

## INVEST - Sustainable Highways Self-Evaluation Tool

# All Operations & Maintenance Scoring Questions - Versior 1.2

#### OM-01 Internal Sustainability Plan (15 points)

Focus on sustainability improvements within the agency's internal operations that affect all three principles of the triple bottom line.

OM-01.1 Does the agency have a sustainability commitment endorsed by senior executives? - 2 points

- Yes (2 points)
- No (0 points)

OM-01.2 Has the agency developed a comprehensive internal sustainability plan that includes goals, performance metrics, quantifiable targets, strategies, and actions? - 4 points

- Yes (4 points)
- No (0 points)

OM-01.3 Is the Comprehensive Internal Sustainability Plan integrated with coordination, implementation, and/or monitoring and tracking? - 0 points

Yes (0 points)

OM-01.3a Coordination: Is the plan integrated with national, state, and/or regional sustainability goals?

- 1 point
- Yes (1 point)
- No (0 points)

OM-01.3b Monitoring and Tracking: Does the plan include a performance measurement system, a plan for monitoring the plan's progress, and a schedule for updating the plan as needed? - 1 point

- Yes (1 point)
- No (0 points)

OM-01.3c Implementation: Does the plan have an implementation section that includes responsible parties, timelines, and potential funding sources? - 1 point

- Yes (1 point)
- No (0 points)
- No (0 points)

OM-01.4a Is sustainability training provided for staff, including an introduction to the Comprehensive Internal Sustainability Plan? - 1 point

- Yes (1 point)
- No (0 points)

### $\hbox{OM-01.4b Does the agency have an employee or an employee committee that promotes sustainability?} - 1 \\ \hbox{point}$

- Yes (1 point)
- No (0 points)

#### OM-01.5a Does the agency implement at least two Travel Demand Management options? - 1 point

- Yes (1 point)
- No (0 points)

#### OM-01.5b Does the agency provide support for alternative fuel vehicles used for commuting? - 1 point

- Yes (1 point)
- No (0 points)

## OM-01.6 Does the agency have a CISP per OM-02.2 and does it monitor progress towards goals for at least one year after goal establishment and show measurable advancement towards stated goals? - 2 points

- Yes (2 points)
- No (0 points)

#### OM-02 Electrical Energy Efficiency and Use (15 points)

Reduce the consumption of fossil fuels during operation and maintenance of agency owned and/or operated facilities through improvements in efficiency and the use and/or generation of renewable energy sources.

#### OM-02.1 Does the agency set energy reduction or renewable energy usage goals? - 0 points

Yes (0 points)

#### OM-02.1a Has the agency set an energy reduction goal to be obtained? - 2 points

- Yes (2 points)
- No (0 points)

## OM-02.1b Has the agency set a goal for buying RECs that is at least equivalent to one of the options listed? - 2 points

- Yes (2 points)
- No (0 points)
- No (0 points)

## OM-02.2 Has the agency developed a documented plan that outlines how the energy reduction and renewable energy goals set above will be accomplished? - 4 points

- No (0 points)
- A plan is developed to meet either the energy reduction or renewable energy usage goals. (2 points)
- A plan is developed to meet both the energy reduction and renewable energy usage goals. (4 points)

## OM-02.3 Does the agency maintain an electricity monitoring system for operations and maintenance that tracks electricity usage for all highway facilities? - 2 points

- Yes (2 points)
- No (0 points)

#### OM-02.4a Has the agency implemented an employee awareness program? - 1 point

- Yes (1 point)
- No (0 points)

### OM-02.4b Does the agency employ a representative or maintain an employee committee focused on the reduction of energy consumption and sustainability? - 1 point

- Yes (1 point)
- No (0 points)

OM-02.5a Does the agency execute a contract for a minimum of two years of renewable energy, or create and operate renewable energy facilities within the agency-owned properties to meet the selected goal? - 2 points
• Yes (2 points)

## OM-02.5b Does The Agency Monitor Performance And Demonstrate Attainment Of The Agency's Energy Reduction Goal Over At Least A One-year Period? - 1 point

- Yes (1 point)
- No (0 points)
- No (0 points)

#### OM-03 Vehicle Fuel Efficiency and Use (15 points)

Reduce fossil fuel use and emissions in vehicles used for operations and maintenance.

### OM-03.1 Has the agency set goals for fossil fuel use reduction and set a time frame in which these goals should be achieved? - 4 points

- No (0 points)
- Goals are set by the agency for either light-duty fleet or for heavy-duty and off-road equipment. Or goals are set for light and/or heavy-duty by a governing board only. (2 points)
- Goals are set by the agency for both light-duty fleet and for heavy-duty and off-road equipment. (4 points)

#### OM-03.2 Does the agency have a documented fleet management plan? - 4 points

- No (0 points)
- A plan is developed for either light-duty fleet or for heavy-duty and off-road equipment. (2 points)
- A plan is developed for both light-duty fleet and for heavy-duty and off-road equipment. (4 points)

#### OM-03.3 Is the agency actively testing the use of alternative fuels or reduction methods? - 3 points

- Yes (3 points)
- No (0 points)

### OM-03.4 Does the agency have a fleet tracking program, spreadsheet, or other document that monitors vehicle use and fuel consumption? - 2 points

- Yes (2 points)
- No. (0 points)

## OM-03.5 Does the agency have a fleet tracking system and has it used it to demonstrate progress for at least one year? - 2 points

- Yes (2 points)
- No (0 points)

#### OM-04 Reduce, Reuse and Recycle (15 points)

Create and pursue a formal recycling and reuse plan for agency operated facilities and maintenance activities.

## OM-04.1 Has the agency set goals for operation and maintenance material reduction, reuse, and recycling? - 4 points

- No goals are set. (0 points)
- Goals are set for either administrative waste or operations and maintenance waste. (2 points)
- Goals are set for both administrative waste and operations and maintenance waste. (4 points)

### OM-04.2 Does the agency have a documented plan that outlines how the reduce, reuse, and recycle goals will be accomplished? - 4 points

- No plan is developed or the plan is not linked to the goals set in Requirement OM-04.1. (0 points)
- A plan is developed for either administrative waste or operations and maintenance waste. (2 points)
- A plan is developed for both administrative waste and operations and maintenance waste. (4 points)

### OM-04.3 Does the agency track the waste streams and report the amount of waste produced and the amount of material reduced, reused, and recycled? - 4 points

- Progress is not measured or it is measured and not compared to performance goals set in Requirement OM-04.1. (0 points)
- Waste streams are tracked for either administrative waste or operations and maintenance waste. (2 points)
- Waste streams are tracked for both administrative waste and operations and maintenance waste. (4 points)

## OM-04.4 Has the agency tracked progress toward these goals with the performance measurement system fo at least one year and shown progress toward stated goals? - 3 points

- Yes (3 points)
- No (0 points)

#### OM-05 **Safety Management** (15 points)

Maximize the safety of the existing roadway network through a systematic and comprehensive review of safety data and the allocation of resources in planning and programming to support safety in operations and maintenance.

#### OM-05.1a Is the agency a state agency or a regional agency? - 0 points

• State (0 points)

#### OM-05.1a In evaluating the safety performance of the state, which of the following applies? - 2 points

- The state quantifies the safety performance of the state in terms of a rate or solely with the use of one metric. (0 points)
- The agency identifies the safety performance measures for the state and evaluates the safety performance of the state through a quantitative evaluation of the safety performance of the state. (2 points)
- Regional (0 points)

#### OM-05.1a In evaluating the safety performance of the region, which of the following applies? - 2 points

- The agency quantifies the safety performance of the region in terms of a rate or solely with the use of the overall number of fatalities or fatal and serious injuries in the region. (0 points)
- The agency performs a safety performance evaluation meeting the stated requirements in OM-05.1a. (2 points)

### OM-05.1b In identifying the safety performance metrics for the reduction of fatal and serious injuries in the state or region, which of the following applies? - 2 points

- The agency uses the rate or total number of fatal and serious injuries as the sole safety performance metric for the state or region. (0 points)
- The agency identifies safety performance metrics for each of the emphasis areas identified during the evaluation of the safety performance of the state or region. (2 points)

### OM-05.2a Has the agency set goals and targets for each of the safety performance metrics identified for the reduction in fatal and serious injuries? - 2 points

- The agency has set no safety performance goals, or performance goals are expressed solely as a rate. (0 points)
- The agency has set safety performance goals that can be readily achieved under current program and agency activity priorities. (1 point)
- The agency has set long-term goals and intermediate targets for improvements in the safety performance metrics in addition to the State's fatality reduction goal. (2 points)

### OM-05.2b Has the agency integrated these goals to make resource decisions for maintenance, repair, and operations activity? - 1 point

- Yes (1 point)
- No (0 points)

### OM-05.3a Does the agency have a plan to support the reduction in fatal and serious injuries in the state or region? - 1 point

- No plan exists, or the plan does not meet the requirements listed in OM-05.3a. (0 points)
- The agency has developed a statewide or regional safety plan as part of a collaborative effort across all levels of government. (1 point)

## OM-05.3b Does the plan include specific strategies and activities to support improvement of data and analysis capabilities across the public highway system? - 1 point

- Yes (1 point)
- No (0 points)

#### OM-05.4 Is the agency a state agency or a regional agency? - 0 points

• State (0 points)

#### OM-05.4 Has the state implemented the safety plan? - 3 points

- No plan exists, or implementation of projects, activities, and programs occur within agencies without integration of collaboration across state and regional agencies. (0 points)
- The state has implemented the plan in an integrated and multidisciplinary manner. (3 points)
- Regional (0 points)

#### OM-05.4 Has the region implemented the safety plan? - 3 points

- No plan exists, or implementation of projects, activities, and programs occur within agencies without integration of collaboration across state and regional agencies in support of the common goal to reduce fatal and serious injuries on the public highway system. (0 points)
- The agency implemented the plan in close cooperation with local agencies. Facilitate and support allocation of funding that reflects the priorities of the plan to the extent possible. (1 point)
- The agency adopted PlanSafe or a similar program as an integral part of the agency's technical process for conducting transportation planning. (3 points)

#### OM-05.5 Is the agency measuring progress and monitoring performance? - 1 point

- The agency is measuring progress and change in the system safety performance solely based on the overall crash rate, crash rates for typical facilities, the rate of fatal and serious injuries, or the total number of fatal and serious injuries. (0 points)
- The agency is measuring progress using some of the safety performance metrics identified. (1 point)
- The agency is measuring the performance of the public highway system in the region with the identified safety performance metrics. (0 points)

### OM-05.5 Is the agency using advanced and statistically sound methods to perform evaluations of the safety performance of the system? - 2 points

- Yes (2 points)
- No (0 points)

## $\begin{tabular}{ll} \textbf{OM-05.5 Is the agency incorporating project and program evaluations into the monitoring process? - 1\\ \textbf{point} \end{tabular}$

• Yes (1 point)

• No (0 points)

#### OM-06 Environmental Commitments Tracking System (15 points)

Ensure that environmental commitments made during project development related to operations and maintenance are documented, tracked, and fulfilled.

#### OM-06.1 Does the agency use a Comprehensive Environmental Compliance Tracking System (ECTS)? - 2 point

- Yes (2 points)
- No (0 points)

#### OM-06.2 Are any of the key features identified integrated into the ECTS? - 0 points

Yes (0 points)

### OM-06.2a Are environmental commitments communicated from project development to operations & maintenance? - 1 point

- Yes (1 point)
- No (0 points)

#### OM-06.2b Are tracking mechanisms leveraged? - 1 point

- Yes (1 point)
- No (0 points)

### **OM-06.2c** Is training needed for necessary maintenance and operations staff identified periodically? - 1 point

- Yes (1 point)
- No (0 points)

#### OM-06.2d Are periodic reports verifying the commitments have been fulfilled provided? - 1 point

- Yes (1 point)
- No (0 points)

#### OM-06.2e Are quantifiable performance metrics for the ECTS established? - 1 point

- Yes (1 point)
- No (0 points)
- No (0 points)

#### OM-06.3 Does the agency require use of ECTS? - 2 points

- The agency has official policies and procedures in place that require use of the ECTS by project development, construction, and maintenance and operations staff. (2 points)
- No (0 points)

#### OM-06.4 Does the agency have a GIS-based ECTS? - 2 points

- The agency has an ECTS that is geographic information system (GIS)-based. (2 points)
- No (0 points)

### OM-06.5a Are goals set for compliance with environmental commitments and set a time frame in which thes goals should be achieved? - 2 points

Yes (2 points)

OM-06.5b Has the tracking system set up to measure performance and track progress toward ECTS goals been used for at least one year and shown that progress has been made toward stated goals? - 2 points

- Yes (2 points)
- No (0 points)
- No (0 points)

#### OM-07 Pavement Management System (15 points)

Leverage a pavement management system to balance activities that extend the life and function of pavements witl impacts to the human and natural environment.

#### OM-07.1 Does the agency have a pavement management system (PMS)? - 1 point

- The agency does not have a PMS that includes all six functions identified. (0 points)
- The agency has a PMS that includes all six of the functions identified and collects system-wide data. (1 point)

#### OM-07.2a Is pavement network performance tracked using one of the common metrics identified? - 1 point

- Yes (1 point)
- No (0 points)

## OM-07.2b Does the agency have measures related to project timeliness of rehabilitation, preservation, and maintenance activities? - 2 points

- Yes (2 points)
- No (0 points)

### **OM-07.3** Does the agency set pavement system performance goals and monitor progress toward goals? - 2 points

- The agency does not set quantifiable goals relating to both condition and timeliness as noted above; or set quantifiable goals relating to both condition and timeliness but do not monitor, or have not monitored progress towards goals for at least one year after goal establishment. (0 points)
- The agency has set quantifiable goals relating to both condition and project timeliness as noted above, including when these goals are to be achieved, and monitor progress towards goals for at least one year after goal establishment. (2 points)

#### OM-07.4 Does the agency have a PMS and leverage data to demonstrate sustainable outcomes? - 0 points

• Yes (0 points)

## OM-07.4a Are projects prioritized based on system modeling, scenario analyses, trade-off analyses, and system optimization rather than a "worst-first" approach? - 2 points

- Yes (2 points)
- No (0 points)

## OM-07.4b Are life-cycle cost analysis (LCCA) techniques leveraged to predict costs and to perform short- and long-term budget forecasting? - 2 points

- Yes (2 points)
- No (0 points)

### OM-07.4c Are routine pavement preservation needs Included in the annual UPWP or STIP/TIP that are based on the condition and timeliness goals? - 1 point

- Yes (1 point)
- No (0 points)

## OM-07.4d Is the PMS leveraged to link pavement repair, preservation, and maintenance projects to adjacent capital projects? - 2 points

- Yes (2 points)
- No (0 points)

• No (0 points)

#### OM-07.5 Does the agency have a PMS and consider sustainable pavement solutions? - 2 points

- The agency is testing sustainable pavement solutions. (0 points)
- The agency has special provisions specific to at least one sustainable pavement solution that allow the use of this solution. (1 point)
- The agency has standard specifications and/or special provisions specific to at least one sustainable pavement solution and requires the consideration of sustainable pavements as a first solution. (2 points)

#### OM-08 Bridge Management System (15 points)

Leverage a bridge management system (BMS) to balance activities that extend the life and function of bridges with impacts to the human and natural environment.

#### OM-08.1 Does the agency have a Bridge Management System (BMS)? - 2 points

- The agency does not have a BMS or has a BMS but does not collect system-wide data. (0 points)
- The agency has a BMS that includes at least five of the seven procedures noted above and collects system-wide data. (1 point)
- The agency has a BMS that includes at all seven of the procedures noted above and collects system-wide data. (2 points)

#### OM-08.2 Is bridge network performance tracked? - 0 points

Yes (0 points)

## OM-08.2a Does the tracking include bridge network condition using common metrics; is there a database of the structural health for each bridge managed by the agency? - 1 point

- Yes (1 point)
- No (0 points)

#### OM-08.2b Does the tracking report any operational limits (or have no limits to report)? - 1 point

- Yes (1 point)
- No (0 points)

## OM-08.2c Does the tracking have measures related to project timeliness of rehabilitation, preservation, and maintenance activities? - 2 points

- Yes (2 points)
- No (0 points)
- No (0 points)

### OM-08.3 Does the agency set bridge system performance goals and monitor progress toward goals? - 2 points

- Set quantifiable goals relating to less than two of the three metrics listed above for agency bridges; or set quantifiable goals relating to at least two of the three metrics listed above for agency bridges but do not monitor or have not monitored progress towards goals for at least one year after goal establishment. (0 points)
- Set quantifiable goals relating to at least two of the three metrics listed above for agency bridges, including when these goals are to be achieved, and monitor progress towards goals for at least one year after goal establishment (1 point)
- Set quantifiable goals relating to all three of the metrics listed above for agency bridges, including when these goals are to be achieved, and monitor progress towards goals for at least one year after goal establishment (2 points)

#### OM-08.4 Is a BMS used and are data leveraged to demonstrate sustainable outcomes? - 0 points

Yes (0 points)

OM-08.4a Is the BMS used to perform sophisticated modeling, including forecasting, scenario analyses, trade-off analyses, and system optimization? - 2 points

- Yes (2 points)
- No (0 points)

## OM-08.4b Are life-cycle cost analysis (LCCA) techniques leveraged to predict costs and to perform short- and long-term budget forecasting? - 2 points

- Yes (2 points)
- No (0 points)

## OM-08.4c Are routine bridge preservation needs included in the annual UPWP or STIP/TIP that are based on the condition and timeliness goals? - 1 point

- Yes (1 point)
- No (0 points)

## OM-08.4d Is the BMS leveraged to link bridge repair, preservation, and maintenance projects to adjacent capital projects? - 2 points

- Yes (2 points)
- No (0 points)
- No (0 points)

#### OM-09 Maintenance Management System (15 points)

Leverage a Maintenance Management System (MMS) to inventory, assess, analyze, plan, program, implement, and monitor maintenance activities to effectively and efficiently extend the life of the system, improve the service, and reduce the impacts to the human and natural environment.

#### OM-09.1 Are any of the key elements identified integrated into the Maintenance Management System (MMS)?

- 2 points
- The agency does not have an MMS or has an MMS that has less than three of the modules listed. (0 points)
- The agency has an MMS that has three or four of the modules listed. (1 point)
- The agency has an MMS that has five or six of the modules listed. (2 points)

#### OM-09.2 Does the agency Leverage vehicle-based technologies to connect to MMS? - 2 points

- Yes (2 points)
- No (0 points)

#### OM-09.3 Does the agency's MMS integrate their PMS, BMS, RMP, and TCMP? - 0 points

Yes (0 points)

#### OM-09.3a Are Roadway Inventory Systems integrated within the MMS? - 1 point

- Yes (1 point)
- No (0 points)

#### OM-09.3b Are Financial Management Systems integrated within the MMS? - 1 point

- Yes (1 point)
- No (0 points)

#### OM-09.3c Are Construction/Project Management Systems integrated within the MMS? - 1 point

- Yes (1 point)
- No (0 points)

#### OM-09.3d Are Equipment Management Systems integrated within the MMS? - 1 point

- Yes (1 point)
- No (0 points)

#### OM-09.3e Is the Environmental Commitment Tracking System integrated within the MMS? - 1 point

- Yes (1 point)
- No (0 points)
- No (0 points)

#### OM-09.4 Does the agency's MMS tie into its PMS and BMS and exchange information? - 3 points

- Yes (3 points)
- No (0 points)

#### OM-09.5a Does the agency have a MQA program that relates highway maintenance to highway performance?

- 2 points
- Yes (2 points)

## OM-09.5b Is the MQA program being used to help managers to understand maintenance conditions, set priorities, and document the relationship between costs and outcomes? - 1 point

- Yes (1 point)
- No (0 points)
- No (0 points)

#### OM-10 Highway Infrastructure Preservation and Maintenance (15 points)

Make paved roadway surfaces, bridges, tunnels, roadsides, and their appurtenance facilities last longer and perform better by undertaking preservation and routine maintenance on them.

#### OM-10.1 Has the agency implemented an Road Maintenance Plan (RMP)? - 4 points

- The agency does not have an RMP that covers the four core systems listed. (0 points)
- The agency has an RMP consisting of multiple documents that covers the core assets only. (1 point)
- The agency has an RMP consisting of multiple documents that covers the core assets and at least two additional assets or the agency has a consolidated RMP that covers core assets only. (2 points)
- The agency has an RMP consisting of multiple documents that covers the core assets and all of the additional assets listed, or the agency has a consolidated RMP that covers the core assets and at least two of the additional assets listed. (3 points)
- The agency has a consolidated RMP that covers the core assets and all of the additional assets listed. (4 points)

## OM-10.2a Is appropriate funding allocated to accomplish preventative maintenance, routine maintenance, and repair activities in the RMP and annual work plan? - 3 points

- Yes (3 points)
- No (0 points)

### OM-10.2b Does the RMP highlight activities that contribute to sustainability during maintenance and operations? - 2 points

- Yes (2 points)
- No (0 points)

#### OM-10.2c Does the RMP include activities that contribute to sustainability of infrastructure assets. - 2 points

- Yes (2 points)
- No (0 points)

## OM-10.3a Does the plan include performance measures that can be used to monitor the effects of plan implementation? - 2 points

Yes (2 points)

#### OM-10.3b Does the agency monitor progress towards goals for at least one year after goal

#### establishment and show measurable advancement towards stated goals? - 2 points

- Yes (2 points)
- No (0 points)
- No (0 points)

#### OM-11 Traffic Control Infrastructure Maintenance (15 points)

Increase safety and operational efficiency by maintaining roadway traffic controls.

#### OM-11.1 Has the agency implemented a Traffic Control Maintenance Plan (TCMP)? - 2 points

- The agency does not have a TCMP that covers the items listed. (0 points)
- The agency has a TCMP consisting of multiple documents that covers all of the required items or the agency has a consolidated TCMP that covers at least four of the six items listed. (1 point)
- The agency a consolidated TCMP that covers the all of the required items. (2 points)

#### OM-11.2a Has the agency established quantifiable performance metrics for the TCMP? - 2 points

Yes (2 points)

#### OM-11.2b Does the agency use these to evaluate the overall performance of the TCMP? - 2 points

- Yes (2 points)
- No (0 points)
- No (0 points)

### OM-11.3a Does the agency set quantifiable goals relating to the metrics above for agency traffic control devices? - 1 point

Yes (1 point)

### OM-11.3b Does the agency monitor progress towards goals for at least one year after goal establishment and show measurable advancement towards stated goals? - 2 points

- Yes (2 points)
- No (0 points)
- No (0 points)

### OM-11.4a Does the TCMP specifically address sustainability and highlight procedures, specifications, and activities that contribute to sustainability during preservation and maintenance activities? - 3 points

- Yes (3 points)
- No (0 points)

## OM-11.4b Does the TCMP specifically address sustainability and include procedures, specifications, or measures that contribute to the sustainability of infrastructure assets? - 3 points

- Yes (3 points)
- No (0 points)

#### OM-12 Road Weather Management Program (15 points)

Plan, implement, and monitor a road weather management program (including snow and ice control) to reduce environmental impacts with continued or better level of service.

### OM-12.1a Has a RWMP been developed that includes strategies that can be used to mitigate the effects of weather on traffic? - 0 points

• Yes (0 points)

#### OM-12.1a Does the RMP cover all geographies and weather types within the agency? - 2 points

- Yes, in multiple documents. (1 point)
- Yes, in a consolidated plan. (2 points)

### OM-12.1b Does the RWMP address long-term weather changes based on long-term predictions rather than historical weather data only? - 2 points

- Yes (2 points)
- No (0 points)
- No (0 points)

#### OM-12.2a Has the agency established quantifiable performance metrics for the RWMP program? - 2 points

• Yes (2 points)

### OM-12.2b Has the agency monitored progress towards goals set in OM-12.2a for at least one year after goal establishment and shown measurable advancement towards stated goals? - 1 point

- Yes (1 point)
- No (0 points)
- No (0 points)

#### OM-12.3 Has the agency implemented a Roadway Weather Information System (RWIS)? - 2 points

- The agency does not have an RWIS. (0 points)
- The agency is implementing an RWIS in select areas identified, but has not implemented a system agency-wide. (1 point)
- The agency is implementing an RWIS agency-wide in most or all areas identified vulnerable to weather conditions and shares the data with the NWS. (2 points)

## OM-12.4a Does the agency have an RWMP that includes, at a minimum, the listed elements specific to snow and ice control? - 1 point

Yes (1 point)

## OM-12.4b Does the agency's program include performance standards that take into account sustainability, and demonstrate a reduction in materials and truck fuel usage? - 1 point

- Yes (1 point)
- No (0 points)
- No (0 points)

## OM-12.5 Does the agency successfully implement a Materials Management Plan to monitor quantities of salt applied and level of service? - 2 points

- Yes (2 points)
- No (0 points)

#### OM-12.6 Has the agency implemented a Maintenance Decision Support System? - 2 points

- The agency does not have an MDSS. (0 points)
- The agency has MDSS processes that are not based on roadside RWIS. (1 point)
- The agency has MDSS processes that are based on both roadside RWIS and vehicle mounted sensing technologies. (2 points)

#### OM-13 Transportation Management and Operations (15 points)

Maximize the utility of the existing roadway network through use of technology and management of operations strategies.

### OM-13.1 Has the agency taken enhanced or expedited measures to improve mobility and user level of service? - 2 points

- Yes (2 points)
- No (0 points)

### OM-13.2 How many categories of ITS technologies were utilized on this project? See Table OM-13.2.A and it instructions. - 6 points

- None (0 points)
- 1 (1 point)
- 2 (2 points)
- 3 (3 points)
- 4 (4 points)
- 5 (5 points)
- 6 (6 points)

### OM-13.3 Has the agency tailored the National ITS Architecture to create a regional architecture based on agency-specific needs? - 2 points

- Yes (2 points)
- No (0 points)

### OM-13.4 Has the agency integrated a system to ensure the needs of M&O strategies are fully considered in roadway infrastructure design? - 2 points

- Yes (2 points)
- No (0 points)

### OM-13.5a Have performance metrics been established, including at least one each related to safety, mobility, and integration of M&O strategies into design? - 2 points

Yes (2 points)

# OM-13.5b Has progress toward goals been measured for at least one year using the performance measures established in OM-13.5a and has measurable advancement toward stated goals been shown?

- 1 point
- Yes (1 point)
- No (0 points)
- No (0 points)

#### OM-14 Work Zone Traffic Control (15 points)

Plan, implement, and monitor Work Zone Traffic Control (WZTC) methods that maximize safety of workers and system users with continued or better level of service.

#### OM-14.1 Does the agency have a Work Zone Traffic Control Program (WZTC)? - 3 points

- The agency does not have a WZTC program that covers two or more of the elements listed. (0 points)
- The agency has a WZTC program that covers two or three of the required elements. (1 point)
- The agency has a WZTC program that covers four or five of the required elements. (2 points)
- The agency has a WZTC program that covers six or seven of the required elements. (3 points)

#### OM-14.2a Does the agency have quantifiable performance metrics for the WZTC program? - 2 points

Yes (2 points)

### OM-14.2b Does the agency monitor progress towards goals for at least one year after goal establishment and show measurable advancement towards stated goals? - 2 points

- Yes (2 points)
- No (0 points)

• No (0 points)

#### OM-14.3 Are Intelligent Transportation Systems (ITS) used to anticipate and reduce congestion? - 2 points

- The agency does not use ITS to anticipate and reduce congestion. (0 points)
- The agency allows and has a few projects using ITS to anticipate and reduce congestion. (1 point)
- The agency routinely uses ITS to anticipate and reduce congestion. (2 points)

#### OM-14.4 Does the agency Apply and Review ITS Technologies and Innovations? - 1 point

- Yes (1 point)
- No (0 points)

### OM-14.5 Does the agency use contracting incentives or dis-incentives to encourage contractors to reduce and optimize construction timelines? - 3 points

- The agency does not use innovative contracting to encourage contractors to reduce and optimize construction timelines. (0 points)
- The agency has test cases that use innovative contracting to encourage contractors to reduce and optimize construction timelines. (1 point)
- The agency routinely includes the use of innovative contracting to encourage contractors to reduce and optimize construction timelines in design-build contracts only. (2 points)
- The agency routinely includes the use of innovative contracting to encourage contractors to reduce and optimize construction timelines in both design-build and design-build contracts. (3 points)

### OM-14.6 Does the agency use a public involvement or WZTC representative to communicate regularly with property owners and businesses affected by work? - 1 point

- Yes (1 point)
- No (0 points)

## OM-14.7 Does the agency participate in National Work Zone Awareness Week and develop a campaign to promote work zone safety awareness? - 1 point

- Yes (1 point)
- No (0 points)