Organization and Workforce Guidance

LEVEL 2 TO LEVEL 3

Why Organization and Workforce is Important

Efficient execution of processes supporting effective programs requires appropriate combination of coordinated organizational functions, and technical qualified staff with clear management authority and accountability.

Improvement Target

<table>
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<tr>
<th>From</th>
<th>Relationship among roles and units rationalized and core staff capacities identified (L2)</th>
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<tr>
<td>To</td>
<td>Top level management position and core staff for TSM&amp;O established in central office and districts (L3)</td>
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<td>By</td>
<td>Integrating TSM&amp;O organization and staff into overall agency structure and clarifying reporting relationships</td>
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Key Sub-dimensions

- Program Status
- Organizational Structure
- Staff Development
- Staff Recruitment and Retention
Program Status Action Plan (L2 to L3)

Strategy Summary

Establish senior executive manager in central office and districts with program responsibility

Key Actions

A  Develop case for top level organizational unit status appropriate to formal program of equal importance to mission

B  Develop systems for accountability appropriate to unit responsibilities for TSM&O-related outputs or outcomes

ACTIONS

Action A: Develop case for top level organizational unit status appropriate to formal program of equal importance to mission

Rationale: Advancing TSM&O as a key agency strategy on the path to continuous improvement of effectiveness requires program-level status with explicit recognition as a program that can be managed.

A.1 Identify key features of responsibility and authority, including span of control and reporting/accountability, that are essential to a formal agency program that is expected to make explicit and accountable contributions to agency mission.

A.2 Position responsible senior TSM&O managers at the overall statewide level, one that provides the necessary span of control and access to senior management without a detour through competing program managers.

A.3 Establish position in districts/regions which establishes/incorporates program-wide focus/management for all TSM&O-related activities.

Responsibility and Relationships: Consideration of establishing formal program status should be widely discussed among senior managers involved in policy, planning and operations.
**Action B:** Develop systems for accountability appropriate to unit responsibilities for TSM&O-related outputs or outcomes

**Rationale:** Program status requires reporting and accountability to determine if progress is being made in fulfilling the mission of increasingly effective use of the existing system.

**B.1** Identify performance measures for both activity effectiveness (outputs and outcomes) and unit effectiveness, with appropriate level of accountability at the unit level.

**B.2** Establish reporting and accountability framework for TSM&O managers based on reasonable fulfillment potential.

**Responsibility and Relationships:** Central office (statewide) and district/region managers develop proposed approach. Accountability relationships are needed and developed between TSM&O managers and agency top management.

**Examples/References**

Organizational Structure Action Plan (L2 to L3)

Strategy Summary

Consolidate central office units with appropriate span of control and accountability and central office-district relationships

Key Actions

| A | Clarify and/or establish central office vs. regional/district roles and establish regular process for internal accountability |
| B | Review functions that may merit consideration for outsourcing |
| C | Consolidate TSM&O-related central office (statewide) functions as necessary to minimize overlap and clarify responsibility |
| D | Establish senior manager with fulltime responsibility for TSM&O and appropriate span of control |
| E | Clarify unit objectives and relate to program objectives, including accountability |
| F | Utilize TSM&O policy group of key internal and external stakeholders to review program and relationships |

ACTIONS

Action A: Clarify and/or establish central office vs. regional/district roles and establish regular process for internal accountability

Rationale: Field activities involving TSM&O strategy implementations require (often in common) a range of specialized technical support that can be supplied by central office units.

A.1 Determine the allocation of functions that can be efficiently centralized vs. dispersed to districts/regions, based on the existing “organizational concept of operations” (see L1-L2, Action A). In most cases responsibility for real-time TSM&O activities and the related local partnerships will be at the regional or corridor level. The organization structure and reporting relationships may be consolidated or decentralized depending on the scope of regional programs and the value of consolidation for shared functions.

A.2 Consider staged evolution towards new organizational structure recognizing the current fit of positions and individuals and convenient opportunities for minimally disruptive organizational change.
Responsibility and Relationships: Lead by senior central office TSM&O managers with all key unit managers involved.

Action B: Review functions that may merit consideration for outsourcing

Rationale: Given staffing resource constraints and recruitment limitations, certain functions and key capabilities may be considered for outsourcing to capitalize on access to technical capabilities and staffing flexibility.

B.1 Review key functions regarding ability to effectively staff or recruit and consider outsourcing opportunities and related costs and benefits. (See the Outsourcing/Public-Private Partnerships Action Plan (L1 to L2) within the Collaboration Dimension for further considerations.)

Responsibility and Relationships: Senior central office TSM&O managers with all key unit managers involved.

Action C: Consolidate TSM&O-related central office (statewide) functions as necessary to minimize overlap and clarify responsibility

Rationale: While there is no ideal organizational structure for TSM&O appropriate to all agencies, systematic consideration must be given to making changes necessary to improve organizational efficiency.

C.1 Consider functional relationships in terms of lead and support capabilities, frequency and type of interaction, and degree of interdependency. Identify those that can be efficiently centralized vs. those that are service delivery and field related. In this regard, key trade-offs will be necessary.

C.2 Consolidate TSM&O-related functions as necessary to minimize overlap and clarify responsibility through alternative organizational structure orientations (hierarchy vs. matrix) to account for program/project delivery consolidation vs. shared oversight with technical support.

C.3 Review both ideal (as per above) structure and short-run practical limitations accounting for existing staff capabilities and positions. While compromises will be essential, keep improving organization as target to be achieved with staff turnover and reorganization over time.

Responsibility and Relationships: Senior TSM&O-related management at the central office and district/regional level including traffic engineering and maintenance.
Action D: Establish senior manager with fulltime responsibility for TSM&O and appropriate span of control

Rationale: To ensure coordination and accountability across all TSM&O activities, it is essential to have a fulltime program manager with agency-wide span of control over TSM&O.

D.1 Create position as necessary and staff with appropriate capability in relationship to organizational structure developed in Action A.

Responsibility and Relationships: Senior management. Note: Units may have new reporting relationships.

Action E: Clarify unit objectives and relate to program objectives, including accountability

Rationale: Effective TSM&O requires clarifying the program objectives and related performance objectives of each unit in delivering the program of activities.

E.1 Identify work program-related objectives within the overall program objectives as set forth in the agency TSM&O mission and defined by the unit roles.

E.2 Identify specific measures of internal performance for which the unit can be held accountable during efficient execution of its role.

Responsibility and Relationships: Senior central office manager working with all unit managers collectively and individually.

Action F: Utilize TSM&O policy group of key internal and external stakeholders to review program and relationships

Rationale: Utilize the established TSM&O policy group (see L1-L2, Action D) representing policy, planning, budgeting, design, implementation and maintenance on a continuing basis.

F.1 Convene TSM&O policy group on a regular basis to review unit functions and organizational structure, as they relate to program effectiveness, and identify any needed changes.
Responsibility and Relationships: Central office unit responsible for convening policy group.

Examples/References

- “A Transportation Executive’s Guide to Organizational Improvement” (NCHRP 20-24(42)):
  http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/20-24(42)_FR.pdf
Staff Development Action Plan (L2 to L3)

**Strategy Summary**

Develop training opportunities and access to national knowledge base

**Key Actions**

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<td><strong>B</strong></td>
<td>Expand training program to include technical as well as management personnel at all levels and units in agency (including internal “operations academy”)</td>
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<td><strong>C</strong></td>
<td>Establish co-training opportunities with partners (public service agencies, local government, coalitions, colleges and universities)</td>
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<td><strong>D</strong></td>
<td>Eliminate legacy limitations on non-civil engineering staff advancement</td>
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**ACTIONS**

**Action A:** Identify and resolve issues regarding position descriptions, related KSAs and existing agency and state position descriptions

**Rationale:** TSM&O positions may introduce new KSAs related to technical knowledge, work hours and responsibilities across traditional job classifications requiring special adjustments to accommodate efficient staffing.

**A.1** Compare TSM&O-related position requirements (see L1-L2) and current agency and state job classifications for compatibility and identify inconsistencies or issues, if any.

**A.2** Work with agency and state HR and union officials where relevant to resolve barriers to efficient staffing and recruiting.

**Responsibility and Relationships:** Senior TSM&O staff working with agency training/human resources staff, as well as through potential cooperation with peer states.
**Action B:** Expand training program to include technical as well as management personnel at all levels and units in agency (including internal “operations academy”)

**Rationale:** A continuing training “process” is required to facilitate TSM&O program development to higher levels of effectiveness and scale, as well as to develop efficient, non-disruptive staff succession.

**B.1** Identify key position and activity-related training needs that may warrant a continuing availability, and develop or access training materials. These materials would include both technical and management materials and would focus both on training for entry-level positions in TSM&O for current activities and to obtain KSAs to support program advancement.

**B.2** Establish training requirements and training schedule for key positions.

**B.3** Develop or acquire training materials for in-house training program especially where such training can be offered as a component of an existing agency program supported by in-house training program manager. Consideration may also be given to contracting with outside entity to develop and offer training (that may be supported by multiple agencies).

**B.4** Establish a formal mentoring program for junior staff to support professional development and clarify paths of career advancement.

**Responsibility and Relationships:** Senior TSM&O staff working with agency training/human resources staff, as well as through potential cooperation with peer states.

**Action C:** Establish co-training opportunities with partners (public service agencies, local government, coalitions, colleges and universities)

**Rationale:** Given the specialized nature of TSM&O systems, strategy protocols, and management objectives, a cooperative, consolidated approach to providing training may efficient.

**C.1** Review opportunities to develop joint training with appropriate peer states, including custom-tailored offerings.

**C.2** Consider opportunities to cooperate with key collaborators in TSM&O service delivery (public service agencies, local government, coalitions, colleges and universities).

**C.3** Review offerings and availability of existing training programs such as National Highway Institute and the I-95 Corridor Coalition Operations Academy™ and utilize or adapt as appropriate.
**Responsibility and Relationships:** Senior TSM&O staff working with agency training/human resources staff, as well as through potential cooperation with peer states.

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**Action D:** Eliminate legacy limitations on non-civil engineering staff advancement

**Rationale:** In some cases, agencies are unable to hire and retain staff with the needed key technical specialties (that may be "core" capabilities needed to ensure program improvement) owing to external competition for such skills.

- **D.1** Review relevance/appropriateness of current agency position specifications, qualifications, classifications, and compensation and incentive packages compared to the market for key capabilities.
- **D.2** Develop case (if needed) for modifications in civil service categories and propose approach to meet agency needs.

**Responsibility and Relationships:** Senior TSM&O staff working with agency training/human resources staff, as well as through potential cooperation with peer states.

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**Action E:** Participate in national forums and associations such as AASHTO, TRB, ITE, and others

**Rationale:** It is essential that TSM&O staff participate in forums related to state of the practice in order to learn from the experience of other agencies; share experience and stay current with the development of federal programs and technology development; and gain the perspective from other entities such as public service agencies and private technology and service providers.

- **E.1** Identify key staff to participate in national forums such as AASHTO, TRB, ITE, ITS-America, IEEE, etc.
- **E.2** Encourage senior agency executives to participate in TSM&O-related events to provide agency-level perspective.
- **E.3** Establish membership on appropriate committees considering issues of importance to the agency.
- **E.4** Support establishment of, and participation in, state-level chapters of national organizations focused on TSM&O.
Responsibility and Relationships: Senior TSM&O managers working with professional staff.

Examples/References

- University of Maryland Center for Advanced Transportation Technology Laboratory training and capability study reports: [http://www.catt.umd.edu/research/transportation-operations-framework](http://www.catt.umd.edu/research/transportation-operations-framework)
Staff Recruitment and Retention Action Plan (L2 to L3)

Strategy Summary

Develop strategies to access and retain key staff

Key Actions

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<td>B</td>
<td>Conduct a survey of peer agencies, private sector and other government agencies to establish competitive conditions of employment for key staff positions</td>
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<td>C</td>
<td>Investigate alternatives to align agency benefits/skills/job functions with positions offered by other organizations</td>
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<tr>
<td>D</td>
<td>Develop incentives for staff retention including enhanced training, working conditions and professional development</td>
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ACTIONS

**Action A:** Identify issues regarding position descriptions, related KSAs and existing agency and state position descriptions limiting attractive conditions of employment

**Rationale:** Agencies frequently experience difficulties retaining and/or recruiting qualified staff due to limitations imposed by agency and state level position-filling procedures related to position descriptions, preferences and specific KSAs.

**A.1** Review position requirements as per current procedures and consider limitations imposed regarding acquiring qualified staff (see L1-L2).

**A.2** Identify potential sources of recruits for specific positions (recent graduates, inside agency, other state departments, private sector) regarding their known employment interests and likely conditions of employment criteria, and compare with existing position descriptions and conditions of employment.

**Responsibility and Relationships:** Senior TSM&O staff working with agency human resources with appointed staff responsibility.
**Action B:** Conduct a survey of peer agencies, private sector and other government agencies to establish competitive conditions of employment for key staff positions

**Rationale:** Agencies frequently experience difficulties attracting qualified staff due to competition with the private sector and peer agencies. However, before concluding that this is a problem, it is important to survey these other organizations to establish a benchmark regarding conditions of employment that is likely to be effective.

- **B.1** Conduct a survey of peer agencies, transportation consultants and other comparable government agencies to establish the relative competitiveness in terms of salaries, fringe benefits and other conditions of employment.

- **B.2** Review other considerations of interest to potential hires including length of hiring process and attractiveness of training and advancement.

- **B.3** Incorporate findings into recruitment strategy.

**Responsibility and Relationships:** Senior TSM&O staff working with agency human resources with appointed staff responsibility. Consulting support is recommended to ensure development of an unbiased set of results.

**Action C:** Investigate alternatives to align agency benefits/skills/job functions with positions offered by other organizations

**Rationale:** Salaries within public agencies are often legislatively constrained, a condition that prevents adjustments to ensure that such salaries are competitive with the private sector and/or other public agencies. It is important to recognize the unique aspects of a TSM&O within the overall agency and the public sector.

- **C.1** Identify full range of benefits (some of which may be attractive to recruits from other agencies and the private sector) including regular working hours, ability to establish policy and direction and provide leadership, and working with advanced systems and technology.

- **C.2** Work with human resources and government civil service managers to identify unique features of positions.

- **C.3** Adjust job descriptions where possible to provide improved parity with private sector salaries.

**Responsibility and Relationships:** Senior TSM&O staff working with agency human resources with appointed staff responsibility.
**Action D:** Develop incentives for staff retention including enhanced training, working conditions and professional development

**Rationale:** Employee retention is as important as effective hiring. Given the shortage of qualified TSM&O personnel, and the cost of hiring and training new personnel, it is incumbent upon all public sector agencies to utilize every tool at their disposal to maximize employee satisfaction.

**D.1** Develop a retention strategy for TSM&O staff recognizing the importance of effective management, choice of job assignments, public contact, job satisfaction, agency and professional recognition, working conditions, salary, incentive performance bonuses and other factors.

**D.2** Develop incentives for staff retention including enhanced training, working conditions, professional development, rotational assignments and opportunities to participate in external professional activities.

**Responsibility and Relationships:** Senior TSM&O staff working with agency human resources with appointed staff responsibility.

**Examples/References**