

# Strategies for Managing a Research Unit

#### Alma Mujkanovic

Office of Performance-Based Management and Research (OPMR)

**Georgia Department of Transportation** 



#### **Agenda**



- Introductions
- Overview of OPMR and GDOT Research Program
- Helpful Strategies for Managing a Research Unit
  - 1. Understand Program Requirements and Risks
  - 2. Perform Assessments (Workload, Resources, Self-Assessment)
  - 3. Develop an Action Plan
  - 4. Prioritize and Streamline
  - 5. Execute the Action Plan
  - 6. Monitor and Make Adjustments
  - 7. Document Processes and Lessons Learned
- Questions



#### Office of Performance-based Management and Research



#### **PERFORMANCE – BASED MANAGEMENT UNIT**







Define the strategy and a plan to achieve it

Explain how assets are managed and decisions are made

Measure, monitor, and manage performance

#### **RESEARCH UNIT**



Administer and manage Research program

### A Snapshot of GDOT's Research Program

- ~\$10M yearly budget used for participation in Federal, Regional, and State research activities
- GDOT Personnel
  - > 6 FT employees
  - Chief Engineer
  - Research Advisory Committee (RAC) Division Directors
  - Research Technical Advisory Groups (RTAG's): Policy/Workforce, Asset Management, Mobility and Safety
- Georgia Transportation Institute delivers Research Projects for GDOT
- Research Implementation



#### **Research Unit's Work Environment**





## Creative



Resourceful



**Innovative** 



Thoughtful



Collaborative



#### **Value of Organization, Structure, and Efficiency**





Manageable/
balanced workload

Clearly defined priorities

Higher productivity

Better retention rate

Higher employee and customer satisfaction

#### **Strategies for Managing a Research Unit**



- 1. Understand
  - a) Program Requirements and Risks
  - b) HR Policies and Procedures
- 2. Perform Assessments
  - a) Workload
  - b) Resources
  - c) Self
- 3. Develop an Action Plan
- 4. Prioritize and Streamline
- 5. Execute the Action Plan
- 6. Monitor and Adjust
- 7. Document Processes and Lessons Learned

#### **Understand Program Requirements and Risks**



- Federal/State regulations that govern research program
- ❖ Internal deliverables: Annual Research Work Program, Contracts, Invoices
- Stakeholders and Their Expectations
  - Internal Chief Engineer, DOT program recipients/technical committees and Research Employees
  - External academia/consultants, FHWA
- Understand HR policies and guidelines
- Identify and regularly assess Research Program Risks
  - Financial
  - Regulatory
  - Staffing

#### **Perform Assessment**



WORKLOAD ASSESSMENT	RESOURCES ASSESSMENT	SELF ASSESSMENT
DELIVERABLES	EMPLOYEES	SELF
<ul><li>Number/costs/duration of projects</li><li>Deadlines</li><li>Priorities (program and project level)</li></ul>	<ul> <li>Skills employees have vs need → identify gaps and trainings needed</li> <li>Employee assessment of quality and benefit of unit's deliverables</li> </ul>	<ul><li>Time management</li><li>Areas for growth and development</li></ul>
CUSTOMERS	INTERNAL STAKEHOLDERS	MENTORS/ADVISORS
<ul> <li>Customer profile and satisfaction</li> <li>Number of projects initiated, area of study demanded, projects implemented, etc.</li> </ul>	<ul><li>Chief Engineer</li><li>Advisory and Technical Committees</li></ul>	Internal vs. external
CONTRACTORS	EXTERNAL STAKEHOLDERS	
<ul> <li>Projects conducted/funded, project durations, areas researched, etc.</li> <li>Stakeholder satisfaction</li> </ul>	<ul><li>FHWA</li><li>Other State DOTs</li></ul>	
DESIRED OUTCOMES	DESIRED OUTCOMES	<b>DESIRED OUTCOMES</b>
<ul><li>Calendar of deliverables</li><li>Customers/contractor profile</li></ul>	<ul><li>Employee/stakeholder feedback</li><li>Strategies to successfully deliver the program</li></ul>	<ul><li>Self improvements identified</li><li>Plan of action developed</li></ul>

#### **Create a Plan of Action – Set Expectations**



- ❖ Develop a Calendar list deliverables, due dates and person(s) responsible
  - Delegate Assign specific duties, break bigger projects into smaller milestones
- Prioritize and Streamline
- Conduct regular follow ups (one on one or team meetings) to ensure projects' progress and that employees are receiving regular feedback and coaching
- Clearly define quality standards to avoid mistakes and rework
- Define customer service expectations
- Review employee performance criteria and periodically mentor and coach your employees provide regular performance feedback
- Identify processes that need to be documented

#### **Create a Plan of Action – Prioritize and Streamline**



- Categorize deliverables (internal/external; funding related; customer related)
  - Further break the categories into high, medium, and low priorities
- Plan to deliver projects ahead of their due dates
- Determine which deliverables have multiple stakeholders involved (risk of running late)
- Determine if there are items/projects/requests that could be done simultaneously
- Develop a unit priority list and assign the delivery dates based on priorities
- Share the list with the team members

#### **How to Manage a Research Unit – Execute**



- Ensure that appropriate QA/QC took place
- Dry run the presentations (review final deliverables) with the team
- Require the team to deliver the product with better quality and standards each time
- Document feedback, lesson learned and 'new ideas/items to incorporate in the future'

# How to Manage a Research Unit – Monitor and Make Adjustments



- After each project, conduct a project debrief with the team
- Survey your customers/stakeholders
- Determine what went well and what needs improvement
- Document feedback and institute improvement steps immediately

# How to Manage Research Unit – Document Processes and Lessons Learned



- Routinely document current processes and any lessons learned
- Test your documentation
- Make knowledge management a requirement (use it as one of the performance criteria for your employees)
- Keep it simple, easy to use, and accessible to everyone
- Periodically (annually) review and make modifications
- Use it as a training tool for your current and new employees

### **How to Manage Research Unit – Food for Thought**



- ❖ Don't be afraid of mistakes/failures; treat every challenge as a new opportunity
- Mandate Excellence, Engagement, and Teamwork
- ❖ Learn to think [and act] outside of the box
- Pilot new process or new technique prior to implementing
- ❖ When implementing changes, start with current processes and practices first
- Always have your 'elevator speech' ready



## **Questions?**

### Alma Mujkanovic

Office of Performance-Based Management and Research

**Georgia Department of Transportation** 

amujkanovic@dot.ga.gov

404-631-1446

