



Welcome to Project Management



Welcome & Introductions

Agenda Day 1

Roles & Responsibilities of a Project Manager

1. Welcome & Introductions
2. What is Happening in North Carolina
3. Working Through Transitions
4. Understanding & Working with Consultants
5. Break-Out Session: NCDOT Process Improvements

Agenda Day 2

Project Management 101

1. Communications
2. Being a Successful Project Manager
3. Partnering and Working as a Team

Housekeeping

- Emergency Exits
- CPR Certifications?
- Washrooms
- 12.75 PDH credits are available for training
 - ✓ Self report
 - ✓ Be sure to sign-in
 - ✓ Keep copy of your Agenda

Training Ground Rules

Please make sure to...

- Respect each other and the classroom environment
- Turn off cell phones
- Open dialogue
- Ask questions!
- Communications will be stressed
- Develop relationships
- Question cards for NCDOT & IPD Leadership

What is a Project Manager?



What is a Project Manager?

- We've ALL done project management in different forms and on a wide variety of projects
- In this training, we are going to focus on the Project Manager tasks, skills, and requirements necessary to lead a project through the NCDOT preconstruction project development process

Your Goals

What is the one, most critical thing you hope to walk away with after our session tomorrow?

Write your answer on the card provided and hand it in.

Introductions

Please stand up and introduce yourself. Be sure to include the following:

- What's your name?
- Where do you work?
- What is your role in the NCDOT project development process?
- How long have you been a PM?
- If someone asked you to be listed as a resource for the DOT, which topic/service area would you choose?

Icebreaker Activity

At your tables, prepare answers to the following questions:

- What is the strangest job you have ever held?
- What activities do you enjoy when you're not at work?
- If you could drive, ride, or fly anything to work, what would it be? Why?

When complete, compare all the answers at your table and choose the best one for your “team.”



**The difficulty lies not so much in
developing new ideas as in
escaping from old ones.**

John Maynard Keynes

Day 1 – Session 1



What is Happening in North Carolina?

Secretary Trogdon on IPD

“We will embrace technology, thrive on internal and external collaboration, and emerge from this process a better organization with a renewed dedication to serving the people of this great state.”

(November 1, 2018)

Integrated Project Delivery (IPD)

Secretary's Direction

- Each of us are fully invested in developing and implementing the IPD process

Project Delivery Vision

- A culture where we PROMISE what we are going to do and DELIVER what we promise

Working Together

- Division Engineers are project owners
- Project Managers & technical staff work closely with Divisions to meet established goals

How to Implement Integrated Project Delivery

Project Managers are...

- Empowered to **make timely decisions** on scope, schedule, budget, and quality in consultation with technical experts and Project Team
- Responsible to **create and lead** Project Teams
- To **focus only on processes and tasks that are required**

Resulting in...

- Better communication, coordination and decision-making
- Efficient delivery of projects and the overall program

On Timely Decisions:

The price of inaction is far greater than the cost of making a mistake.

- Meister Eckhart

On Focusing on the Right Things:

There is nothing so useless as doing efficiently that which should not be done at all.

- Peter Drucker

Message from Chris Werner

https://youtu.be/sO1LJn_0CWg

Day 1 – Session 2



Working Through Transitions

Changing Transportation Field

Recent Changes

DOTs moving to more outsourcing

Move to more Alternative Delivery

Performance-based decision-making

Rugged tablets for field work

Slide-in Bridge Construction

Laser surveys

Interactive Visualizations

Drones

Potential Advancements

Virtual Reality/ Augmented Reality

Autonomous Vehicles/ automated shuttles

Solar panel roads

Sidewalks that harvest kinetic energy

Concrete using bacteria to heal cracks

Vehicle Mileage Fees



Change...



Who Moved My Cheese?

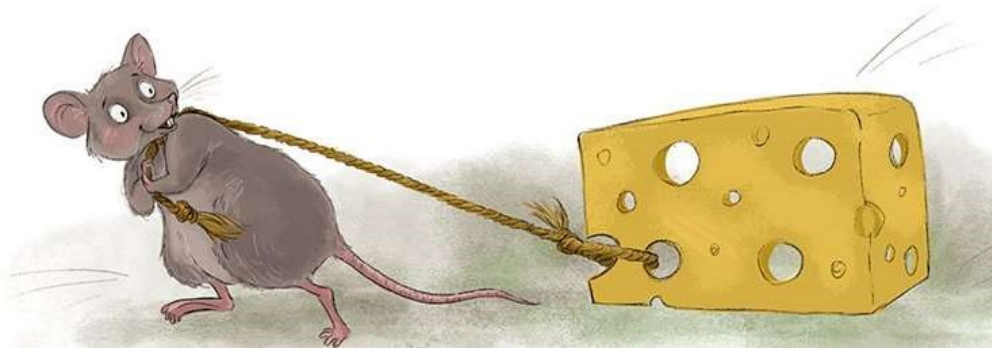


The Secret of Change is to focus all of your energy not on fighting the old, but on BUILDING the NEW
- Socrates



1. Change Exercise

2. Discussion



#1 BESTSELLER

An A-Mazing Way to Deal with Change
in Your Work and in Your Life

Who Moved My Cheese? Spencer Johnson, M.D.

Spencer Johnson, M.D.

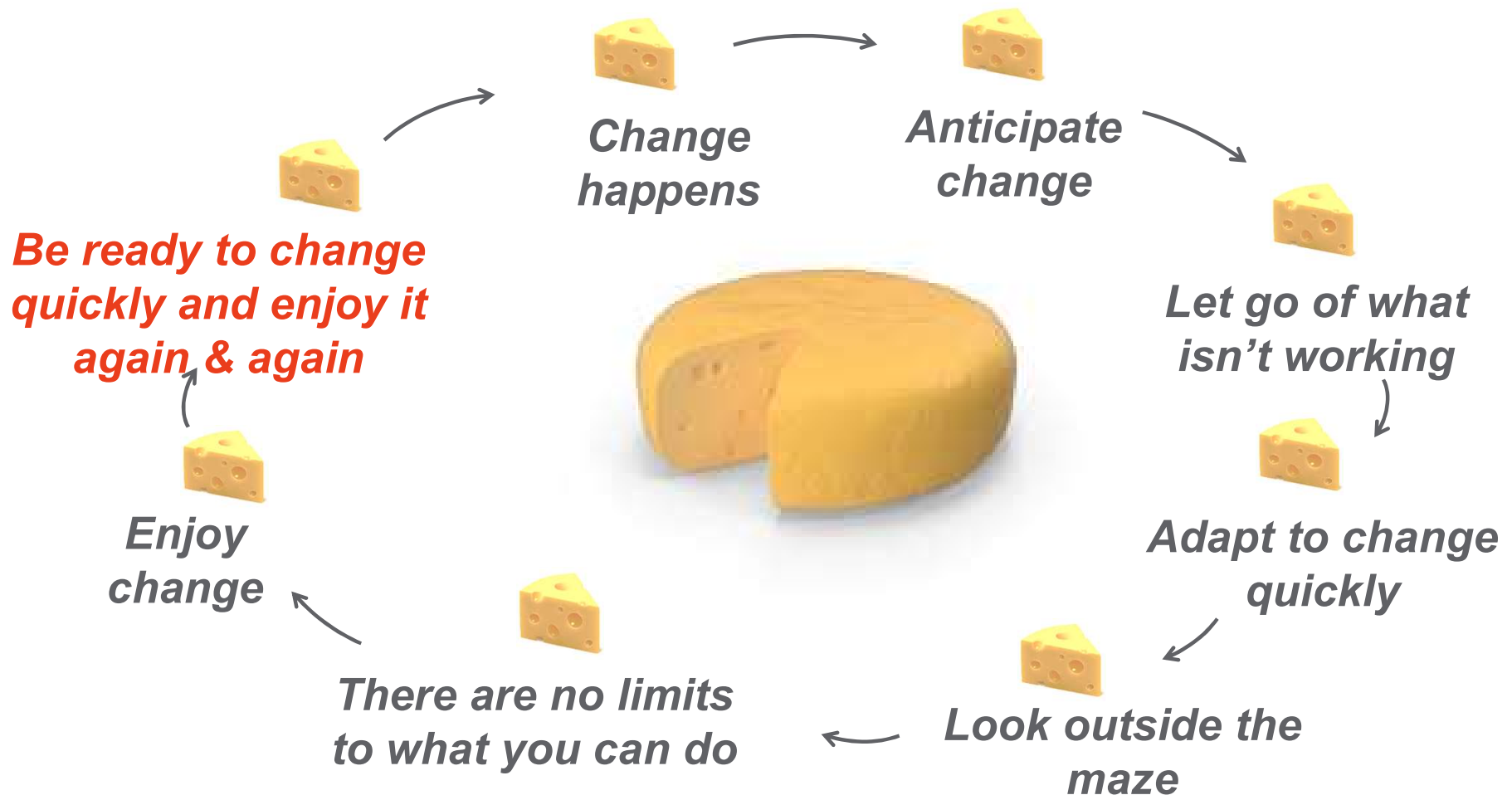


Out of the Maze Spencer Johnson, M.D.

Spencer Johnson, M.D.

Who Moved My Cheese/Out of the Maze

So..What Did They Learn?



Old Cheese the way we were...

Central Program Delivery



What is Pushing “*Old Cheese*” towards Transition?

**Disruptions
and
Challenges**

- *Secretary’s expectations*
- *Strategic Transportation Investments law*
- *Expectations of improved program delivery*
- *State / Federal expectations*
- *Staffing changes*
- *Department reorganization*
- *Innovation and technology*
- *Accountability*



Project Delivery Management

Best Practices for DOTS



Silo effect between functional or operational units completely or nearly completely absent

The accountability of PMs and technical support units is a system hallmark

Best systems composed of cohesive, multidisciplinary teams that communicate well among themselves

Roles & Responsibilities must be clearly understood

New Cheese at NCDOT



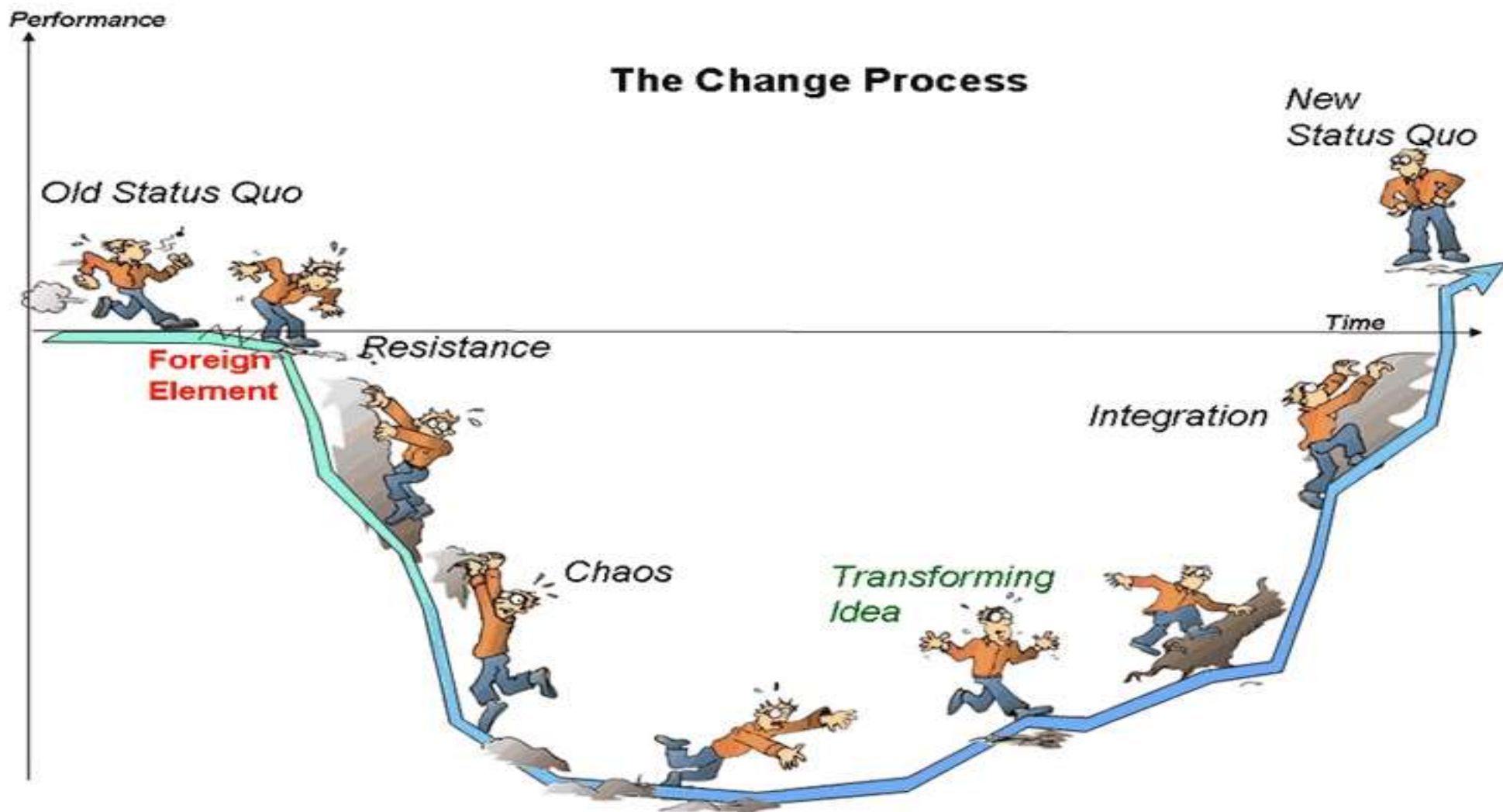
Progress, policy, technology changes
for more projects being delivered
faster with less staff

NCDOT performs less production, more
oversight, decision-making and advising

Critical thinking – focus on what needs
to be completed for each project to meet
state and federal regulations

What makes sense!

The Change Process



Out of the Maze: *Adapting to Transitions*

Initiation

Need for change
is realized

Investigation

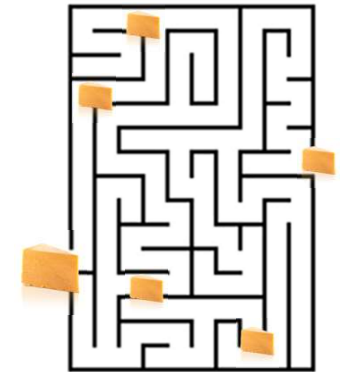
Intention

Introduction

Implementation

Integration

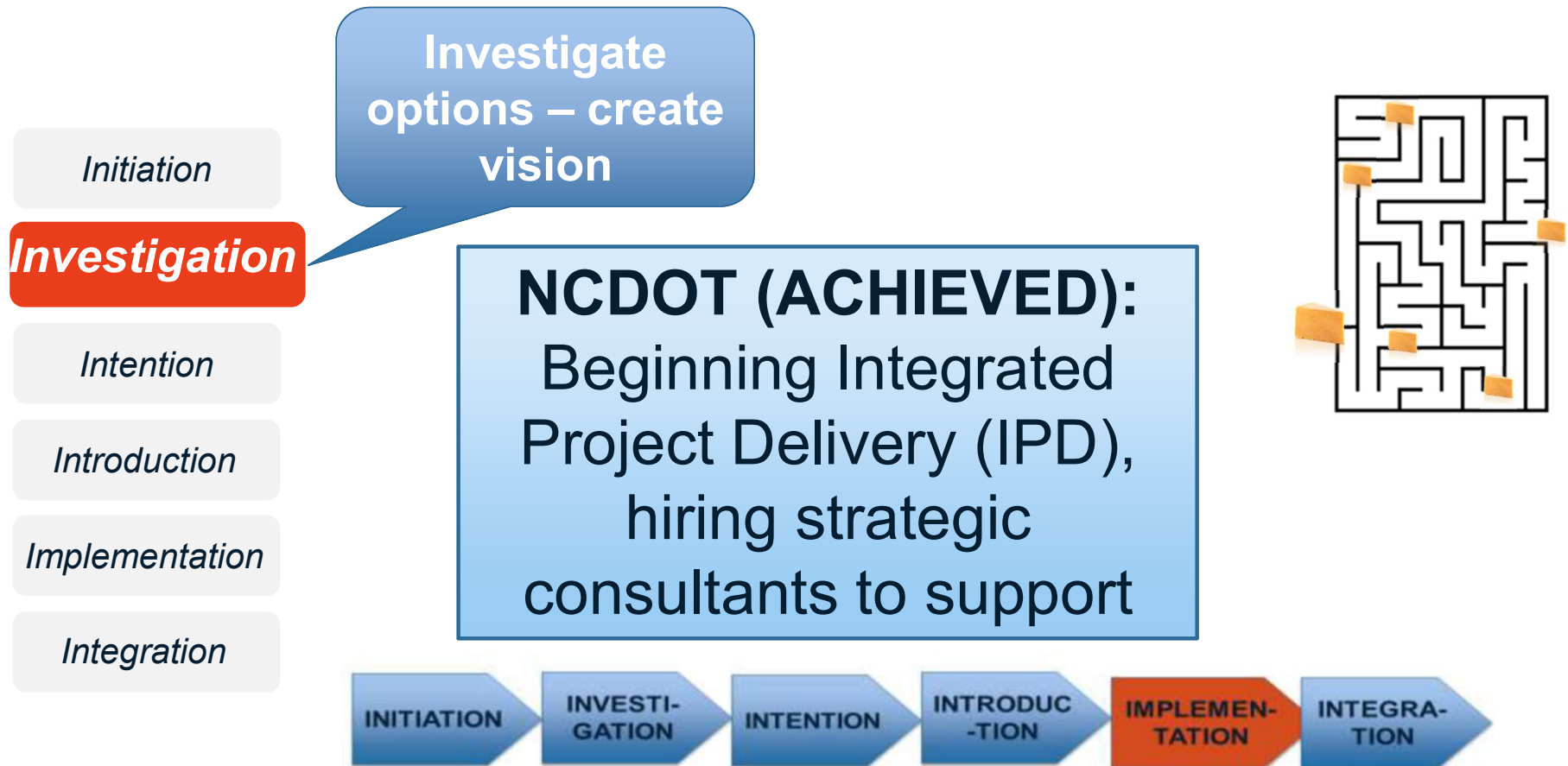
NCDOT (Past):
Secretary's initiative
on Pillars of Success
to improve overall
Program Delivery



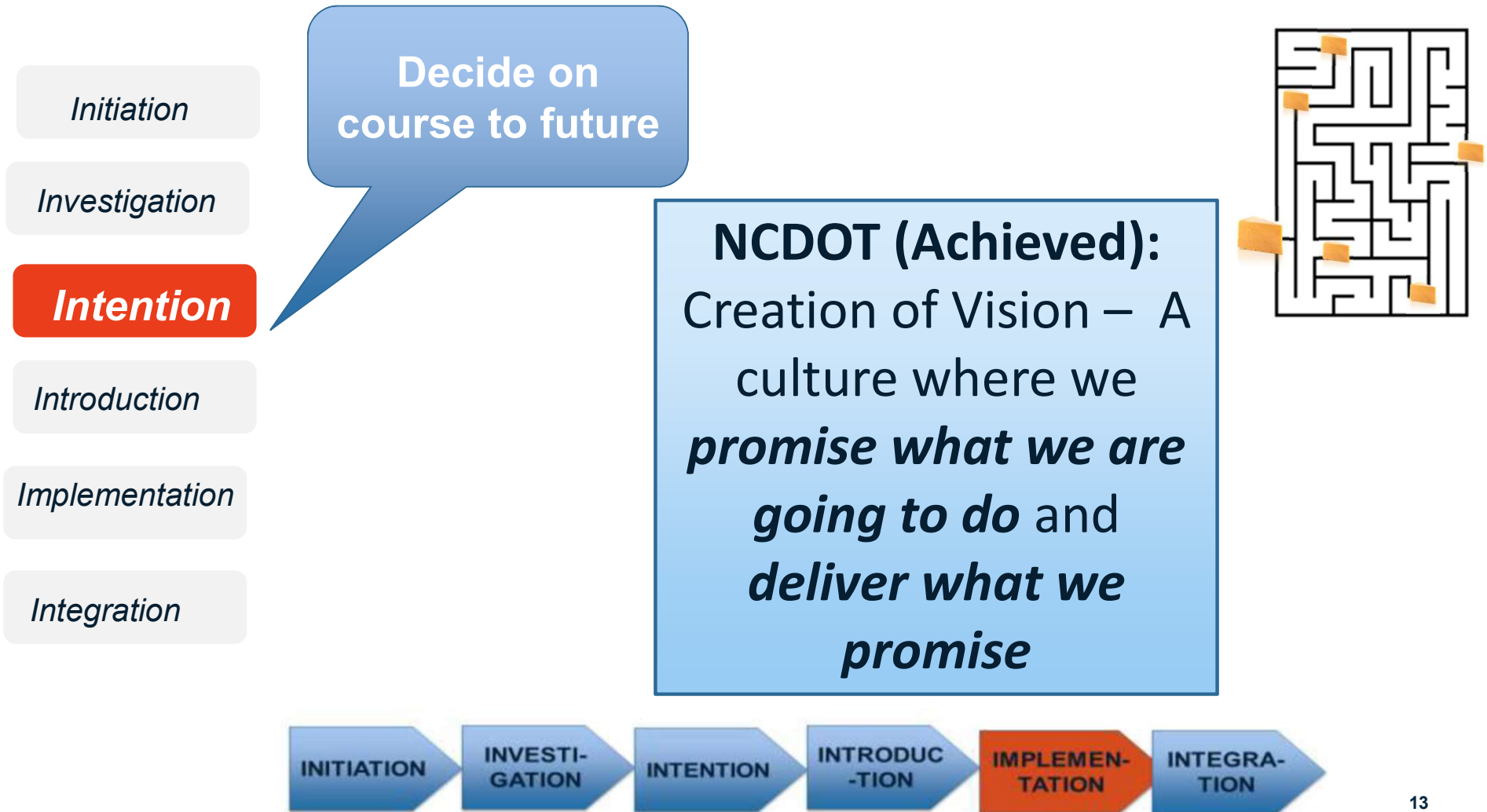
From "A Management Checklist
To Guide Your Efforts in Managing
Change"



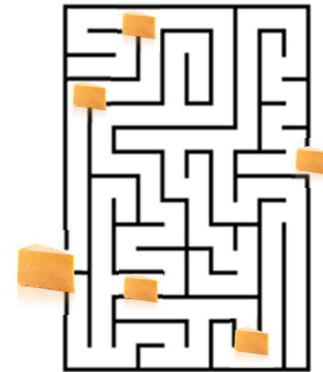
Out of the Maze: *Adapting to Transitions*



Out of the Maze: *Adapting to Transitions*



Out of the Maze: *Adapting to Transitions*



Initiation

Investigation

Intention

Introduction

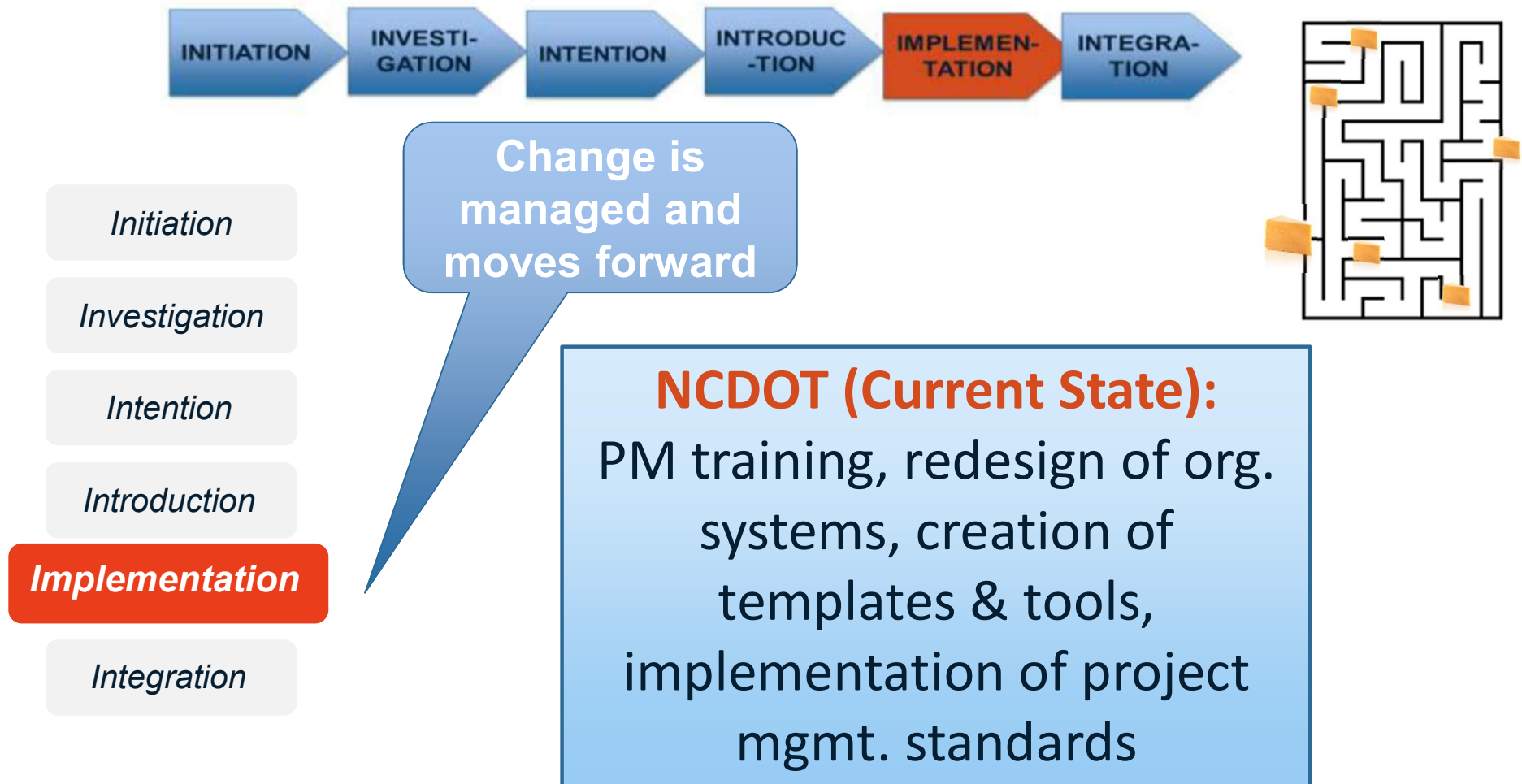
Implementation

Integration

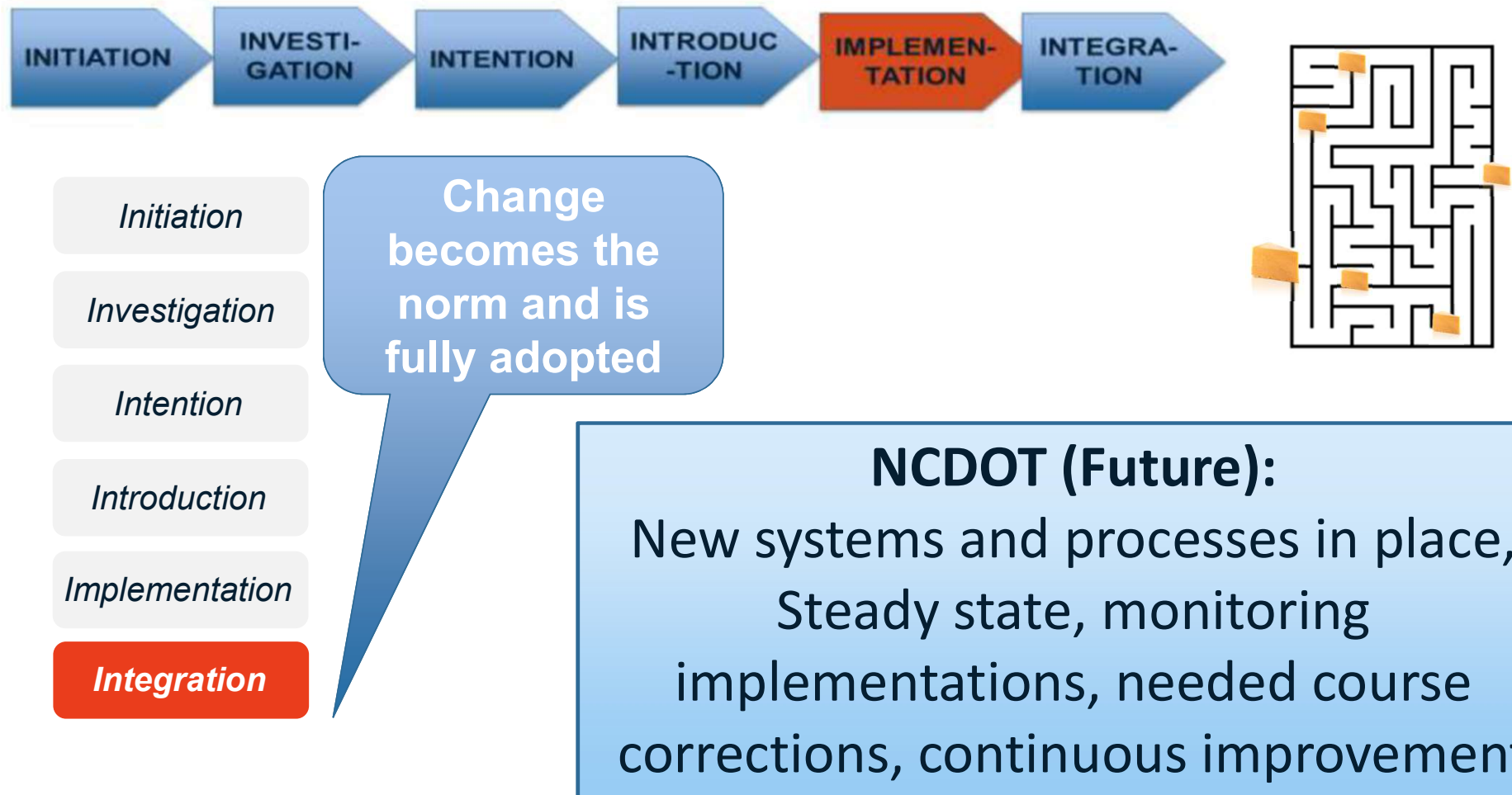
Beginning the change...

NCDOT (Achieved):
Creation of project delivery matrix organization & Project Manager roles; IPD Team begins work

Out of the Maze: *Adapting to Transitions*



Out of the Maze: *Adapting to Transitions*



NCDOT New Cheese:

Transition to Strong Matrix

Current Status:

- **Emerging Project Management discipline and standards**
- **Increasing support from consultant community**
- **Development of streamlined processes**



NCDOT NEW CHEESE

Adapting to Help PM's Succeed

In Progress:
Provide increased efficiency with tools and templates, process flow charts

In Progress:
Extensive Project Management Training initiative

In Progress:
Provide increased effectiveness with consistent approaches across the state

Ready for Action:

NCDOT NEW CHEESE

- **Don't wait** to start implementing these behaviors
- The new process will be easier once old projects work through the system
- **Use your consultants** to decrease the PM workload

“It always seems impossible
until its done.”
- Nelson Mandela

Break Out Exercise

Transitions

Form Groups

Break into
assigned
groups for
the Day

Group Discussion

1. Discuss suggestions to help NCDOT staff successfully adapt and embrace new roles and processes at NCDOT
2. Discuss what feedback mechanisms should be in place at NCDOT during this transition

Report

Report out by
group

Final thoughts on “New Cheese”

“The world hates [New Cheese],
yet it is the only thing that has
brought progress.”

– Charles Kettering

“[New Cheese] is the law of life and those who look only to
the past or present are certain to miss the future.”

– John F. Kennedy

The greatest danger in times of
turbulence is not the turbulence – it
is to act with yesterday’s logic.”

– Peter Drucker

Day 1



NCDOT Agreements

Contracts

All contracts at NCDOT are procured by PSMU

- PMs manage the Task Orders under LSCs that result in DOT issuing a NTP that leads to a PO being approved.
- Our discussion will focus on task Purchase Orders

Contract Procurement Process

These steps are not necessarily the responsibility of the PMs. PSMU oversees this process for Contracts.

- a) Solicit Letters of Interest (LOI)
- b) Assemble the Selection Committee
- c) Select the Firm(s)
- d) Negotiate the Contract (by Division/Business Unit if desired)
- e) Execute the Contract

(Note: Tasks a, b, and c do not necessarily apply to POs under LSCs)

Task Purchase Orders (POs)

Timelines

- See “*Policies and Procedures for Procurement and Administration of Major Professional or Specialized Services Contracts*” (included in PM Training Resources and in Data Sheet)
- For NTP – reference the “*Purchase Order Under Limited Services Contract - Notice to Proceed*” flow chart

POLICIES AND PROCEDURES FOR PROCUREMENT AND
ADMINISTRATION OF MAJOR
PROFESSIONAL OR SPECIALIZED
SERVICES CONTRACTS

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION



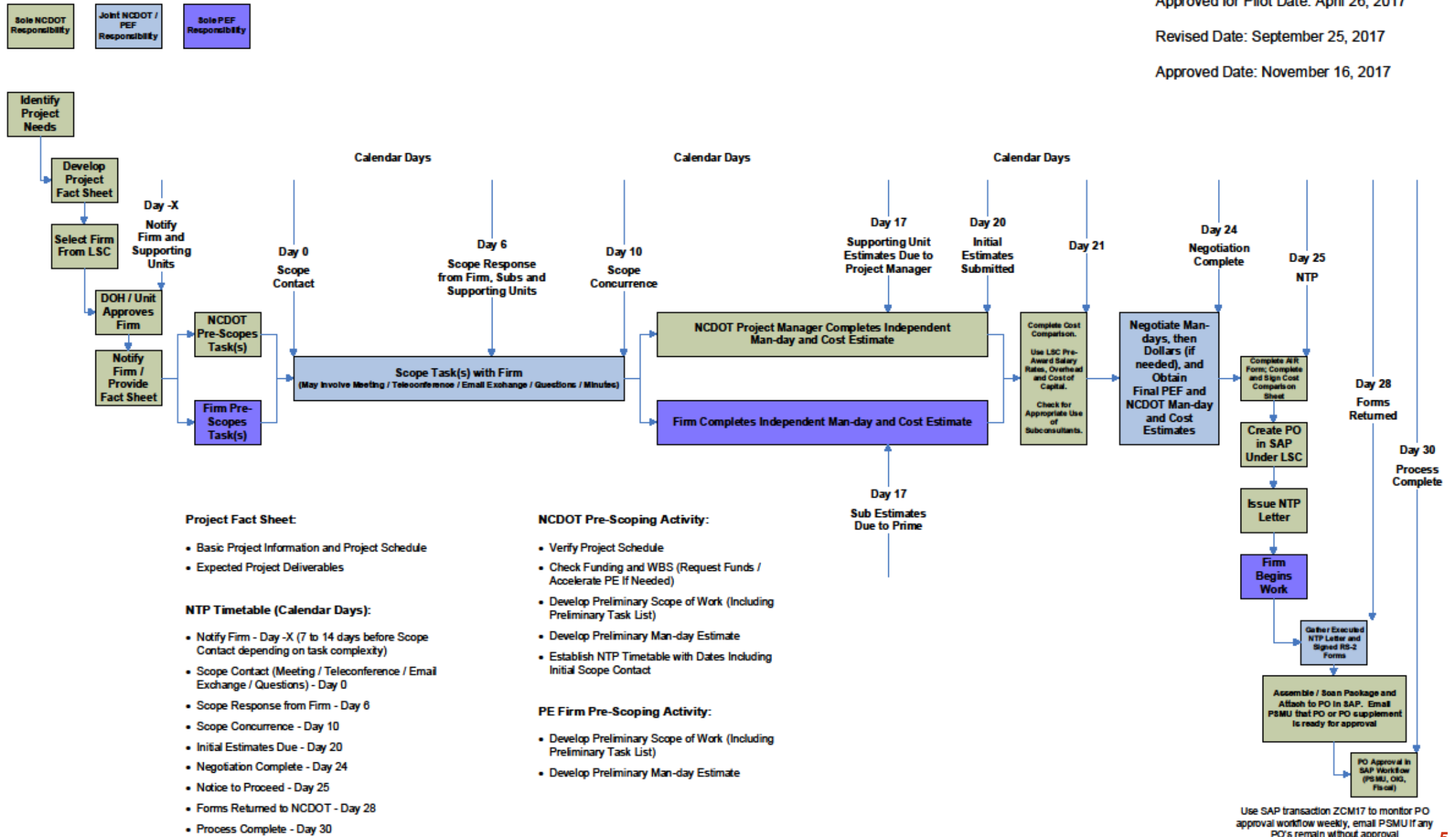
APPROVED		Date
	Director of Technical Services	
APPROVED		Date
	Division Administrator, FHWA	
Adopted by North Carolina Board of Transportation: June 30, 2016		

Purchase Order Under Limited Services Contract - Notice to Proceed

Approved for Pilot Date: April 26, 2017

Revised Date: September 25, 2017

Approved Date: November 16, 2017



Pre-qualifications

NCDOT “List of Discipline Requirements”

- 126 pages of work types
- Document (5/10/2018 version) will be included with PM Training Resources on website and in Data Sheet
- Includes:
 - Discipline
 - Descriptions of work
 - Key personnel required

PRECONSTRUCTION

Unit contact: William Akabi-Davis (919) 707-6211

ROADWAY DESIGN

wakabidavis@ncdot.gov

Discipline Code	Discipline	Description of Work	Key Personnel Required	Employee NC Registration Required	Minimum Years of Experience	Firm NC Registration Required	Additional Requirements
201	Rural Roadway Design	Entry level for smaller and less complex projects, i.e. bridge replacement projects, safety projects and rural widening projects.	Roadway Engineer	P.E.		P.E.	Must submit sample plans showing sufficient design capacity, including horizontal and vertical alignments with curve data, design information for intersections and interchanges, typical sections and cross sections. Statement of CADD capability – Microstation/Geopack Software is required, including names of CADD users/technicians.
269	Urban Roadway Design	More complex urban widening and new location projects with increased project impact restrictions due to dense residential and/or commercial development.	Roadway Engineer	P.E.		P.E.	Must submit sample plans showing sufficient design capacity, including horizontal and vertical alignments with curve data, design information for intersections and interchanges, typical sections and cross sections. Statement of CADD capability – Microstation/Geopack Software is required, including names of CADD users/technicians.
126	Interchange Design	Required for any projects that have interchanges in the scope of work.	Roadway Engineer	P.E.		P.E.	Must submit sample plans showing sufficient design capacity, including horizontal and vertical alignments with curve data, design information for intersections and interchanges, typical sections and cross sections. Statement of CADD capability – Microstation/Geopack Software is required, including names of CADD users/technicians.
314	Roadway Lighting	Roadway lighting layout design for fully controlled-access interchanges and for continuous sections between interchanges. Design utilizes a combination of high mast light standards, shoulder mount light standards, median mount light standards, underpass lighting if needed,	Roadway Engineer	P.E.		P.E.	Must meet the “Necessary Expertise” stated in the AASHTO Roadway Lighting Design Guide, dated October 2005. Must submit sample of work, including lighting construction plans, corresponding lighting photometric plans using lighting design software and sample voltage drop calculation for circuit design.

General Information

Are you aware of these items you “shall comply” with?

- General Statute § 133-32 (Gifts and Favors Regulated)
- North Carolina Department of Transportation Personnel Manual, Section 8, entitled “Discipline, Appeals & Grievances”
- Policy on Ethical Conduct as adopted by the Board of Transportation

General Information

January 24, 2018 Letter to Division Engineers & Business Unit Heads

“Professional Service Contract Negotiations, Fees, and Limited Notice to Proceed”

- Discussion regarding standard fee
 - Account for size, complexity, duration, and degree of risk
- Limited Notice to Proceed
- Manday Estimates
- PSMU role

Business Process Procedures

Hundreds of BPPS are Available to Assist you with SAP Topics

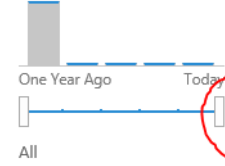
- 45 related to contracts/agreements
- 121 related to Accounts Payable
- Access through the NCDOT PSMU “Inside Page”
- Go to inside.ncdot.gov and search for “BPP”

INSIDE SEARCH > SEARCH RESULTS

Search Results

[Back to Search](#)

Modified Date filter: Search bar with 'bpp' and 'SEARCH' button



Relevance dropdown menu

BPP's
inside.ncdot.gov/Forms Documents Manuals/.../IT/BSIP/**BPP's**
Authors: Lin, Laura G;Parada, Donna D Date: 6/18/2012 Size: 0

File Type

- Excel
- PDF
- Web page
- Word

Developing LSC Task Orders (Modeling)
Developing Limited Service Contract Task Orders ... Purpose Background Responsibility Policy, Regulatory, and Legal Requirements Scheduling ... (Refer to the Business Process Procedure (BPP ...
connect.ncdot.gov/.../Developing LSC Task Orders (Modeling).pdf
Authors: EThomas;service-spsnapmgr Date: 7/14/2010 Size: 96 K

BPP Filter Codes
BPP Sharepoint Filter Codes Document ... **bpp** bsip document
inside.ncdot.gov/Forms Documents Manuals/.../**BPP** Filters.pdf
Authors: afiller;Filler, Alfred L Date: 12/19/2013 Size: 69 K

Author

- Stanley, Eric D
- joe
- Lin, Laura G
- Langdon, Amy S
- ptippette
- [show more](#)

BSIP Time Entry BPP's
BPP's by Module ... inside.ncdot.gov/Business/technology/Pages/Tech-BSIP-**BPP**-TE.aspx
Authors: Parada, Donna D;Patrick M. Doran Date: 2/18/2018 Size: 121 K

BSIP Controlling BPP's
BPP's by Module ... inside.ncdot.gov/Business/technology/Pages/Tech-BSIP-**BPP**-CO.aspx
Authors: Parada, Donna D;Patrick M. Doran Date: 2/18/2018 Size: 140 K

Type

- DOT Document
- Folder
- Welcome Page
- Document
- Link

BSIP Materials Management BPP's
MM Inventory BPP's ... MM Purchasing BPP's ... MM Quality Management BPP's ... BPP's by Module ...
inside.ncdot.gov/Business/technology/Pages/Tech-BSIP-**BPP**-MM.aspx
Authors: Parada, Donna D;Patrick M. Doran Date: 2/18/2018 Size: 209 K

BSIP Funds Management BPP's
FM Encumbrance BPP's ... FM Budget BPP's ... BPP's by Module ...
inside.ncdot.gov/Business/technology/Pages/Tech-BSIP-**BPP**-FM.aspx
Authors: Parada, Donna D;Patrick M. Doran Date: 2/18/2018 Size: 155 K

- 📁 Documents
- ▶ 📄 Content Owner
- ▶ 📄 Content Type

Mission & Goals

Glossary & Acronyms

Document Library

 [Employee Contact Directory](#)

 **Your Feedback**
Make This Site Better

INSIDE NCDOT
BSIP ▶ BPP's

All Docs in folders 🔍

<input checked="" type="checkbox"/>	📄 Name	Title	Form Number	Modified By	Created	Filter-By	Business Content Type	Data Security Classification	Checked Out To	Document ID	Date	Date Modified
<input type="checkbox"/>	Contract Management	Contract Management		Parada, Donna D	3/19/2012 9:17 AM	bsip bpp						
<input type="checkbox"/>	Controlling	Controlling		Parada, Donna D	3/19/2012 9:26 AM	bsip bpp						
<input type="checkbox"/>	Finance	Finance		Parada, Donna D	3/19/2012 9:39 AM	bsip bpp						
<input type="checkbox"/>	Funds Management	Funds Management		Parada, Donna D	3/21/2012 8:58 AM	bsip bpp						
<input type="checkbox"/>	Materials Management	Materials Management		Parada, Donna D	3/14/2012 1:57 PM	bsip bpp						
<input type="checkbox"/>	Plant Maintenance	Plant Maintenance		Parada, Donna D	3/14/2012 11:04 AM	bsip bpp						
<input type="checkbox"/>	Project Systems	Project Systems		Parada, Donna D	3/19/2012 10:29 AM	bsip bpp						
<input type="checkbox"/>	Time Entry	Time Entry		Parada, Donna D	3/19/2012 10:05 AM	bsip bpp						
<input type="checkbox"/>	BPP_Filters	BPP Filter Codes		Filler, Alfred L	12/19/2013 8:34 AM	bpp bsip document				INSIDE-7-9023		

Get Help

- [Website Help](#)
- Cust. Service: 1-877-DOT-4YOU

NCDOT Help Desk

- NCDOT Raleigh: (919) 707-7000
- NCDOT Statewide: (800) 368-2778
- ITS Help Desk: (919) 754-6000

NCDOT System Links

- [Citrix](#)
- [Connect NCDOT](#)
- [Contact Us Login for SMEs](#)
- [Employee Contact Directory](#)
- [ETRACS](#)
- [File Transfer System \(FTS\)](#)

- [NC EBS Portal](#)
- [NCDOT Parking System](#)
- [NCDOT.gov](#)
- [Outlook Web E-mail](#)
- [Traveler Information Management System \(TIMS\)](#)

State Links

- [BEACON](#)
- [Governor's Office](#)
- [NC State Employee Directory](#)
- [NC.gov](#)
- [NCID](#)
- [State Health Plan](#)

[All NCDOT System Links](#)

Procurement Methods

4 Types of Procurement Methods

1. Competitive Negotiation (LSA, LSC, GESOC)

NOTE: The GESOC does not have the authority to determine scope, manage the selection of other consultants (except the subconsultants on its own GESOC team), or other tasks that are the responsibility of NCDOT or other contracted consultant teams

Procurement Methods

2. Small Purchasing Threshold Procurement

- Contracts < \$50,000
- Really treated like a sole-source procurement. Rules apply

3. Non-competitive procurement

- Emergency Conditions

4. Non-competitive procurement

- Sole Source

Task Order

Procurement Process

- The process and criteria for selection varies.
- PMs have been encouraged to look at the complexity of the:
 - work/project
 - areas of specialty needed
 - timeframe
 - available contracting authority and balance between firms
 - capability and availability of the firm's staff

Task Orders

Which Type?

1. Lump Sum
2. Cost + Overhead + Profit (Cost-Plus)
3. Cost per Unit of Work
4. Specific Rate of Compensation

Task Orders

Which Type?

- Combinations? (Contracts – Yes)
- A Contract/Agreement may allow for both Purchase Order types, but in general a Purchase Order itself will be one type or the other
- The PM is responsible for scoping, negotiating and making sure the contract administration is completed and the Notice to Proceed is issued

Lump Sum

Description

The Task Order is developed with a fixed price including labor, overhead, non-salary direct costs, and fee for the performance of specific services

- Establishes a single, fixed price for all activities defined in the Scope
- Initial agreement can be supplemented as needed
- DOT and consultant share risk
- Can be a lump sum contract consisting of task orders as the scope evolves by task assignments

Lump Sum

Best to use when...

The required services can be well defined and clearly understood by both NCDOT and the consultant and tasks have little chance for changes

An explicit Scope helps protect both parties from harm

Lump Sum

Benefits

1. Easy invoice/payment process
2. NCDOT contracts state that Lump Sum task orders are billed on a monthly basis as a %-complete, with monthly progress reports submitted
3. Can reduce client risk
4. Costs known at project initiation

Lump Sum

Drawbacks

1. No or very limited flexibility
2. Changes can be difficult to quantify and price
3. Tracking progress accurately can be difficult
4. Raises risk to consultant
5. Potential for conflict - If project does not go as expected, efforts may not be able to be compartmentalized by task

Cost Plus

Based on:

Actual allowable, and documented costs:

- Cost for labor
- Cost of overhead
- Fee/Profit
- Cost of capital
- Other non-salary direct costs incurred by the consultant performing work plus fee

Cost Plus

Based on Costs

1. Hourly rates are based on actual consultant employee hourly rates
2. Overhead is determined through audit procedures and is fixed by federal regulations
3. Fee is determined in negotiations and is a % of the original estimated budget
4. “Not to Exceed” price reduces risk to owner while maintaining advantage of cost-plus

Fee is generally “fixed” at 9%, so \$ amount varies based on the size of the contract.

Cost Plus

Best to use when...

- Portions of the scope are undefined or you don't know what actions will be required
- The general magnitude of services, or type of services, is known but the scope of services or period of performance cannot be defined clearly
- NCDOT needs more flexibility in expediting the work without excessive amendments to the contract

Cost Plus

Benefits

- Project costs are limited to actual work done by consultant
- Work can start even if there are portions of the scope not clearly defined
- Fair price for project for the work required
- Good for large, multi-year projects

Cost Plus

Drawbacks

- Invoicing is more complicated
 - Invoices must include receipts and hourly breakdowns
- Generally not, but *could be a* higher risk to owner than Lump Sum

Cost per Unit of Work

Description

The contract is based on estimated quantities of items with fixed unit prices (rates: hourly, per unit work volume, etc.)

Best to use when...

There is a well-known need for resources with unknown quantities at the time of the contract (e.g. obtaining right-of-way plats)

Cost per Unit of Work

Benefits

- Simplifies negotiations
- Client gets what they pay for
- Easy invoicing

Cost per Unit of Work

Drawbacks

- Doesn't account for unique or difficult "unit price" items
- Doesn't account for cost escalations
- Not good for multi-year contracts

Specific Rate of Compensation

Description

This contract is developed with compensation based on an agreed cost per hour of work including labor, overhead, and profit margin for specific staff. As the work is completed, the hours spent on project work are invoiced at the agreed upon rates

Best to use when...

The magnitude of services is ambiguous but the character of services is known and a cost per hour can be determined (e.g. Training, data research, etc.)

Specific Rate of Compensation

Benefits

- Uses established and fair OH and Profit
- Easy to administer
- Allows work to be completed on tasks with initially unknown durations

Specific Rate of Compensation

Drawbacks

- Confirming the costs lags the work that has been completed by a time span = reporting period (i.e. a month could go by before you know what costs have been incurred)
- Schedule can be difficult to track

Individual Exercise

5 minutes

- Consider projects you are working on or know about
- Identify a project that is well-suited to be completed as a **Lump Sum** agreement
- Identify a project that is well-suited to be completed as a **Cost Plus** agreement
- Class discussion

Changes

DOT PMs should understand...

- Consequences of decisions and instructions given to consultants
- To be careful about what they ask for, understand consultants are in a business

Changes

Good Original Scopes = Minimal Changes

- What constitutes a “Task Order change?”
- Identify, avoid, and manage
- Ways to handle a change
 - Document it
 - Ability to compile multiple changes into single Amendment

Division Based Task Order Process

Divisions have the ability to establish a task Purchase Order (“PO”) under a Limited Services Contract (“LSC”) and issue “Notice to Proceed” (“NTP”) for that task order.

- Create more flexibility for Divisions
- With this authority comes certain rights and responsibilities.
- The Division will perform activities required to assign, scope, estimate, and issue NTP for task orders
- PSMU retains responsibility for all solicitations, selections, award and execution of all professional services contracts (including LSCs)
- Copy will be included in the PM Training Resources

Division Based Task Order Process



- Preparation of scope, manday and cost estimates
- Project negotiations are performed by the PM or their delegate
- Authorized Division representative makes sure that the process is followed, appropriate spread sheets and documentation are prepared, reviews and approvals conducted, enter PO into SAP with supporting documentation, etc.
- PSMU is available to support you and the process

Task Order Changes

✓ Document them!

Project Decision Request/Record		
Project: Baudette-Rainy River International Bridge - Preliminary Engineering S.P. 3905-09 Trunk Highway 72		
A. Request or Record Originator		
Name: <u>Dale Grove</u>	Date: <u>October 19, 2016</u>	
Signature: <u><i>Dale Grove</i></u>		
Comments: _____ _____		
B. Topic Area		
<input type="checkbox"/> Environmental	<input type="checkbox"/> Bridge	<input type="checkbox"/> Permitting
<input type="checkbox"/> Layouts	<input type="checkbox"/> Documentation	<input checked="" type="checkbox"/> Contract deliverables
C. A Decision was Made <i>(if completed, skip Sections D & E and forward this request to the Stantec PM)</i>		
Description: _____ _____		
Made by: _____	Date: _____	
D. A Decision is Requested		
From Whom: <u>Joe McKinnon/Kevin Saunders</u>	Agency/Firm: <u>MnDOT & MTO</u>	
Description of What and Why: <u>As we look to move into the next phase of design, we are requesting a formal recognition of deliverables that have been eliminated from the contract scope. These items include the ABC Workshop (Scope Item 4.4.2, contract deliverable B-uu), and the Constructability Review and Report (Scope Items 1.6.1.2 and 6.2.1; contract deliverable B-bb).</u>		
<i>(After a decision has been requested, forward this form to the Stantec Project Manager for processing)</i>		
E. Response from Requestee		
<input type="checkbox"/> Request is Approved	<input type="checkbox"/> Request is Denied	
Comments: _____ _____		
Signature: _____	Date: _____	
F. Approval or Acknowledgement		
Target "Reply by" Date: <u>November 4, 2016</u>		
<u>Joe McKinnon - MnDOT Project Manager</u>	_____ Date	
<u>N/A</u>	_____ N/A	
<u>Dale Grove - Stantec Project Manager</u>	_____ Date	
cc: Theresa Maahs, Tim Belliveau (Stantec)		

Appendix B

Scope, Schedule Budget Change Form (SSBC)

General Project Information

STIP Project Name: _____ Current Document Date: _____
STIP Number: _____ Current ROW Date: _____
County: _____ Current LET Date: _____
NCDOT Division: _____
Project Description: _____

Proposed Change Information

Proposed Change Date: _____
Proposed Change: _____
Reason for Proposed Change: _____

Change of Scope Information

Scope Implications: Proposed change requires the following changes or updates (list of reports, designs, traffic, meetings, requests, etc. that will need to be redone or supplemented):

Change of Schedule Information

How would the proposed change impact the project schedule? (estimated additional months of work after NTP for proposed change):

What is the estimated time required after approval of this form to reach NTP:

Will the proposed changes impact the scheduled Right of Way or Let date (if so, propose updated milestone timeline)?

Type of Date	Current Date	Proposed Date
Document		
ROW		
LET		

Change of Budget Information

What is the approximate cost of the proposed change (plus or minus 20 percent):

Project Management Approval

Project Manager approval that the need for the proposed change is sufficient to justify the impacts to scope/schedule/and budget. Name, Position, Unit

Name: _____ Signature: _____ Date: _____

Supervisor Approval

Name: _____ Signature: _____ Date: _____

Task Order Amendments

Why, how, when?

- Formal agreement which modifies the terms of the original Task Order
- Used to authorize work necessary to complete the general intent of the Task Order
- A change doesn't mean an Amendment has to be immediately processed
- If agreed, budget can be moved between tasks and disciplines

Task Order Amendments

Required for any Task Order modifications that:

- Change the scope/effort/fee
- Significantly change the character, scope, complexity, or duration of services
- Significantly change the conditions under which the services are required to be performed

NCDOT and Consultant should work in **partnership to set an initial contract scope and fee that includes some contingencies for risk items based on the project context; Communications essential to address changes**

Task Order Amendments

Fees

- Significant changes to the scope of services may require adjustment of the fee portion of a Task Order
- NCDOT does not necessarily modify the fee portion of any Task Order
 - If a supplemental is needed, estimates (including mandays, salary rates, overhead, cost of capital, and profit) are completed and changes made to Task Orders

Task Order Amendments

Minor Changes

- The PSMU/Business Unit/Division may, without a contract amendment, authorize changes involving details of clarifications, changes in time schedules, and other changes of a minor nature which do not cause a significant change in the scope of services or a change in the amount of compensation.
- Document it!

NCDOT Rule - No work is to be performed by the contracted Firm on additional or disputed items of work until the Amendment is executed and/or the dispute is resolved.

Day 1



Understanding and Working with Consultants

Consultant **noun**

con·sul·tant | \ kən-'səl-tənt  \

Definition of *consultant*

- 1 : one who consults another
- 2 : one who gives professional advice or services : EXPERT

NCDOT & Consultant PMs

How are we alike?

DOT	Project Management	PEF
✓	Communications	✓
✓	Production	✓
✓	Schedule	✓
✓	Budget	✓
✓	Staffing	✓
✓	Invoicing	✓

NCDOT & Consultant PMs

How are we alike?

DOT	Training & Professional Development	PEF
✓	Keep License(s) Current	✓
✓	New Technologies	✓

NCDOT & Consultant PMs

How are we alike?

DOT	Staff Development	PEF
✓	Mentoring	✓
✓	Succession Planning	✓

DOT	External Presence	PEF
✓	Involvement with Industry	✓
✓	Professional Organizations	✓

NCDOT & Consultant PMs

How are we alike?

DOT	Administration	PEF
✓	Project/Staff Allocation	✓
✓	Staff Reviews	✓
✓	Time/Expense Reviews	✓
✓	Staff Issues Resolution	✓
	Business Planning	✓

NCDOT & Consultant PMs

How are we alike?

DOT	Professional Approach	PEF
✓	Serve the Citizens of NC	✓
✓	Build Safe Systems	✓
✓	Wisely Use Taxpayer \$\$	✓
✓	Improve Quality of Life	✓

NCDOT & Consultant PMs

How are we different?

DOT	Marketing	PEF
	Clients (New & Existing)	✓
	Future Projects	✓
	Proposals	✓

DOT	Business	PEF
	New Areas and Lines	✓
	Keep the Business Alive!	✓

NCDOT Project Manager

Why do I care about consultant success?

We are a team!

They can *lighten my workload*

They can bring *specialized expertise*

They can present a *new perspective*

If your consultant is successful, YOU are successful!

Consultant Project Manager

above all else, wants to

be a *Partner* with the NCDOT Project Manager

Act as an *extension* of the NCDOT PM

Be a *technical resource*

Become a *trusted advisor*

Make the NCDOT PM a rock star!

Consultant Project Manager

Make the client happy!

- Within ethical bounds
- Challenge ideas and processes
- Identify new options
- Make a full range of recommendations
- Accept client choices (with bounds)

Working Together - Scope

Don't assume the Consultant knows what you want!

- Be clear on expectations up-front
- Document expectation
- Always know what your consultant is working on

Break Out Exercise

Scope

15 minutes

Form
Groups

Break into assigned groups

Group
Discussions

- *Review provided **Scope of Service***
- *Identify strengths and weaknesses*
- *What changes would you propose?*

Report
Out

Brief description of results

Handout: Project Scope Example

Working Together - Scope

Consider

- What you are (and are not) requesting
- What is your comfort level with ambiguity?
- How well are unknowns known?
- How well you know what you want?
- Trust with consultant
- A more detailed scope will get you what you specify (but leave you with less flexibility)

Working Together - Scope

Consider

- Level of detail should be tailored to the project and work type
- Conditional/Phased Scopes
 - i.e. – “No work shall be undertaken on Phase II without written permission of the State’s Project Manager.”
- Be careful and deliberate in what you ask for in a project

Working Together - Scope

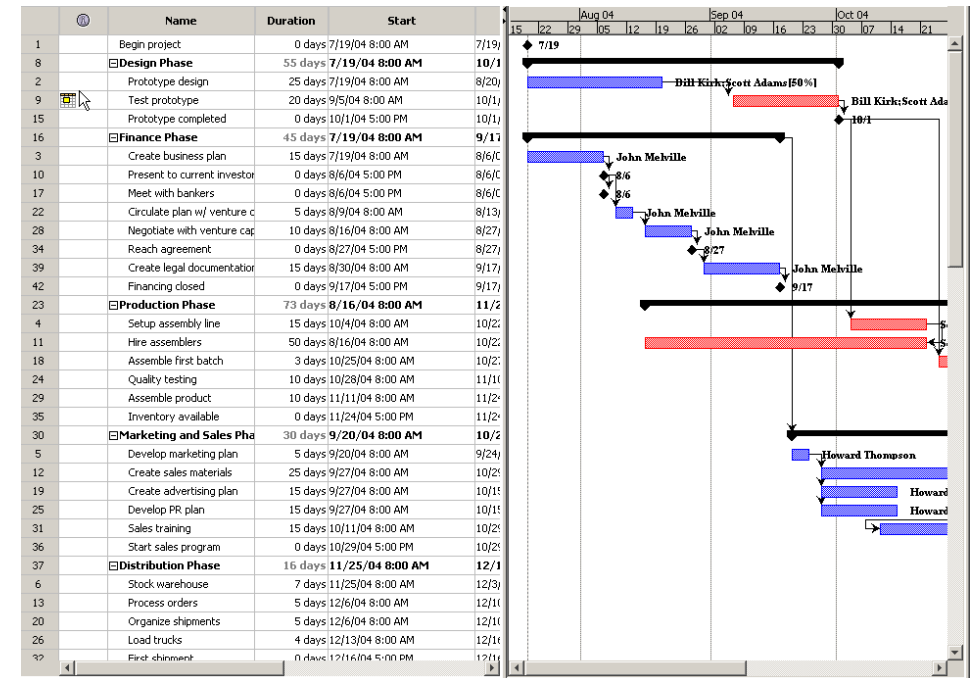
“*Marching orders*” for your consultant

- They are required to not vary without written approval or an amendment
- Ask for materials in a format that is most conducive to you. Consultants will adapt
- Communication is essential: establish clear methods between consultant and DOT PM
 - Weekly, Bi-Weekly, Monthly
 - Meetings
 - e-mails
 - Phone Calls

Working Together - Schedule

What is a Schedule?

- A road map: who needs to do what and when
- Know what tasks are coming up, in progress and completed
- Understand how tasks relate to each other

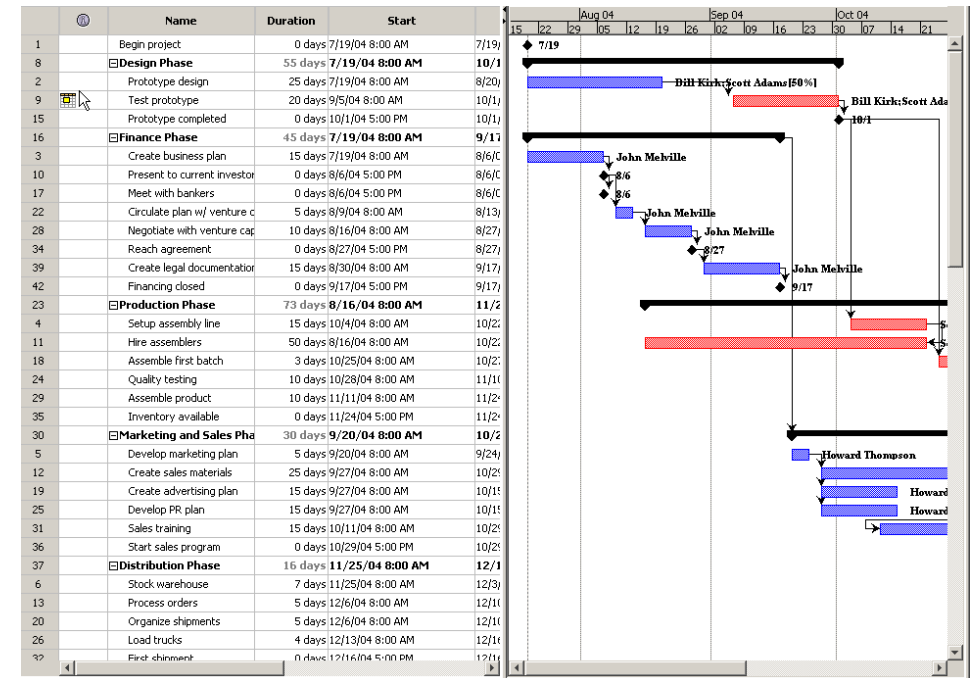


Working Together - Schedule

What is a Schedule?

- Helps to identify risks
- Overall timeline/phases/specific tasks
- Schedule impacts from accelerated or delayed tasks

Helps PM (and Team) manage scope, schedule and risks



Working Together - Schedule

NCDOT Project Fact Sheet

- Planning Document
- R/W Plans Complete (RPC)
- Raleigh Letting (LET)
- NTP Timetable
- Scoping Meeting
- Firm Submits Scoping Meeting Minutes & Blank Manday Estimate
- Minutes Approved and Scope Concurrence
- NCDOT Approves Blank Manday Estimate
- Initial Estimates Due to NCDOT
- Final Estimates Complete
- Notice to Proceed
- Forms Returned to NCDOT
- Process Complete

Working Together - Schedule

What is a Schedule?

- Every project should have a schedule (regardless of size)
- The firm creates the schedule in consultation with PM and Project Team
- PM is responsible for approving initial schedule and keeping it current

Note: Use a GESC and/or technical units to review and provide feedback on the tasks and schedule, as well as the relationship between tasks.

Working Together - Schedule

Why Have an Accurate Schedule?

- Tasks, Milestones, and Deliverables
- Start and End Dates
- Durations
- Critical Path
- Assignments

Working Together - Schedule

What to Look for in a Schedule - Scope

- All tasks are included, including deliverables and key milestones?
- Are all tasks needed?
- Are any tasks missing based on the context of the project?
- Are the task leads identified? (PM, Firm, GESC, Technical Unit, etc.)

Working Together - Schedule

What to Look for in a Schedule

- Is the schedule acceptable?
 - Is the order of tasks the most efficient? (desired schedule)
 - Does the schedule consider resource availability (realistic)?
- Are dependencies between tasks appropriately linked (and triggers for activities are included)?
- Is float included in the project schedule sufficient or overkill?
- Is the schedule current?

Working Together - Schedule

How Should I Use the Schedule?

- Assess progress
- Identify risks and issues
- Hold Team accountable
- Communicate expectations

Note: An accurate schedule is a critical part of understanding if your project is (or will be) in trouble.

Working Together - Schedule

Questions to Ask Your Consultant

- How early can we start this task?
- Does this task depend on any other task or deliverable to enable it to begin?
- Are all these tasks absolutely required?
- Do we really need this task? Do we need it at this point in the process?

Working Together - Schedule

Questions to Ask Your Consultant

- What are the risks if we started this sooner? What would the tradeoffs be?
- What if we did this instead of that? Does it save us time overall?
- Are there any issues or risks that should be accounted for in the plan?

Working Together - Budget

NCDOT Requirements

- The in-house estimate must be completed prior to opening the cost proposal submitted from the selected Firm, and is to be used only in evaluating the reasonableness of the Firm's cost proposal.
- The Firm will prepare a cost proposal for performing the required services.
- NCDOT requires names, raw hourly rates, and classifications in Manday estimates.

Working Together - Budget

Understand...

- *Who* you want in the room to help you negotiate (Division/Business Unit), and why
- The *Scope*, before you look at costs
- *What* a consultant has to do to manage the project: invoicing, meeting prep and minutes, deliverables, close-out, creating and updating Project Management Plans, schedule, etc.
- *Tasks* more specifically than in the proposal

Working Together - Budget

Consultant Approach

- Fair fees are critical to business survival
- Just like you, they want to avoid Amendments, if possible
- Contract Type impacts approach
 - Cost-Plus is safer
 - Lump Sum – Risk/Reward

Working Together - Budget

Consider:

- Consultant should submit invoices monthly and Progress Reports even if no work has been completed
 - Consultants required to alert NCDOT PM at 75%, 90% budget spent milestones
- Does % budget spent parallel % project completed?
- Consider other tools to help identify issues (e.g. Earned Value Analysis)
- Incorrect “estimated work complete” may look good now, but can cause issues later

Working Together - Negotiations

A 3-step Process

- Scoping Meeting with consultant so everyone understands:
 - Tasks
 - Schedule
 - Deliverables
 - Task Order type
- Consultant prepares scope, schedule, budget
- Negotiate the contract

PM makes ultimate decision on Negotiations

Working Together - Negotiations

Extra pointers:

- Use plain language
- List all tasks
- List deliverables – both Consultant and DOT
- Agree on the schedule details
- Create a list of contacts – Primary, Secondary, Other

Working Together: Kick-Off

Data Collection

- Thorough and timely
- Deliver prior to kick-off
- Be sure the latest data is being provided

Working Together: Kick-Off

Agenda Items

- Sample documents
- Required standards
- Deliverables
- Project related plans
- Preferences

More details covered in session:
“Partnering and Working as a Team”

Working Together: Kick-Off

Agenda Items

- Reporting timelines
- Meetings and minutes
- Communications
- Handling out-of-scope work
- Data transfer & sharing

More details covered in session:
“Partnering and Working as a Team”

Working Together: Kick-Off

Deliverables

- List in the Scope
- Specify standards, format, quality
- Specify software to be used
- How/when to be delivered

NCDOT Status Reports

Available from PMU

<https://connect.ncdot.gov/site/Preconstruction/division/div06/R-5705B%20NC%2055/Project%20Development/Forms/AllItems.aspx>

STATUS REPORT- STIP. No. A-1234

DATE:

<p>STIP R/W Date: MM/DD/YYYY</p> <p>Current Estimate: Construction: \$ Right of Way Acquisition: \$ Utility Relocation: \$</p>	<p>Project Description STIP Let Date: MM/DD/YYYY</p>	<p>Funding Source: State</p>						
<p><u>COMPLETED ACTIVITIES (since last status report)</u></p> <ul style="list-style-type: none"> • 								
<p><u>CURRENT ACTIVITIES</u></p> <ul style="list-style-type: none"> • 								
<p>SCHEDULE: (next three mos.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Upcoming Major Milestones/Activities</th> <th style="width: 15%;">Schedule</th> <th style="width: 15%;">Actual</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td></td> <td></td> </tr> </tbody> </table>			Upcoming Major Milestones/Activities	Schedule	Actual	1.		
Upcoming Major Milestones/Activities	Schedule	Actual						
1.								
<p>OUTSTANDING ISSUES:</p> <ul style="list-style-type: none"> • 								
<p>COMMITMENTS/AGREEMENTS:</p> <ul style="list-style-type: none"> • 								
<p>RIGHT OF WAY INFORMATION:</p> <p>ROW Estimate: _____</p> <p>No. of Parcels Impacted: _____</p> <p>No. of Parcels Requiring Relocation: _____</p> <p style="text-align: right;">ROW Authorization received: <u>TBD</u> ROW Consultation Required: <u>TBD</u></p>								

STATUS REPORT- STIP. No. A-1234

DATE:

<p>UTILITIES INFORMATION:</p>		
Title	Planned Date	Delivered Date
<i>USACE: 404 – NWP</i>	<i>TBD</i>	
<i>DWR: 401 – Water Quality Certification</i>	<i>TBD</i>	
<i>SEA/FONSI</i>	<i>TBD</i>	
<p>PERMITS REQUIRED: None identified at present</p>		
<p>Construction Consultation Required: <u>TBD</u></p>		
<p>WBS #: Type of Planning Document: Merger____ Non-Merger____ Document Signed Date: TBD</p>		
<p>PROJECT CONTACT PMU Team Lead / Project Manager: Project Management Unit Office Number: Email: mailto:</p> <p><u>Other Team Members: Located in Sharepoint</u></p>		
<p><u>Project Schedule: Located in Sharepoint</u></p>		

NCDOT COORDINATION:

*

Bi-Weekly Status Report

	B	C	D	E	F	G	H	I	J
1	Time Period	Mar 2, 2019 - Mar 15, 2019							
2	Report #18								
3	Milestone	Milestone Date	Date Completed	Percent Progress this Time Period	Percent Progress to Date	Activities Accomplished This Time Period	Activities to be Accomplished Next Time Period (Mar 16 - Mar 29)	Activities to be completed by NDDOT	Notes
4	PHASE I								
5	Field Review	7/1/2018	7/16/2018	0%	100%				
6	Pre-Survey Meeting	NA	8/1/2018	0%	100%				
7	Draft Phase II Scope/Fee	5/4/2016		0%	100%				
8	Collection of Views	8/1/2018	8/28/2018	0%	100%				
9	Draft Phase II Scope/Fee	7/25/2018		0%	100%				
11	PHASE II								
12	Public Input Meeting	1/14/2019			97%	Prepare PIM Report	Submit PIM Report		Meeting held
13	Safety Review - Minor Rehab	5/1/2019			25%		Continue work on Safety Review		
14	Safety Review - Major Rehab	5/1/2019		5%	30%	Get survey info for signs	Continue work on Safety Review		
15	Metals Determination (Field)	1/1/2018			100%				
16	Permit and Jurisdictional Report	1/1/2018			100%				
17	Jurisdictional Determination (SA/E)	1/1/2018			100%				Received JD on 2/14/2019
18	Section 106 Cultural Resources	2/1/2019			100%				Final SHPO Reports submitted
19	Endangered Species Act	4/1/2019			0%				
20	Draft Documented CatEx	4/15/2019		20%	35%	Developing CatEx Report and Design Exception Request	Continue to develop CatEx Report and submit preliminary Design Exception Request for review (anticipated week of March 18)		
21	Documented CatEx	5/15/2019			0%				
22	Aerial Survey	4/1/2019		10%	86%	Made alignment updates, performed supplement field survey.	Finalize survey		Supplimental field work done week of March 11, 2019. Stream shots will be taken when water is open. Anticipated week of April 1, 2019.

Other
Status
Reports

Project Development

Problems

- Understand that problems can and do happen
- Find the cause of the problem before acting
- Problems are not always one sided
- Don't let any concern go unresolved (little or big)
- DOT PM Role
- Most problems can be minimized/avoided with good communications

Break Out Exercise

Scope – Part II

5 minutes

Form
Groups

Reform your groups

Group
Discussions

*Review your earlier comments on the provided
Scope of Services
Would you change anything? Why?*

Report
Out

Brief description of results

Unique Consultant Activities

1. Marketing

- Future Projects
- Proposals

2. Business

- Billable Time
- Overhead
- fee

Consultant Activities

What goes into the development of a proposal?

- Assess firm's technical capabilities
- Investigate teaming
- Make a go/no-go decision
- Set up internal project number to track costs and predict upcoming work
- Consider the available capacity to successfully deliver the project on schedule

Consultant Activities

Priorities during proposal phase?

- Identification of DOT project team
- Very clear scope
- Detailed, specific description of desired outcome
- Response time to match project complexity
- Selection criteria that matches proposal requirements
- Page limits are good!

Consultant Activities

Priorities during selection phase?

- Evaluation criteria that matches RFP contents
- Timely decision making and notification
- Timely debrief

Overhead and Fixed Fee

Understanding Consulting Business

- Businesses are corporations responsible to shareholders
- Shareholders expect a return in exchange for the risk they incur
- Everyone here today is an investor

Shareholders are:

- Employees
- Moms & Dads
- Neighbors
- Taxpayers
- Team members
- Investors who incur risk

Overhead and Fixed Fee

Governing Principles

- Federal Acquisition Regulation (FAR)
 - Governs acquisition of services
 - Sets criteria for eligible cost reimbursement
 - Federal and state funds
- Uniform Audit and Accounting Guide
 - AASHTO
 - FHWA
 - ACEC

Overhead and Fixed Fee

Business Reimbursement

- Accounting guide and FAR define and control:
 - Project labor (direct labor)
 - Allowable business expenses (overhead)
 - Unallowable business expenses (overhead)

Overhead and Fixed Fee

Definitions

- Direct Labor = Actual labor expense for each employee that works on a project (billable hours)
 - $\$30/\text{hour} \times 50 \text{ hours} = \$1,500$ Direct Labor
- Overhead Costs = All costs that support company operations
 - Some are allowable, some are not

Overhead and Fixed Fee

Definitions – Overhead Rate

$$\text{OH Rate} = \frac{\text{Overhead Costs}}{\text{Direct Labor Costs}}$$

- fee = A predetermined rate as identified in the agreement

Overhead and Fixed Fee

Common Unallowable Costs

- Advertising
- Trade show expenses
- Promotional materials
- Souvenirs or clothing provided to public
- Bad debts
- Fines, penalties, and mischarging costs related to violation of laws
- Costs to correct defects in materials and workmanship
- Personal use of company vehicles
- Membership in community organizations
- Contributions or donations
- Lobbying and political activities
- Employee gifts and recreation
- Social activities
- Alcoholic beverages
- Life insurance on key employees
- Interest expense
- Patent costs

Overhead and Fixed Fee

Developing a “Loaded” (Billable) Rate

Actual Hourly Rate = \$30 per hour

Overhead = 1.65

Fee = 9%

$$\begin{aligned}\text{Loaded Rate} &= [\$30 + (30 \times 1.65)] \times 1.09\% \\ &= (\$30 + 49.5) \times 1.09 \\ &= 79.5 \times 1.09 \\ &= \$ 86.66\end{aligned}$$

Consultants

Summary

- We're more alike than different
- Work hard to make the DOT Project Manager successful
- Need to make sure their business stays alive
- Have the same goals as you:
 - ✓ Serve the citizens of North Carolina
 - ✓ Build safe systems
 - ✓ Wisely use taxpayer \$\$
 - ✓ Improve quality of life

Day 1 – Session 4



Breakout Session: NCDOT Process Improvements

Process Improvements

Identify issues and obstacles that make your work harder than it has to be.

Identify ideas, suggestions, and process that could make your life easier and/or speed up the project delivery process.

Break-Out Exercise

- Get into your groups.
- Think about the project development process (including tasks and processes outside your control) and develop a list for each of the four questions.
- Copy the lists onto sticky-back flip chart pages.

Break-Out Exercise

- Each group share your lists with the class.
- Vote by placing your sticky dots next to the top three responses for each of the four questions.
 - ✓ Green = best choice
 - ✓ Yellow = second choice
 - ✓ Red = third choice

Process Improvements

Break into small groups (30 minutes)

1. What are your biggest **challenges** as project managers?
2. What are the most **effective tools** you currently use to manage your projects?
3. Where do you feel you need the most **support** as a *PM*?
4. What is **needed** (tools, training, etc.) to make the project delivery process better?

Break-Out Exercise

Vote! Place a dot next to the top three responses for each of the four questions.

- ✓ Green = best choice
 - ✓ Yellow = second choice
 - ✓ Red = third choice
-
- Identify the top items for each question.
 - Questions/comments on the lists or top vote-getters?

Day 1 – Wrap-Up



Day 1: Wrap-Up, Questions, and Comments



Thank you!

See you tomorrow at 8:00 am

Day 2 – Session 1



Communications

Communication

Define communication

- Take 30 seconds to write down words or a sentence that define “communication”

My definition of communication(s) is:

Communication **noun**

com·mu·ni·ca·tion | \ kə-,myü-nə-'kā-shən  \

Definition of *communication*

- 1 **a** : a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior
// the function of pheromones in insect communication
also : exchange of information
- b** : personal rapport
// a lack of communication between old and young persons
- 2 **a** : information communicated : information transmitted or conveyed
- b** : a verbal or written message
// The captain received an important communication.

Communication. In Merriam-Webster Online Dictionary copyright © 2015 by Merriam-Webster, Incorporated. Springfield, MA:

Introduction

“The art of communication is the language of leadership.”

– James Humes

- Of the projects that fail to meet their goals, half of them are due to ineffective communications
- Top 2% of PMs have superior relationship & communication skills along with a positive attitude. (PMI PMBOK Guide)
- Keep communications consistent – even if the news may be bad.



Project Manager Role in Communications

Project Manager

As the Stakeholder interface, PMs provide:

- ✓ Constant and effective communications on major issues
- ✓ Conflict resolution
- ✓ Coordination

Division

Public Involvement

Agency Partnerships

Other Stakeholders

Executive Management

Technical Units

Team Members

Basic Types of Communication

- **Interpersonal**
- **Non-Verbal**
- **Written**
- **Oral**



Communications: Interpersonal

“Nobody cares how much you know, until they know how much you care” – Theodore Roosevelt

Definition:

- Communication between a small group of individuals, typically in a face-to-face setting, where participants engage in a minimally restricted dialogue with each other.



Provides a shared level of familiarity

Communications: Interpersonal

Reflects caring for the individual

Important that this occurs with subordinates, peers, and superiors

Benefit:

- Improved relationships, better flow of information, job satisfaction increases



Communications: Connect & Lead

Connect, then Lead

- Need to build a level of trust before exerting a position of power
- People need to know they can trust you before they can respect you
- Before people decide what they think of your message, they decide what they think of you



Communications: Non-verbal

“It’s not what you say, but how you say it”

Definition:

- Anything besides words, such as gestures, actions, facial expressions, body language and other aspects of your physical appearance, that, when seen, communicate something
- An extension of verbal communication
- 55% of a message is received through body language



Communications: Non-verbal

Usually done without thinking

Challenge:

- doesn't always match what you are saying
- Effective communicators align with verbal message
- Emotional “microbursts”



Communications: **Written**

“I would have written you a shorter letter, but I didn’t have the time.” – Mark Twain

Definition:

- Messages that are transmitted to recipients in writing
- It is often easier to write a lot of words quickly than to say something briefly but to the point with more meaning.



Communications: **Written**

Advantages:

- Quick and economical – cheaply spread over a wide geography
- Efficient and accurate – writer has the time to refine it
- Flexible – can send and be read, at their convenience
- Official Record – documents a conversation

Disadvantages:

- Written communications are public records – without careful attention, they could convey inaccurate information
- Impersonal
- Subject to misinterpretation



Communications: Oral

“Wise men speak because they have something to say; fools speak because they have to say something.” – Plato

Definition

- Communications through spoken words, including face-to-face, meetings, training, interviews, telephone, performance reviews, presentations, etc.
- Most common form of communication



Communications: Oral

Benefits:

- Ensure a message was received
- Immediate feedback
- Facilitate assurance of proper understanding

Drawbacks:

- Can be inconsistent or ambiguous
- Allows for personal inferences



Communications: Written & Oral

Use the “*Five C’s of Communications*” - PMBOK

- **Correct** - grammar and spelling increases credibility
- **Concise** – reduces opportunities for misunderstanding
- **Clear Purpose** – tailored to the needs and interests of the audience
- **Coherent Flow** – create a flow with introductions and summaries
- **Controlling** – control flow of words with graphics or summaries

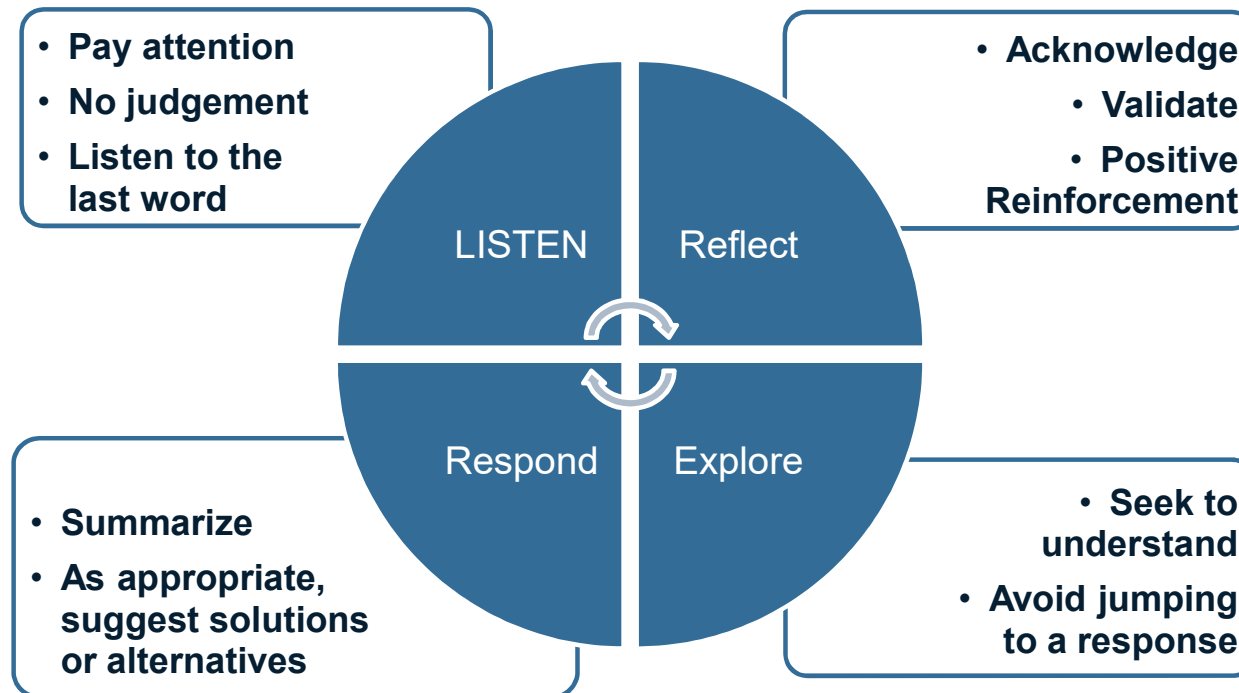
Active Listening



Project Team

Communication Methods

Active Listening



Active Listening Skills

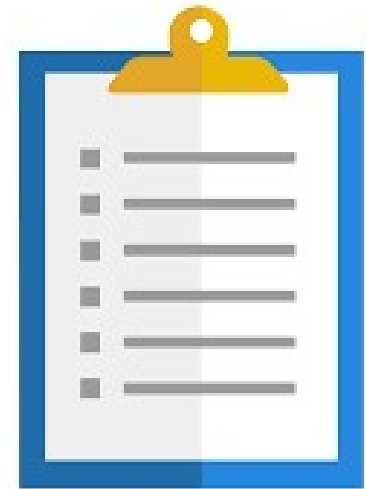
- **Observe** – non-verbal behavior
- **Focus** – don't do anything else while listening
- **Acknowledge** – acknowledge the message, even if you don't agree with it
- **Respect** – let the speaker finish

It's Not About the Nail

How Do We Communicate?

Write down 2-3 of your required day-to-day project development activities that are best (and the one worst) communicated through:

1. Face-to-face discussion
2. In a group meeting
3. Via email
4. Phone call



Communications???

“The single biggest problem in communication is the illusion that it has taken place.” - George Bernard Shaw

- HINT: posting to SharePoint does not qualify as “communications”

Communications Plan

Who

- Project Team, Internal Stakeholders
- External Stakeholders, Public, Media

What

- Project Working Information
- Public information

Internal Communication Aspects

Operating Guidelines

- Time, frequency, location team mtgs
- Responsible party for agenda, notes, attendees

Team Protocol

- Key decision makers & authority levels
- Identify who involved in project
- Communication methods
- Document management

Reporting

- Required reports
- Responsible party

Communications Plan

Process of developing an appropriate approach and plan for project communication activities

- **Benefit:** documented approach to effectively and efficiently engage internal and external stakeholders by presenting relevant information in a timely manner

Communications Plan

Describes how project communications will be planned, structured, implemented, and monitored for effectiveness.

Part of the Project Management Plan

1. Develop a strategy to ensure effective communications among all stakeholders based on the project needs and the stakeholders
2. Carry out and implement the plan

Communications Plan: Timing

- Developed early in the project development process
- Prepared in concert with a Project Management Plan
- Update often...
 - if stakeholders change
 - at each new phase of the project



Communications Plan: Inputs

- **Vision for the Project**
- **Project environment (stakeholder concerns, policies, etc.)**
- **DOT policies and preferences**

Communications Plan: Considerations

- Consider where it might be appropriate to include stakeholders in meetings
- Use multi-faceted approach including social media, as appropriate
- Think about stakeholder, cultural, and educational differences



Monthly Project Reporting

Executive Project Status Report

Who Receives

- Department upper management, project stakeholders

Who Responsible

- Project Manager

When

- First Friday each month or if important changes

Why

- Executive level account of project

Project Management Status Report

Who Receives

- Project Team

Who Responsible

- Consultant Project Manager

When

- Last Friday of each month

Why

- Detailed account of project status

Hyperlinks to both reports in Data Sheet: [Executive Project Status Report](#), [Project Management Status Report](#) ³⁰

Stakeholder Engagement



Communications: Email

Research shows that, on average, US employees spend about 25% of their time at work reading and sending email.

- Even with all that practice, many don't know how to use email appropriately
- Carefully consider if it's best to email vs. meet or have a conversation with someone
- Eleven good rules to remember when using email



Communications: Email

Recognize what email is good for and when it needs to be avoided

- Good Uses
 - Sharing files
 - Documenting events and issues
- **Do not use email to try reaching understanding or resolving conflicts.**



Communications: Email

Depending on interpretation...

- Readers assign meaning to everything written
- Tendency is to believe email content – it's right there, in black-and-white
- No non-verbal clues to help the reader understand the meaning of what was written
- People write as though they are having a conversation, but the reader doesn't read that way



Communications: Email

Depending on interpretation...

*"As email, text messaging, and other forms of computer-mediated communication become more dominant forms of interaction, **the communication of affect becomes more difficult**, primarily because facial expressions, gestures, vocal intonation, and other forms of expressing emotion are lost."*

– Monica A. Riordan on Research findings at Chatham University



Email Rules: #1

Email rules from “Dealing with Electronic Communications” by Colorado LTAP

Write as though anyone and everyone may see the email

- **No email is private**
- Once sent, you have no control over who may copy, print, or forward your message
- For DOT employees, your email is considered *Public Record*; covered under *NCDOT Retention Policy*
- Non-work related email (politics, bad jokes, criticism, etc.) all reflect a lack of professionalism. Keep your work email for work purposes.



From NCDOT Retention Policy...

Users DO NOT have a right, nor should they have any expectation, of privacy while using any Department computing system at any time, including accessing the Internet, and using email. To the extent that Users wish that their private activities remain private, they shall not use the Department's computing systems such as their computer, the Internet, or email...

Email Rules: #2

Don't email when you are angry

- If you are angry, your judgement is impaired
- Step away for a day (or two if possible) before replying
- Consider having someone else read your email before you eventually send it



Email Rules: #3

Don't use email for confidential purposes

- *“If you were having this conversation in person, would you have to shut the door?”*
(APWA PWI)
- Is the information on a “Need to Know” basis?
- Make sure you are not putting you or your employer’s security in jeopardy
- Never send personal, credit card, or social security information



Email Rules: #4

Replying to an email with a new topic

- Your message may get inadvertently moved, skipped, or deleted
- Change the subject line/header/signature
- Remove parts of the email that are not relevant to the new topic



Email Rules: #5

AVOID THE USE OF ALL CAPS and exclamation points!!!!!!!!!!!!

- Writing in all caps can make the reader feel you are shouting, and no one likes BEING YELLED AT
 - but, writing everything in lower-case conveys laziness
- If you are going to use it, use only one exclamation point. More may seem emotional or immature
 - Consider other ways to relay importance
- Adding backgrounds, special fonts, etc. can lead to your message being identified as SPAM



Email Rules: #6

Add attachments first, fill in the addresses last

- Proof and finish a message before you hit “send”
- "Even when you are replying to a message, it's good precaution to delete the recipient's address and insert it only when you are sure the message is ready to be sent." - Barbara Pachter, Business Etiquette Expert
- When including a file, reference the filename and format/program in your message



Email Rules: #7

Use humor carefully

- Without hearing the tone of voice and seeing body language/facial expressions, humor can be easily misinterpreted
- Don't use sarcasm or rude jokes
- Something funny that is spoken can be very differently interpreted when written
- In professional correspondence, leave out humor (unless you know the recipient very well)



Email Rules: #8

Take care with abbreviations and emoticons

- Save the LOL, IDK, BTW, and other slang for texting with friends
- Don't assume email allows you to be informal in business communications
- Emoticons may be fun, but they are not professional



Email Rules: #9

Be very sure before you hit the “Reply All” button

- Use with discretion
- Don't use reply all unless you are sure that everyone on the list wants and needs to see your reply
- Can be distracting to recipients (pop-ups and notifications)
- Aren't you busy enough without getting email you don't need?



Email Rules: #10

- **Always use spell-check function**
- **Consider using grammar and spelling tools**
 - <https://www.Grammarly.com>
 - Free tool that can help with fundamental grammar
 - Runs in the background



Email Rules: #11

- **Know when to call**
 - Consider calling FIRST
 - Remember that there is always the possibility that your message will be misinterpreted
 - If you have gone back and forth more than two times and there is no clear understanding of what has been decided or what is going on, pick up the phone!



“By **requiring** employees to use appropriate, businesslike language in ALL electronic communications, employers can **limit liability risks** and improve overall effectiveness of the organization’s E-mail and Internet copy in the process.”

- Excerpt from “Writing Effective Email” by Nancy Flynn and Tom Flynn



Remember...

*email and texting are not replacements for human interaction.
Is sending an email better than a phone call or a meeting?*



Day 2 – Session 2



Being a Successful Project Manager

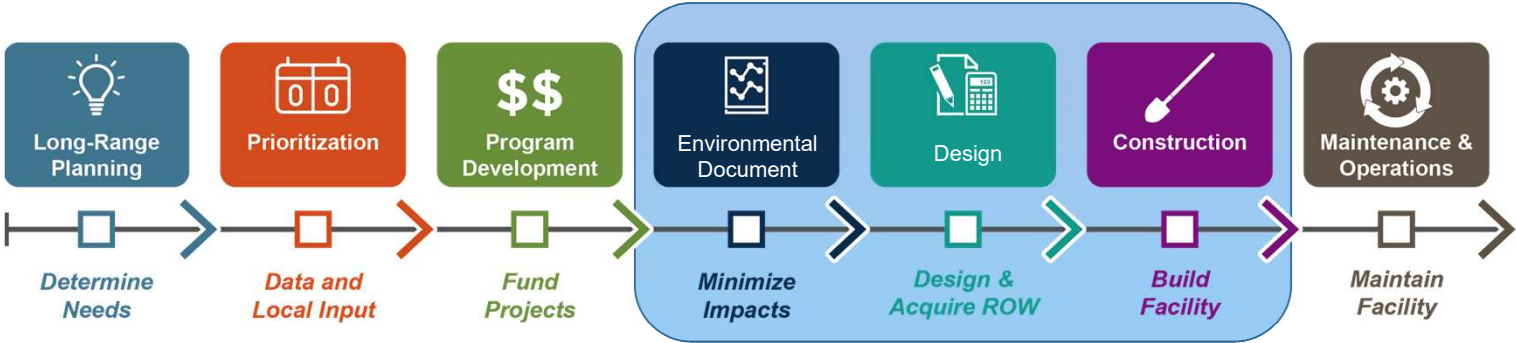
What Does **Successful Transportation Project Mgmt** *mean?*

Outcomes:

- Scope, schedule and budget are in balance
- Quality meets established standards and public expectations
- No unresolved project issues



NCDOT Program Delivery



Project Managers (Constant communication, coordination, and reporting)



R&R Quiz:

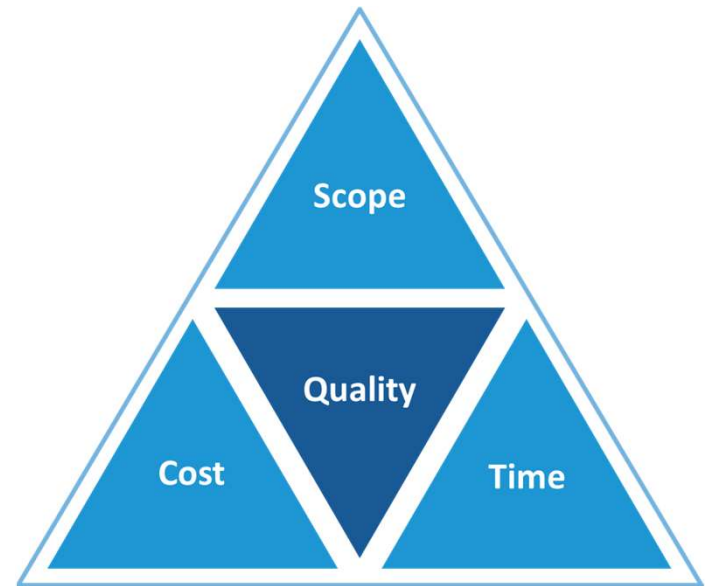
What does Project Management include?



R&R Quiz Answer

Project Management involves:

- Planning, coordinating, tracking, controlling
- Project scope, schedule, budget, quality PLUS
- Risk, change, communications
- From inception through close-out



“Project Management is the application of knowledge, skills, tools and techniques to project activities to meet project requirements.”

(PMI Institute PMBOK Guide)

Project Manager Role Review

Develops and leads Project Team to meet objectives and stakeholder's expectations

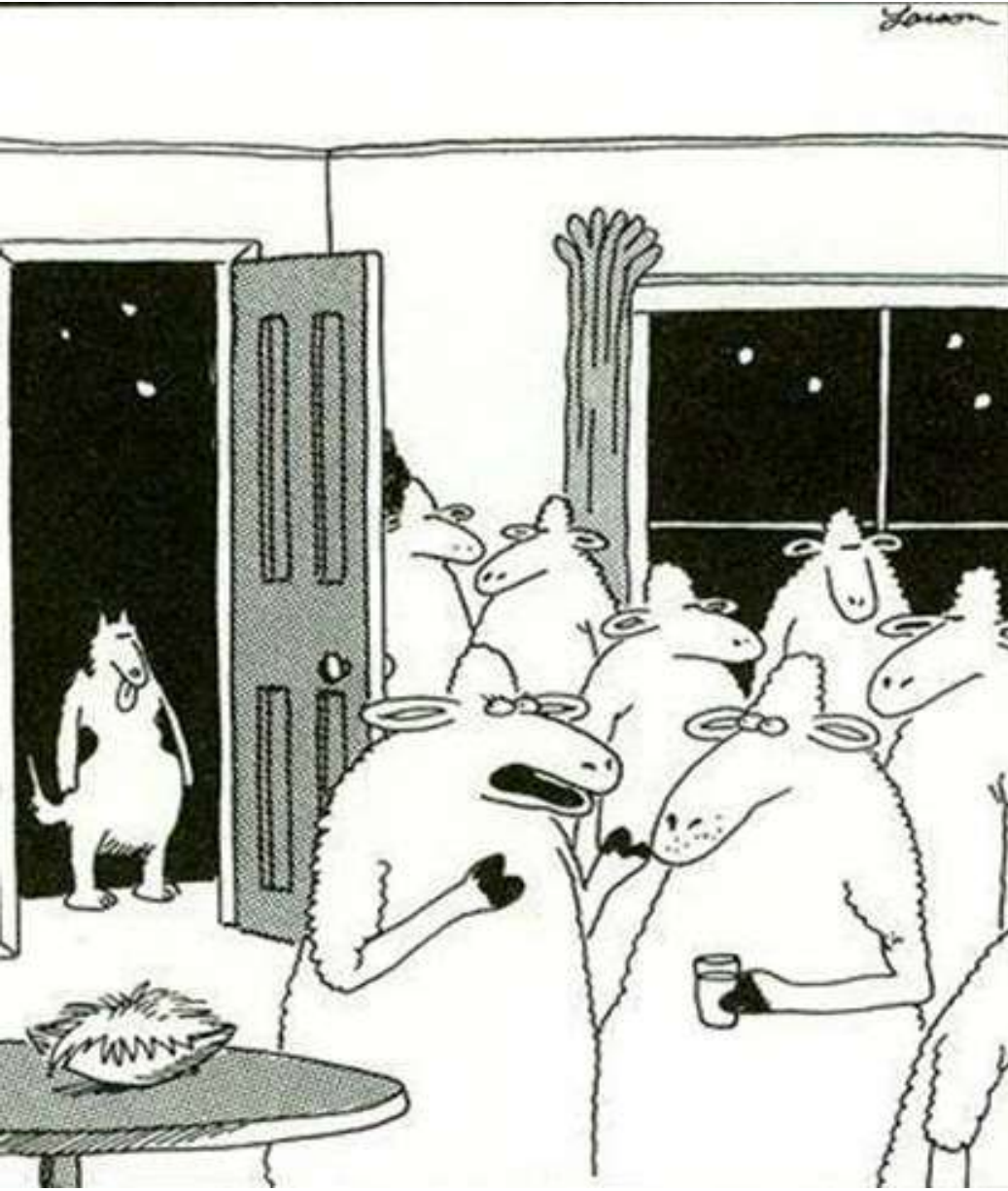
Assures planning, coordinating, monitoring and controlling occur from initiation through closure

Works with Consultants, Technical Units with technical assignments and reviews; Reviews work products

Makes Timely Decisions!



Critical Project Manager Competencies



Henry! Our party's total chaos!

No one knows when to eat, where to stand, what to...

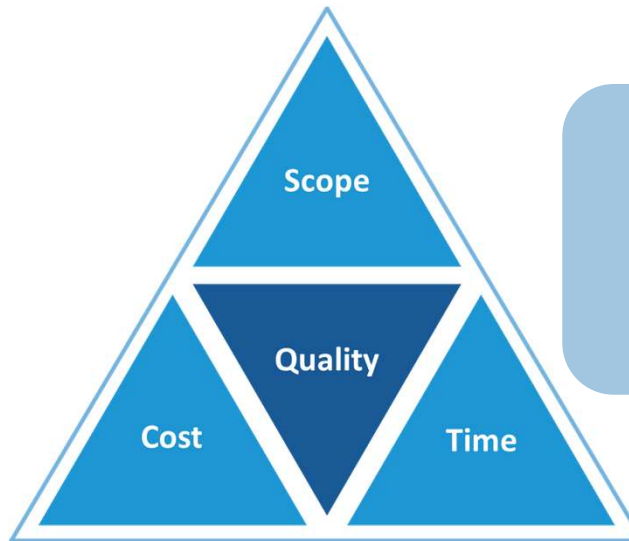
Oh, thank goodness! Here comes a border collie!"

Critical Project Manager Competencies

*The effectiveness of the project manager is critical to project success...
(Effective Project Leadership: Krahn & Hartment)*

Knowledge of project management processes

Knowledge of DOT technical processes and procedures



Leadership and interpersonal skills

Management *AND* Leadership

Management: Process

- Focus on systems & structure
- Rely on control
- Ask *how* and *when*
- Accept the status quo
- Do things right

Leadership: People

- Focus on relationships with people
- Inspire trust
- Ask *what* and *why*
- Challenge the status quo
- Do the right things

The P in PM is as much about 'people management' as it is about Project Management"
- Cornelius Fichtner

Leadership Skills

Timely decision-maker

Problem solver

Excellent delegator

Demonstrate accountability/integrity

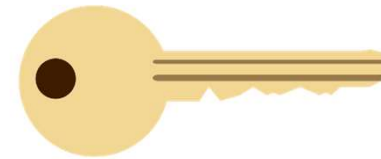
Innovator

Superior interpersonal skills

“The pessimist complains about the wind. The optimist expects it to change. The LEADER adjusts the sails.” – John Maxwell

Keys to Timely Decision Making

- ✓ The PMs responsibility is to ***make decisions*** and focus on what is best for the project.
- ✓ ***Have the courage*** to make decisions when you are not 100% sure.
- ✓ Make the best decision with the ***information that is readily available***. If necessary, collect more information and re-visit your decision.



Keys to Timely Decision Making

- ✓ To make good, quick decisions ***continually grow your project knowledge***: review reports, talk to your team, ask experts about what they do.
- ✓ ***Let go of the idea*** that you can always make “right” decisions. Even Warren Buffet admits: “I’ve made lots of dumb decisions.”
- ✓ Get ***comfortable with discomfort***.



The Seven Habits ~~of~~ *Nuances* of Effective Project Managers

Barry Posner (1987) polled project managers about what it takes to be a “good PM”

RESPONSE

1. Communication (84%)
2. Organizational skills (75%)
3. Team-building skills (72%)
4. Leadership skills (68%)
5. Coping skills (59%)
6. Technological skills (46%)
7. **Ethics (personal addition)**

NUANCE

1. *Develop relationships*
2. *Innovate*
3. *Learn to delegate*
4. *Be a champion*
5. *Manage conflict*
6. *Take the time to learn*
7. *Always take the high ground*

The Seven Habits ~~x~~ *Nuances* of Effective Project Managers

Develop Relationships

- Face-to-face works best
- Develop a personal connection
- Don't always ask – sometimes give
- Look for opportunities to create a new contact
- Step outside the “comfort zone”
- It's always more fun to work with friends!

The Seven Habits ~~x~~ *Nuances* of Effective Project Managers

Innovate

- Not every task has a process in-place
- Actively look for newer and better ways to get things done
- Don't be afraid to try something new
- Outline the process, the solution, and the benefits to those who can make a change

The Seven Habits ~~x~~ *Nuances* of Effective Project Managers

Learn to Delegate

- Realize that others may have better ways to get things done
- Give options to the staff who will do the work
- Learn what is important
- Understand when it is OK to let someone make a mistake (and learn from it)

The Seven Habits ~~x~~ *Nuances* of Effective Project Managers

Be a
Champion



- Projects can be routine - find a reason for people to get motivated
- Generate enthusiasm by showing it
- Be active in the project and engage people who can make a difference
- Don't hold back – state your opinion and be ready to back it up
- When you get tired - and you will - take a break (and remember Sisyphus)

The Seven Habits ~~x~~ *Nuances* of Effective Project Managers

Manage Conflict

- Conflict is healthy and can bring great innovation and change
- Look for the issues that can delay or sink your project
- Proactively manage those tasks, act – don't react
- Never assume conflict will go away on its own

The Seven Habits ~~x~~ *Nuances* of Effective Project Managers

Take the
Time to
LEARN

- Be willing to ask questions
- Listen to answers
- Admit your mistakes, then learn how to prevent them next time
- Follow-up on your projects after they are completed
- Look for people who can teach you – they are all around you

The Seven Habits ~~x~~ *Nuances* of Effective Project Managers

Always
take the
High
Ground

- Never assume that what is done in private will stay private
- Like them or not, treat everyone with respect
- Consider each issue as though it is going to be published in the newspaper
- If you decide to wrestle with the pigs, expect to get muddy

The Seven Habits ~~X~~ Nuances – Bottom Line

It is not always the “big” things that make projects successful. Good habits and practices are critical for success, but managing the seemingly insignificant details and project nuances can make projects great.

“Everything comes to him who hustles while he waits”

Thomas Alva Edison

Team Member Responsibilities

Let the Team know your expectations: To...

Understand and follow Project Management Plan

Perform quality work to project standards within prescribed scope, budget and schedule

Cooperate and communicate openly with other Team members - share ideas, express expectations, call for help when needed

Maintain a positive attitude – show respect for team members

Be proactive and supportive – provide advice, recommendations and solutions, provide timely notice of potential issues or scope changes

Be committed and loyal to the Project and the Project Manager

Break Out Exercise

PM Competencies

**Form
Groups**

Break into assigned groups

**Group
Discussions**

List the 3 PM Competencies that you think make the most positive impact on delivering a successful project. Why? What are the best ways to support these at NCDOT?

**Report
Out**

Discuss as a class

Handout: PM Competencies Exercise



Project Management Processes

*The key to improving the way we deliver projects is in the implementation of **transparent, repeatable and accountable** processes that are effective and efficient.*

Action Plan (Personal)

List actions you will take to improve your project management performance based on your role: Project Manager, Technical Unit position, etc.

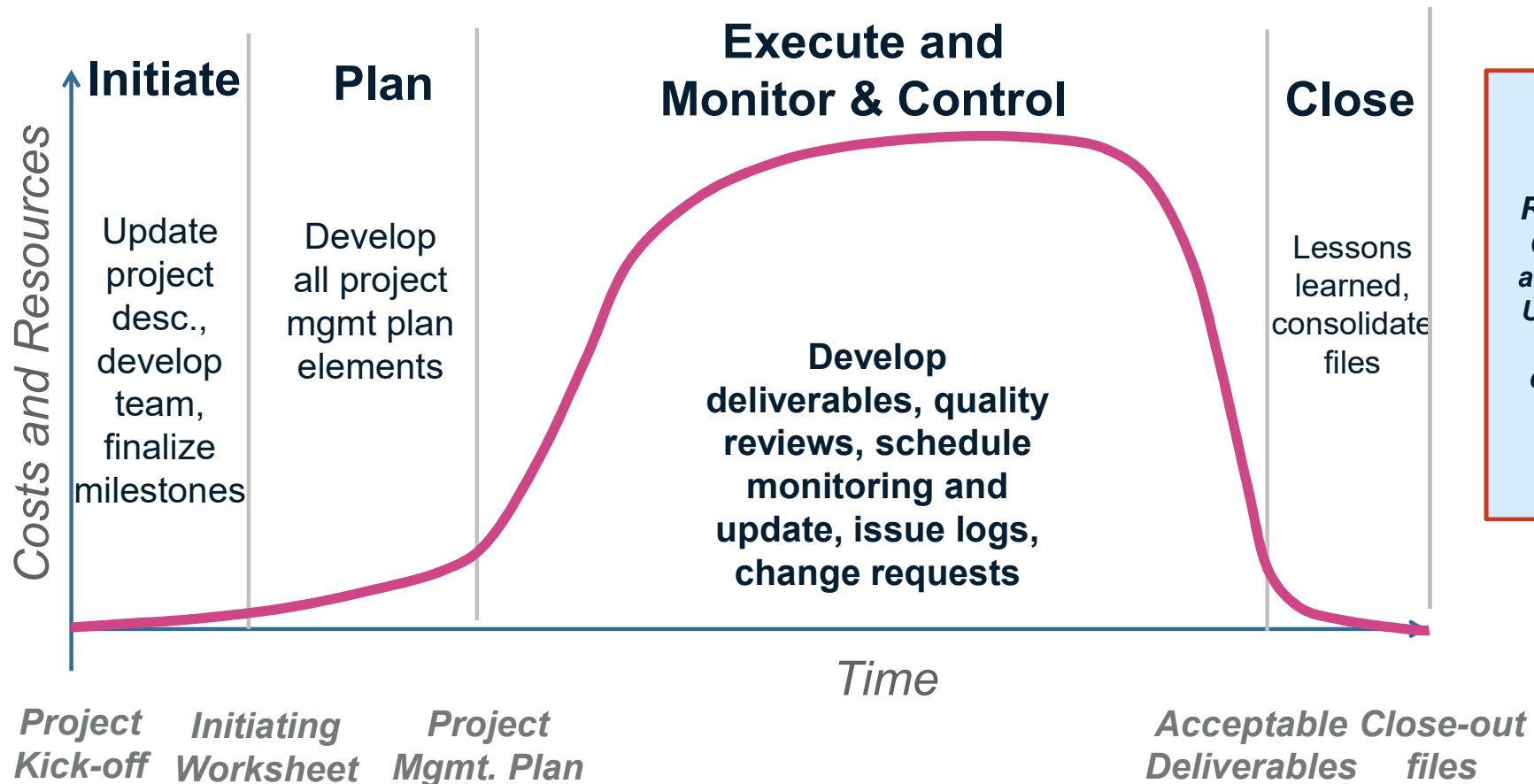
<i>PM Processes</i>	<i>Personal Actions</i>	<i>Team Suggestions</i>
<i>Initiating</i>		
<i>Planning</i>		
<i>Executing/ Monitoring/ Controlling</i>		
<i>Closing</i>		


R&R Quiz:

What are the 5
Project Management
processes?



PM Framework




REMINDER:
Consultants and Technical Units provide day-to-day deliverables for these processes



**Why do you think using
Project Management
processes are
important?**



Why should you use

Project Management Processes?

2012 – 2016 PMI survey found successful project outcomes declining

- *Met original goals:*
 - *62% vs 64%*
- *Completed with orig. budget*
 - *53% vs 55%*
- *Completed on time:*
 - *49% vs 51%*
- *Deemed failure:*
 - *16% vs 15%*

Project Management culture strong predictor of outcomes

- *High priority: 71% meet goals*
- *Lower priority: 52% meet goals*

Projects more successful when proven PM practices are used

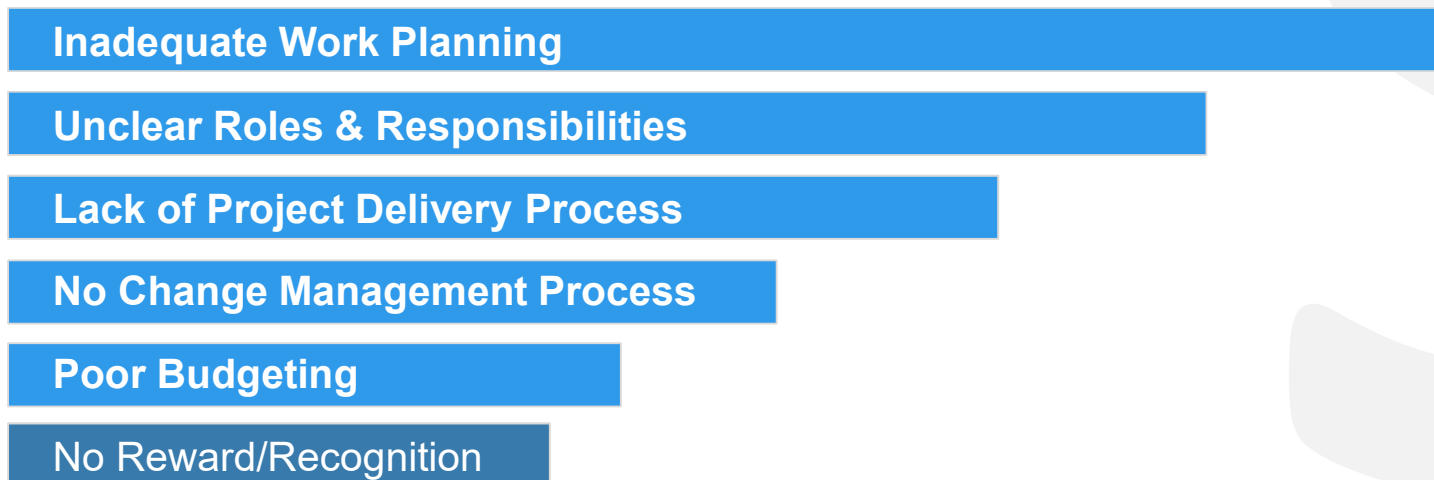
- *89% of projects meet goals WITH project management processes*
- *34% of projects meet goals WITHOUT project management processes*

Source: PMI Pulse of Profession 8th Global Project Management Survey, 2016

Causes of Poor Performance

#1 – Lack of Planning

Top 5 solved with appropriate PM processes



Source: Washington Department of Transportation



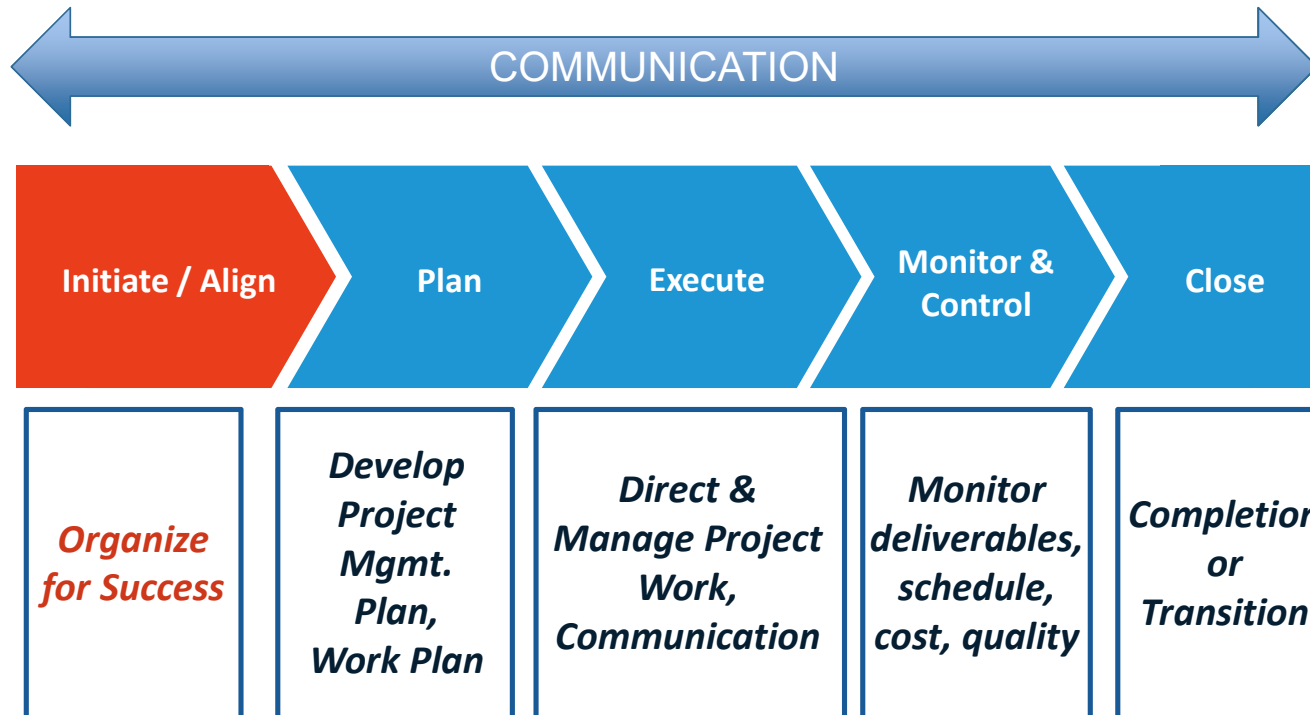
**NOW - Why do you think
using Project
Management processes
are important?**





Project Management Processes: **Initiating and Aligning**

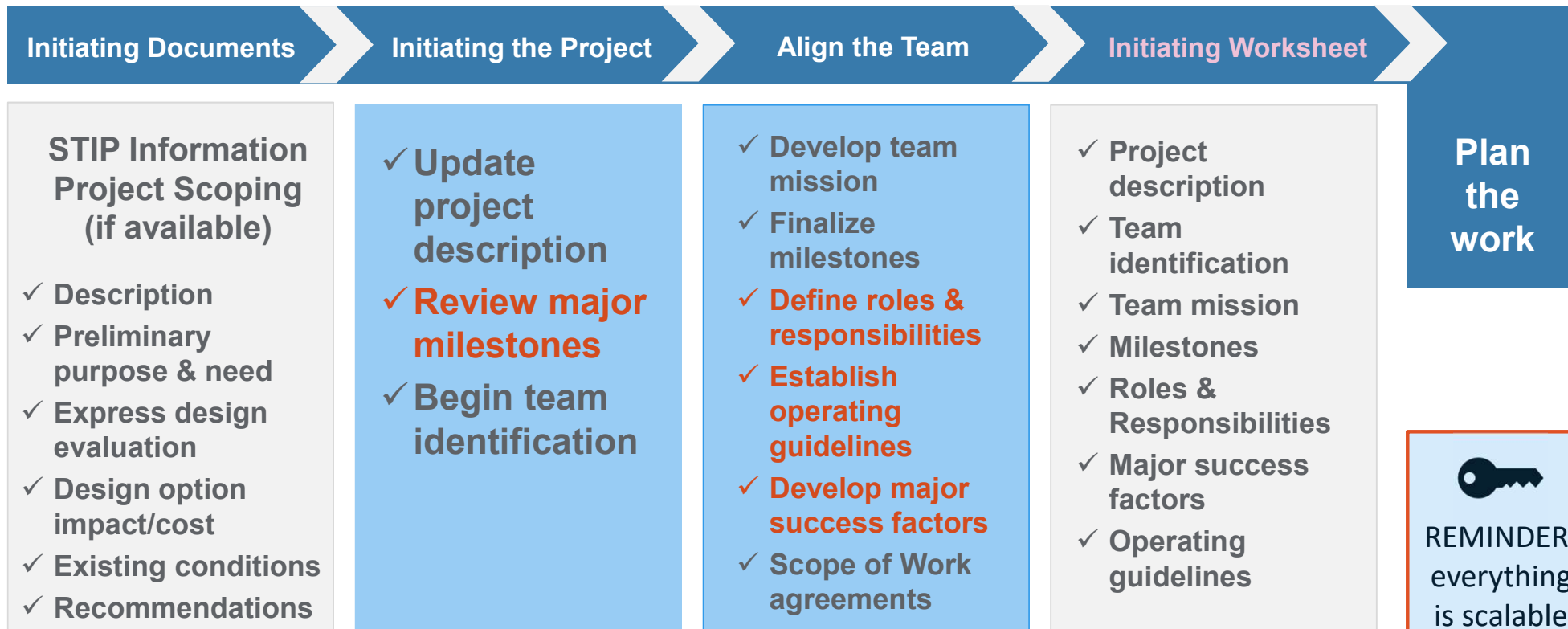
Project Management Steps: Initiate/Align




“Success is the delivery of a product that meets expectation”

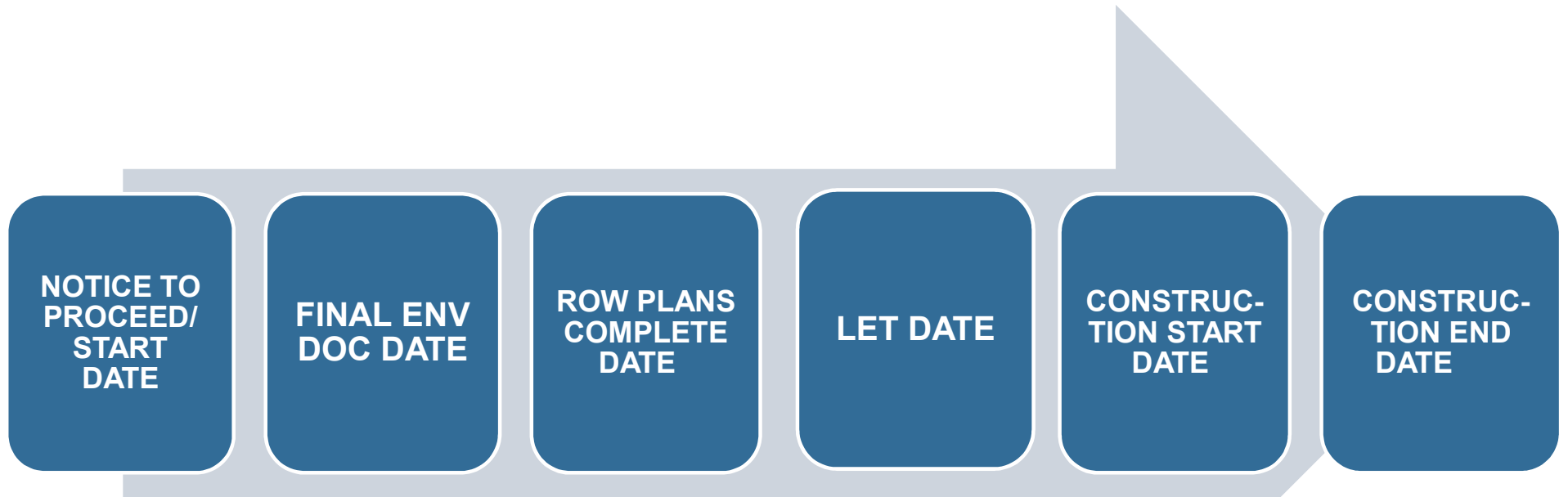
— James Leal from ‘Guide to Assembling the Project Initiation Document’

Initiating & Aligning Overview




REMINDER:
everything
is scalable
to project

Major Milestones



+ PROJECT SPECIFIC



Aligning:

Defining Roles & Responsibilities Using RACI

RESPONSIBLE – role(s) expected to complete work. Every task at least one person responsible

ACOUNTABLE – role to ensure the work is completed, delegate, last one to review. Every task has **ONLY ONE** person accountable, usually not same as Responsible

CONSULTED – role(s) that is consulted on/contributes to the completion of the work

INFORMED – role(s) that receive the work output and/or receives status reports on progress

Deliverable:	Project Manager	Environmental Coordinator	PEF	Utilities
Env Permits	A	R		
Traffic Report	A		R	
Utility Locates	A		I	R
Intersection Design	A	C	R	C

NCDOT – Consider adding Reviewer; Also can add “Sign-off” to make it RASCI

Aligning:

Operating Guidelines

Develop and agree:
*how will the team
govern itself?*

Team decision-making process

Team meetings

Communications

Team measures of success

Team issues and conflict management



**TIP: Make it part of
Communications Plan;
Scalability!**



Aligning: Major Success Factors

Establish relative to NCDOT KPI's but also for project/team

What does success look like for this project?

How will success be measured?

What factors may impact success?



Secrets of Successful Project Initiation

Know your Project

Know your major stakeholders

Understand assumptions/constraints/risks

Define the scope, ask “What will make this project a success?”

Establish clear roles and responsibilities (RACI)

Initiating Worksheet Review

- **Project Description**
- **Team Identification**
- **Team Mission**
- **Major Milestones**
- **Roles & Responsibilities**
- **Measures of Success**
- **Operating Guidelines**
- **Recognition**



Action Plan (Personal)

List actions you will take to improve your project management performance based on your role: Project Manager, Technical Unit position, etc.

<i>PM Processes</i>	<i>Personal Actions</i>	<i>Team Suggestions</i>
<i>Initiating</i>		
<i>Planning</i>		
<i>Executing/ Monitoring/ Controlling</i>		
<i>Closing</i>		



Project Management Processes:

Planning



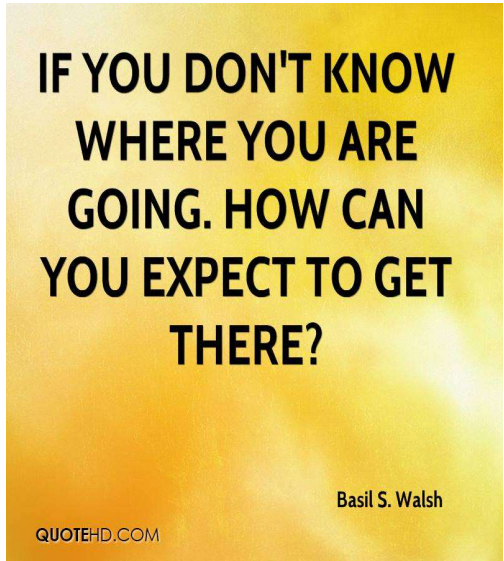
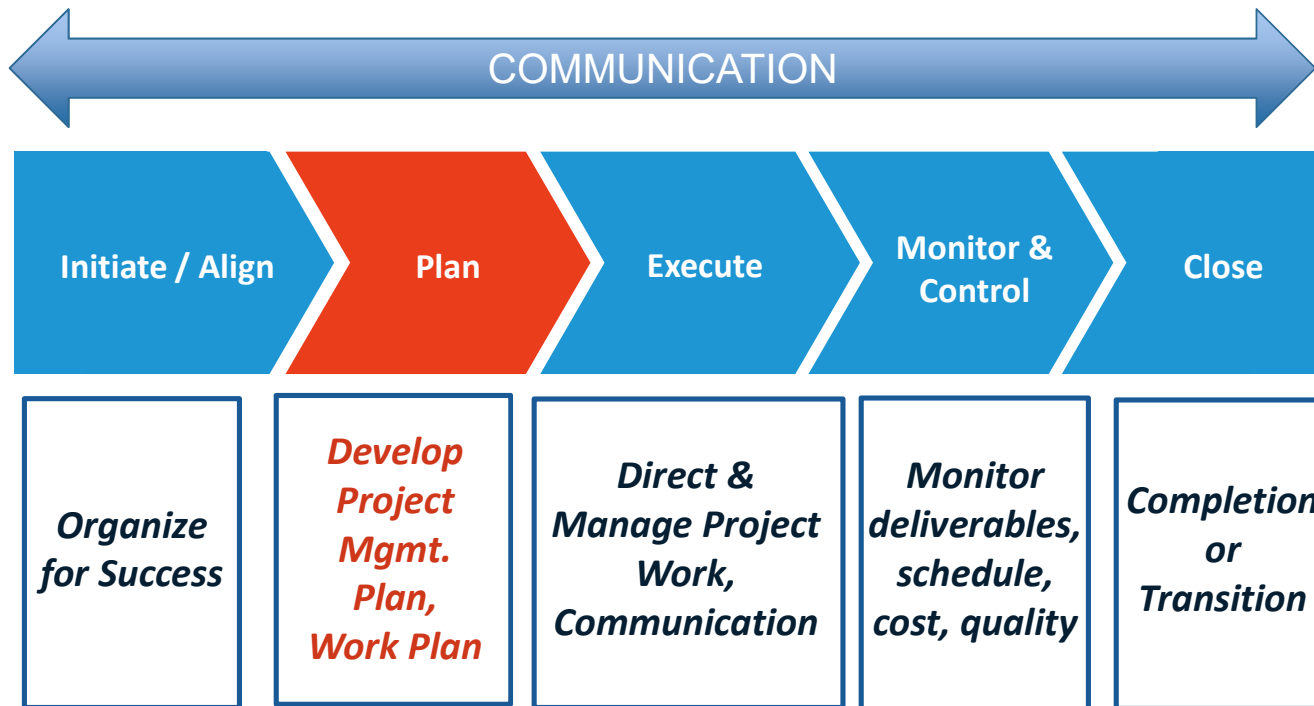
S. Adams E-MAIL: SCOTTADAMS@aol.com



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Project Management Steps: Planning



“Expect the best, plan for the worst, and prepare to be surprised.” - Denis Waitley

Planning is like insurance...

It's "too expensive" until you need it,
and then it's too late.



"Plans are only good intentions unless they immediately degenerate into hard work."

Peter Drucker



Why do I need a


Project Management Plan?


Provide project
“road map” at
outset of project

Provide
documentation,
consistent
direction for
project

Communicate and
distribute to entire
team

Update throughout
project as scope,
budget or
schedules change

 **NOTE: PMP Templates for NCDOT are being developed**

 **REMINDER: PMP is scalable - needs of project dictate components**



How do I develop the plan?

Project Management Plan Elements

Scope Management

Plan, define, create WBS

Transition & Closure

Closure Plan

Change Management

Plan Change Management

Risk Management

Plan, Identify, Analyze, Plan Risk Response

Schedule Management

Plan, define activities, sequence activities, est. durations

Project Integration Management

Develop PMP

Quality Management

Plan Quality Management

Cost Management

Plan Cost Mgmt.

Estimate Costs

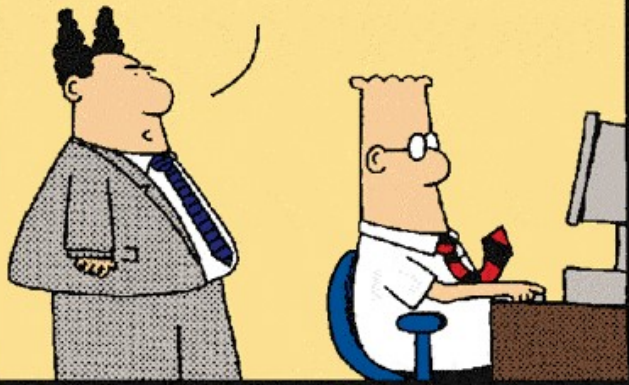
Determine Budget

Scope, Schedule, Cost Baseline

Communications Management

Plan Comm Management

WE JUST HAD A MEETING AND DECIDED TO CHANGE YOUR PROJECT SUBSTANTIALLY.



S. Adams E-Mail: SCOTTADAMS@AOL.COM

WE DIDN'T INVITE YOU TO THE MEETING BECAUSE THINGS GO SMOOTHER WHEN NOBODY HAS ANY ACTUAL KNOWLEDGE.



5-21

SO, WHAT ARE THE CHANGES?

IF I REMEMBER I'LL LEAVE YOU A VOICE MAIL.



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Scope/WBS

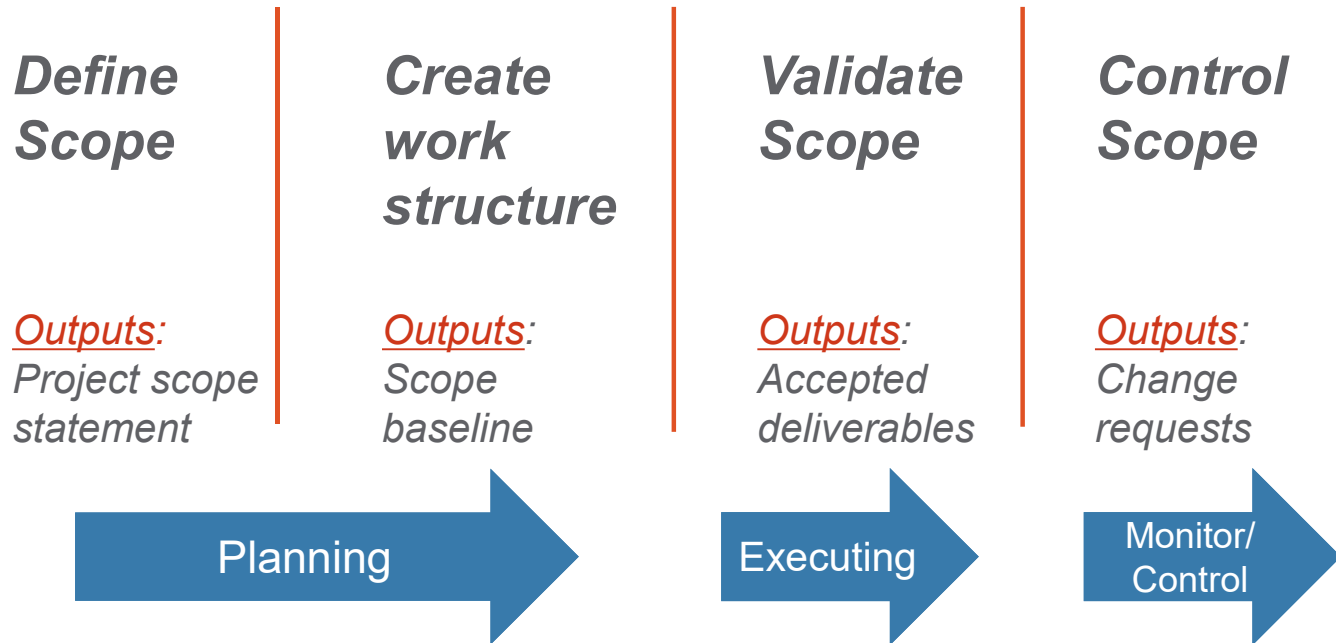
Scope Management Plan

Why?

- *Fully define work to be accomplished*
- *Define deliverables needed to achieve work*
- *Define project Work Breakdown Structure (WBS)*

Scope Management Plan

What?

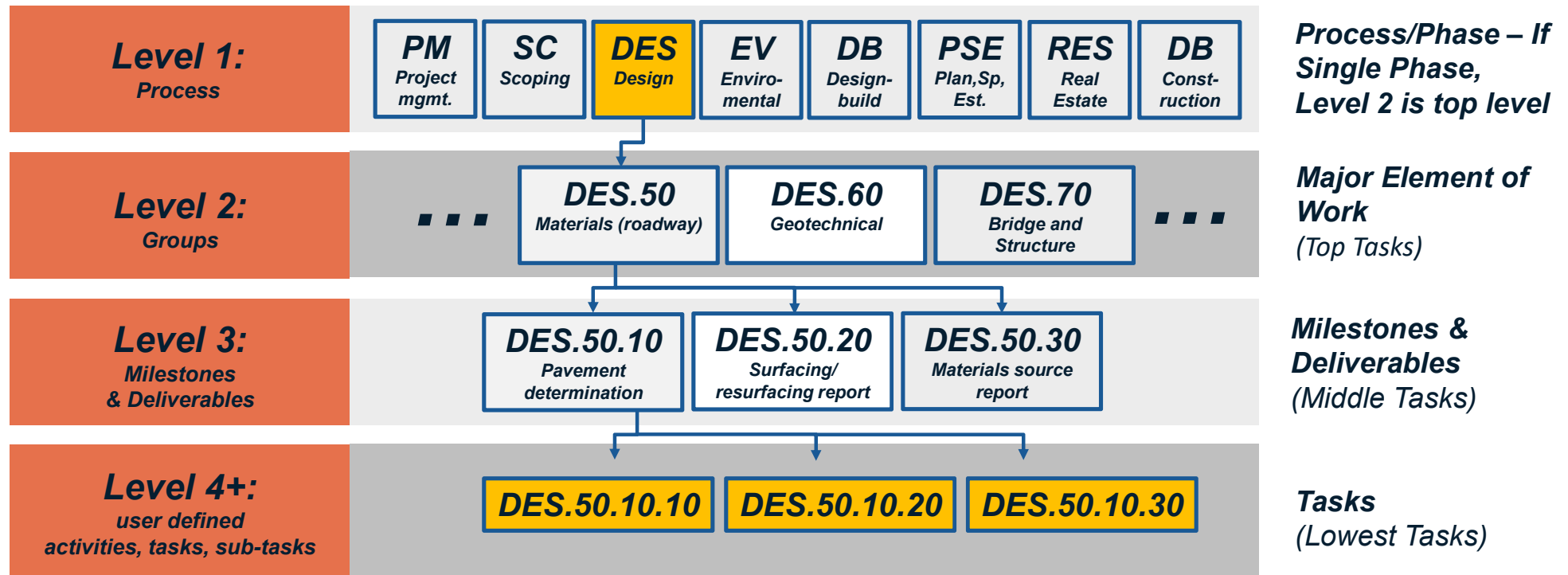


“A well written scope should leave no shades of gray, it should leave the reader with a clear understanding of what falls within the project boundaries.” – Andy Jordan, The 9 Secrets of Successful Project Initiation

Project Work Breakdown Structure

How to Define – Example Structure: WSDOT

KEY TIP: *Develop with your PEF, Technical Unit, GESC; Take the time to get it right!*
 Templates will be developed for NCDOT



Project Work Breakdown Structure

Tips from NCHRP

- Use deliverable based elements where possible
- Use same WBS for scope, schedule, budget
- Use WBS for all project activities
- Include project management as discrete task
- When changes occur, assess if changes needed in WBS as well as schedule/budget
- Keep \$ amount of tasks small enough that if a task goes over budget entire project not jeopardized but large enough to be meaningful



Schedule



What is a *schedule* and why does every project need one?



ONCE AGAIN, NONE OF YOU RESPONDED TO MY EMAILS THIS PAST WEEK.



Dilbert.com DilbertCartoonist@gmail.com

SO I PUT TOGETHER A PROJECT TIME LINE THAT REFLECTS NEITHER CONSENSUS NOR REALITY.



11-23-11 © 2011 Scott Adams, Inc./Dist. by Universal Uclick

CAN I HAVE A COPY SO I CAN MOCK IT?

NO. I'M STILL ENJOYING THE ILLUSION OF PROGRESS.



What is a Schedule and Why Does Every Project Need One?

Integral element of effective project control system

Roadmap: major milestones, deliverables, tasks, timeframes, CRITICAL PATH

Shows internal and external commitments and constraints; expectations for project team

Shows integration of PM, technical staff, and consultant(s) activities

Monitoring tool

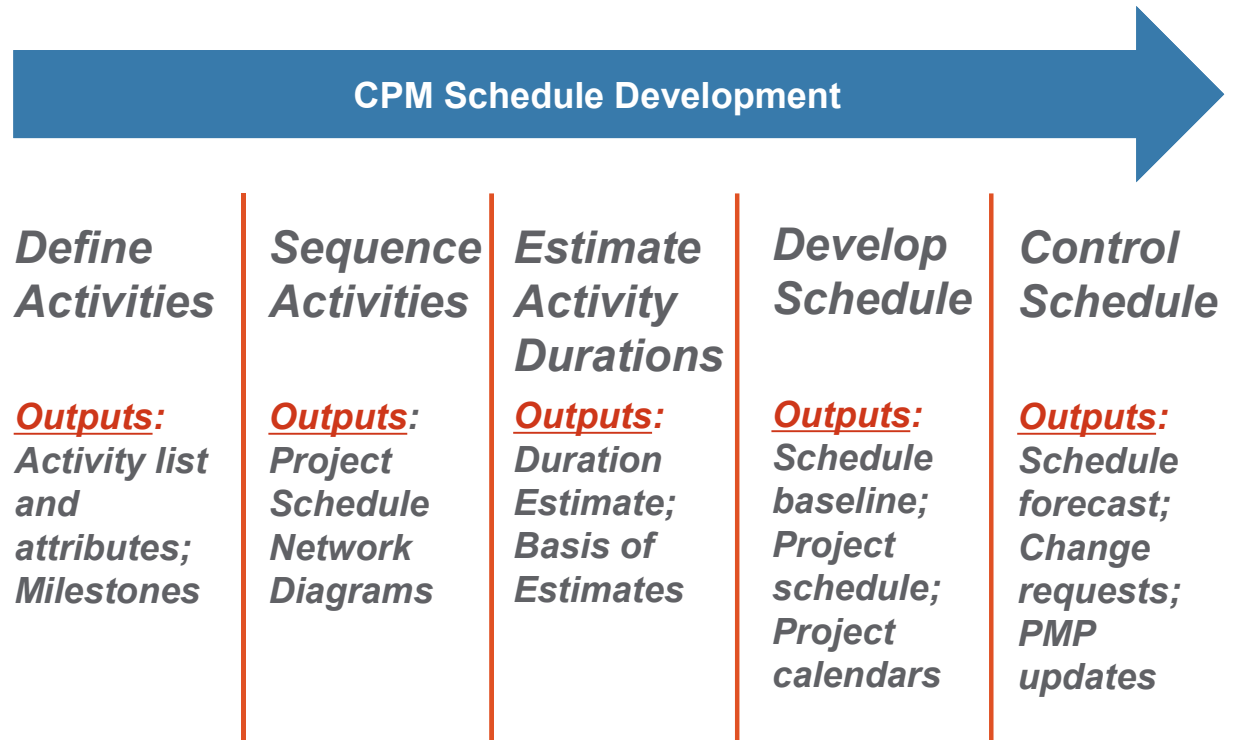


TIP: *In most cases generated by Consultant, verified by PM in consultation with Project Team, GESC*

Schedule Management

Plan: describes process for developing and managing project schedule

- *Narrative/table on development/management of schedules*
 - *Assigns roles and responsibilities*
 - *Timing of reviews and updates*
- *Critical Path Method*



Tip: In most cases schedule will be developed with and managed by your consultant

Handout:
Schedule Example⁵⁹

Effective Scheduling: Good Schedules...



- Focus on milestones and deliverables – use WBS as guide
- Consider the logical sequence of tasks and critical path(s), task inter-relationships
- Include meetings, review and correction time
- Build in quality checks
- Keep on calendar basis; Make it visually clear (not too detailed)



Effective Scheduling: Avoid...



- Not allowing for internal review and changes
- Starting tasks before prerequisites are complete and delivered
- Failing to consider staff availability – people take vacations!
- Excessive complexity
- Forgetting to include ALL project delivery activities



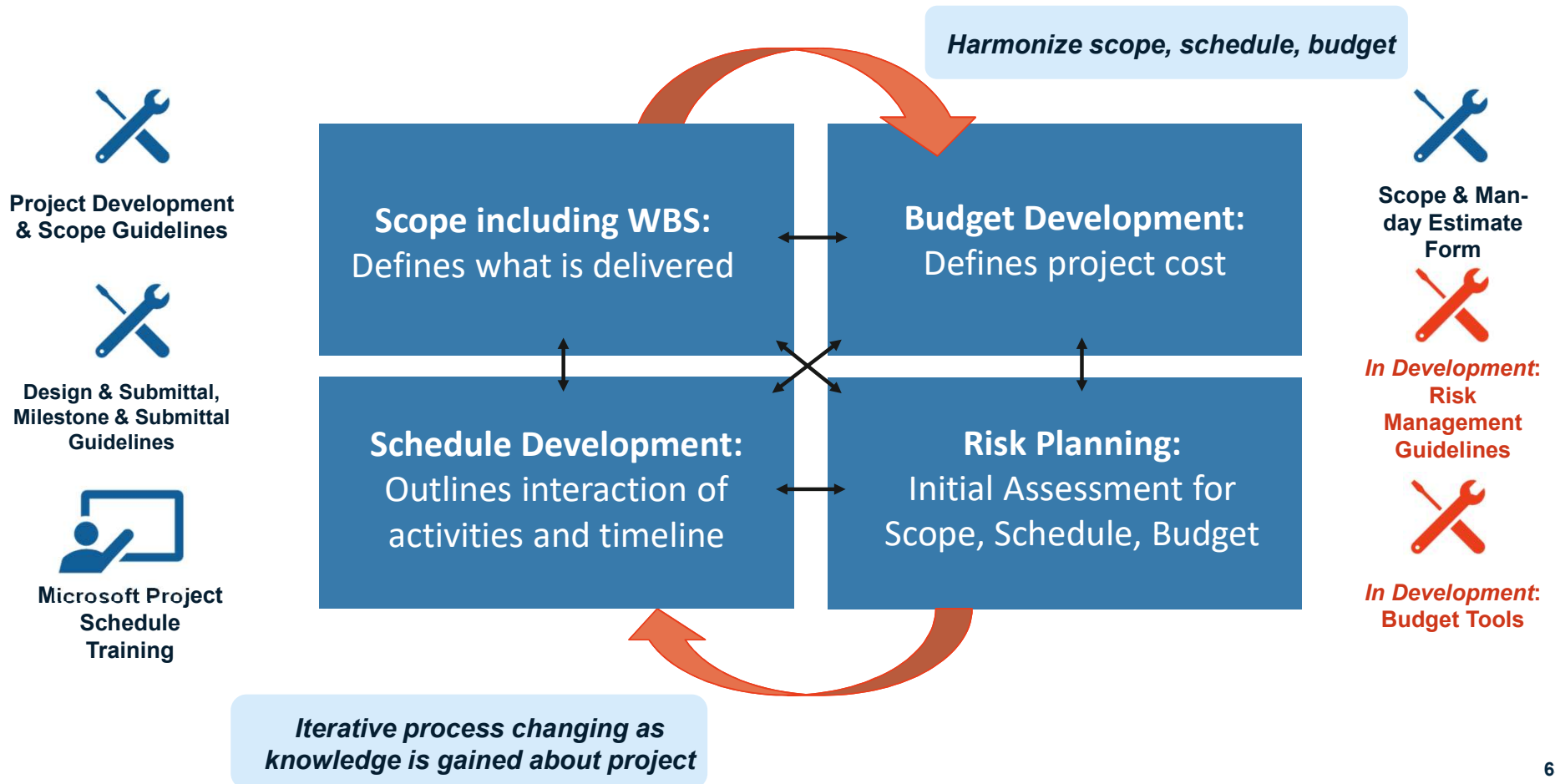
“Even with the best planning and collaboration, things happen. Make sure your project schedule reflects the actual and current reality of the project.”

Robert Kelly

Services Solution Executive,
Global Accounts at Lenovo



Work Planning Project Baselines





Communication Plan

Communication Plan

Who needs what information? When? How?

- **Project Team, Internal Stakeholders**
 - Project Working Information
- **External Stakeholders, Public, Media**
 - Public information

- **Contents**
 - Who is being communicated with
 - Information to be communicated
 - Methods and technologies
 - Timeframes and frequency
 - Responsibilities
 - Process for updating
 - Escalation procedures

Communication Plan

Who needs what information? When? How?

Internal Communication Aspects

Operating Guidelines

- Time, frequency, location team mtgs
- Responsible party for agenda, notes, attendees

Team Protocol

- Key decision makers & authority levels
- Identify who involved in project
- Communication methods
- Document management

Reporting

- Required reports
- Responsible party

Communication Plan

Who needs what information? When? How?

Public Communication Aspects

ID	Who; identify agencies, stakeholders, businesses, the public, etc.	What event or information will be provided?	When will the information be provided?	With what frequency?	Responsible Party
Example	General public	Project web page	Immediately	Updated monthly or after significant milestones	Melissa K
Example	Elected officials, project neighbors and businesses	Open House	12-Mar	One time	Keith T

Break Out Exercise

Communications Plan

Class
Discussion

Using Project Example - as a class, discuss the critical elements of the Communications Plan – both Internal and External

Review
Template

Review Communications Plan Template

Handout: Communications Plan Template



Quality

QUALITY

*...is everyone's
responsibility.*

(Deming, W. Edwards)

NCDOT Project Quality

- **Quality Management Plan**
 - Determines quality policies and procedures for project deliverables, defines who is responsible for what and document compliance
- **Two Components to Quality Plan**
 - Quality Control
 - Routine reviews and quality checks to measure and control quality of project deliverables Operational techniques and processes of verification and documentation used to achieve a quality product
 - Quality Assurance
 - Review procedures conducted to insure that QC process followed and standards met

NCDOT PM Role in Quality

- **Ensure a Project Quality Plan is developed and executed properly**
 - Need to address ALL project activities
 - Consultants providing production work submit their Quality Management Plan
 - Technical Units follow their Quality Management procedures
 - All final deliverables should have QA review internally or by a consultant providing QA role
- **Determine if independent QA team required depending on project complexity**

Quality Key Takeaways

Project Manager has ultimate responsibility

Quality is not an option

Quality reviews save time overall and protect the budget

Comprehensive NCDOT Quality approach under development



Risk Management

Risk Management



www.dilbert.com
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What is Risk?

Risk:

An uncertain event or condition that, if it occurs, has a positive or negative effect on the project's objectives. If negative, considered a "Threat"

Opportunity (aka "positive risk"):

A term sometimes assigned to a risk that has a *positive* effect.

If both terms are used, risk usually means those conditions or events that have a *negative* effect.

NCDOT Risk Management

Previous approach – serial management of tasks

- Less risk but requires more staff and time

Current approach – need risk management process

- More “in parallel” activities

Future: a NCDOT-specific risk management process is being developed

Benefits of Risk Management

Recognize uncertainty and better forecast possible outcomes

Create opportunities for improved project monitoring control

Produce improved project outcomes

Positive influence on creative thinking and innovation

Better anticipate problems/issues and provide action plan to respond

Risk Management Register Example

Identification

- Status
- Priority
- Date Identified
- Risk Event
- Description
- Risk Trigger
- Type of Impact

Quality Analysis

- Likelihood
- Impact
- Risk Level

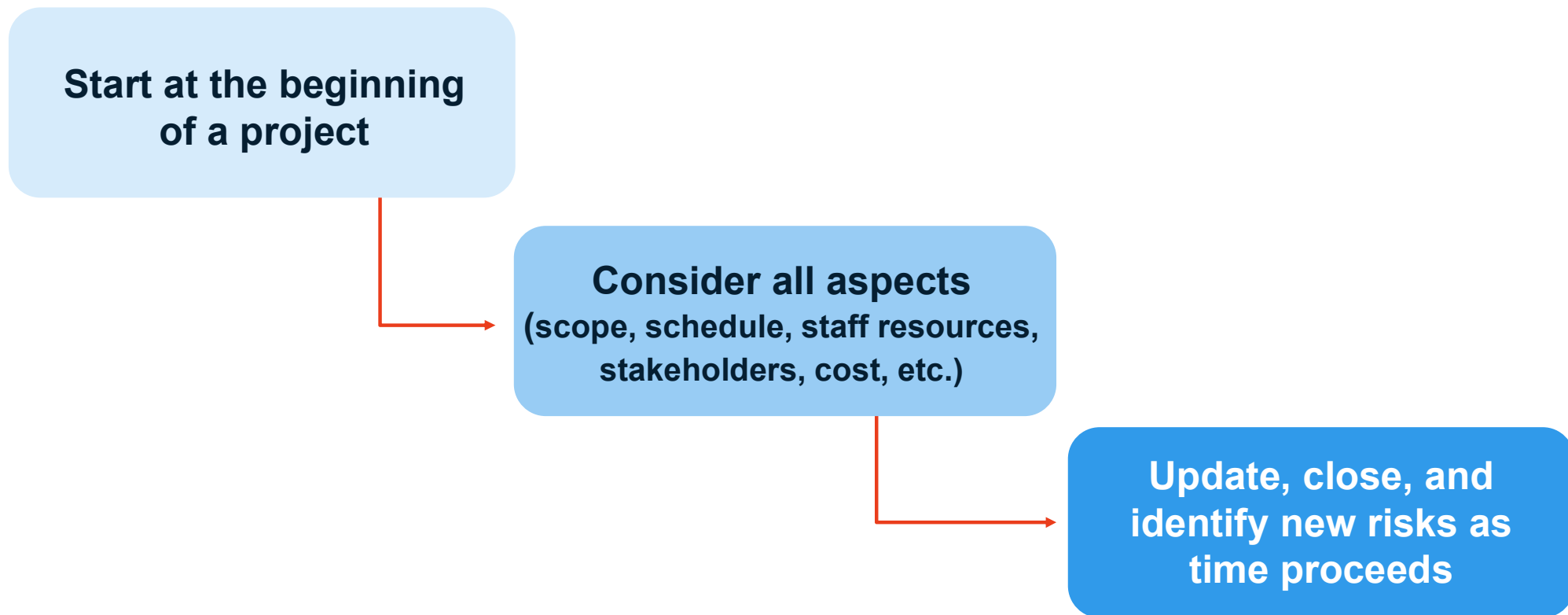
Response Strategy

- Risk Owner
- Strategy
- Planned Action

Monitoring and Control

- Review Status Interval
- Date/Review Comments

Apply Risk Management to Project



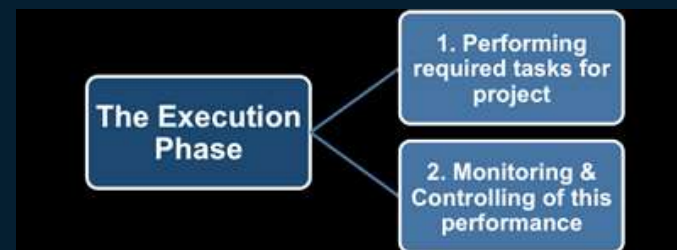
Action Plan (Personal)

List actions you will take to improve your project management performance based on your role: Project Manager, Technical Unit position, etc.

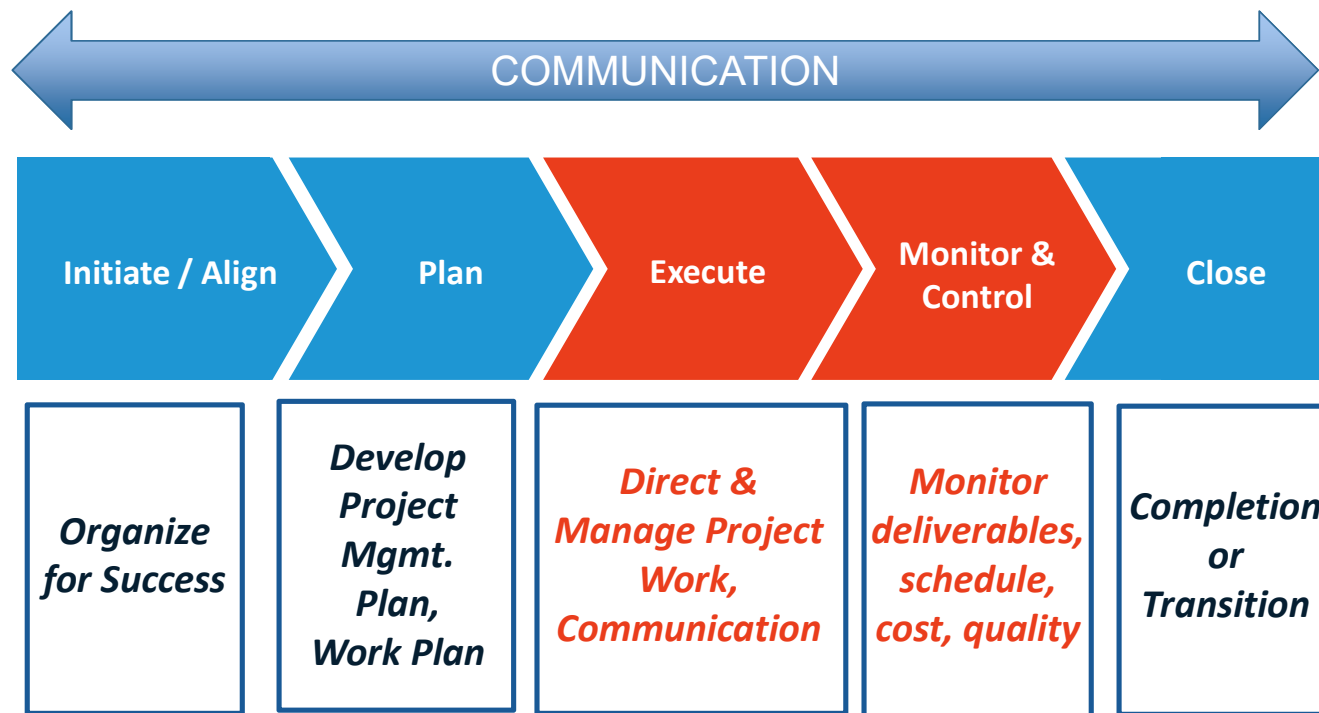
<i>PM Processes</i>	<i>Personal Actions</i>	<i>Team Suggestions</i>
<i>Initiating</i>		
<i>Planning</i>		
<i>Executing/ Monitoring/ Controlling</i>		
<i>Closing</i>		



Project Management Processes: **Executing, Monitoring, Controlling**



Project Mgmt Steps: Execute/Monitor/ Control



“No excuses. No explanation. You don’t win on emotion. You win on execution.”

- Tony Dungy

The cost of preventing mistakes is generally much less Than the cost of correcting mistakes.” - PMBOK

Executing

Manage Work and Communications



Deliver
scope on
schedule
and within
budget



Manage
team/
coordinate
resources



Manage
risk and
change



Ensure
effective
comm.



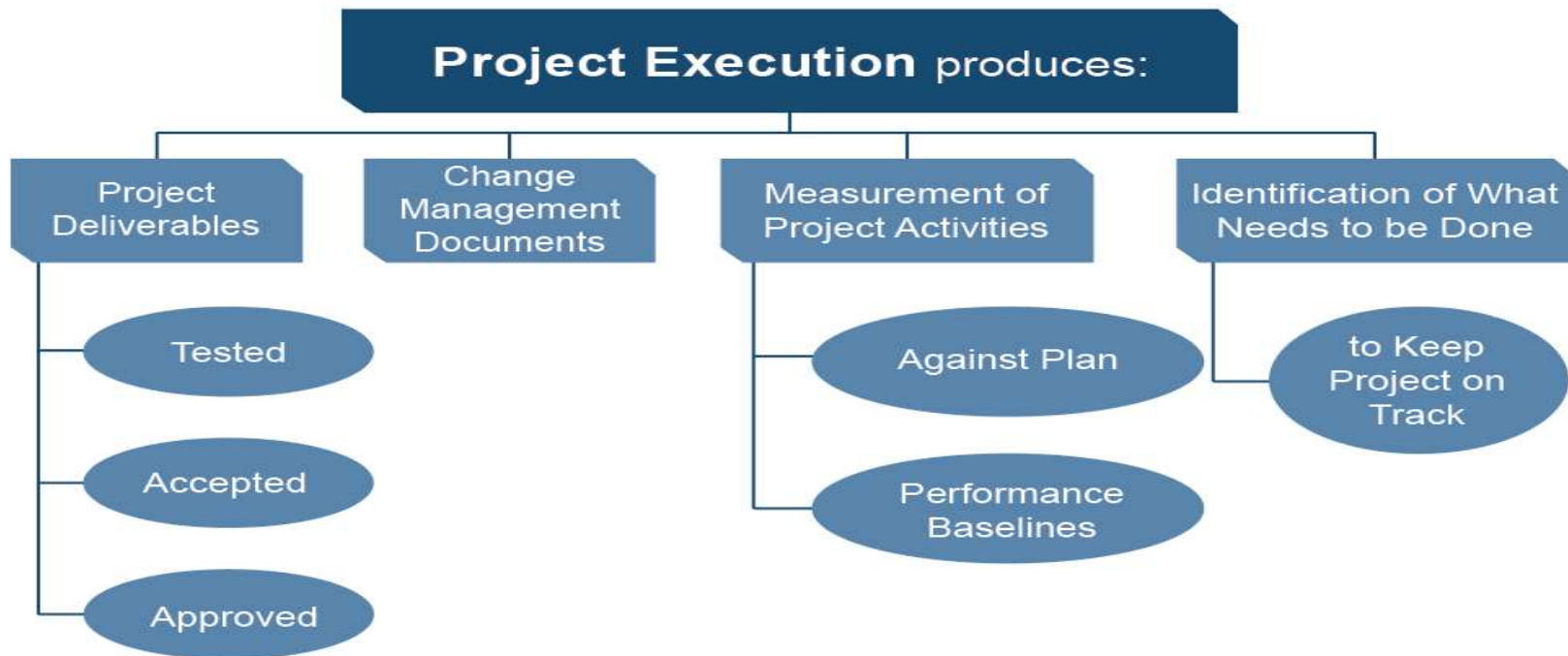
Perform
quality
assurance



Meet
project
specs.

***"A good plan, violently executed now is better than a perfect plan tomorrow."** – George Patton*

Project Execution Activities



Executing

Tools for Project Management

- **Project Development Guidance and Resources – Project Planning Phase**
 - Comprehensive Transportation Plan
 - Express Design Evaluation
 - Express Design Scoping
 - SPOT
 - STIP

GUIDANCE AND RESOURCES – PROJECT PLANNING PHASE

Guidance documents, policies and procedures manuals, and other useful references are hyperlinked throughout this guide. This page includes a consolidated list of documents and templates available.

Click on the buttons below to link to resources.

**Comprehensive
Transportation Plans**

Express Design Evaluation

Express Design Scoping

SPOT

STIP

Executing

Tools for Project Management

- **Guidance and Resources – Project Development Phase**
 - Project Initiation
 - Project Coordination
 - Purpose & Need
 - Prelim Design & Tech
 - Categorical Exclusion

GUIDANCE AND RESOURCES – PROJECT DEVELOPMENT PHASE

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Click on the buttons below to link to resources.

[Project Initiation](#)

[Project Coordination](#)

[Purpose & Need](#)

[Prelim Design & Tech](#)

[Categorical Exclusion](#)

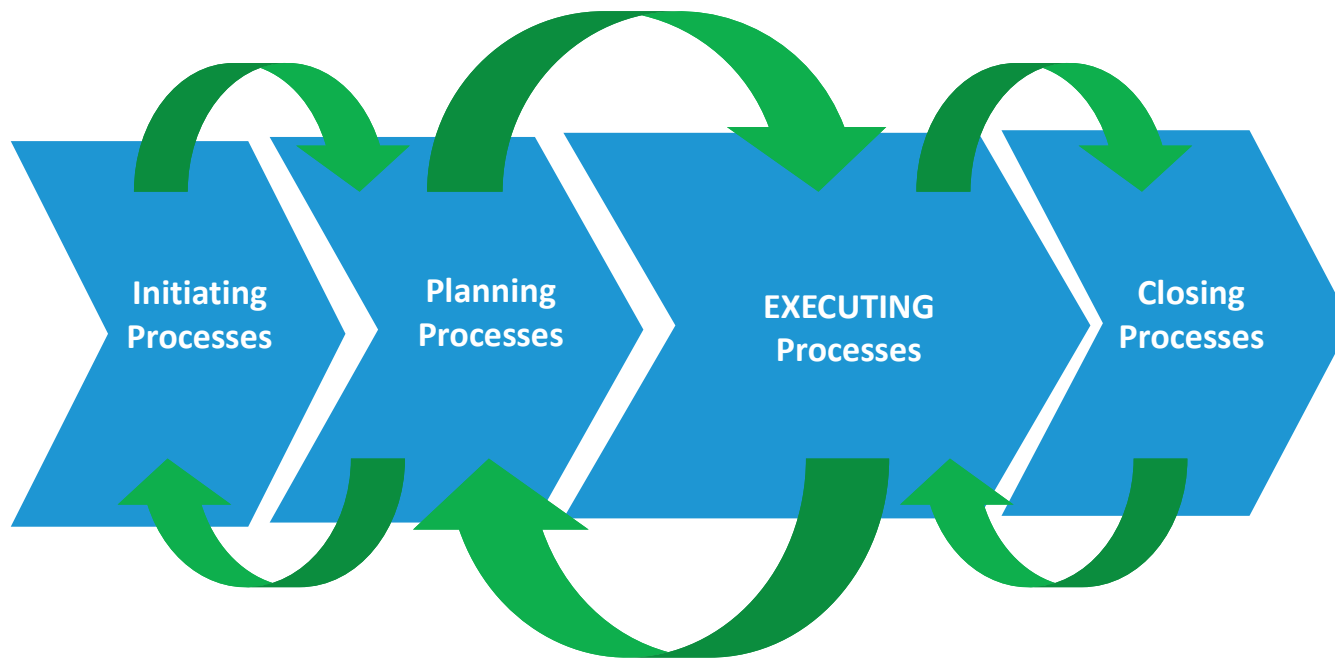
Executing Issues Log Template

Issue Type	Who raised issue?	When issue raised?	Desc.	Classification	Resp. Party	Status	Final Solution
Possible types: cost, scope, schedule, quality or combination				Define escalation level, if not resolved at lowest level, document change when it occurs	Assign responsible party to lead resolution	Monitor progress to assure timely resolution	Record solution and basis. If change required, follow Change mgmt. Process

Record and track all issues above Level 1 (see escalation protocol from R&R); assign responsibility for logging issues

What Am I Doing Today?

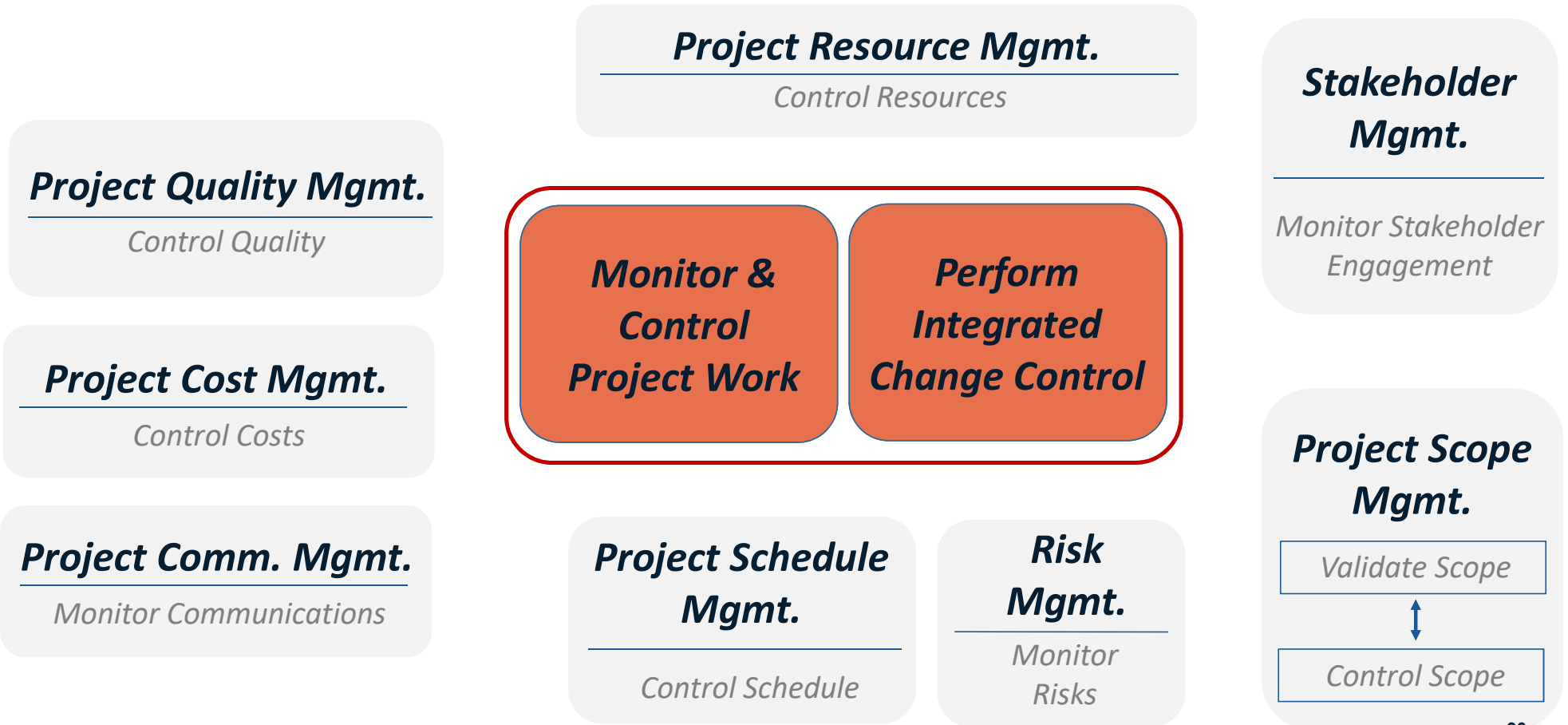
Monitoring and Controlling Processes



Monitoring & Controlling Processes occur throughout
Emphasis during Executing

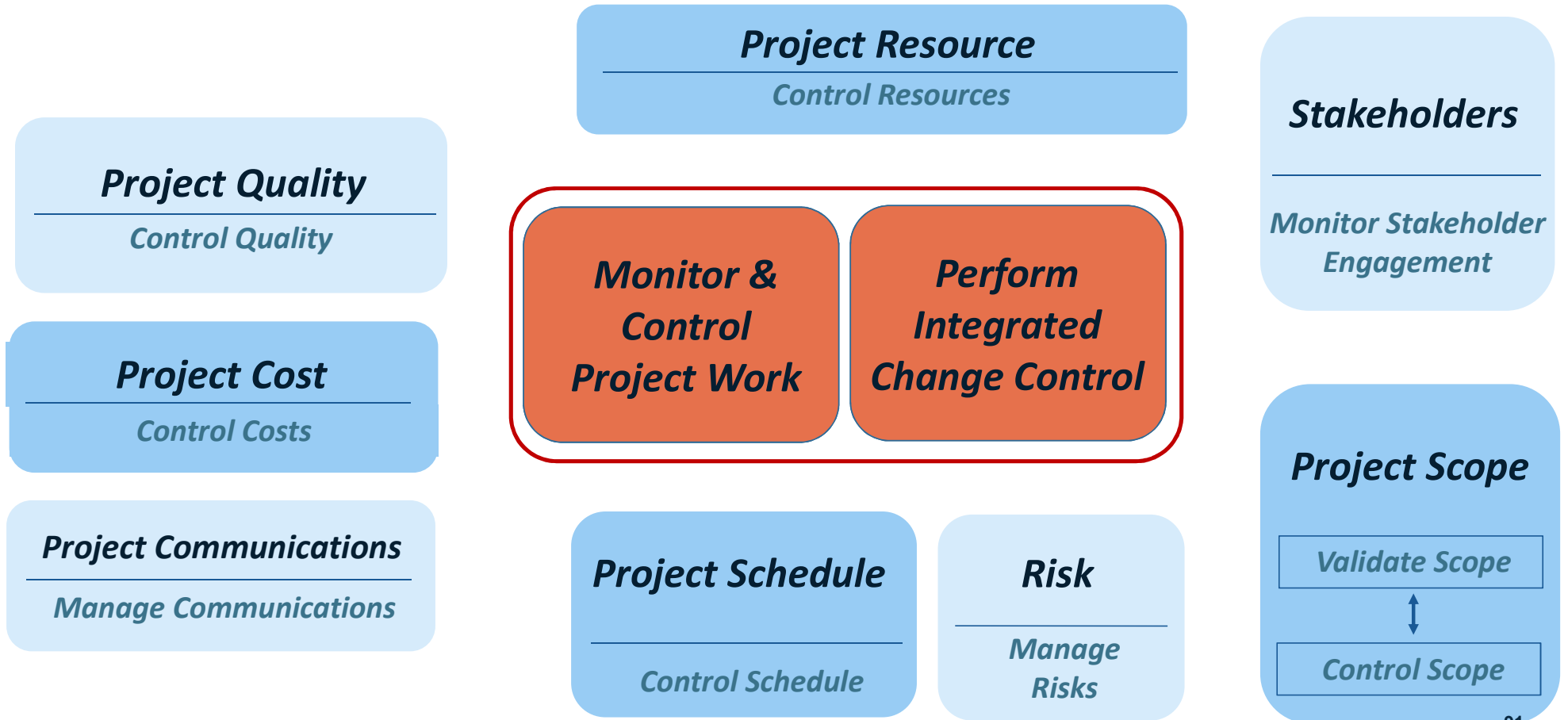
What Am I Doing Today?

Monitoring and Controlling Elements



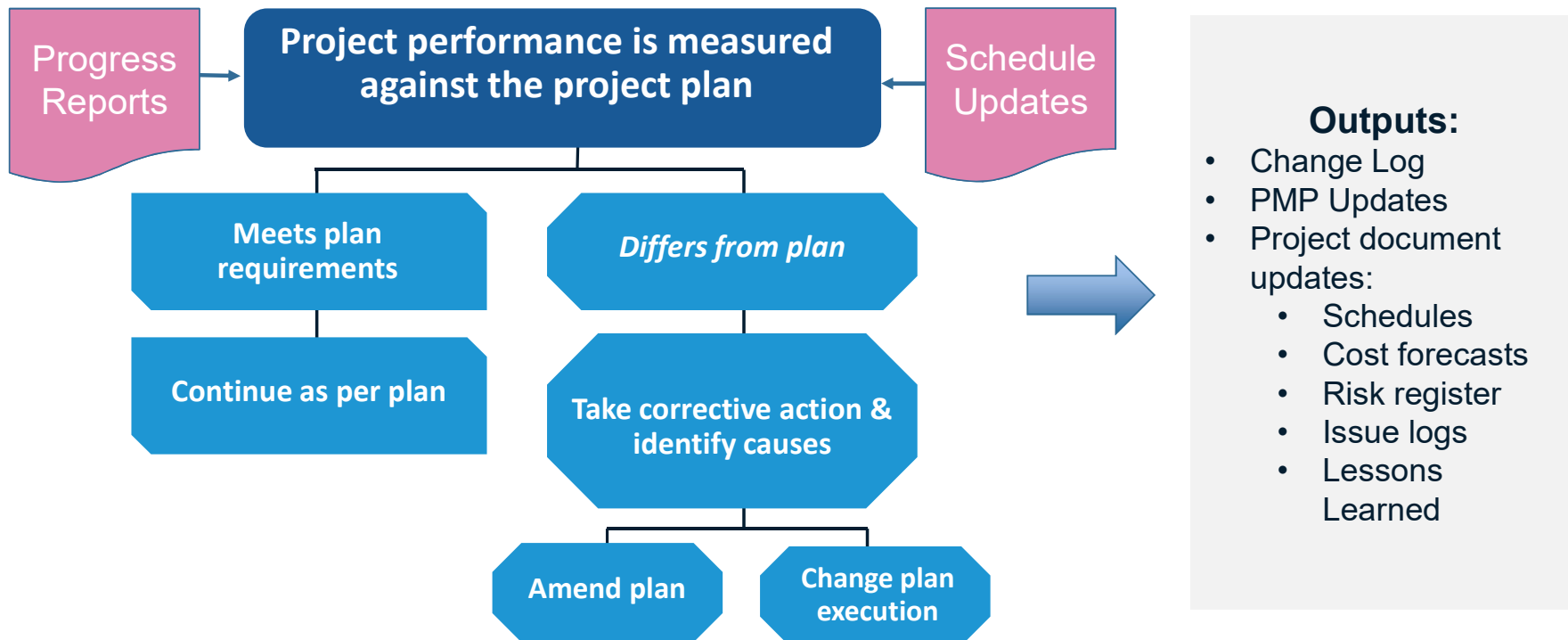
Monitoring and Controlling

What am I doing today?



What Am I Doing Today?

Monitoring and Controlling OUTPUTS





Change Management

Change Management



Change Management Objectives

Manage each change request from initiation through to closure;

Process change requests based upon direction from the appropriate level of authority; and

Communicate the impact of changes to appropriate personnel

Change Management

Why Manage Change?

Because it ensures thorough analysis of potential impacts, for example:

- **Rework to design, plans, and specs**
- **Environmental impacts**
- **ROW impacts**
- **Cost impacts**
- **Change to utility plans**
- **Missed milestones and/or letting date**
- **Additional and/or different types of expertise**

Change Management Plan

Outlines process for...

- Identifying
- Documenting
- Evaluating
- Approving
- Implementing

...project changes

*Failure to manage
change is a leading cause
of project delivery
problems*

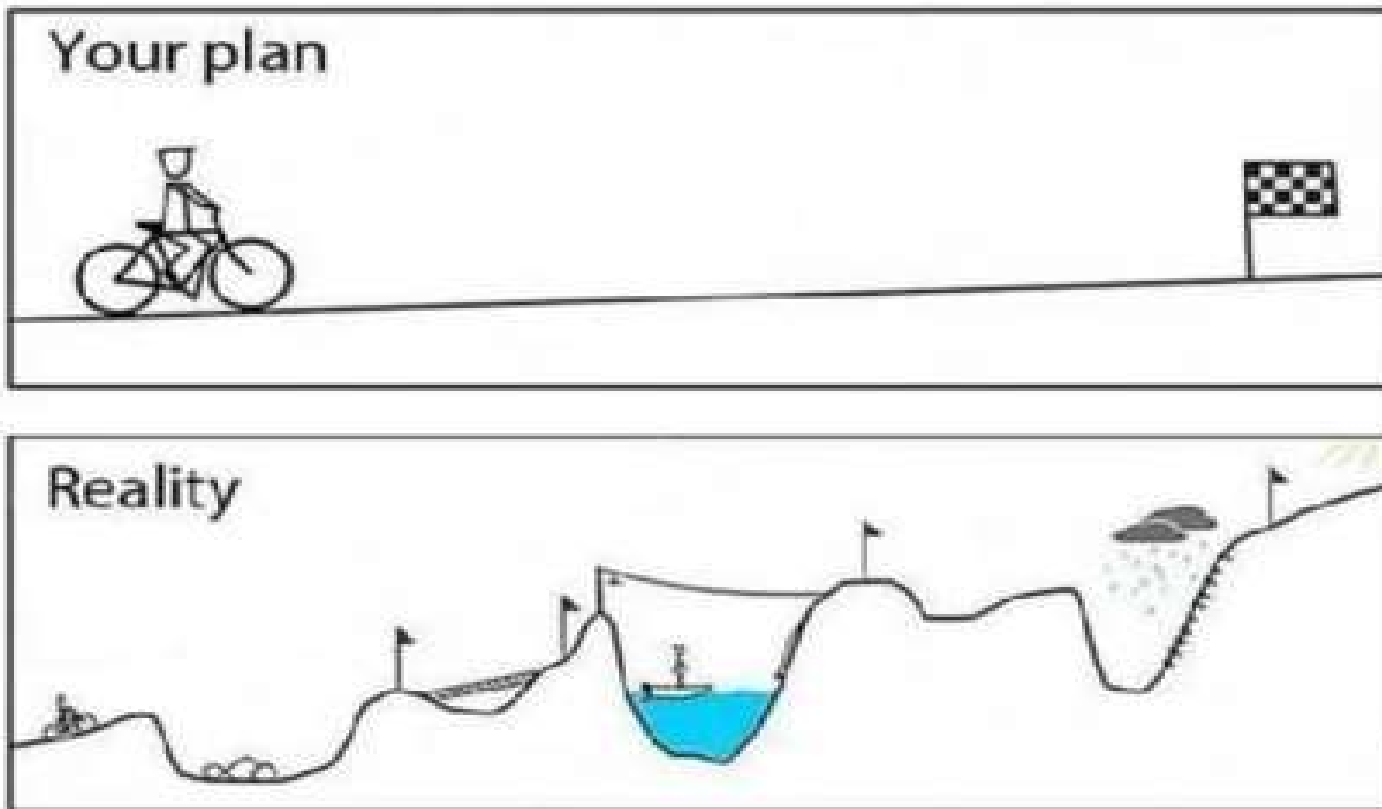
Examples of Changes

- **Scope**
 - Additions, Reductions, Modifications
- **Schedule**
 - Regular updates, Acceleration, Delays, Change to Critical Path
- **Staffing**
- **Budget**

Change Mgmt: Key Takeaways

- **New NCDOT-specific approaches for risk and change management are being developed**
- **Proper risk and change management**
 - Saves time
 - Protects budget
 - Protects quality
 - Allows opportunities to be seized
- **Starts at initiation and runs through Closing**
- **Project Manager has ultimate responsibility**

Change Happens...



“One of the true tests of leadership is the ability to recognize a problem before it becomes an emergency.”

~ Arnold Glasow

Break Out Exercise

Risk & Change

Form
Groups

Break into assigned groups

Group
Discussions

List 2-3 specific negative and at least 1 positive risk you typically see on projects. Discuss possible mitigation strategies and what changes they might create if they occur.

Report
Out

Each group provides a brief description of results

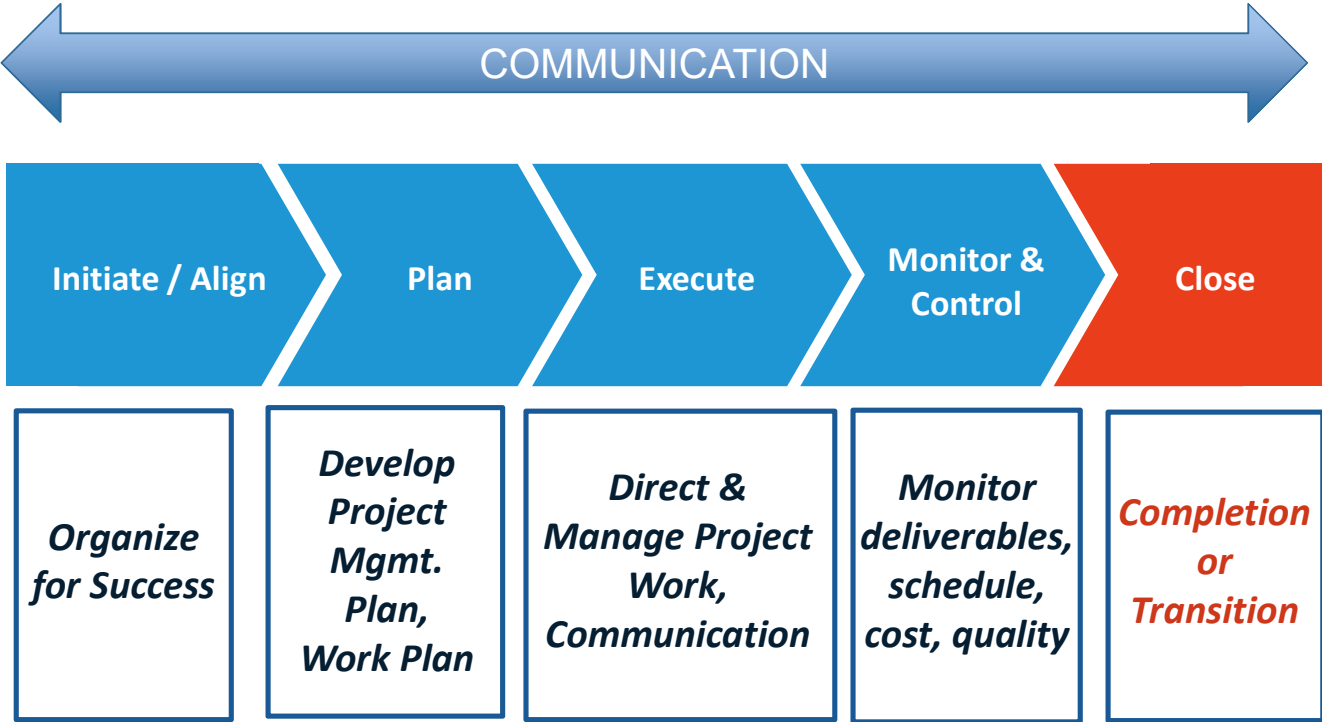
Handout: Risk & Change Exercise

Action Plan (Personal)

List actions you will take to improve your project management performance based on your role: Project Manager, Technical Unit position, etc.

<i>PM Processes</i>	<i>Personal Actions</i>	<i>Team Suggestions</i>
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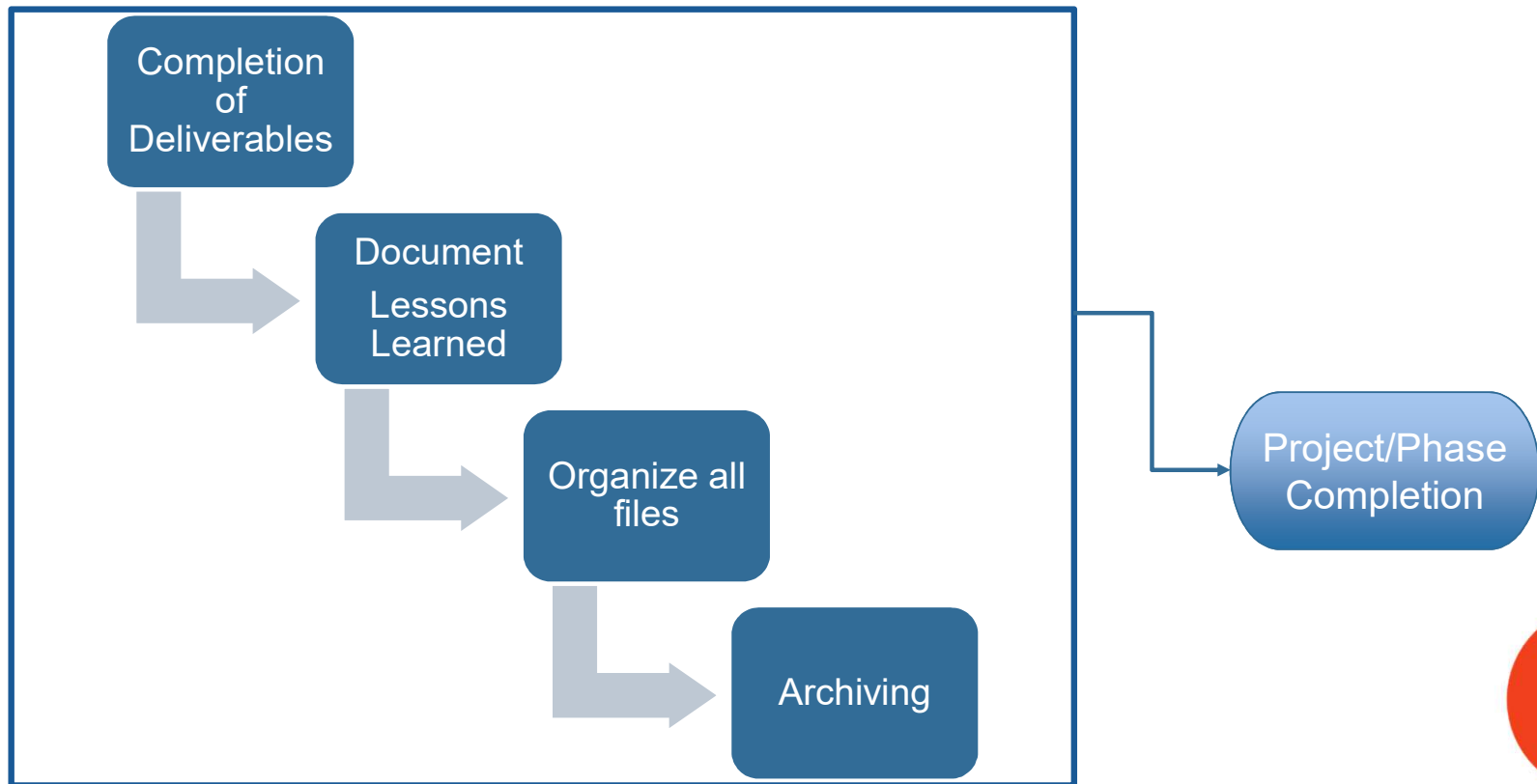
Project Management Steps: CLOSE



A task is not done until it is done. – Louis Fried 1992

Transition and Closure

On lessons learned – don't look where you fall, but where you slipped. – African Proverb



Lavish credit on anyone and everyone who helped you the least bit. – Tom Peters

Being a Better PM...

Start your Project with a Kick-off Meeting

- Communicate project objectives, roles and responsibilities, review draft milestone plan and make sure everyone is on the same page. **GET FEEDBACK FROM TEAM**

Be Proactive

- **“Why do so many professionals say they are project managing, when what they are actually doing is firefighting?” – Colin Bentley**
- Be sure everyone is aware of deadlines

Document

- Ensure short and sharp documentation of all important elements particularly assumptions, issue resolution and changes

Regularly communicate with your Team & Stakeholders

- Emphasize people-to-people communication over written
- Get regular feedback on progress from your Team

Pulling it all together...

“Right-size” PMP to Project

PMP Components

- *Project description/scope*
- *Team mission*
- *Roles & Responsibilities*
- *Measures of Success/KPIs*
- *Milestones*
- *Budget*
- *Schedule*
- *Operating Guidelines*
- *Stakeholders*
- *Risk Management*
- *Other: Change Mgmt, Comm. Plan, Quality Plan*

Review WSDOT PMP Examples

PMP Handouts



Break Out Exercise

Project Management Plan

Form
Groups

Break into assigned groups - each group receives assigned component of PMP

Group
Discussions

Using the Project Scope Example, prepare
All: Critical Stakeholders, Measures of Success PLUS
1, 2 - Internal Operating Guidelines
3,4 – Current Risks
5,6 – External Communication
BONUS (if you have time): Team Mission

Report
Out

Each group discusses their process and brief description of results

Handout: PMP Exercise

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Reminders for the Successful PM...

Build the right Project Team

Have a clear and well thought out PMP, including Microsoft Project Schedule, updated regularly

Start your Project with kick-off meeting

Calmly and thoughtfully lead your Team through a successful project using the PM Processes

Ensure short and sharp documentation of all important elements

Regularly communicate with your Team & stakeholders

Schedule regular project reviews

Manage, don't react to, risk

Proactively manage change – use issue log

Don't forget Lessons Learned at end of Project

Recognize your Team's contributions

IPD Support

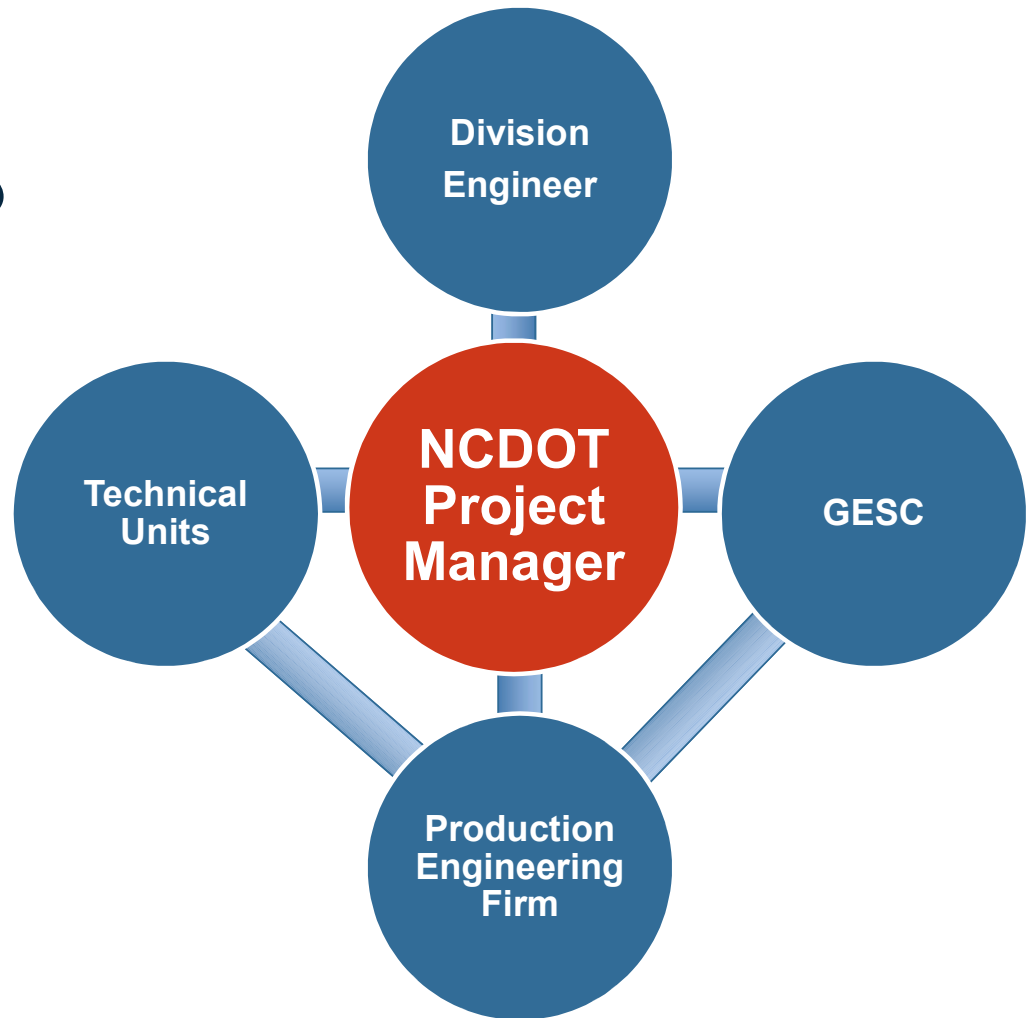
- **Keep Current with Project Management webpage**
 - On [Connect NCDOT/Projects](#)
- **Questions/Assistance/Suggestions**
 - Submit request through the Project Management webpage using the Contact Form on [Connect NCDOT](#)

Day 2 – Session 3



Partnering and Working as a Team

Who is the Project Team?



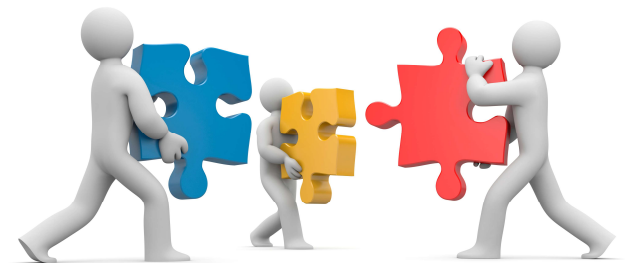
Challenges



Building the Project Team

Carefully assess the *capabilities, resources, and availability* from:

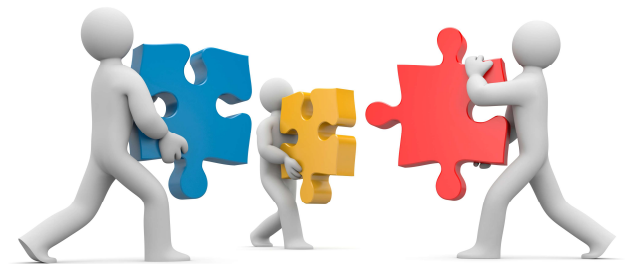
- Division staff
- Technical Units
- Consultants
- GESC



Building the Project Team

Working with Technical Units

- Work through Head of the Technical Unit head to identify internal staff
- If using PEF, discuss options with Technical Unit (identify multiple firms)
- Get coaching on processes and deliverables



Building the Project Team

- Consider lines of authority and project control issues
- Ask tough questions
- Require commitments whether internal or external
- Do what is best for the project
- Use PMU/Sr. PMs as a resource



Using PMP to become ONE TEAM

Clearly defined Roles & Responsibilities and expectations for the team – DOCUMENTED

- Consultant role in Project Management support
- Priorities
- Decisions will be made by...
- Understand the structure/authority



Using PMP to become ONE TEAM

Importance of Team Alignment

Importance of Integrated Schedule

- All Deliverables
- Critical Path
- Review Times



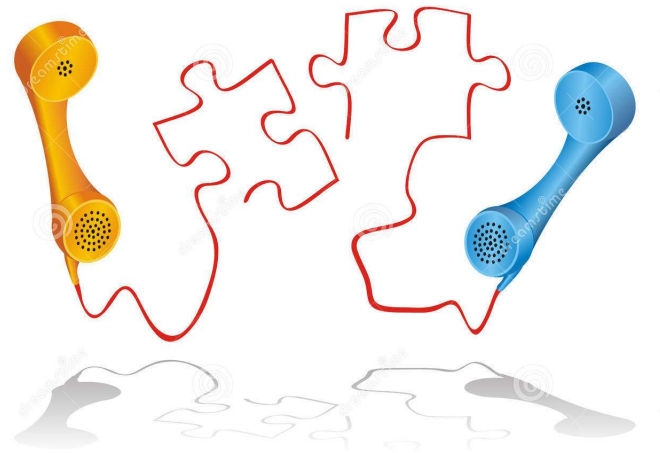
Using PMP to become ONE TEAM

SharePoint

- Standard PMI-based structure for all projects

Communications Plan – Communication Flow

- Consultant
- Internal DOT
- External agencies
- Stakeholders
- TAC, PAC, PMT, etc.?



Using PMP to become ONE TEAM

Identify reporting timelines

- What needs to be reported?
 - Note NCDOT PM and Executive Status Reports
- Format
- Frequency
 - Monthly? More frequently?



Using PMP to become ONE TEAM

Meetings and Minutes

- Who prepares and distributes?
- Timelines for delivery
- Identify responsibilities for internal and external meetings
 - Pros and Cons of Consultant lead
 - Develop a protocol (who, how, etc.)



Using PMP to become ONE TEAM

Importance of regular status updates

- Tailor to fit the stage of the project

Data Transfer & Sharing

- SharePoint
- Email
- FTP sites
- US mail



One Team Working Together

Internal Units & Consultants

Document and resolve issues

- Document issues as they arise and establish process to resolve (Issue log). Utilize the Escalation process discussed in R&R training

Quickly address conflicts

- Address issues promptly
- Be clear and factual about any conflicts
- Critique actions, not individuals

Treat others with professionalism and respect

- Maintaining these relationships is critical to project success



Starting off right: Project Kick-off

PMP elements

- Schedule and milestones
- Communications
- Stakeholder Involvement
- Project Baseline
- QA/QC



Starting off right: Project Kick-off



Quality is everyone's
responsibility.

W. Edwards Deming

Starting off right: Project Kick-off

- Risk Management
- Provide sample documents
- Identify required standards
- Discuss deliverables



Starting off right: Project Kick-off

- Identify preferences (be sure what Tech Units want/need)
- Confirm the schedule and milestones
- Make effective use of issue logs to document items as they occur



Starting off right: Project Kick-off

Out-of-Scope work, develop a process to:

- Identify the work as quickly as possible
- Agree to the Scope, budget, and schedule changes necessary
- Document changes
- Approvals – identify requirements
- Proceed with the work



Think about it...

Take 2-3 minutes and write down something you can personally do with your team to:

- Improve morale and generate enthusiasm
- Raise the bar on quality
- Identify new or different ways to get things done that benefit the project



Project Development: Problems

- **Understand that problems can and do happen**
 - Product submittal is late
 - Product quality is poor
 - Budget issues
 - Turn-around time for reviews



Project Development: Problems

- Look for the factors that may cause problems
- Problems are not always one sided
- Don't let any concern (little or big) go unresolved



Project Development: Problems

As the DOT PM

- Work directly with the consultant PM
- Do NOT direct sub-consultants
- If issue cannot be worked out with PM, ask for new contact with whom you can discuss issue

Most problems can be minimized or avoided with good communications



Project Development: Problems

- Stick to the scope of the contract
- Don't ask for extra work unless you are willing to pay for it and provide additional time
- When asking for new or changed work, find out what is on the other side of the “but”
 - *“We can do that, but...”*



Project Development: Problems

Ensure:

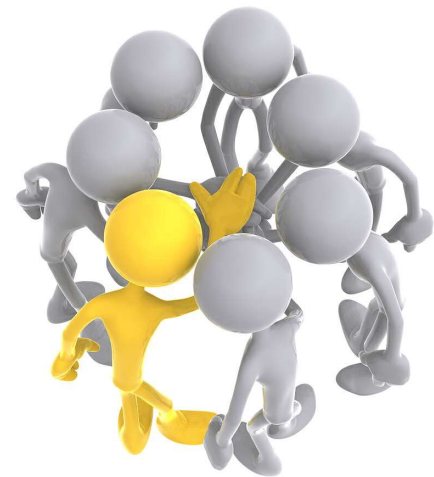
- Internal DOT reviews are performed in timely manner
- DOT review comments are vetted before returning them
- Consultants are provided what they need to work effectively



Project Development: Reviews

It's your project. Nobody else is going to drop everything when materials come in for review.

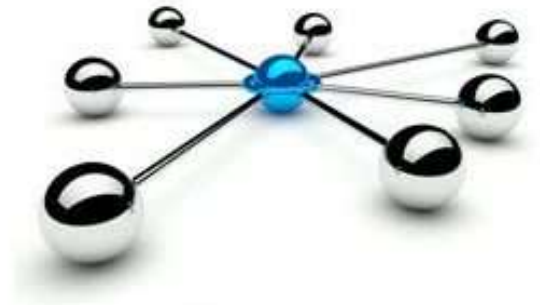
- **As the DOT PM, be sure to:**
 - Include reviews in project schedule
 - Agree ahead of time on review duration and timing
 - Give advance warning to technical groups of impending reviews
 - Notify them if schedule changes
 - Make them understand that *if they don't review it now, they can't change it later*



Project Delivery

The level of detail should be scaled to your project!

- The DOT and consultants share the same goals for project delivery – **TEAM effort**
- Clear PMP is roadmap for project
- Constant 2-way communications, DOT PM is the hub!
- Create response and turn-around requirements



Project Delivery

- Follow communication protocol and use points-of-contact
- Regular in-person Project Management Team (PMT) meetings including DOT technical units
- Clear meeting agendas and detailed meeting minutes with action items – Accountability
- Regular phone meetings between consultant and NCDOT project managers
- Manage changes, don't be a victim of changes

Project Delivery

- Timely invoices
- Early discussion of scope changes, need for contract amendments
- Running “Action Items List”
- Follow QA/QC Plan
- Be specific on timelines

Stakeholder Involvement

- Ongoing communication makes project management engine operate efficiently and effectively
- PM maintains communication with internal parties and with external stakeholders
- Clear and timely communication = success
- Based on project needs, develop a specific Public/Stakeholder Involvement Plan
 - Folds into Communications Plan



Stakeholder Involvement

- Identify stakeholders involved
- Determine their needs and wants (Regulatory? Special needs?)
- Identify communications options
- Consider special teams (PAC, TAC, PMT, etc.)



Stakeholder Involvement

Considerations when working with Stakeholders

- They can kill your project
- Understand their agendas
- Clearly explain their roles (Advisory, decision making, other?)
- Is a MOU/MOA or other document appropriate?



Active Listening Skills

- **Observe** – non-verbal behavior
- **Focus** – don't do anything else while listening
- **Acknowledge** – acknowledge the message, even if you don't agree with it
- **Respect** – let the speaker finish
- *It's not About the Nail*

Project Team Communication Methods

Active Listening



Most people do not listen with the intent to understand; they listen with the intent to reply.

Stephen R. Covey

quote fancy

Think about it... (again)

Look at the list you started earlier in this session with things you can do with your team to improve morale and generate enthusiasm, raise the bar on quality, and identify innovate processes.

- Is there anything you want to add?

