tr>
<tr>
<td>The responsible office</td>
<td>Safety</td>
</tr>
<tr>
<td>Timeframe</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Action owner</td>
<td>Employee name</td>
</tr>
<tr>
<td>Dependencies within agency</td>
<td>OMPS</td>
</tr>
</tbody>
</table>

**Linkages to Other TPM Components**  
Component 01: Strategic Direction  
(See TPM Framework)

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Regularly set expectations for employees through measures and targets

**Description**

Once employees understand their roles and responsibilities (subcomponent A.2) and the expectation that daily activities should relate to strategic goals and targets (step A.3.2), managers should begin to hold them accountable by implementing performance-based employee evaluations. This will promote a sense of shared responsibility among staff. Running a pilot can be an effective way to establish such evaluations; starting with one division, or with senior managers will allow management to adjust and improve the evaluations before expanding to the agency as a whole.

However, there is some disagreement about linking employee evaluations to performance. It is difficult to do so for accounting staff and others who do not have roles directly related to transportation outputs and outcomes. It also can be seen as a punishment tool rather than a motivator. It may be better to implement such evaluations when the TPM program is more established; this will reduce initial resistance among staff and enable a smoother integration.

Providing recognition or rewards to employees who go above and beyond or demonstrate commitment to TPM practices can show that performance data will not be used to punish. By highlighting employees who are supportive, TPM will spread more quickly through the organization. Even more effective is external recognition; leadership and managers should put employee names forward when possible.

**Alternatives to performance-based employee evaluations include:**

- Publicize comparative data across work groups or employees. This may be more acceptable to employees than performance-based evaluations, but can also be difficult to implement because of data comparison issues.
- Identify program directors as key performance indicator (KPI) owners, but keep this information unrecorded or at least unreported. This may instill ownership among program directors without the threat of punishment.

**Examples**

**Maryland State Highway Administration (SHA)**

SHA, a modal administration within the Maryland Department of Transportation, is piloting a program to link managers’ performance reviews to office/district business plans as well as individual performance targets. Office and district plans reflect the SHA Business Plan, which reflects MDOT priorities. The administration has changed its personnel assessment forms to incorporate transportation performance management; the assessment now has two parts: Leadership competencies (40 percent) and an annually updated Performance Plan (60 percent). Staff down to the mid-management level has reviews tied to performance data that focus on output measures. The reviews are designed to increase the prominence of the office/district business plans across the agency so every employee can see how performance measures are used as a management tool and identify how their work supports the goals of the organization.

---


Regularly set expectations for employees through measures and targets

**Long Beach Transit: Setting Expectations with Measures and Targets**

Long Beach Transit (LBT) service includes bus and ferry routes covering 13 cities south of Los Angeles, CA. Annually, the agency sees 29 million boardings. As a way to more effectively use resources, LBT leadership has engaged with performance data to convert it into information that is usable for improving results. The agency’s Scoreboard helps staff analyze raw data to make informed decisions to drive performance. Combined with strategic goals, the Scoreboard serves as a roadmap for improving results on the organizational, department and individual level as seen in the image below. LBT uses performance measures and targets such as “reduce early departures by 10%” that link back to strategic goals through department and organizational goals, making clear expectations of individuals within the agency.

![Figure A-13: Long Beach Transit Linkage Between Agency, Department, and Individual Goals](source)

This commitment to linking organizational mission to the day-to-day activities of staff is clear even before employees are hired. Job postings state how the responsibilities of a particular position contribute to the agency’s vision and mission. For example, a Part-Time Data Collector contributes to the agency mission to “provide transit services that enhance and improve the quality of life for residents” by collecting data that is used to plan new routes and schedules.

---

| STEP A.4.3 | Regularly set expectations for employees through measures and targets that better align with residents’ needs. | By stating this information in the first line of a job posting, the agency is ensuring that potential employees understand that their role will be linked to agency goals. When LBT’s long-time CEO retired, the advertisement for the position included the following under duties and responsibilities of the position: “Translates and communicates the organization’s vision into concrete plans and measurable goals for staff.” |

| Linkages to Other TPM Components | Component 01: Strategic Direction | Component 02: Target Setting |
| | Component C: Data Management | Component D: Data Usability and Analysis |

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## RESOURCES

<table>
<thead>
<tr>
<th>Resource</th>
<th>Year</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPM Toolbox</td>
<td>2016</td>
<td><a href="http://www.tpmtools.org">www.tpmtools.org</a></td>
</tr>
</tbody>
</table>
**ACTION PLAN**

1. Of the TPM subcomponents discussed in this chapter, which one would you like to work on?
   - Leadership Team Support
   - Roles and Responsibilities
   - Training and Workforce Capacity
   - Management Process Integration

2. What aspect of the TPM process listed above do you want to change?

3. What “steps” discussed in this chapter do you think could help you address the challenge noted above?
   - **Leadership Team Support**
     - Evaluate how new agency processes have been implemented previously
     - Develop TPM pitch
     - Clarify role of senior and executive management
   - **Roles and Responsibilities**
     - Assess current organizational structure
     - Define and document TPM roles and responsibilities
     - Identify and implement changes to organizational structure
   - **Training and Workforce Capacity**
     - Identify gaps in employee skillsets
     - Design, conduct, and refine training program
     - Build agency-wide support for TPM
   - **Management Process Integration**
     - Incorporate performance discussions into regular management meetings
     - Link employee actions to strategic direction
     - Regularly set expectations for employees through measures and targets

4. To implement the “step” identified above, what actions are necessary, who will lead the effort and what interrelationships exist?

<table>
<thead>
<tr>
<th>Action(s)</th>
<th>Lead Staff</th>
<th>Interrelationships</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

5. What are some potential barriers to success?

6. Who is someone (internal and/or external) I will collaborate with to implement this action plan?

7. How will I know if I have made progress (milestones/timeframe/measures)?
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