State: Georgia
Workshop Date: December 5, 2013

Capability Maturity Implementation Plan

This memo provides a set of prioritized capability maturity workshop actions with suggested steps for advancing to the next maturity levels, organized as an implementation plan.

Background for Host State Agency

- This document contains two sections:
  1. Your Capability Maturity Workshop output of strengths, weaknesses, and actions along with (for the lowest capability level) reformulated/consolidated actions with suggested steps
  2. Implementation Plan Templates for conversion of these reformulated/consolidated actions into your Implementation Plan (IP) actions and tasks
- The Workshop dimensions with the lowest level of capability have been targeted as priorities for inclusion in the IP. For these priority dimensions, the most important workshop actions have been identified. These may have been restated slightly or combined (reformulated/consolidated)
- "Good Practice" steps have been suggested for each action to help the Host State identify tasks and subtasks to implement the action—these may be further modified, combined, and detailed as appropriate to better fit the local context
- The Implementation Plan Templates are standardized with regard to the specification of responsibilities, roles, resources, schedule, products, etc. for each task or set of tasks

Host State Agency Responsibilities in Preparing the Implementation Plan Templates

1. The Host state will review the priority actions (and suggested steps) to estimate the level of effort that might be involved compared to staff capacity. Implementing all the priority actions may not be feasible in the initial effort—and can be addressed subsequently. The selection of actions to be pursued will be discussed among the Host State and FHWA/AASHTO
2. The Host State may wish to modify the reformulated/consolidated Workshop actions or select other actions from the Workshop that relate to the lowest level dimension
3. Prior to the IP Webinar/Workshop, the Host State will fill in the IP Templates for each selected action, in effect creating a "skeletal work program" of tasks (and perhaps subtasks) for implementation
4. The generic "good practice" steps (suggested steps) can be used as a point of departure to form tasks for the IP Templates for each action. The suggested steps may be combined into a smaller number of tasks
5. For each set of tasks to implement an action, the IP Templates include the needed work plan specifications related to task execution (responsibilities, schedules, products etc.) that the Host State will identify for discussion with the Consultant Team and FHWA/AASTHO before and during the IP Webinar/Workshop
6. The IP Templates presume that each action with its set of tasks can be considered a coordinated effort of one staff team so that the single specification of responsibilities, roles, resources, schedules, products, etc. apply to all the tasks on that action template. However, the Host State may want to specify these details for each task or subset of tasks. The Template's task details can simply be reproduced and completed for each
7. The completed IP Templates (with the specifications for tasks) will be the focus of a joint discussion at the IP Webinar/Workshop. The Consultant Team's role will be limited to help ensure that the IP Templates are logically related to the action items identified in the Workshop and focused on capability improvement.

Section 1:

Prioritized Capability Maturity Workshop Actions with Suggested Steps

Business Processes: Planning and Programming

Workshop Outputs

Strengths Cited	Weaknesses Cited

• Some ongoing review of ITS Strategic Deployment Plan, in part triggered by success of RTOP
• Recent expanded use of TTC in Savannah region (but staffing an issue)
• Success with public communication through Twitter (Cobb County)
• Good collaborative relationship between GDOT and FHWA to support operations with available resources
• Good relationship between GDOT operations and planning divisions
• Four-year operations plan in place (with flexibility) that prioritizes investments within lump sum budgeting process
	• Need to capitalize on opportunities for updating SDP
	• Risk that future commissioner/senior management may not have an operations background could lead to diminished top-level understanding and support
	• Potential need for a more policy driven/institutional approach to supporting operations needs/funding/investment decisions rather than "lump sum" approach
	• Challenge with generating performance measure (B/C) justification to support investment decisions
	• Need to identify and apply performance measures that "make the business case" and are externally understood/meaningful
	• Local jurisdiction challenges:
	  ○ Incorporation of ITS into roadway project planning and programming upfront at the local level, despite the SDP
	  ○ Cataloging needs and lessons learned from operations activities outside Metro Atlanta
	  ○ Demonstrating value of operations strategies/projects, showing that staff are not just "watching cameras"
	  ○ Obtaining resources (funding and staff)
	  ○ Information sharing with the public at the county level / among local agencies (unlike GDOT)

Level	1 — Performed	2 — Managed	3 — Integrated	4 — Optimizing
Criteria	Each jurisdiction doing its own thing according to individual priorities and capabilities	Consensus regional approach developed regarding TSM&O goals, deficiencies, B/C, networks, strategies and common priorities	Regional program integrated into jurisdictions' overall multimodal transportation plans with related staged program	TSM&O integrated into jurisdictions' multi-sectoral plans and programs, based on a formal, continuing planning processes
Consensus		2.5		

Workshop Actions to Advance to the Next Level

- Update ITS Strategic Deployment Plan
- Develop an ITS strategic plan with collaborative focus that incorporates district input/vision of operations
- Integrate planning for signal maintenance and upgrades into asset management project prioritization tool (GAMS)
- Prepare outreach/communication materials (PowerPoint, brochures, videos) to make the case for operational effectiveness and educate future senior management/decision makers, as well as others as necessary to sustain a culture supportive of operations

Consultant Reformulated/Consolidated Actions
for Implementation Plan (post-workshop)

Actions	Products and Desired Outcomes	Suggested Steps to Implement Actions *These are a resource for the host state to draw upon in developing task(s) for this action*
Update the ITS Strategic Plan with collaborative focus that incorporates districts and a statewide vision.	Statewide/Regional TSM&O Plan (terminology; may also call this the ITS Strategic Plan)	1. Compile an inventory of existing TSM&O/ITS activities/products/benefits for use as a tool in convincing others of the need for an updated TSM&O strategy and plan. Consider audiences/ stakeholders and dissemination means. 2. Identify any specific focus areas (geographic, arterial ops, ICM, etc.) for the plan to address and convene integrated/inclusive working group/planning committee including potential partners in service delivery (districts). 3. Review examples of statewide/regional TSM&O plans and architectures from peer states/regions and planning guidance from FHWA/AASHTO 4. Identify and/or update mission, goals, and objectives, and relate to easily identifiable needs and deficiencies (also see Culture dimension). 5. Assess potential need for a more policy driven/institutional approaches to support operations and include performance measures that "make the business case" and are externally understood/meaningful. 6. Update statewide and regional architectures by building on current state of practice (as defined in step #1) reflecting ongoing/planned activities in existing architectures/concepts of operations/systems 7. Identify improvement actions (systems, strategies, and procedures), timeframes and participants including those focused on process and procedure improvements with very modest costs 8. Review long and short-term investment options (capital, maintenance and staffing) in context of alternative levels of expenditure and resource availability and develop program(s) and schedules (s) for improvement actions, linking them to updated architectures 9. Document revised ITS Strategic Plan (or TSM&O Plan).
Develop a process to integrate signal maintenance and upgrades into asset management (GAMS)	Integrated asset management activities with ITS assets.	1. Document current planning process for signal maintenance and upgrades. Determine if any updates are needed for this process 2. Convene meeting(s) of RTOP stakeholders and GAMS stakeholders to discuss avenues for integrating existing GDOT-owned signals into GAMS. 3. Develop and document a process to integrate signal maintenance and upgrades into GAMS.

Systems and Technology

Workshop Outputs

Strengths Cited	Weaknesses Cited
• Structured process in place for deploying technology solutions, including use of ConOps • ITS architecture in place that supports relationships among technology selection and deployment and relates it to needed functionalities • Good relationship with IT department (e.g. selecting software for cameras, ITS device maintenance) • Common statewide traffic signal controller platform • GDOT seeks out and applies new technologies through participation in national forums (ITS-A) • Local agencies use qualified products list (QPL)	• Need for feedback from GDOT to local jurisdictions on technology deployment issues (QPL, procurement challenges, incorporating consultant help, integrating with Navigator, keeping up with its pace) • Difficult to keep QPL current with latest technology; potential need for a formal performance feedback loop • Expected growing pains from planned software upgrade for signal controllers • Staffing challenges at local level makes rigorous technology selection difficult (e.g. testing) • Challenges with individual/small ITS procurements that are not associated with a larger project • Not maximizing full capability of deployed technologies (e.g. Clayton County)

Level	1 — Performed	2 — Managed	3 — Integrated	4 — Optimizing
Criteria	Ad hoc approaches to system implementation without consideration of systems engineering and appropriate procurement processes	Regional conops and architectures developed and documented with costs included; appropriate procurement process employed	Systems & technology standardized and integrated on a ***statewide*** basis (including arterial focus) with other related processes and training as appropriate	Architectures and technology routinely upgraded to improve performance; systems integration/interoperability maintained on continuing basis
Consensus			3	

Workshop Actions to Advance to the Next Level

- Formalize a feedback loop between GDOT and local jurisdiction for keeping the QPL up to date in part by capitalizing on outputs from GAMS (asset management software tool) to help alleviate burden on local staff
- Solicit local input and provide training assistance on signal controller upgrade; embody actions in detailed rollout plan; identify and incorporate appropriate requirements in RFP (e.g. those for training)
- Address need for improved local jurisdiction-GDOT communication/technical assistance through the restarted Navigator Users Group [see Collaboration]
- Reorient standards away from technical specifics to functional requirements to allow improved ability to keep pace with technology
- See actions [Business Processes, Collaboration] regarding education and collaboration to address maximizing full capability of technology

Consultant Reformulated/Consolidated Actions
for Implementation Plan (post-workshop)

Actions	**Products and Desired Outcomes**	**Suggested Steps to Implement Actions** *These are a resource for the host state to draw upon in developing task(s) for this action*
No priority actions. Core team may decide to add if this dimension is a focus for the region.		1.

Performance Measurement

Workshop Outputs

Strengths Cited	Weaknesses Cited

• Analysis, before-and-after studies, benefits assessments, etc. routinely applied, especially driven by demand to demonstrate benefits and successes to public
• Performance measures reviewed at regular division directors meetings, ideas for improvement generated
• Evolution of performance measurement at GDOT has led to measuring only what is useful, not simply what can be measured
• Performance dashboard designed for public, legislature, and governor audiences
• Internal dashboard with actionable measures that support public-facing, big-picture dashboard to be launched early 2014
• Efforts underway to fill gaps in data and gain a better understanding of traffic congestion/reliability measures (good preparation in advance of MAP-21)
	• Room for improvement in developing high-level benefit-cost evaluations to influence upper management decision making
	• Greater understanding of ongoing maintenance (lifecycle) costs of capital projects needed in order to make truer comparisons of capital vs. operations investments
	• Performance monitoring on an ongoing basis needs to be more formally applied to keep deployments and programs operating as intended over time
	• Customer service / satisfaction measures lacking
	• Need for improvements at district and local levels:
	  ○ Potential for greater utilization of collected performance measures/data in districts (for management and demonstrating value)
	  ○ Need to make determination at local jurisdiction level as to what PMs are relevant to decision makers (e.g. measures indicate congestion increasing, but also throughput due to RTOP); data is available to answer questions, but is not proactively broadcasted
	  ○ Local governments would benefit from standardization and direction on how to collect, utilize, and report PMs (e.g. to make the case, conduct preventive maintenance)
	• Local jurisdictions would benefit from GDOT assistance on signal timing PMs and data collection (some RTOP corridors monitored)

Level	1 — Performed	2 — Managed	3 — Integrated	4 — Optimizing
Criteria	Some outputs measured and reported	Output data used directly for after-action debriefings and improvements; data easily available and dashboarded	Outcome measures identified (networks, modes, impacts) and routinely utilized for objective-based program improvements	Performance measures reported internally for utilization and externally for accountability and program justification
Consensus			3	

Workshop Actions to Advance to the Next Level

- Identify and develop the most important performance measures (especially for Traffic Operations Division) for Phase II of the internal dashboard rollout
- Offer training program associated with rollout for internal dashboard to external GDOT partners (in addition to internal audiences of Division Directors)
- Identify opportunities for assistance and coordination between GDOT, MPOs, and local jurisdictions with respect to MAP-21 performance measure requirements and arterial performance measures to achieve standardization across partners/jurisdictions
- Develop and incorporate automated generation of data analysis outcomes associated with project performance evaluations
- Publish TMC weekly report on Navigator and/or GDOT website
- Leverage GAMS development to gain better understanding of long-term lifecycle costs and document the tradeoffs among categories of future preventative maintenance set-asides (e.g. pavement vs. operations)

Consultant Reformulated/Consolidated Actions
for Implementation Plan (post-workshop)

Actions	Products and Desired Outcomes	Suggested Steps to Implement Actions *These are a resource for the host state to draw upon in developing task(s) for this action*
Identify and develop the most important performance measures (especially for Traffic Operations Division) for Phase II of the internal dashboard rollout	Integrated outcome and output measures	1. For annual reporting, tie outcome measures to the output measures used in the monthly NaviGAtor reports 2. For internal dashboard, ensure that “drill-down can be performed for output measures at the corridor level 3. Coordinate outcome measures (e.g., congestion level, reliability) with other units and agencies (e.g., emergency responders work zones, winter maintenance, CMP for major MPOs) – make sure they understand their contribution to overall mobility levels

Culture

Workshop Outputs

Strengths Cited	Weaknesses Cited
• Marketing campaign underway for HERO program (engaging media, branding, anniversary acknowledgment) • Upper management supportive and receptive to operations improvements and benefits; operations has a "seat at the table"	• No high-level business case document/program/strategy for telling the story of GDOT operations • No mechanism for packaging and communicating aggregate effect of multiple operations strategies and programs for public understanding (understanding is typically at the individual's level) • Management culture among local jurisdictions not operations oriented • Need to expand operations message beyond Metro Atlanta to statewide • Need to make the case for addressing operational traffic issues to sustain economic development and retain and attract major employers • Better cross-disciplinary coordination needed between planning/zoning and traffic operations; local governments could benefit from assistance

Level	1 — Performed	2 — Managed	3 — Integrated	4 — Optimizing
Criteria	Individual Staff champions promote TSM&O	Jurisdictions' senior management understands TSM&O business case and educates decision makers/public	Jurisdictions' mission identifies TSM&O and benefits with formal program and achieves wide public visibility/understanding	Customer mobility service commitment accountability accepted as formal, top level core program of all jurisdictions
Consensus		2.5		

Workshop Actions to Advance to the Next Level

- Conduct proactive relationship building with public service providers to deliver consistent message/information to the public
- Identify opportunities to demonstrate successful practices and benefits of operations strategies (e.g. w/special events) to local jurisdictions that have not embraced them through live peer demonstration or illustrative case demonstration; use them to help change mindsets
- Formalize and increase demonstration and communication (advertising) of the benefits of RTOP (use model of outreach for MTOP and PTOP)
- Evaluate opportunities/feasibility of engaging communications/marketing specialists (GDOT in-house communication staff, district PIOs); leverage power of media to inform and make the case to legislators

Consultant Reformulated/Consolidated Actions for Implementation Plan (post-workshop)

Actions	Products and Desired Outcomes	Suggested Steps to Implement Actions *These are a resource for the host state to draw upon in developing task(s) for this action*
Conduct proactive relationship building with public service providers.	Outreach materials specific to public service providers	1. Using materials developed for the Business Case (under the Business Process Actions) reach out to public service providers and determine what types of targeted communications this audience would need to better understand collaborative resources. 2. Convene a forum** and provide for opportunities for open two-sided dialog between TSM&O stakeholders and public service stakeholders. 3. Document next steps to define positive steps to make progress for increased coordination and workings between these two stakeholder groups. ** may be addressed with restart of NaviGAtor User Group.
Develop outreach and communications materials to promote TSM&O. Document lessons learned and success stories to broadcast success of TSM&O program.	Business case document and related communications material designed to justify and promote TSM&O capability and strategy improvements as a basis for resource allocation. Outreach materials on success stories to feed the Business Case	1. Establish cross-discipline interagency working group** to develop consensus business case based on performance data -- and define purpose, scope, and audience (internal and external) for business case. 2. Identify key audiences and "hot button" issues – and promising media formats and communication strategies. 3. Review peer experience with business case development and FHWA/AASHTO/SHRP2 materials regarding approach to identification and presentation of costs, benefits, payoffs, and expected outcomes. Assess relative B/C compared to non-TSM&O alternatives. 4. Identify and select case study opportunities to document and support outreach materials being developed as part of action items under Business Processes dimension ("develop Business Case"): a. Using the MTOP and PTOP models generate targeted outreach materials that showcase various success stories and benefits of the RTOP program b. Provide for varied RTOP case studies to exhibit corridor, statewide and other specific successes. c. Look for opportunities to present materials at special events that attract TSM&O stakeholders 5. Coordinate with and provide input to the Business Case documentation. 6. Identify and select data and analytics, identify project-type targets, and identify full range of cost and benefit categories of interest (including monetary and non-monetary) for TSM&O alternatives. a. Develop agency specific case study (that will lead to outreach piece) on the RTOP program. 7. Garner any support and/or resources needed from State Public Information Office. 8. Identify promising formats and communication strategies for business case's targeted audiences and construct the business case outputs in terms of technical memo and related presentations. ** may be addressed with restart of NaviGAtor User Group.
Develop LTAP GDOT Course on ITS and signals. Investigate ITS training, standards, and certification opportunities for GDOT forces and local agencies.	Training resources for TSM&O	1. Convene a working group to assess current training resources specific to ITS and operations 2. Engage local university staff to support this working group 3. Define training needs specific to TSM&O within GDOT 4. Work with FHWA, NHI, and AASHTO to determine federal training resources 5. Develop a library of training resources for TSM&O staff 6. Develop LTAP GDOT course on ITS and signals 7. Establish ITS training standards/certification for both GDOT and local jurisdictions, as well as their contractors; develop a plan for tying certification to training courses and attaching outcome to higher level title 8. Identify opportunities to expose agency interns to operations activities/careers

Organization and Staffing

Workshop Outputs

Strengths Cited	Weaknesses Cited
• Satisfaction with GDOT organizational structure • Ability to be flexible with organization and reporting structure when the need is identified; little resistance to change • Ongoing workforce planning effort within an environment of shrinking workforce • Much ITS activity takes place at HQ level (not necessarily good or bad)	• Potential opportunity to redistribute HQ ITS maintenance workload to districts • Local jurisdictions understaffed and suffer from lack of leadership's understanding of ITS maintenance needs • IT staff turnover leads to need to rebuild relationships • Acquiring IT-oriented skill sets among operations staff takes time and then opens that person up to advancement elsewhere (often private sector) • Potential need for formal training/certification for operators (may benefit from an advisory national standard as well) • Field technician skills definition/level a challenge to pinpoint and train for • Recruitment challenges due to lack of merit increases, finding appropriate skill sets • Opportunity to better capitalize on interns (GDOT slot limitations)

Level	1 — Performed	2 — Managed	3 — Integrated	4 — Optimizing
Criteria	TSM&O added on to units within existing structure and staffing -- dependent on technical champions	TSM&O-specific organizational concept developed within/among jurisdictions with core capacity needs identified, collaboration takes place	TSM&O Managers have direct report to top management; Job specs, certification and training for core positions	TSM&O senior managers at equivalent level with other jurisdiction services and staff professionalized
Consensus		2.5		

Workshop Actions to Advance to the Next Level

- See actions under Culture for communicating benefits of operations (to educate senior leadership, especially among local jurisdictions)
- Develop LTAP GDOT course on ITS and signals; investigate NHI offerings
- Establish ITS training standards/certification for both GDOT and local jurisdictions, as well as their contractors; lay out plan for tying certification to training courses and attaching outcome to higher level title
- Identify opportunities to expose agency interns to operations activities/careers

Consultant Reformulated/Consolidated Actions
for Implementation Plan (post-workshop)

Actions	Products and Desired Outcomes	Suggested Steps to Implement Actions *These are a resource for the host state to draw upon in developing task(s) for this action*
See combined actions under Culture dimension		1.

Collaboration

Workshop Outputs

Strengths Cited	Weaknesses Cited

• Progress made in partnerships with coroners involved in IM, success in issuing them flashing lights to arrive on scene quicker (permits from DPS)
• Recent addition of part-time GSP personnel in Navigator allows good access to unintegrated GSP CAD system, permits ability to discuss issues and PMs and how to address them (supported by MOU)
• Discussion of GSP collocation
• GSP IM training supported by GDOT, currently building the case for sustainable funding for continued training
• SHRP2 IM training taking place
	• ITS Steering Committee (and Operations/Users Groups underneath it) formed after Olympics to carry forward operations activities developed then no longer active
	  ○ Reduced opportunity for local agencies/districts to learn and share ideas
	  ○ Reduction in engagement of high level decision makers to help them understand operations benefits
	• Need to identify next steps for newly integrated local jurisdictions into Navigator: how to collaboratively operate and communicate, how to manage/conduct arterial IM collaboration
	• Improved MPO-GDOT collaboration needed for long-range planning, prioritization, and programming, especially identification of maintenance funding (focus has been on start-up activities with less consideration longer term)
	• Need to expand on RTOP success to better collaborate/integrate arterial management
	• Departure of champion for state level coroner signing the Open Roads policy

Level	1 — Performed	2 — Managed	3 — Integrated	4 — Optimizing
Criteria	Relationships ad hoc, and on personal basis (public-public, public-private)	Objectives, strategies and performance measures aligned among organized key players (transportation and public safety agencies) with after-action debriefing	Rationalization/sharing/formalization of responsibilities among key players through co-training, formal agreements and incentives	High level of TSM&O coordination among owner/operators (state, local, private)
Consensus		2.0		

Workshop Actions to Advance to the Next Level

- Reconstitute and re-launch Navigator User Group (similar to Olympics-era ITS Steering Committee) to examine issues associated with Navigator 2, to discuss SOPs on arterials; and use it as a forum for other collaborative activities
- Define data stakeholder group for data sharing / sharing resources on performance data (Atlanta Metro or statewide) and discuss issues of integration and coordination; consider distinction between historical performance measure data vs. real time data (incident, dispatch data, etc.)
- Formulate plan for local jurisdiction signal maintenance responsibility (consider involvement of districts and level of formalization)
- Formulate strategy for bringing partners on board to Open Roads policy

Consultant Reformulated/Consolidated Actions
for Implementation Plan (post-workshop)

Actions	Products and Desired Outcomes	Suggested Steps to Implement Actions *These are a resource for the host state to draw upon in developing task(s) for this action*

Perform an overall assessment of stakeholder groups and interest areas that will advance statewide operations and TSM&O efforts. Reconstitute NaviGAtor Users Group.	Re-invigorated Users Group	1. Dust off historical NaviGAtor user group participants listing, assess and update to present day stakeholders. Broaden as necessary.
		2. Document the management of and an updated mission and purpose of this Users Group
		3. Determine schedule for engaging this Users Group (monthly, quarterly, etc.)
		4. Convene updated User Group with appropriate fanfare to re-engage participants. Prioritize the following as near-term agenda items:
		  a. Define data stakeholder group for data sharing / sharing resources on performance data (Atlanta Metro or statewide)
		  b. Define issues of integration and coordination; consider distinction between historical performance measure data vs. real time data (incident, dispatch data, etc.)
		  c. Formulate plan for local jurisdiction signal maintenance responsibility (consider involvement of districts and level of formalization)
		  d. Formulate strategy for bringing partners on board to Open Roads policy
		  e. Coordinate GDOT operations deployment planning with major MPOs

Section 2:

Capability Maturity Implementation Plan Templates

See page 1 for instructions to host state on completing these Implementation Plan Templates

Business Processes (Planning and Programming)

Implementation Plan Template

Details for Action 1 of 2 *Host State may wish to use the reformulated/consolidated Workshop actions, modify them, or select other actions from the Workshop that relate to the lowest level dimension. This table should be reproduced for each action associated with this dimension.*	
Action Description	Update the ITS Strategic Plan with collaborative focus that incorporates districts and a statewide vision.
Products and Desired Outcomes	Statewide/Regional ITS Strategic Plan
Task(s) / Subtask(s)	1. Compile an inventory of existing TSM&O/ITS activities/products/benefits for use as a tool in convincing others of the need for an updated TSM&O strategy and plan. Consider audiences/ stakeholders and dissemination means. 2. Identify any specific focus areas (geographic, arterial ops, ICM, etc.) for the plan to address and convene integrated/inclusive working group/planning committee including potential partners in service delivery (districts). 3. Review examples of statewide/regional TSM&O plans and architectures from peer states/regions and planning guidance from FHWA/AASHTO 4. Identify and/or update mission, goals, and objectives, and relate to easily identifiable needs and deficiencies (also see Culture dimension). 5. Assess potential need for a more policy driven/institutional approaches to support operations and include performance measures that "make the business case" and are externally understood/meaningful. 6. Update statewide and regional architectures by building on current state of practice (as defined in step #1) reflecting ongoing/planned activities in existing architectures/concepts of operations/systems 7. Identify improvement actions (systems, strategies, and procedures), timeframes and participants including those focused on process and procedure improvements with very modest costs 8. Review long and short-term investment options (capital, maintenance and staffing) in context of alternative levels of expenditure and resource availability and develop program(s) and schedules (s) for improvement actions, linking them to updated architectures 9. Document revised ITS Strategic Plan
Implementation Task Details *Details below apply to all tasks above or can be duplicated and specified for single tasks or subset of tasks.*	
Lead	Mark Demidovich
Support Staff	Chad Hendon, with Atkins task order utilizing non-Operations staff (office staff)
Staff Level of Effort (person-days)	45 for GDOT staff, 60 for consulting staff
Senior Leadership Support Actions	Approve task order for Atkins
Collaboration Actions and Requirements	Need to meet with active District staff to gain input
Technical Issues	None anticipated
Key Risks	Should locals be involved? Would scope get too big? Maybe just RTOP-active locals?
Resource Requirements	Atkins staff via engineering task, GDOT staff to oversee
FHWA Support Resources and Contact	Provide samples of TSM&O plans from other similar regions
Start Date	7/1/2014
End Date	6/30/2015
Success / Completion Indicator	Issuance of ITS Strategic Plan

Details for Action 2 of 2 *Host State may wish to use the reformulated/consolidated Workshop actions, modify them, or select other actions from the Workshop that relate to the lowest level dimension. This table should be reproduced for each action associated with this dimension.*	
Action Description	Develop a process to integrate signal maintenance and upgrades into asset management.
Products and Desired Outcomes	Integrated signal asset management activities using ITS assets.
Task(s) / Subtask(s)	1. Document current planning process for signal maintenance and upgrades. Determine if any updates are needed for this process 2. Convene meeting(s) of RTOP stakeholders and District stakeholders to discuss avenues for integrating existing GDOT-owned signals into an asset management system. 3. Develop and document a process to integrate signal maintenance and upgrades into an asset management system.
Implementation Task Details *Details below apply to all tasks above or can be duplicated and specified for single tasks or subset of tasks.*	
Lead	Alan Davis
Support Staff	Traffic Signal section, RTOP staff
Staff Level of Effort (person-days)	180
Senior Leadership Support Actions	Determine currently available asset management tools at Enterprise level. Decide if they can be used in this effort or are different systems needed.
Collaboration Actions and Requirements	Meet with stakeholders and gain input, proof of concept testing on RTOP.
Technical Issues	Need to fully understand capabilities of Department's Enterprise asset management solution
Key Risks	Department's current tool is not the right tool and we will need our own independent tool
Resource Requirements	I.T. assistance, District assistance for signal inventory
FHWA Support Resources and Contact	Recruit visitor from another state to visit GA and show examples of what they've done similarly for traffic signal asset management. Greg Morris to facilitate.
Start Date	7/1/2014
End Date	12/31/2015
Success / Completion Indicator	Deployment of a signal inventory/asset management tool

Systems and Technology

Implementation Plan Template

Details for Action 0 of 0 *Host State may wish to use the reformulated/consolidated Workshop actions, modify them, or select other actions from the Workshop that relate to the lowest level dimension. This table should be reproduced for each action associated with this dimension.*	
Action Description	None identified. Already an integrated level of capability in this dimension
Products and Desired Outcomes	
Task(s) / Subtask(s)	*Tasks and subtasks can draw on the Suggested Steps as appropriate – including combining, eliminating, and modifying – as suitable to the local context.*
Implementation Task Details *Details below apply to all tasks above or can be duplicated and specified for single tasks or subset of tasks.*	
Lead	
Support Staff	
Staff Level of Effort (person-days)	
Senior Leadership Support Actions	
Collaboration Actions and Requirements	
Technical Issues	
Key Risks	
Resource Requirements	
FHWA Support Resources and Contact	
Start Date	
End Date	
Success / Completion Indicator	

Performance Measurement

Implementation Plan Template

Details for Action 1 of 1 *Host State may wish to use the reformulated/consolidated Workshop actions, modify them, or select other actions from the Workshop that relate to the lowest level dimension. This table should be reproduced for each action associated with this dimension.*	
Action Description	Identify and develop the most important performance measures (for freeway AND arterial roadwaysn) for Phase II of the internal dashboard rollout
Products and Desired Outcomes	Integrated outcome and output measures
Task(s) / Subtask(s)	1. For annual reporting, tie outcome measures to the output measures used in the monthly NaviGAtor reports 2. For internal dashboard, ensure that "drill-down can be performed for output measures at the corridor level Coordinate outcome measures (e.g., congestion level, reliability) with other units and agencies (e.g., emergency responders work zones, winter maintenance, CMP for major MPOs) – make sure they understand their contribution to overall mobility levels 3. Use signal performance metrics from RTOP to prioritize corridor optimization efforts
Implementation Task Details *Details below apply to all tasks above or can be duplicated and specified for single tasks or subset of tasks.*	
Lead	Mark Demidovich
Support Staff	Chad Hendon, with Angshuman Guin of GA Tech performing work under Atkins contract, Grant Waldrop
Staff Level of Effort (person-days)	45 days
Senior Leadership Support Actions	Approval of task order on Atkins contract to perform work
Collaboration Actions and Requirements	Need to collaborate with IT during project development to get buy in.
Technical Issues	How will data be given to Guin? Will processes that run be hosted on DOT servers or externally?
Key Risks	Guin is single point of failure. If for some reason he leaves or quits task early, no one is easily available to take over
Resource Requirements	Atkins contract task order for Angshuman Guin to develop performance measures. Mark Demidovich and Chad Hendon to oversee project.
FHWA Support Resources and Contact	Get sample layouts of best examples of performance measures charts and graphs from around the country. Greg Morris or Grant Zammit
Start Date	7/1/2014
End Date	6/30/2015
Success / Completion Indicator	Actively running "dashboards" with a variety of performance measures shown.

Culture

Implementation Plan Template

Details for Action 1 of 3 *Host State may wish to use the reformulated/consolidated Workshop actions, modify them, or select other actions from the Workshop that relate to the lowest level dimension. This table should be reproduced for each action associated with this dimension.*	
Action Description	Conduct proactive relationship building with public service providers.
Products and Desired Outcomes	Outreach materials specific to public service providers
Task(s) / Subtask(s)	1. Using materials developed for the Business Case (under the Business Process Actions) reach out to public service providers and determine what types of targeted communications this audience would need to better understand collaborative resources. 2. Convene a forum** and provide for opportunities for open two-sided dialog between TSM&O stakeholders and public service stakeholders. 3. Document next steps to define positive steps to make progress for increased coordination and workings between these two stakeholder groups. ** may be addressed with restart of NaviGAtor User Group.
Implementation Task Details *Details below apply to all tasks above or can be duplicated and specified for single tasks or subset of tasks.*	
Lead	Chad Hendon or TMC Manager (when vacancy filled)
Support Staff	Atkins staff, media liaison
Staff Level of Effort (person-days)	45 days
Senior Leadership Support Actions	None anticipated
Collaboration Actions and Requirements	Bring together counties, cities public service providers
Technical Issues	None anticipated
Key Risks	Pushback from 911 centers not wanting to cooperate. Territorialism
Resource Requirements	911 center contact database from GEMA, TIME and TIM team meetings
FHWA Support Resources and Contact	Potentially a facilitator of a workshop or panel discussion
Start Date	9/1/2014
End Date	9/30/2015
Success / Completion Indicator	Production of outreach materials. Successful completion of several working groups or discussion groups.

Culture

Implementation Plan Template

Details for Action 2 of 3 *Host State may wish to use the reformulated/consolidated Workshop actions, modify them, or select other actions from the Workshop that relate to the lowest level dimension. This table should be reproduced for each action associated with this dimension.*	
Action Description	Develop outreach and communications materials to promote TSM&O. Document lessons learned and success stories to broadcast success of TSM&O program
Products and Desired Outcomes	Business case document and related communications material designed to justify and promote TSM&O capability and strategy improvements as a basis for resource allocation. Outreach materials on success stories to feed the Business Case
Task(s) / Subtask(s)	1. Establish cross-discipline interagency working group** to develop consensus business case based on performance data – and define purpose, scope, and audience (internal and external) for business case. 2. Identify key audiences and "hot button" issues – and promising media formats and communication strategies. 3. Review peer experience with business case development and FHWA/AASHTO/SHRP2 materials regarding approach to identification and presentation of costs, benefits, payoffs, and expected outcomes. Assess relative B/C compared to non-TSM&O alternatives. 4. Identify and select case study opportunities to document and support outreach materials being developed as part of action items under Business Processes dimension ("develop Business Case"): a. Using the MTOP and PTOP models generate targeted outreach materials that showcase various success stories and benefits of the RTOP program b. Provide for varied RTOP case studies to exhibit corridor, statewide and other specific successes. c. Look for opportunities to present materials at special events that attract TSM&O stakeholders 5. Coordinate with and provide input to the Business Case documentation. 6. Identify and select data and analytics, identify project-type targets, and identify full range of cost and benefit categories of interest (including monetary and non-monetary) for TSM&O alternatives. a. Develop agency specific case study (that will lead to outreach piece) on the RTOP program. 7. Garner any support and/or resources needed from State Public Information Office. 8. Identify promising formats and communication strategies for business case's targeted audiences and construct the business case outputs in terms of technical memo and related presentations. ** may be addressed with restart of NaviGAtor User Group.
Implementation Task Details *Details below apply to all tasks above or can be duplicated and specified for single tasks or subset of tasks.*	
Lead	Chad Hendon, or TMC Manager (when filled)
Support Staff	Atkins Median Liaison, GDOT Communications staff
Staff Level of Effort (person-days)	45 days
Senior Leadership Support Actions	Approval of communications materials for dissemination
Collaboration Actions and Requirements	Working with Communications office on best approach. Assistance with development of outreach materials
Technical Issues	Getting the correct data put together to "sell" the story
Key Risks	Not finding enough compelling material to promote
Resource Requirements	Need Atkins contract staff assistance. Media Liaison most likely.
FHWA Support Resources and Contact	Provide good examples of outreach material from other states/regions. Potentially bring in experts to Georgia. Greg Morris
Start Date	8/1/2014
End Date	3/31/2015
Success / Completion Indicator	Successful production of outreach materials. Distribution of such materials to sizeable numbers of persons.

Culture

Implementation Plan Template

Details for Action 3 of 3 *Host State may wish to use the reformulated/consolidated Workshop actions, modify them, or select other actions from the Workshop that relate to the lowest level dimension. This table should be reproduced for each action associated with this dimension.*	
Action Description	Develop LTAP GDOT Course on ITS and signals. Investigate ITS training, standards, and certification opportunities for GDOT forces and local agencies.
Products and Desired Outcomes	Training resources for TSM&O
Task(s) / Subtask(s)	1. Convene a working group to assess current training resources specific to ITS and operations 2. Engage local university staff to support this working group 3. Define training needs specific to TSM&O within GDOT 4. Work with FHWA, NHI, and AASHTO to determine federal training resources 5. Develop a library of training resources for TSM&O staff 6. Develop LTAP GDOT course on ITS and signals 7. Establish ITS training standards/certification for both GDOT and local jurisdictions, as well as their contractors; develop a plan for tying certification to training courses and attaching outcome to higher level title Identify opportunities to expose agency interns to operations activities/careers
Implementation Task Details *Details below apply to all tasks above or can be duplicated and specified for single tasks or subset of tasks.*	
Lead	Alan Davis
Support Staff	Grant Waldrop, RTOP staff, Paul DeNard
Staff Level of Effort (person-days)	100 days
Senior Leadership Support Actions	None anticipated
Collaboration Actions and Requirements	Work with FHWA NHI and AASHTO to schedule courses/classes. Include locals/contractors. Convene working group
Technical Issues	Development of course material
Key Risks	
Resource Requirements	GDOT traffic signal staff, RTOP staff to participate in course development and establishment of standards for training.
FHWA Support Resources and Contact	Scheduling training classes, coordinating instructors/travel, etc. Greg Morris
Start Date	8/1/2014
End Date	6/30/2015
Success / Completion Indicator	Successful completion of coursework by wide variety of state and local staff. Development of training standards. Establishment of working group.

Organization and Staffing

Implementation Plan Template

Details for Action 0 of 0 *Host State may wish to use the reformulated/consolidated Workshop actions, modify them, or select other actions from the Workshop that relate to the lowest level dimension. This table should be reproduced for each action associated with this dimension.*	
Action Description	See Culture dimension
Products and Desired Outcomes	
Task(s) / Subtask(s)	*Tasks and subtasks can draw on the Suggested Steps as appropriate – including combining, eliminating, and modifying – as suitable to the local context.*
Implementation Task Details *Details below apply to all tasks above or can be duplicated and specified for single tasks or subset of tasks.*	
Lead	
Support Staff	
Staff Level of Effort (person-days)	
Senior Leadership Support Actions	
Collaboration Actions and Requirements	
Technical Issues	
Key Risks	
Resource Requirements	
FHWA Support Resources and Contact	
Start Date	
End Date	
Success / Completion Indicator	

Collaboration

Implementation Plan Template

Details for Action 1 of X *Host State may wish to use the reformulated/consolidated Workshop actions, modify them, or select other actions from the Workshop that relate to the lowest level dimension. This table should be reproduced for each action associated with this dimension.*	
Action Description	Perform an overall assessment of stakeholder groups and interest areas that will advance statewide operations and TSM&O efforts. Reconstitute NaviGAtor Users Group, blend with RTOP participants
Products and Desired Outcomes	Re-invigorated Users Group
Task(s) / Subtask(s)	1. Dust off historical NaviGAtor user group participants listing, assess and update to present day stakeholders. Broaden as necessary. 2. Document the management of and an updated mission and purpose of this Users Group 3. Determine schedule for engaging this Users Group (monthly, quarterly, etc.) 4. Convene updated User Group with appropriate fanfare to re-engage participants. Prioritize the following as near-term agenda items: a. Define data stakeholder group for data sharing / sharing resources on performance data (Atlanta Metro or statewide) b. Define issues of integration and coordination; consider distinction between historical performance measure data vs. real time data (incident, dispatch data, etc.) c. Formulate plan for local jurisdiction signal maintenance responsibility (consider involvement of districts and level of formalization) d. Formulate strategy for bringing partners on board to Open Roads policy e. Coordinate GDOT operations deployment planning with major MPOs
Implementation Task Details *Details below apply to all tasks above or can be duplicated and specified for single tasks or subset of tasks.*	
Lead	Mark Demidovich
Support Staff	Chad Hendon, RTOP staff
Staff Level of Effort (person-days)	30 days
Senior Leadership Support Actions	Nudge locals to participate in Users Group if there is any hesitation
Collaboration Actions and Requirements	Convening of working group, made up of as many current Navigator users as possible. Include districts.
Technical Issues	None anticipated
Key Risks	Users Group doesn't stay focused and lapses again.
Resource Requirements	Staff time to hold User Group meetings and prepare follow-up documentation
FHWA Support Resources and Contact	Potentially someone to act as meeting facilitator, especially in early stages
Start Date	9/1/2014
End Date	Non-ending, should convene on a regular basis for the foreseeable future.
Success / Completion Indicator	Regularly held meetings of Users Group. Successful formulation of plans for signal maintenance.