Roles and Responsibilities in Project Delivery
Poll Question 1

• Prior to today’s meeting, did you know about the Integrated Project Delivery effort?
Poll Question 2

- Do you understand what a Matrix Organization is?
Objectives

- Why Are We Implementing IPD?
- What Is A Matrix Organization?
- How Have Roles And Responsibilities Changed?
- How Will These Concepts Be Implemented?
- What Comes Next?
- Wrap Up
Why Are We Implementing IPD?

Roles & Responsibilities
Why All The Changes?
“A good plan violently executed now is better than a perfect plan executed next week.”

- General George S. Patton
Integrated Project Delivery

**PROJECT DELIVERY VISION**
- A CULTURE where we PROMISE WHAT WE ARE GOING TO DO and DELIVER WHAT WE PROMISE

**COMMITMENT**
- Developing IPD Business Practices that can withstand changing workforce dynamics and transportation needs well into the future

**DELIVERY IMPROVEMENT KEY**
- Implementation of transparent, repeatable and accountable processes that are effective and efficient
NCDOT Program Delivery

Project Managers
( Constant communication, coordination, and reporting)

- Division
- Roadway Design
- Hydraulics
- Geotechnical Engineering
- Structures
- Location and Survey
- Right of Way
- Environmental Analysis
- Photogrammetry
- Construction
- Mobility
- Utilities
- Contract Services
The efficient delivery of our project and overall program requires NCDOT and our partners to...

<table>
<thead>
<tr>
<th>Timely Decisions</th>
<th>Make timely decisions regarding scope, schedule, budget, and quality</th>
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<tbody>
<tr>
<td>Focused Work Processes</td>
<td>Focus on only the work processes and tasks that are required</td>
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<tr>
<td>Improve</td>
<td>Improve communication, coordination and decision making</td>
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<tr>
<td>Accountable</td>
<td>Hold ourselves accountable, more than ever, for how well we deliver on our promises and serve our customers</td>
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What Is A Matrix Organization?

Roles & Responsibilities
This Matrix?
Why A Matrix Organization?
Why a Matrix Organization?
ENTER THE MATRIX
NCDOT Matrix Organizational Structure

Technical manager provides technical staff for the project team (internal or external)

Project Manager focuses on scope, schedule, budget, and quality along with their team

Represents a team member from a Technical Unit assigned to a project
How a Matrix Organization Works

Divisions are project owners
Project Managers and technical staff work with Division Engineers to meet established goals.

Project Managers ensure proper communication, coordination and timely decision making.

Technical units provide technical support to effectively and efficiently deliver projects.

Technical units responsible for maintaining internal technical expertise.
Matrix Organization Provides...

- Communication
- Clear Project Objectives
- Project Integration
- Efficient Use of Resources
- Retention of Disciplinary Teams
- High Morale
- Development of Project Managers

Source: Struckenbruck, LD The matrix organization, Project Management Quarterly
How Have Roles and Responsibilities Changed?
NCDOT Program Delivery

Project Managers
(Constant communication, coordination, and reporting)

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So Mr. Anderson, you want to be a NCDOT Project Manager
Project Manager Role

KEY: Communication among all spokes
Building the Team: “None of us is as smart as all of us.” - Ken Blanchard

Project Manager Initiates Project, Team Building Begins

Yes, External

Determine PEF Contract(s) or Procurement

Decision on Internal, External Resources

Yes, Internal

Reach out to Technical Unit Head(s)
PM Provides Scope and Schedule,
Receive Feedback on Availability to Meet Requirements

If Not Available

PEF Selection / Negotiate Scope, Schedule, Budget

Negotiate Scope, Schedule & Staffing with Technical Manager(s)

If Available

Feed to Project Schedule

Document Final Scope, Schedule, Staffing

If Agreement

Begin Team Alignment

Roles and Responsibilities in Project Delivery

Begin Team Alignment

"None of us is as smart as all of us.” - Ken Blanchard
How Will these Concepts Be Implemented?

Roles & Responsibilities
Benefits of a Matrix Organization

- Quality
- Budget
- Scope
- Schedule
Failure To Implement
NCDOT Project Management Guiding Principles

- Know your Area of Responsibility
- Prepare a Project Management Plan
- Establish Functional and Effective Technical and Stakeholder Teams
- Manage Project Risks to Scope, Schedule and Budget; Measure Progress; Communicate
- Document and Communicate Important Decisions and Issues
- Be Proactive
- Ensure Customer Satisfaction
- Make Decisions
NCDOT Issue Resolution Process (Escalation)

Level 1: Technical Issues
- Between technical units and/or consultant staff
- Majority of issues resolved here
- If no resolution at Level 1
  - PM actively involved; if resolved no further action
  - If unresolved, move to Level 3

Level 2: Cost, Scope, Schedule, Quality, Contractual
- If no resolution at Level 1
- Use if failure to resolve among project team
  - PM lead role in resolving; keep Div Eng involved
  - Recommended time frame: 3 days

Level 3: Technical Cost, Scope, Schedule, Quality, Contractual
- If legal - involve Assistant AG
- Recommended time frame 1 week

Level 4: Policy/Legal
- Final step: Dept policy or legal issue
- PM coordinate resolution with Unit Heads or Technical Services Chief/Chief Engineer

Document all Issues Levels 2-4 (See Issue Log Template)
What is Next?

Roles & Responsibilities
Roles and Responsibilities Training

2-Day Project Manager Training
The Matrix Has You....
Thank you!