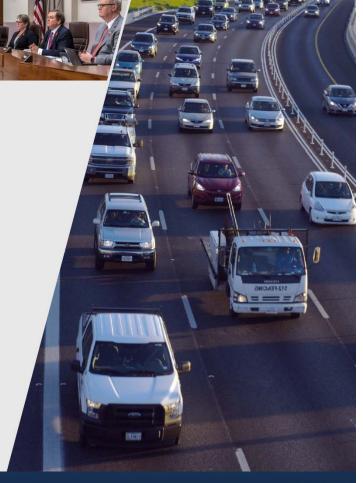


# 2019 Transportation Project Delivery Conference



October 2019

#### Welcome!





Poll Everywhere
Text 2019TPD to 22333
once to join

Submit Feedback PPM\_Helpdesk@TxDOT.gov



#### **Safety Briefing – Double Tree by Hilton**



#### For Medical Emergencies

- Please call 911
  - Address: 6505 IH-35 North, Austin, TX 78752

#### In Case of Tornado/Inclement Weather

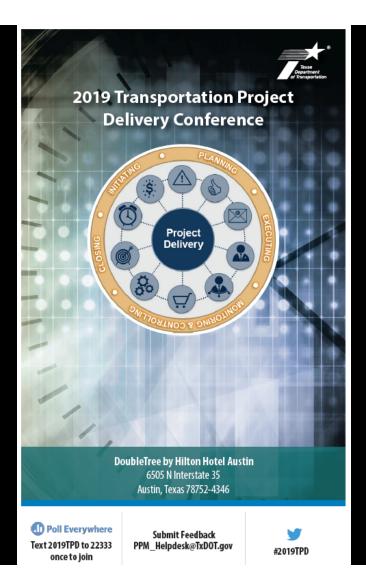
- Stay inside
- Move away from exterior walls and windows
- Shelter in this room

#### In Case of a Fire, or other need to evacuate building

- Fire Extinguishers are marked and located in hallways
- We will evacuate through exit doors to the right and proceed to the green space in front of the hotel South towards Pappadeaux

#### In Case of Active Shooter/Bomb Threat

Follow instructions from the public address system and onsite personnel



#### Thank You, Exhibitors!





#### **DANNENBAUM**



















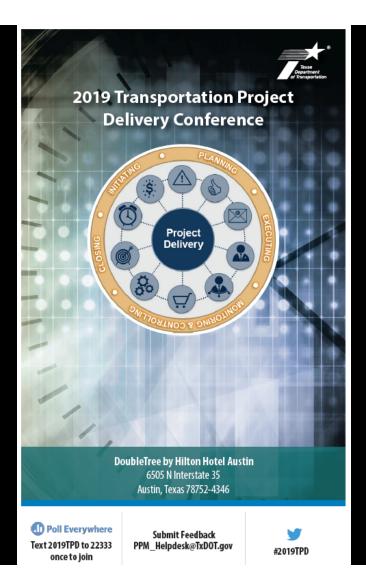
October 2019

#### **Opening Speaker**





Brian Barth, P.E.
Texas Department of Transportation
Director of Project Planning &
Development



#### Thank You, Exhibitors!





#### **DANNENBAUM**







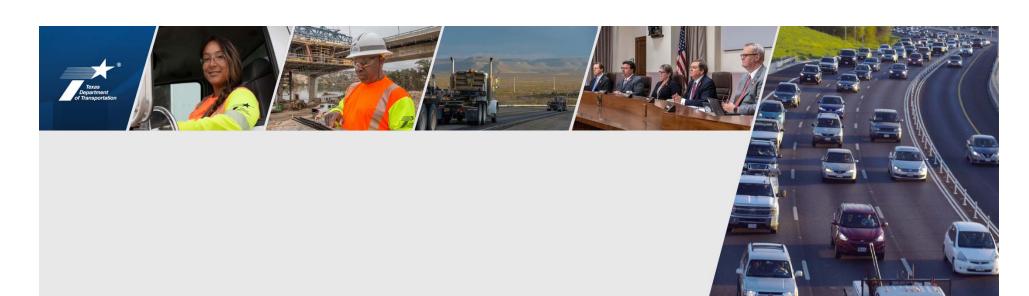












# Project Delivery Perspectives

**2019 Transportation Project Delivery Conference** 

October 2019

#### **Panel Members**

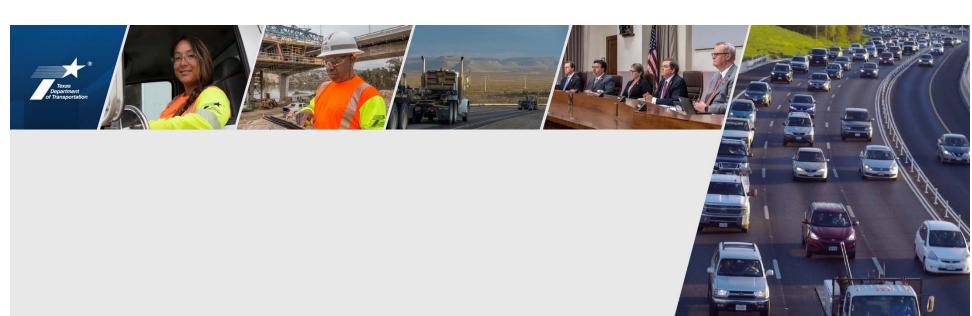




Brian Barth, P.E.
Texas Department of Transportation
Director of Project Planning &
Development



Michael Lee, P.E.
Texas Department of Transportation
Director of Engineering &
Safety Operations



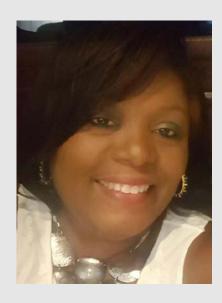
# **Project Management Foundation**

**Transportation Project Delivery Conference** 

October 2019

#### **Session 1 Speakers**





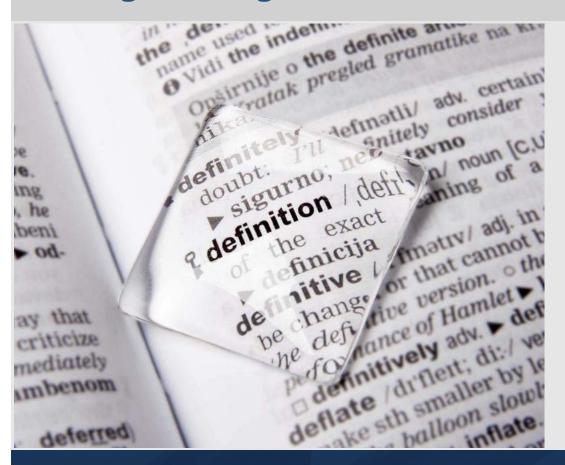
Regaynal Poplion
Right of Way Division
Texas Department of Transportation



Darren McDaniel Transportation Programs Division Texas Department of Transportation

#### **Defining Terminologies**





Project

Program

Portfolio



#### Project

A temporary endeavor undertaken to create a unique product, service or result.



#### **Project Management**

The application of knowledge, skills, tools and techniques to project activities to meet the project requirements.

### Examples of Transportation Projects Managed at TxDOT:

- · Bridge replacement
- Median barrier installation
- Signal improvement at an intersection
- Seal coat project on a rural highway
- Converting undivided highway to divided highway
- Constructing a hike and bike trail



#### Process Groups

What Project Managers **DO** 

- Initiating
- Planning
- Executing
- Monitoring & Controlling
- Closing

#### **Knowledge Areas**

What Project Managers need to **KNOW** 

- Integration Management
- Scope Management
- Schedule Management
- Cost Management
- Risk Management

- Quality Management
- Communication Management
- Stakeholder Management
- Resource Management
- Procurement Management

#### **Program**



#### Program

Related projects that are managed in a coordinated manner to obtain benefits not available from managing them individually.

#### **Program**



#### Program Management

The application of knowledge, skills, and principles to a program to achieve the program objectives and obtain benefits and control not available by managing program components individually.

### Examples of Transportation Programs Managed at TxDOT:

- CAT 6 Bridge Program
- CAT 8 Safety (HSIP)
- I-35 Program
- Preventive Maintenance Plan
- CAT 4 Connectivity
- Local Government Program

#### **Portfolio**



#### Portfolio

Projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives.

#### **Portfolio**



#### Portfolio Management

The centralized management of one or more portfolios to achieve strategic objectives.

### Examples of Transportation Portfolios Managed at TxDOT:

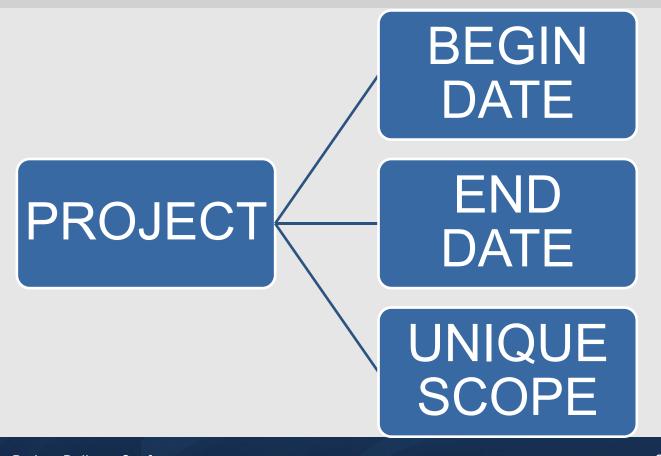
- Agency Portfolio
- District Portfolio
- ROW Portfolio

#### **Project - Program - Portfolio**



# RECAP





#### **Program**



PROGRAM

PROJECTS

MANAGED IN A
COORDINATED
WAY

# **Portfolio PROJECTS** PROGRAMS PORTFOLIO SUB PORTFOLIO'S MANAGED AS A GROUP TO ACHIEVE BUSINESS OBJECTIVES

#### **Project, Program and Portfolio Management Relationship**



### Projects

Bridge Widening, Bridge Replacement

Median Barrier, Signal Improvement

> I-35 & Parmer, I-35 & Oltorf

Seal Coats, Overlays

US 281Divided /Super2

Hike and Bike

### Programs

CAT 6 Bridge

CAT 8 Safety

Mobility I-35 Program

Preventive Maintenance Plan

**CAT 4 Connectivity** 

**Local Government** 

#### **Portfolios**

Agency Portfolio

District Portfolio

**ROW Portfolio** 

#### **Audience**





#### **Join by Text**



- Text the number 22333
- Text the message 2019TPD

#### Join by Web

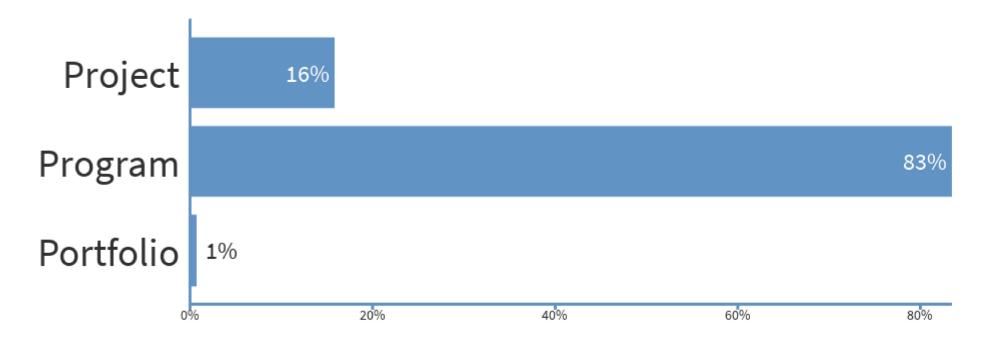


- 1 Go to PollEv.com
- 2 Enter 2019TPD
- Respond to activity

When poll is active, respond at PollEv.com/2019tpd

☐ Text 2019TPD to 22333 once to join

# Widening all narrow highways (less than 24 feet wide) to improve safety.



When poll is active, respond at PollEv.com/2019tpd

☐ Text 2019TPD to 22333 once to join

# Upgrading a highway from 2 lanes to 4 lanes with a construction budget of \$2.1 million beginning in Spring 2020 and expected completion in Fall 2021.



When poll is active, respond at PollEv.com/2019tpd

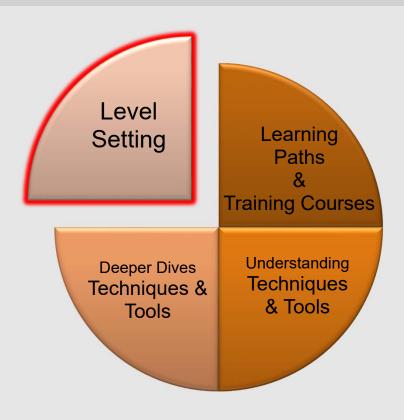
☐ Text 2019TPD to 22333 once to join

#### Statewide Long-Range Transportation Plan



#### **Project Management Discipline Workshop**





#### **Fundamentals of Project Management**





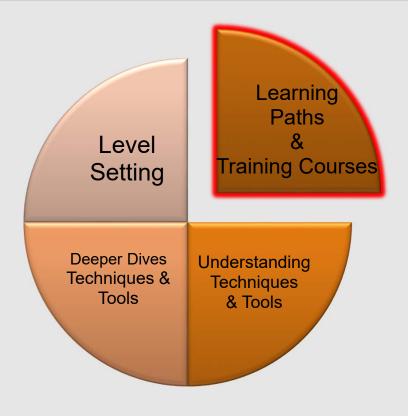
Knowledge Areas cover what a project manager needs to know in order to successfully manage a project and achieve desired results.

**Project Process Groups** cover what a project manager has to **do** in order to deliver a project successfully.

Each of the Knowledge Areas and Process Groups overlap, interact and depend on each other!

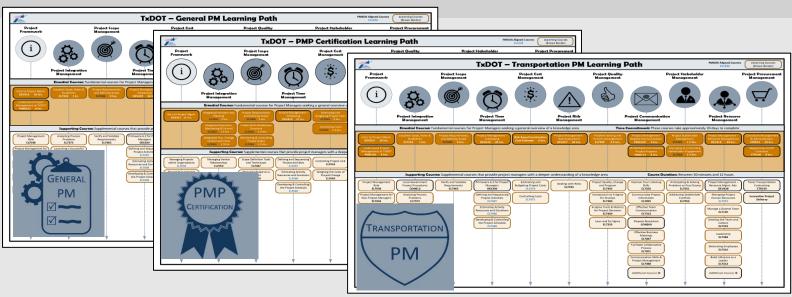
#### **Project Management Discipline Workshop**





#### **Learning Paths for the Project Management Training Program**





The PM Learning Paths provide a suggested sequence of courses geared towards

- General Project Managers,,
- Individuals seeking <u>PMP Certification</u>
- and <u>Transportation Project Managers</u>
- Essential and Supporting Courses
- Instructor-Led and eLearning

#### **PMD Training Courses**



	Class	Title
PROJECT MANAGEMENT TRAINING CLASSES  Project & Portfolio Management Instructor-Led Courses	PMD 103	Transportation Scheduling Using P6
	PMD108	Construction Contract Time Determination for Transportation Projects Using P6
	PMD 120	Project Scope Management
	PMD 140	Risk Based Construction Cost Estimate
	PMD 141	Three-Point Estimating (Quantity, Duration, Cost)
	PMD 151	Transportation Project Risk Management
	PMD 300	Transportation Project Management at TxDOT

#### **Project Management Training Courses**

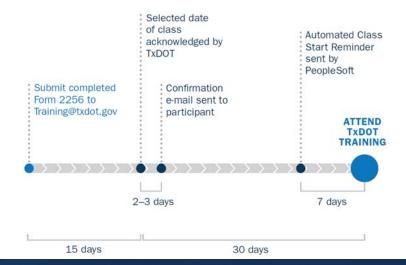


## NON-TXDOT PARTICIPANT ENROLLMENT PROCESS

- Form 2256
- http://txeform/lc/apps/ws/index.html#
- Training helpline at (512) 416-2000

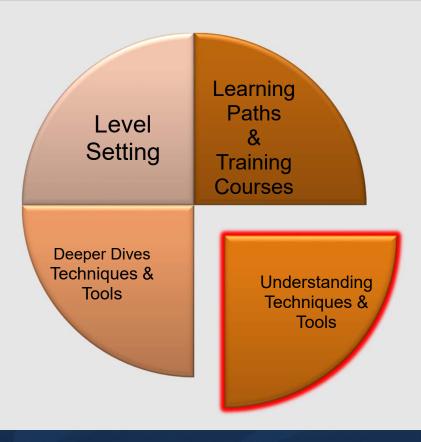
#### Who is eligible to attend?

In addition to TxDOT employees, consultants, contractors, government employees and employees of other publicly funded organizations (i.e. Traffic Safety, Public Transportation and Metropolitan Planning Organizations) are eligible to attend our project management courses. Active TxDOT employees have first priority. Vacant seats are offered on a first-come, first-serve basis.



#### **Project Management Discipline Workshop**



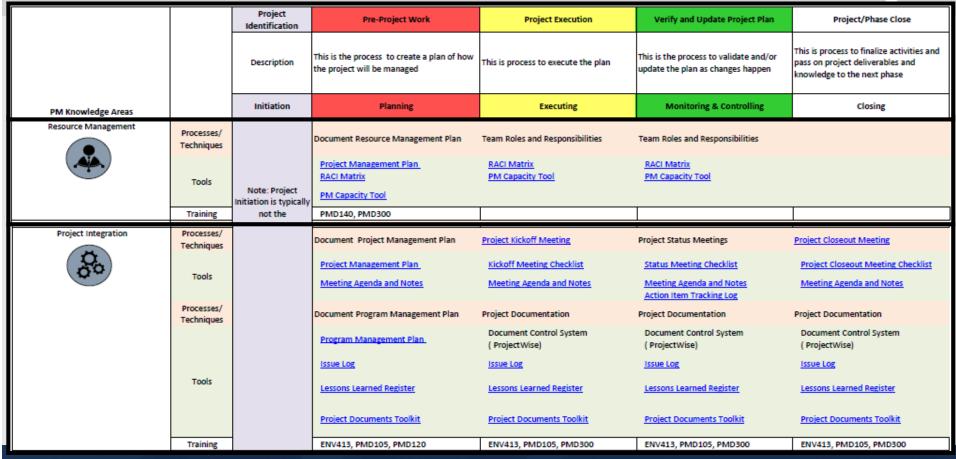


#### **PPM Matrix**



		Project Identification	Pre-Project Work	Project Execution	Verify and Update Project Plan	Project/Phase Close
		Description	This is the process to create a plan of how the project will be managed	This is process to execute the plan	This is the process to validate and/or update the plan as changes happen	This is process to finalize activities and pass on project deliverables and knowledge to the next phase
PM Knowledge Areas		Initiation	Planning	Executing	Monitoring & Controlling	Closing
Stakeholder Management	Processes/ Techniques		Document Stakeholder Management Plan	Document Project Stakeholders	Document Project Stakeholders	
	Tools		Project Management Plan	Stakeholder Register	Stakeholder Register	
	Training		ENV413, OPI100, PMD108, PMD151, PMD300, ROW100, ROW101	ENV413, OPI100, ROW100, ROW101	ENV413, OPI100, ROW100, ROW101	PMD300, ROW100, ROW101
Quality Management	Processes/ Techniques		Document Quality Management Plan	PM Role in QA/QC	PM Role in QA/QC	
	Tools Processes/ Techniques		Project Management Plan  Schedule Quality Processes	Review Comments Resolution	Review Comments Resolution Schedule Quality Processes	
	Tools		Acumen Fuse		Acumen Fuse	
	Training		CTR616	CTR616	CTR616	
Risk Management	Processes/ Techniques		Document Risk Management Plan	Risk Management Process	Risk Management Process	Risk Management Process
	Tools		Project Management Plan	Risk Primer Risk and Issue Register Risk Workshop (Video)	Risk and Issue Register Risk Workshop (Video)	Risk and Issue Register
	Training		PMD108 , PMD300, ROW100, ROW101	PMD151, ROW100, ROW101	PMD151, ROW100, ROW101	ROW100, ROW101

#### **PPM Matrix**



TOOLS

YOUDECIDE

RACI Matrix

Stakeholder Register

Risk and Issue Register

Action Item Tracking Log

Kick Off Meeting Checklist

**Review Comments Resolution** 

When poll is active, respond at PollEv.com/2019tpd

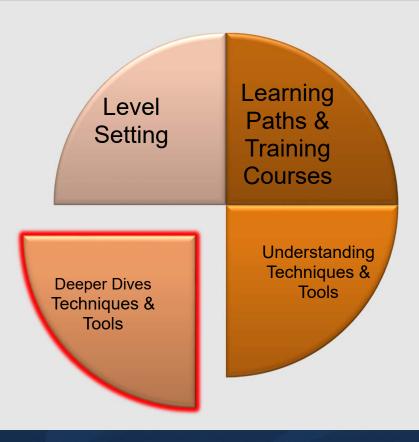
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### **PPM Tool - Deeper Dive**



### **Project Management Discipline Workshop**

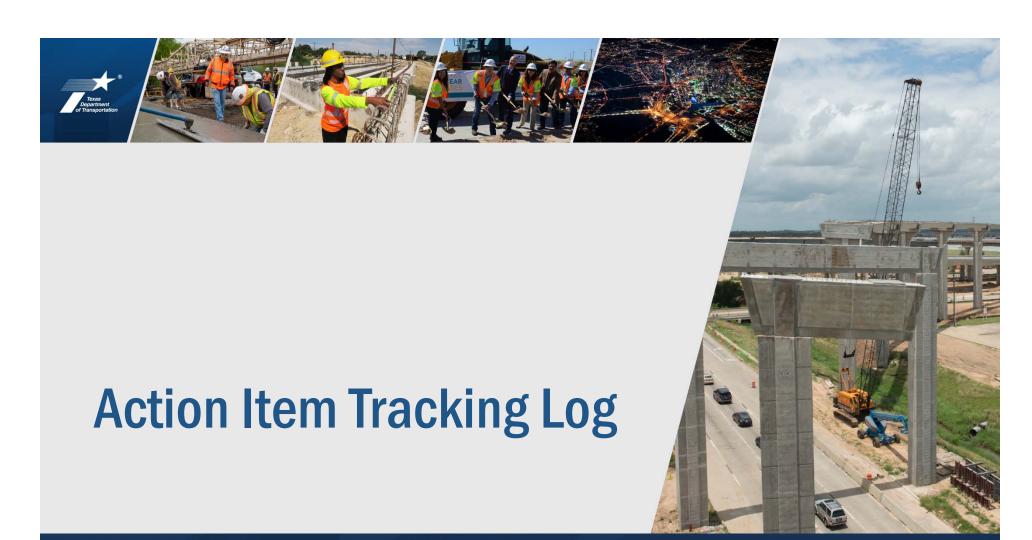




### **Deeper Dives**

- 1 Action Item Tracking Log
- 2 Kick Off Meeting Checklist
- 3 RACI Matrix
- 4 Review Comments Resolution
- 5 Risk and Issue Register
- 6 <u>Stakeholder Register</u>

Topic 2



October 2019



To provide a way to capture action items, communicate those action items to your team, and to track progress on those action items as the project progresses. It also serves as a permanent record of the action item after being completed.

# TITLE (2-3 words about action item)	DESCRIPTION (2-3 sentences that explain action item)	ASSIGNED TO (Person responsible for completing and / or tracking action item)	BALL-IN- COURT (Individual / organization action item is with right now)	DUE DATE (When action item is due)	NEXT STEPS / STATUS (Make sure to include clear direction and movement on the action item)
30% plans review	Review and provide comments on 30% plans for Johnny Jogger Expressway.	Betsy Bob	Jane Doe (Division Design)	8/22/2014 (Friday)	Jack to follow up with Jane at DES to make sure she has everything she needs, answer any questions, and see if we are on schedule with the review.
Geotechnical report review	Identify someone to review geotechnical report. Anticipate receiving report first week of September. (This is a critical path item. Review comments will be due back to consultant within 30 days.)	JJ Talker	PDQ Consulting, Inc.	8/15/2014 (Friday)	Work with Bob to identify who can review. Follow up with that person to make sure they knothis is coming and understand the urgency.
1 2		-			



#### TITLE

(2-3 words about action item)



#	TITLE (2-3 words about action item)	DESCRIPTION (2-3 sentences that explain action item)	ASSIGNED TO (Person responsible for completing and / or tracking action item)	BALL-IN- COURT (Individual / organization action item is with right now)	DUE DATE (When action item is due)	NEXT STEPS / STATUS (Make sure to include clear direction and movement on the action item)
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2						
4						



#### DESCRIPTION

(2-3 sentences that explain action item)



	Review and provide comments on 30% plans for Johnny Jogger Expressway.	Betsy Bob	Jane Doe	8/22/2014	Jack to follow up with Jane at DES to make sure
199	₽ ₽		(Division Design)	(Friday)	she has everything she needs, answer any questions, and see if we are on schedule with the review.
	September. (This is a critical path item. Review comments will	JJ Talker	PDQ Consulting, Inc.	8/15/2014 (Friday)	Work with Bob to identify who can review. Follow up with that person to make sure they know this is coming and understand the urgency.
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	port review	port review Anticipate receiving report first week of September.	port review Anticipate receiving report first week of September. (This is a critical path item. Review comments will	port review Anticipate receiving report first week of September. (This is a critical path item. Review comments will	port review Anticipate receiving report first week of September. (This is a critical path item. Review comments will



#### **ASSIGNED TO**

(Person responsible for completing and / or tracking action item)

#### Texas Department of Transportation

#	TITLE (2-3 words about action item)	DESCRIPTION (2-3 sentences that explain action item)	ASSIGNED TO (Person responsible for completing and / or tracking action item)	BALL-IN- COURT (Individual / organization action item is with right now)	DUE DATE (When action item is due)	NEXT STEPS / STATUS (Make sure to include clear direction and movement on the action item)
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#### BALL-IN-COURT

(Individual / organization action item is with right now)

#### Texas Department of Transportation

#	TITLE (2-3 words about action item)	DESCRIPTION (2-3 sentences that explain action item)	(Person responsible for completing and / or tracking action item)	BALL-IN- COURT (Individual / organization action item is with right now)	DUE DATE (When action item is due)	NEXT STEPS / STATUS (Make sure to include clear direction and movement on the action item)
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#### DUE DATE

(When action item is due)



#	TITLE (2-3 words about action item)	DESCRIPTION (2-3 sentences that explain action item)	ASSIGNED TO (Person responsible for completing and / or tracking action item)	COURT (Individual/ organization action item is with right now)	DUE DATE (When action item is due)	NEXT STEPS / STATUS (Make sure to include clear direction and movement on the action item)
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#### **NEXT STEPS / STATUS**

(Make sure to include clear direction and movement on the action item)



#	TITLE (2-3 words about action item)	DESCRIPTION (2-3 sentences that explain action item)	ASSIGNED TO (Person responsible for completing and / or tracking action item)	BALL-IN- COURT (Individual) organization action item is with right now)	DUE DATE (When action item is due)	(Make sure to include clear direction and movement on the action item)
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1						
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4						

### **Questions & Discussion**





**Deeper Dive List** 





October 2019



### Conduct a Kick Off Meeting at the start of each phase —

- Planning and Environmental
- Design
- Construction



#### PREPARATION CHECKLIST

Timeframes provided as guidance for **low** and **medium** rigor projects—some low rigor projects may only need 1-2 days for prep High rigor projects may require more than 2 weeks for prep

10 D	ays Before Meeting	5 to	10 Days Before Meeting
	Develop project schedule		Obtain and print maps for project overview
	Identify critical path and major milestones		Identify available budget / programmed amount
	Develop organization (org) chart		Obtain latest cost estimate (if applicable)
	Confirm org chart with supervisor		Review agenda and track down any other items that
	Identify teleconference information		need to be reviewed or prepared before the meeting
	Reserve conference room		Make sure everyone assigned to present an agenda item is aware of their role and has what they need
	Send meeting invitation		Obtain Project Management Plan and any other project
	Prepare draft RACI matrix	_	documents created during previous phase
	Review RACI matrix with supervisor		To ensure proper hand-off between project phases,
	Draft agenda		meet with prior project manager to discuss existing:
	Obtain / create Action Item Tracking Log		<ul><li>Risks and issues</li><li>Commitments</li></ul>
	and Issue Escalation Log		- Project documents
1 to 5	5 Days Before Meeting	Day	of Meeting
	Print agendas and sign-in sheet		Set up meeting room 20 minutes before meeting starts
	Gather all materials		
	Review who has accepted or declined		



#### INVITATION CHECKLIST - PROJECT TEAM AND STAKEHOLDERS

Potential participants to include in kickoff meeting — review invitation list with supervisor

- Support Staff
- Area Engineer
- District Design
- Advanced Project Development
- Environmental
- ROW
- Others as needed

#### **All Projects**

- Support staff
- Area Engineer
- Representative from District Design
- ☐ Representative from Advanced Planning and Design

#### **High Rigor Projects**

- ENV, Design Division, ROW, etc.
- Other offices
- District Engineer
- External stakeholders
- Local, State, and Federal Agencies



#### **AGENDA**

Potential topics to present / discuss during kickoff meeting
Agenda items and timing are provided as guidance and may vary per project — try to keep meeting to 1 hour

- Potential topics to present & discuss during kick off meeting are provided as general guidance
- Suggested durations are also listed

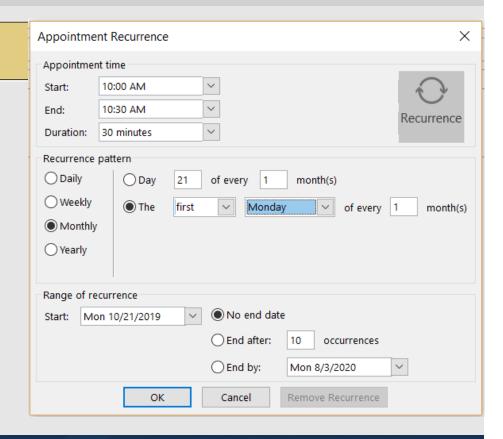
- ☐ Introductions (~5 minutes) Each person provide name and role on the project
- □ Sign-in Sheet (~1 minute) Explain sign-in sheet and begin passing it around
- Project Overview (~10 minutes) Go through project as you understand it
  - Limits / area of study Map of project
    - Planning and Environmental: High level / regional map
    - Design: Latest roll plot or schematic
    - Construction: Bid plans
  - Goals and objectives Not to be confused with purpose and need
    - Planning and Environmental goal example: Evaluating transportation improvements along Johnny Jogger's Expressway
    - Design / Construction goal example: Widening Johnny Jogger's Expressway from 4 to 6 lanes
  - Typical section To the extent known, depending on project phase
- Budget and Costs (~5 minutes)
  - · Programmed amount / available funds
  - Latest cost estimate (if applicable)
- Organization Chart (~5 minutes)
  - Chart overview
  - Contact information Confirm sign-in sheet is complete
  - Communication protocols
  - RACI Matrix Distribute and review, make updates, and answer questions on responsibilities
- Schedule (~5 minutes)
  - Major milestones
  - Long-lead items or other critical path items
- □ Document Control Protocols (~5 minutes) Quick review, note any special considerations
- Issues and Risks (~15 minutes) Consider having previous project manager at kickoff, to report on this agenda item
  - Issues Review existing issues and include relevant correspondence and key audiences involved
    - Definition: Events that already happened and are actively being managed
  - Risks Review existing risks
    - Definition: Events that could happen and are actively being mitigated
  - Risk Workshop For high rigor projects, schedule workshop and identify attendees; for low to medium rigor projects, consider workshop and discuss with supervisor and Field Agent
  - Commitments Review known commitments
- Action Item Recap (~5 minutes) Review action items captured during meeting, and ensure each has a clear description, assigned team member, and deadline
- Status Meeting (~1 minute) Explain you will be scheduling a regular / recurring status meeting and ask if anyone has schedule constraints on specific days or times
- Wrap Up and Close (~5 minutes) Allow time for attendees to bring up any remaining comments, and let attendees know you will send out meeting minutes and applicable documents as soon as possible



#### **FOLLOW UP CHECKLIST**

Items to address after kickoff meeting

- Update Action Item Tracking Log
- Complete Meeting Agenda and Notes
- Distribute these items to project team after Kick-off Meeting
- Schedule regular project status meetings using recurring invite

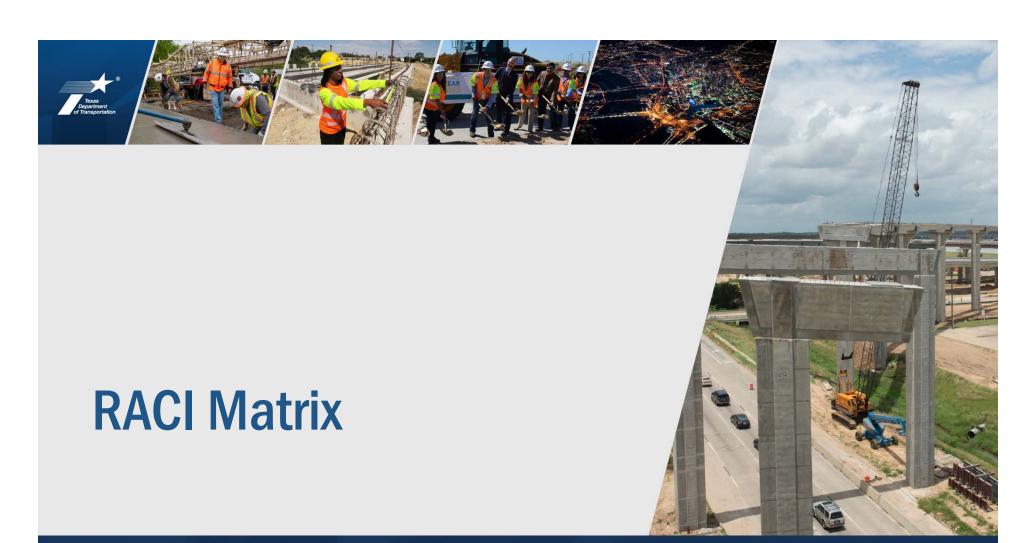


### **Questions & Discussion**





**Deeper Dive List** 



October 2019





Responsible – The doers. They get the work done.



• **Accountable** – The buck stops here. This single person is ultimately answerable for the task.



 Consulted – People consulted typically are subject matter experts, whose advice is sought.



• **Informed** – Those that need to know. These people are kept aware of what is going on.



#### Task Management

 A RACI Chart can be used to manage a task or tasks.

#### **Project Management**

 A RACI Chart can be used to manage related/organized tasks to complete a project.

#### Perform 'As Is' Analysis

 A RACI Chart can be used to evaluate and diagnose problems in tasks, projects, teams, or other situations.

#### Perform 'To Be' Design

 A RACI Chart can be used to create a what-if analysis for different situations that meet the needs of the desired 'To Be' situation.

# **RACI Charting**

Note: Responsibility Charting is a way of clarifying relationships pertaining to functional roles, participation expectation assigned to functional roles, and/or actions needed to deliver a product or service



	Pro	oject I	Mana	ger			Datab Servic		Disti		vironm Iinator		D	esign E	Engine	er	RO	W Coe	ordina	tor			nmeni or/Wri		A	Area Er	nginee	er
Tasks	R	А	С	ı	R	А	С	1	R	A	С	ı	R	А	С	1	R	А	С	,	R	А	С	1	R	А	С	1
Perform Background Search		St	ep '	1: Li	ist R	lole	s to	acc	omp	olish	the	tas	k in	the	арр	ropr	riate	col	umr	าร								
Perform Site Assessment at Location  Analyze Site Data	-	Step 1: List Roles to accomplish the task in the appropriate columns  Step 2: List all the task to needed in the appropriate rows																										
Produce EA Report & Recommendations																·				Ţ,	.,							_



	Proj	iect I	Man	ager		mat i earch				viror	trict imen linato		De	sign l	Engin	eer	ROI	N Cod	ordine	ator			nmei r/W	ntal riter	Ar	ea Ei	ngine	eer
Tasks	R	A	С	1	R	A	С	1	R	A	С	1	R	A	С	1	R	A	С	ı	R	A	С	ı	R	A	С	1
Perform Background Search		А			R							ı				ı				ı				I				1
Perform Site Assessment at Location		А					С					ı				I				ı	R							-
Analyze Site Data		Α					С					-				Ι				_	R							1
Produce EA Report &		А		and			С					ı				I			·	ı	R							1

#### Legend

- **Responsible** The person who is assigned to do the work .
- Accountable The person who has ultimate ownership for the completion of the task. This person delegates work to those responsible for achieving the task
- Consulted The person who must be consulted before a decision or action is taken. This person is typically a subject matter expert who has two-way communication with the person responsible.
  - Informed The person who must be informed that a decision or action has been taken. This person is kept up-to-date on progress and completion of a task or deliverable.

- **Step 3:** Assign proper responsibilities to each role according to the Legend.
- **Step 4:** Review with team to seek buy-in. Update as needed and communicate.



	Dist	trict	Engii	neer	TP	&D I	Direc	tor		viron oord			Des	ign I	Engir	neer	С	RC oord		or	P6	Cooi	rdina	itor	Ar	ea Ei	ngine	eer
	R	A	с	1	R	A	с	1	R	А	С	1	R	A	с	1	R	А	С	1	R	A	с	1	R	А	с	1
Advanced Planning																												
Define Scope/Project Definition				1		Α					С		R						С					1			С	
Route and Toll Studies				ı		Α					С		R						С					1			С	
Schematic Design				1		Α					С		R						С					ı			С	
Funding		Α			R							1				1				_							С	
Environmental																												
NEPA Clearance				1		Α				R					С				С					1				1
Clearance for Letting				1		Α				R					С					_				1			С	
Permits and Commitments/Mitigation				1		А				R					С					_				_			С	
PS&E																												
Data Collection				ı		Α					С		R							_				ı				1
Roadway and Structural Design				1		А						_	R							_				1			С	
Traffic Operations				1		А						_	R							_				1			С	
Letting																												
Final Review				1		А		_			С				С				С					1				1
Processing				ı		Α										_				_				ı				ı
Construction																												
Construction				ı				1							С	ı								ı	R			
Management																												
Project Management (Scope, Risk, Schedule, etc.)	R		С			Α	С		R		С		R		С		R		С					ı	R		С	

#### Legend

R Responsible – The person who is assigned to do the work .

Accountable – The person who has ultimate ownership for the completion of the task. This person delegates work to those responsible for achieving the task.

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C

Informed – The person who must be informed that a decision or action has been taken. This person is kept up-to-date on progress and completion of a task or deliverable.



RACI Analysis - A 3-Minute Crash Course (3 min)

RACI explained: it's simple yet powerful (5 min)



### **Questions & Discussion**





**Deeper Dive List** 





October 2019



Comment Resolution form is used to track the comments as given on the said project or drawings by Project Reviewers and Project Manager, its response by the Project Manager and final resolution about what needs to be done.

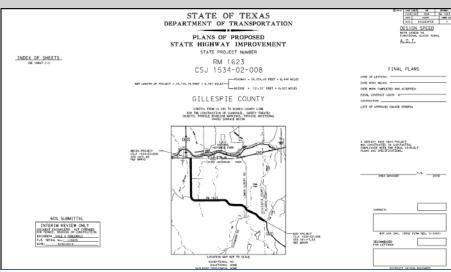
Project Name (ie:C0	CSJ)	XXXX-XX-XXX		4 5		
Deliverable Owner		Project Manager	Review Comme	ent R	eso	lution Form
TxDOT District/ Divi	sion	D/D Name				
		FIELDS TO	BE FILLED IN BY REVIEWER	F	IELDS	TO BE FILLED IN BY COMMENT OWNER
Document Name	Submittal Phase	Reviewer Name	Reviewer Comment	Comment Owner	Action	Response
Title Sheet	30%	J. Doe	Scale and north arrow not shown	PM	Pending	
Bridge Layout	30%	BRG- J. Doe	Use bridge approach standard for asphalt pavement	PM	Pending	



- Project Information
  - CCSJ
  - Project Manager (PM)
  - TxDOT Division/District
- Fields to be filled in by Reviewer
  - Document Name
  - Submittal Phase or Plan Sheet Number
  - Reviewer Name
  - Reviewer Comment
- Fields to be filled in by Comment Owner
  - Comment Owner
  - Action
  - Response



## **PS&E** Review

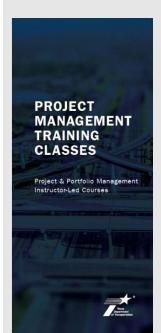


Project Name (ie:CCSJ)	1534-02-008
Deliverable Owner	Darren McDaniel
TxDOT District/ Division	TPD-PPM

### **Review Comment Resolution Form**

FIELDS TO BE FILLED IN BY REVIEWER					FIELDS TO BE FILLED IN BY COMMENT OWNER			
Document Name	Sheet #	Submittal Phase	Reviewer Name	Paviewer Comment	Comment Owner	Action	Response	
RM1623PlanSet30pct	1002	30%		The project has two funding lines, one for 2008 and 2001, the 1002 only shows 2008.	Consultant	Pending	Agree	
RM1623PlanSet30pct	DSR	30%		The DSR calls out an existing ROW width of 100', the plans show 80', please confirm.	Consultant	Pending	RM 473 = 100 ft	
RM1623PlanSet30pct	4 - 10	30%	Ben Ramirez	Show alignment information shown on Roadway Alignment Layouts	Consultant	Pending	Agree	





# Large Group Reviews

Document		PM Training Pamphlet							
TxDOT Division		TPD-PPM	Draft PM Training Pamphlet Review Comment Resolution						
PPM Training Team		Ben	Ziaiti iii riaiiiiig i airipineti kevien eenimenekeesiaaen						
		FIE	LDS TO BE FILLED IN BY REVIEWER			FIELDS TO BE FILLED IN BY OWNER			
PDF Page Number	Submittal			Comment					
T DI Tage Number	Phas∈	Reviewer Name 🔻	Reviewer Comment -	Owner	Action	Response			
3	Draft	Darren	Add the S to task- Anyone who leads projects or supporting tasks	Ben	Complete	Communicated to Creative Services to update			
3	Draft	Nicole	Bullet point under what will I learn "Create and edit a project schedule"	Ben	Complete	Communicated to Creative Services to update			
5	Draft	Darren	Consider adding a bullet for PMD108- What will I learn - Understand how calendars reflect anticipated working days, holidays and weather days.	Ben	Complete	Communicated to Creative Services to update			
6	Draft	Nicole	Suggest on "Target Audience add supporting planning staff"	Ben	Complete	Communicated to Creative Services to update			
6	Draft	Nicole	" Project Scope Management" we could call out and include planning staff	Ben	Complete	Communicated to Creative Services to update			
7	Draft	Nicole	"Risk Base Construction Estimating" we should maybe include and call out Project Estimator	Ben	Complete	Communicated to Creative Services to update			
9	Draft	Darren	Remove the S from risks- How to develop transportation project risk responses	Ben	Complete	Communicated to Creative Services to update			
10	Draft	Darren	Change Book to Body- Project Management Body of Knowledge (PMBOK)	Ben	Complete	Communicated to Creative Services to update			





# Work Authorization Negotiations

Design Project Manager (PM) Darren McDaniel Construction Manager  LOE Review Comment Resolution Form						
FIELDS TO BE FILLED IN BY REVIEWER FIELD			TELDS TO BE FILLED IN BY PROJECT MANAGER( PM)			
Sheet Number or Document Name	Submittal Phase	Reviewer Name	Reviewer Section	TxDOT Response (01/14/19)	PM Action	PM Response
Environmental Studies RM 1623	LOE	PPM		Consider reducing the number of hours for the EPIC Sheets and Environmental Study review as most of the environmental issues will be handled by District staff.	Agree	EPIC sheet reduced from 19 hours to 7 hours. Environmental Study review reduced from 7 hours to 2 hours.
Roadway Design RM 1623	LOE	PPM		Please clarify that the design will be performed using Open Roads 3D as opposed to Geopak.	Clarification provided	Design will be in Opens Roads 3D, Scope under FC160.1 clarifies OpenRoads 3D.
Roadway Design RM 1623	LOE	PPM	FC 160.1	Please provide clarification on the tasks that both the Senior Engineer & Project Engineer will be doing to calculate roadway centerlines using Open Roads 3D as they have the same number of hours under this task. Is there duplicate effort here?	Agree	Reviewed hours for Senior and Project Engineer, reduced 12 hours.
Roadway Design RM 1623	LOE	PPM	FC 160.1	Please provide clarification on the tasks that both the Engineer-in-training & Senior Engineer Tech will be doing to calculate roadway centerlines using Open Roads 3D as they have the same number of hours under this task. Is there duplicate effort here?	Agree (some duplication, removed)	The hours were split between EIT and Senior Tech to share the effort of mainline pavements and cross streets starting at opposite ends and meeting in the middle. Reviewed hours and reduced 20 hours.
Roadway Design RM 1623	LOE	PPM	FC 160.1	Pavement Edges for all improvements - The hours for this task are high. Please provide clarification why there is a need for 87 hours with 6 individuals. What will these individuals be doing, what will be their roles in this task?	Agree (reduced effort and moved hours to less indivuals)	Hours adjusted (reduced senior engineer 6 hours, removed project engineer 4 hours, removed senior engineer tech 20 hours, added 8 hours to senior cadd operator) Task hours from 87 reduced to 65 with 4 individuals.



### Considerations

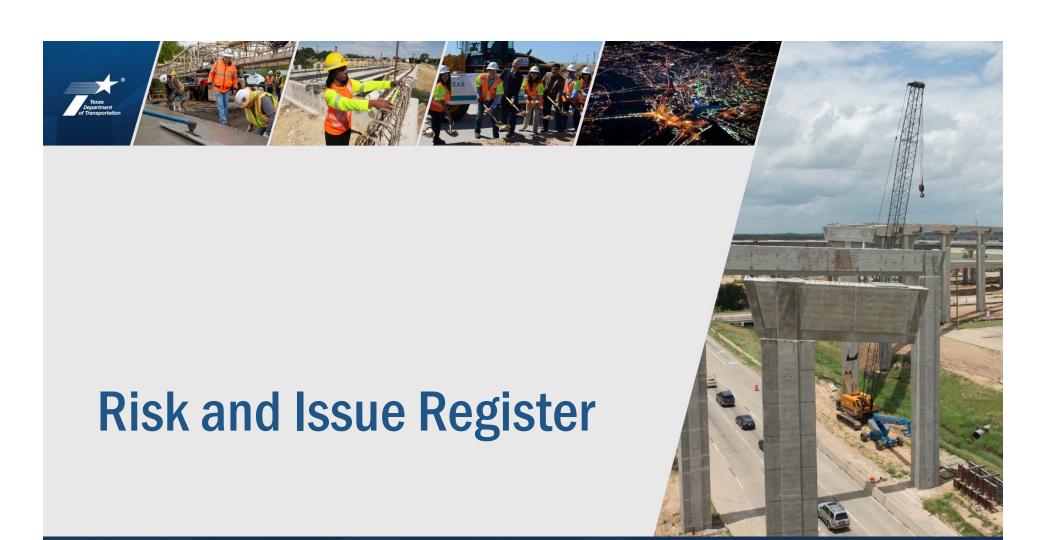
- Best Practices to document comments and resolutions.
- Format may vary around the State.

#### **Questions & Discussion**





**Deeper Dive List** 



October 2019



The Risk and Issue Register is a comprehensive tool utilized to document and manage project uncertainties, similar to how a schedule is used for meeting milestones or a cost estimate is used to ensure the project stays within budget.





**Step 1.** Identify and discuss potential project risks.

**Step 2.** Analyze the probability, impact and severity of the risk and prioritize.

**Step 3.** Develop response and contingency plans. Identify individual risk owners.

Step 4. Monitor and control status of risk.



#### Step 1: Risk Identification

#	Туре	Category	Phase	Opportunity / Threat	Risk / Issue	Risk Name	Detailed Description	Trigger(s)
<b>*</b>	t	<u> </u>	Φ Ψ	- T	~	Archeologic	V	¥
1	Projec	Environ mental_ Hydrauli cs	Pre- Procur ment	Threat	ŖĬŖ	al Discovery	If sites of archeological significance are discovered, then environmental document could be delayed.	Archeological disdcoveries during environmental assessment



#### Step 2: Risk Assessment

	Rank		Cost Impact (\$M)						Schedule Impact (Weeks)			
Probability (1 - 5)	Consequence (1-5)	Severity (Priority)	Probability (%)	Minimum (@10%)	Most Likely (@50%)	Maximum (@90%)	COSTIMPACT	Minimum	Most Likely	Maximum	TIME IMPACT (Weeks)	
4	2	8	80%	0.5	<b>-</b>	2.5	0.9	9	52	104	42.4	



#### Step 3: Risk Response

Response	Administration Notification	Response	Risk Owner	Contingency Plan
Accept	Yes	Follow NEPA procedures.	TxDOT ENV	Conduct environmental assessment early to avoid long delays and increased costs

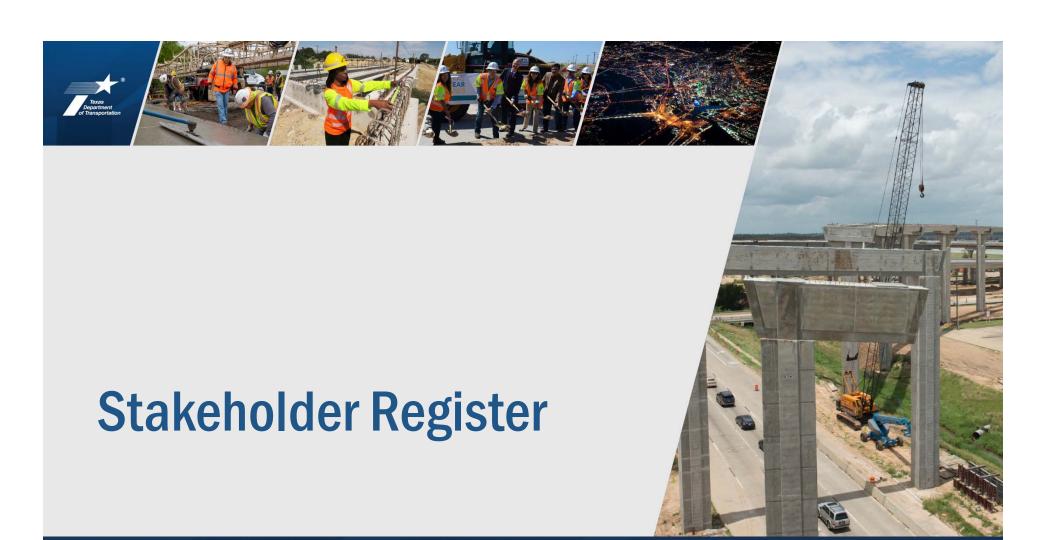
## **Risk and Issue Register** Step 4: Monitor and Control Status **Tracking Comments** Not Started Assumes only further investigation at this point.

#### **Questions & Discussion**





**Deeper Dive List** 



October 2019



A stakeholder register is a project management document which contains the information about the project's stakeholders. It identifies the people, groups, and organizations that have any kind of interest or involvement in your project. In this register, you can find their names, titles, roles, interests, power, requirements, expectations, and type of influence, etc.



	STAKEHOLDER REGISTER											
Stakeholder Name (person, organization, group)	Title & Contact Information	Department, Affiliation or Association	Role on the project	Requirements from Stakeholder	Expectations of Stakeholder	Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)	Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)					
						Select Score	Select Score					
	c											



### Stakeholder Name (person, organization, group...)



Stakeholder Name (person, organization, group)	Title & Contact Information	Department, Affiliation or Association	Role on the project	Requirements from Stakeholder	Expectations of Stakeholder	Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)	Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)
						Select Score	Select Score
						Y.	v v



### Title & Contact Information



Stakeholder Name (person, organization, group)	Title & Contact Information	Department, Affiliation or Association	Role on the project	Requirements from Stakeholder	Expectations of Stakeholder	Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)	Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)
						Select Score	Select Score
				Ö			



#### Department, Affiliation or Association



Stakeholder Name (person, organization, group)	Title & Contact Information	Department, Affiliation or Association	Role on the project	Requirements from Stakeholder	Expectations of Stakeholder	Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)	Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)
						Select Score	Select Score



#### Role on the project



Stakeholder Name (person, organization, group)	Title & Contact Information	Department, Affiliation or Association	Role on the project	Requirements from Stakeholder	Expectations of Stakeholder	Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)	Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)
						Select Score	Select Score
							·



#### Requirements from Stakeholder



Stakeholder Name (person, organization, group)	Title & Contact Information	Department, Affiliation or Association	Role on the project	Requirements from Stakeholder	Expectations of Stakeholder	Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)	Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)
						Select Score	Select Score
				8		2	2



#### **Expectations of Stakeholder**



Stakeholder Name (person, organization, group)	Title & Contact Information	Department, Affiliation or Association	Role on the project	Requirements from Stakeholder	Expectations of Stakeholder	Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)	Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)
						Select Score	Select Score
				Ö			



#### **Expectations of Stakeholder**



Stakeholder Name (person, organization, group)	Title & Contact Information	Department, Affiliation or Association	Role on the project	Requirements from Stakeholder	Expectations of Stakeholder	Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)	Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)
						Select Score	Select Score



Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)



			STAKEHOLDER	REGISTER			
Stakeholder Name (person, organization, group)	Title & Contact Information	Department, Affiliation or Association	Role on the project	Requirements from Stakeholder	Expectations of Stakeholder	Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)	Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)
						Select Score	Select Score



Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)



STAKEHOLDER REGISTER							
Stakeholder Name (person, organization, group…)	Title & Contact Information	Department, Affiliation or Association	Role on the project	Requirements from Stakeholder	Expectations of Stakeholder	Level of Authority (Power) (Score 1 to 5, w/ 5 being greatest)	Level of Concern (Interest) (Score 1 to 5 w/ 5 being greatest)
						Select Score	Select Score
				Ö			



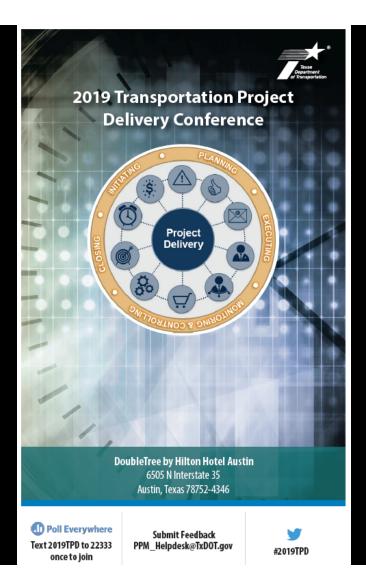
- May be sensitive (may not want to share)
- May want to include who may be communicating with the Stakeholder
- Internal and External Stakeholders

#### **Questions & Discussion**





**Deeper Dive List** 



#### Thank You, Exhibitors!





#### **DANNENBAUM**



















# Program Management Perspectives

**2019 Transportation Project Delivery Conference** 

October 2019

#### **Panel Members**

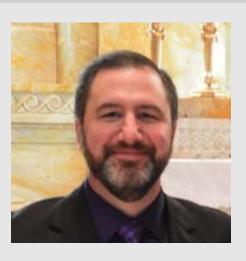




Jerry Ramos, P.E. Ramos Consulting, LLC



Tom Benz, P.E.
Texas Department of
Transportation – Austin District



Paul Merchlewicz, P.E.

Minnesota Department of

Transportation

#### **Your Experience as a Program Manager**

\*

Tell us about your current or past experience as a

program manager



#### **Panel Discussion**



- What are some best practices that you implement as a program manager?
- How do you define a successful transportation program or how do you achieve success at a program level? How do you translate program management to successful project delivery?
- What are some tools and resources that can help with successful program management?
- How do you manage risk from a program management level?

#### **Panel Discussion**

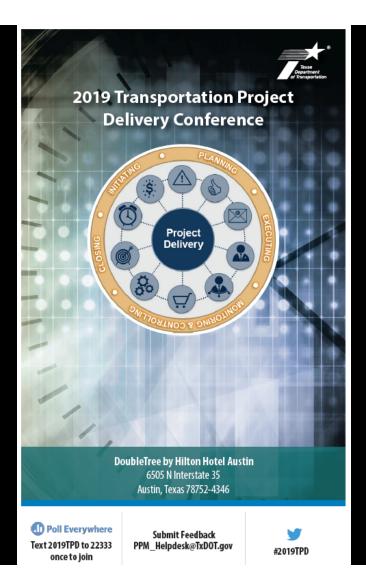


- What is something new and innovative that you are implementing around program management?
- From an owner perspective, what are some things that you could do to make your consultant have better support to your program?
- What measures or best practices do you like as a consultant that the owner does to help you support program management?

#### **Audience Q&A**







#### Thank You, Exhibitors!





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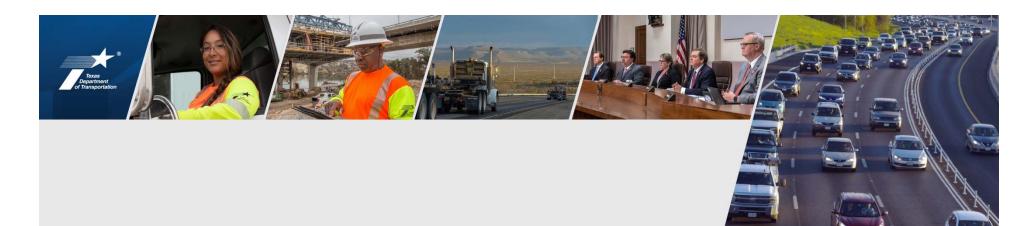












## Portfolio Performance Management

**2019 Transportation Project Delivery Conference** 



October 2019

#### Panel Members



Mildred Litchfield

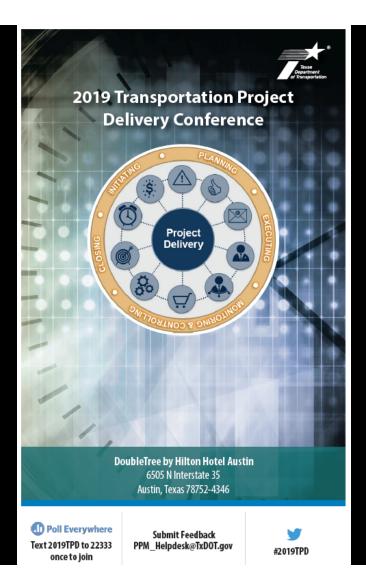
Texas Department of Transportation
Unified Transportation Program and
Portfolio Performance Director



Alberta Blair
Dallas County
Director Of Public Works



Michael Haithcock
Texas Department of Transportation
Director of Transportation Planning and
Development in the Abilene District



#### Thank You, Exhibitors!





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# **Delivery Work Flows**

**2019 Transportation Project Delivery Conference** 



## **Safety Minute**

Mission Zero, Safety Is Intentional



## TxDOT Projects (Design, Bid, Build)

**2019 Transportation Project Delivery Conference** 



# **Project Selection:**

**Look at TxDOT Strategic Objectives** 

- 1. Safety
- 2. Preservation
- 3. Congestion
- 4. Connectivity

TxDOT also considers each project's effect on the Economy and the Environment.





# Phases of Project Development

**Operations & Maintenance** 

**Project Selection** 

**Project Initiation** 

**Preliminary Engineering** 

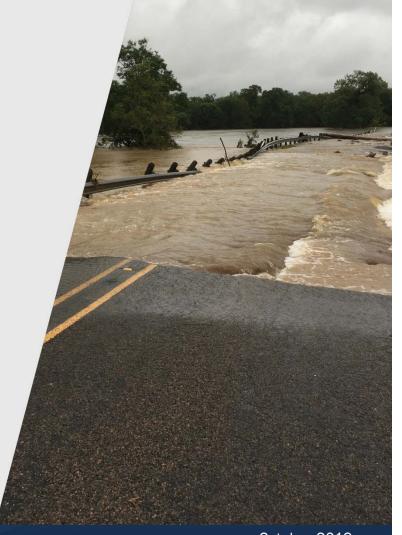
PS&E

Letting

Construction

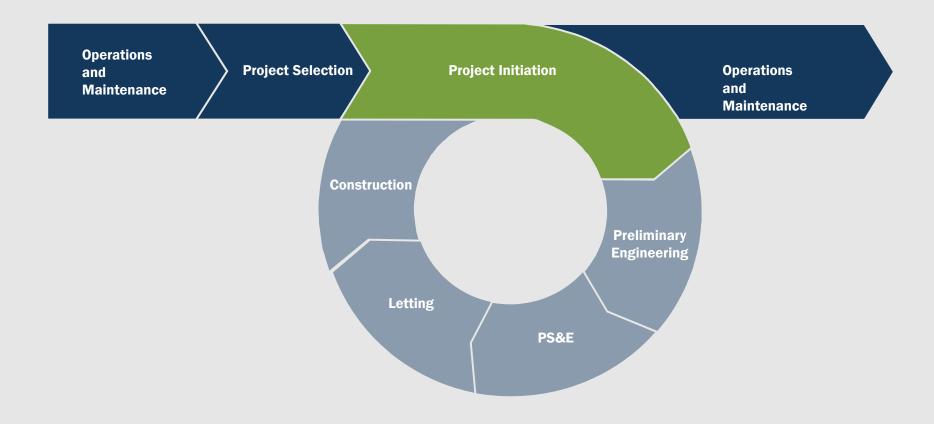
**Operations & Maintenance** 

**Project Selection** 



# "TxDOT CIRCLE OF LIFE"







**Project Initiation/Planning** 

- Public
- Area Engineer, Maintenance Supervisors,
- Area Office staff, district staff,
   Transportation Partners, or developers
- Asset conditions
- Legislature -House Bill 20 (HB20)
- Local governments
- Possible Challenge: Public Opposition





**Preliminary Engineering** 

- Data Collection/agreements
- Design Concept Conference
- Schematic development and approval
- ENV, ROW, UTL coordination
- Public Involvement
- Value Engineering

Parallel Processing is important during Preliminary Engineering to ensure project is delivered on time.

- Possible Challenges: Environmental sensitive areas, ROW acquisition difficulties, Complex & difficult utility relocations.





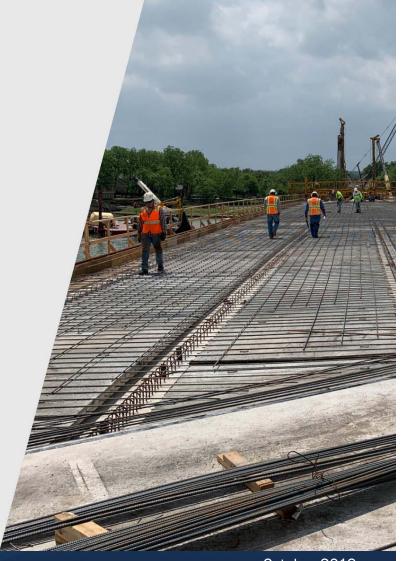
# PS&E

- Finalize alignment and profiles
- Detailed Design
- ENV, ROW, UTL, and RR clearances
- PS&E assembly / design review

Some projects may be designed by Consultants.

Some projects my be reviewed by construction contractors during PS&E development.

- Possible challenges: delays in design, design errors, delays in RR Coordination and Utility Relocation





# Letting

- Letter of Authority
- Project Advertisement
- Bidding Process
- Award of Contract

Important – Pre-Bid questions from Contractors.

Most projects will be low-bid and some projects will be A+B bidding.

- Possible Challenges: Low number of bidders, Addendums, Errors in Plans, Bid>20% Eng. Est.





# Construction

- Notice to proceed
- Pre-construction conference
- Supervision and inspection
- Contract Administration
- Quality assurance and testing
- Change Orders
- Project acceptance and close out

**Important - Partner with contractors.** 

Important – Document daily work in a detailed manner.

- Possible Challenges: Weather delays, found unexpected utility conflict, errors in plans, Contractor falling behind project schedule, Contractor time claims, poor construction records





# Design, Bid, Build

Most TxDOT projects are Design, Bid, Build.

**Involve Stakeholders early in Project** Development.

Want to strive for accurate plans to keep project on time and on budget.

Work with Area Engineer to answer pre-bid questions in a timely manner.

Partner with Contractor.

Keep good detailed records of daily work reports.





# Thank You, Exhibitors!





# **DANNENBAUM**



















# **Projects**

**2019 Transportation Project Delivery Conference** 

# **Table of Contents**



1 Project Definition & Initiation	3-4
Plans, Specifications, & Estimate (PS&E) Phase	5-6
3 Environmental	7-8
4 Utilities	9-10
5 Right of Way (ROW)	11-12
6 Project Letting	13-14
7 Project Challenges and Solutions	15

# **Project Definition & Initiation**



#### **Local Government Project Definition:**

- At Least one Phase of Project Development is Managed by a Local Government (LG) Agency for Which it is Being Reimbursed with Federal (FHWA) and/or State (TxDOT) Funding or
- A Totally Locally Funded Project Managed by the LG on the State Highway System

#### **Local Process:**

- LG Identifies Problem and Develops Project
- Local Funding Source(s) Identified & Used
- Contract Executed Between LG and Consultant

#### **Federal Process:**

- Project Qualifies as LG Project
- Advanced Funding Agreement (AFA) Also Referred to as a Local Project Advance Funding Agreement (LPAFA) is Executed Between TxDOT and LG
- LG Representatives Need to Attend Training
- LG Risk Assessment is Completed

# **Project Initiation**



## Challenge:

Executing the AFA

# Solutions:

- 1. Submit the Project Level Oversight Level Special Approval Form & Location Map ASAP
- 2. Schedule in City Council or Commissioners Court Agenda
- 3. Provide Initial Payment as Determined by AFA

## **Schedule Impacts:**

Variable (0 – 12 Months)

# **Plans Specifications & Estimate (PS&E) Phase**



#### **Local Process:**

- LG Milestone Delivery
- LG Established Specs/Design Criteria

#### **Federal Process:**

- Design Concept Conference (DCC) & Design Summary Report (DSR)
- District Design Review Team (DDRT) Meeting and District Safety Review Team (DSRT) Meeting at 30% & 60% Milestones
- State Standard Specs/Design Criteria, LG 1-9s, etc.
- Project Development Checklist (LG Checklist)
- Typical Sections & Form 1002, Page 3 Submittal

# **Plans Specifications & Estimate (PS&E) Phase**



<u>Challenge</u>: Completing the LG Checklist

#### **Solutions:**

- 1. Scope Consultants to Complete Checklist
- 2. Begin Completing the Checklist in Early Design Phases

<u>Schedule Impacts:</u> Variable (1 – 4 Months)

<u>Challenge</u>: Coordinating the LG and TxDOT Schedules

#### Solutions:

- Provide Milestone Schedule to TxDOT
- 2. Submit Milestone Two Weeks Prior to TxDOT Meetings

<u>Schedule Impacts:</u> Minimal (1 – 2 Months)

## **Environmental**



#### **Local Process:**

- LG Coordinates Directly with Regulators
- Risk Belongs to LG
- Not Usually on Project Critical Path

#### Federal Process (National Environmental Policy Act [NEPA]):

- Formal Scoping Process to Determine Environmental Requirements
- Risk Belongs to TxDOT
- Public Involvement is More Rigorous
- Noise & Air Studies are Required
- More Structured Documentation
- Limits of Work vs Project Limits (Incidental Work)
- Requires Clearance Prior to ROW Acquisition and Letter of Authority (LOA)

## **Environmental**



**Challenge:** Obtaining ENV Clearance

#### Solutions:

- 1. Integrate Environmental Process into Overall Project Development
- 2. Provide a Detailed Project Description
- 3. ENV and PM Coordinate Project Improvements

Schedule Impacts: Variable (2 - 18 Months)

**Challenge:** Public Involvement

#### Solutions:

- 1. Knowledge of the (New) Process
- 2. Early Communication with TxDOT ENV Specialists

<u>Schedule Impacts:</u> Variable (2 – 6 Months)

**Challenge:** ENV Study Area/Incidental Work

#### Solutions:

- 1. Establish Project Improvement Limits Early in Design
- Include Detours, Mill & Overlays, Approaches into/out of Project Limits

Schedule Impacts: Variable (1 - 4 Months)

## **Utilities**



#### **Local Process:**

- Coordination is Responsibility of the LG
- Most LGs Allow Relocations Under Pavement
- Joint-Bid and Build Underground Facilities

#### **Federal Process:**

- Buy America
- Not Eligible for Federal Reimbursement
- Requires Certification in Final PS&E Documents

#### **Utilities**



Challenge: Letting a "Clean Project"

#### **Solutions:**

- 1. Design Underground Improvements Early
- 2. Share Design Files with Utilities
- Stake ROW for Overhead Utilities
- 4. Verify Utility Relocation Plans

Schedule Impacts: Could be Substantial (Up to 12 Months)

**Challenge:** Keeping the Utilities Engaged

#### Solutions:

- "Old-Fashioned Badgering"
- 2. Don't Prioritize Every Project
- 3. Develop, Update, and Distribute a Utility Conflict Matrix

Schedule Impacts: Minimal

# **Right of Way (ROW)**



#### **Local Process:**

- Acquisitions Begin Almost Immediately
- Acquisitions Not Dependent on Environmental Clearance

#### **Federal Process:**

- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 aka Uniform Act
- Environmental Clearance Required
- Documentation Title III Audit, Double Appraisals
- Appraisers Must be Certified
- ROW Certification Required in Final PS&E Package

# Right of Way (ROW)



**Challenge:** Acquiring Properties

#### Solutions:

Identify ROW Needs

2. Monitor ENV Clearance Process and Allow Time in Schedule

Schedule Impacts: Variable (6 - 12 Months)

**Challenge:** Performing the Title III Audit

#### Solutions:

1. Contact the TxDOT ROW Section for Guidance Early in the Process

2. Submit Proposal Packages to TxDOT Prior to the Property Owner(s)

Schedule Impacts: Variable (0 to 4 Months)

**Challenge:** Obtaining Appraisals

#### Solutions:

1. Hire Certified Appraisers

2. Perform Two (2) Appraisals

3. Include Cost Into Budget

Schedule Impacts: Variable (2 – 4 Months)

# **Project Letting**



#### **Local Process:**

- No Additional Agreements Required for Funding
- Schedule Based on Local Advertising Procedures
- Local HUB/DBE Goals Program

#### **Federal Process:**

- Letter of Authority (LOA) & Federal Project Authorization and Agreement (FPAA)
- Letting Schedule: Approximate Three Month Duration from Final PS&E to Letting
  - Final plans to LOA Request = 14 days
  - LOA Request = 28 days
  - Advertising = 30 days (21 days minimum)
  - > TxDOT Concurrence (Letting) = 14 days
- Signed Certifications and ENV Clearance
- DBE Goal Obtained from Office of Civil Rights Prior to Advertising

# **Project Letting**



**Challenge:** Bidding the Project on Schedule

#### **Solutions:**

1. Realistic Advertising & Letting Dates

2. Milestone Deadlines

3. Complete 100% PS&E Submittal

**Schedule Impacts:** Variable (0 – 4 Months)

# **Project Challenges and Solutions**



**Challenge:** Understanding the Federalized Process Itself

#### Solutions:

- 1. Attend Training; Use LG Toolkit, Manuals, Etc.
- 2. Work with Experienced Staff
- 3. Coordinate with TxDOT Staff and Ask Questions

<u>Challenge:</u> Managing the Federal Procedures, Tasks, Meetings, Etc.

#### Solutions:

- Hold Project Kick-Off and Invite TxDOT/Attend Design Concept Conference
- 2. Include in Project Scope/Fee
- 3. Incorporate into the Project Schedule

<u>Challenge</u>: Meeting the Letting Schedule

#### Solutions:

- 1. Early Assessment of Time Constraints
- 2. Identify Ways to Reduce Durations or Eliminate Milestones
- 3. Do Not Change the Project Improvements, Limits, Etc.



Thanks to:
Bexar County
City of New Braunfels
City of San Antonio
City of Seguin
City of Universal City
San Antonio River Authority
TxDOT SAT District Staff



# Thank You, Exhibitors!





# **DANNENBAUM**















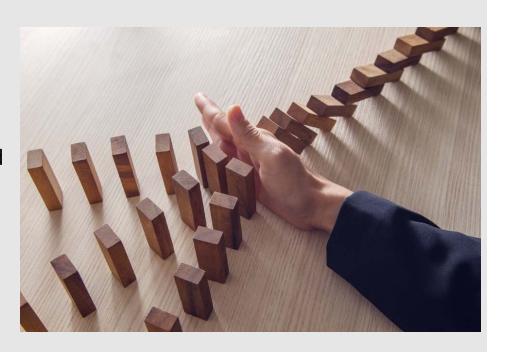






# Answer depends on:

- How complex is the project?
- Who is in the best position to manage and control a given risk?
- Alternative Delivery Support Tool
  - assist the Districts in determining a project's suitability for alternative delivery



# **D-B-B** vs **D-B**: a Comparison



	Design-Bid-Build	Design-Build
Contracting	<ul> <li>TxDOT staff designs or contracts with a consultant to design project.</li> <li>TxDOT advertises design to contractors for bids.</li> </ul>	<ul> <li>TxDOT contracts with a contractor to perform both design and construction.</li> <li>Contractor will contract design consultant to design project.</li> </ul>
Delivery process	<ul> <li>TxDOT hires design firm to deliver 100% complete design documents.</li> <li>TxDOT solicits fixed-price bids from contractors to construct the work.</li> </ul>	<ul> <li>Based on preliminary design, TxDOT solicits State of Qualifications from interested proposers (contractors) to team-up to perform both design and construction work.</li> <li>TxDOT contracts with best-valued proposer to design and construct work.</li> </ul>
Risk	<ul> <li>Public sector (TxDOT) carries the highest amount of project risks with this delivery type.</li> <li>Designers and contractors bear no contractual connection with each other.</li> <li>TxDOT has all risk associated with the completeness of the design documents.</li> </ul>	<ul> <li>Many risks are be transferred from TxDOT to the private sector (contractor).</li> <li>Contractor directly responsible for contracting with design engineers to ensure completeness of design documents.</li> <li>Contractor has most of the schedule risk to deliver project within contracted timeline.</li> </ul>

# **Risk Allocation<sup>1</sup>**



Risk Type	Traditional Project Delivery  Design ► Bid ► Build	Alternative Project Delivery  Design ► Build
Environmental approval		TxDOT
Financing		17001
Operation and maintenance		
Environmental compliance	TxDOT	Shared between
ROW acquisition <sup>2</sup>		TxDOT and Contractor
Utility delays		
Design		
Construction	Contractor	Contractor
Schedule delays	Contractor	

- 1 Actual risk assignments may vary by project.
- 2 Eminent domain delays retained TxDOT.

# **Typical project development schedule (D-B-B)**

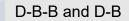


Phase	Scope Description	
Planning	Existing condition and data collection, alternatives development and analysis, traffic modeling and analysis, conceptual schematic development of reasonable alternatives, geometric design of recommended alternative	
Environmental clearance/ Preliminary design	Schematic development, environmental documentation, public involvement, noise analysis, utility investigations, preliminary geotechnical studies, preliminary drainage studies, hazardous materials assessment, preliminary cost estimate	
Right of way (ROW) and utilities	ROW parcel survey and mapping, develop utility agreements	
Plans, specifications and final cost estimate development	Roadway design, pavement design, drainage design, bridge design, signing, pavement markings & illumination designs, intelligent transportation systems design, final cost estimating, develop specifications	
Process and advertise for bidding	Compile plans, specifications, final cost estimate to advertise	
Construction	Materials testing, inspection, construction management	

# **D-B-B** and **D-B** compared



D-B-B	D-B	
Planning	Planning	
Environmental clearance/preliminary design	Environmental clearance/preliminary design	
Right of way (ROW) and utilities	Two-step procurement:	
Plans, specifications and final cost estimate development	<ol> <li>Request for Qualifications</li> <li>Request for Proposals</li> </ol>	
	Design right of way utilities and construction	
Process and advertise for bidding	Design, right of way, utilities and construction	
Construction		







# **Request for Qualifications**



# Request for Information

- Generate industry involvement and appetite for project
- Used to incorporate industry input into RFQ and RFP

# Request for Qualifications (RFQ)

- Minimum criteria potential bidders must meet to bid on work
- Industry is evaluated on their past experience, references, and ability to deliver the project
- Pass/Fail and Qualitative review of evaluation performed on RFQ
- Set shortlisting by TxDOT of most qualified firms

# **Request for Proposal Process**



## One-on-One Meetings

- Allow the proposer to discuss elements of the proposal directly with TxDOT
- Encourage innovation and collaboration

#### Addenda

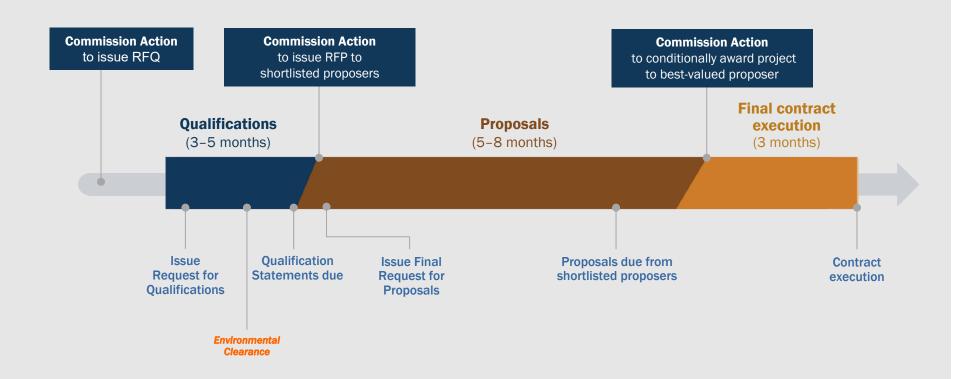
 Once the need to change published documents is identified, an addendum will be prepared and issued.

## Alternative Technical Concepts (ATC)

- Concepts that are inconsistent with the requirements for design, construction, or capital maintenance for the Project or otherwise require a modification of the Technical Provisions
- Contractor provides technical approach equal to or better
- TxDOT review team of technical experts will accept or reject ATC
- Encouraged as a means of innovation leading to better value and time savings

# **Design-Build: Two-step procurement overview**





#### **Design-Build Delivery**



- Acceptance by Independent Quality Firm
- Quality Assurance Program
  - Ensures that materials and workmanship incorporated into the highway construction project are in reasonable conformance
  - Provides statewide consistency and a programmatic approach
  - Clarifies and implements the Federal requirements
- Capital Maintenance Agreement



Quality Assurance Program for CDA / Design-Build Projects with a Capital Maintenance Agreement with Three Optional 5-Year Terms

August 29, 2017

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# Thank You



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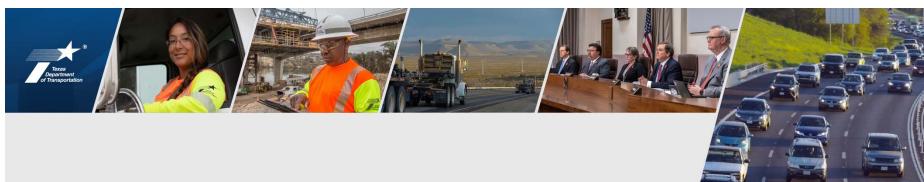






# and AFAs

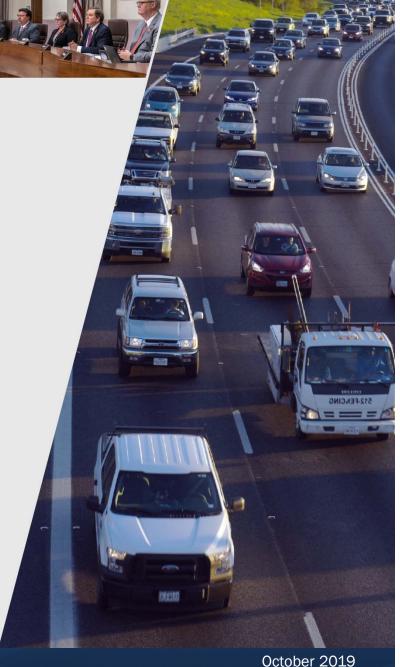
**2019 Transportation Project Delivery Conference** 



# **Local Government Project Administration**

Fort Worth District -

**Risk Assessment Process** 





## **PROJECT ELEMENTS**

Requirements
Local Risk Assessment
Oversight Level Special Approval
Advance Funding Agreement



## **Table of contents**



1	Requirements	5
2	Local Risk Assessment	7-10
3	Oversight Level Special Approval	12-14
4	Advance Funding Agreement	16-18



# Requirements

**Code of Federal Requirements Texas Administrative Code** 



#### Requirements



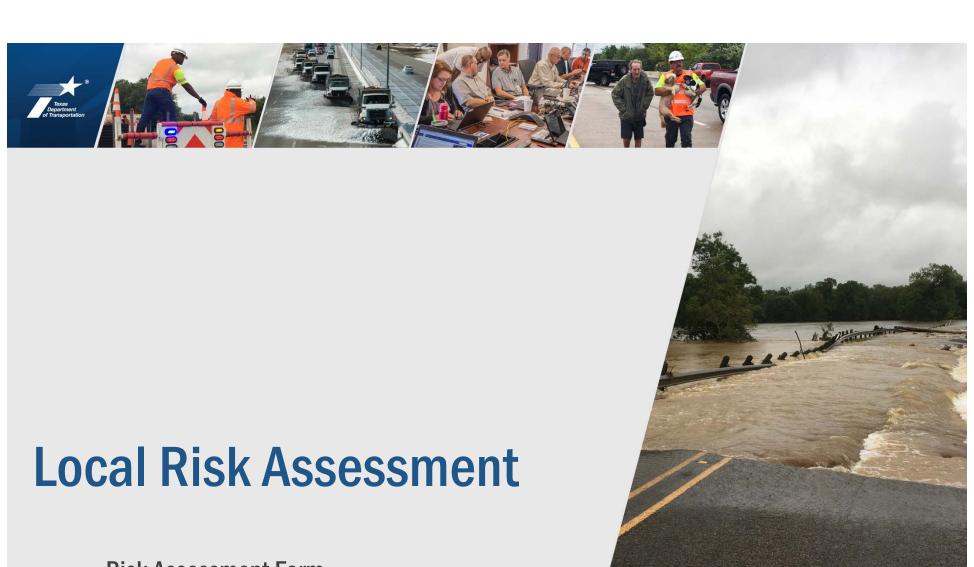
## - 2 CFR § 200.331

"All pass-through entities must evaluate each sub-recipient's risk of non-compliance with Federal statutes, regulations, and the terms and conditions of the sub-award for purposes of determining the appropriate sub-recipient monitoring." (effective Dec 2013, amended Sep 2015)

- TAC § 15.52

**Special Approval Statement** 

http://www.txdot.gov/government/programs/local-governmentprojects.html



**Risk Assessment Form** 

**Oversight** 

**Existing Project** 

#### **Risk Assessment**



- Perform Local Government Risk Assessment
- Oversight Level Special Approval
  - Part A Local Governments
  - Part B TxDOT Evaluation and Special Approval
- Existing Project TxDOT Project Update of Local Government Qualifications

#### **Risk Assessment (Continued)**



- District Responsibilities
  - Schedule District Review of Individual Local Governments
  - Assemble group of individuals familiar with the Local Government Agency's capabilities
    - Preliminary Engineering
    - Environmental
    - Right of Way
    - Construction
  - Complete the risk assessment together for acknowledgement by the District Engineer
    - District Engineer may be one of the participants performing evaluation

#### **Risk Assessment (Continued)**



## Grading Scale:

Low level of risk to TxDOT	Α
Moderate level of risk to TxDOT	В
High level of risk to TxDOT	С
Unacceptable level of risk to TxDOT	D

- Evaluation is qualitative
  - Use professional judgement, be fair, strive for consistency
  - Grade each of 8 categories
  - Overall score is not a numerical calculation
- Include brief comments to explain each rating

## **Risk Assessment (Continued)**



#### 8 Criteria scores:

- 1. Audit
- 2. Project Delivery Process
- 3. Financial
- 4. Compliance
- 5. Communication/Responsiveness
- 6. Stability
- 7. Experience
- 8. Teamwork

#### **Total Overall Risk Assessment Score:**

(A, B, C, or D)



LG Name:
LG Texas ID No. (TIN):
District:

Local Government (LG) Agency Risk Assessment

	Critoria	Range of Attributes*		Riek Score	Commente/Justification for Risk Score
	Recent Single	No findings of concern	A		
20	Audita, Federal	Minor findings that are actively being addressed	В	1	
ş	Agency Audita, or Texas State	Major findings being addressed or multiple minor findings	С	1	
	Agency Audite	Multiple major findings	D	1	
		Well-defined process that regularly demonstrates successful results	A		
8993	Project Delivery Process	Not well-defined process, but demonstrated success on past projects	В		
Po		Well-defined process that is new or has not shown consistent success	o		
		Inadequate process or no project delivery system has been provided	٥		
		Consistently provide accurate and timely billings	A		
Į.		Consistently accurate billings, not as frequently or timely as desired, or occasional inaccuracies	В		
Program Past Performance (with TADOT or Similar Agency)	Financial	Occasional inaccuracies, always resolved, less frequently or timely billings than desired	С		
ŧ		Inaccurate, infrequent, or incomplete billings	D		
중중		Consistent compliance with thorough documentation	A		
1	Compliance	Minor compliance or documentation issues, promptly addressed when notified	В		
	Compliance	Some compliance or documentation issues, addressed but not always promptly	С		
¥ "		Poor performance, frequently lacking documentation	D		
ē		Always timely, credible, and complete information	A		
Ē	Communication/	Credible and complete information, occasionally delayed	В		
Ē.	Responsiveness	Eventually provides credible and complete information upon repeated requests	С		
		Non-responsive, inaccurate, or incomplete information	D	1	
	Stability	Steady, consistent, continuity of personnel in key positions over extended time	A		
		Current personnel have been in positions for a reasonable length of time	В		
		Some turnover in key positions, but culture of LG remains relatively consistent	С		
•		Frequent turnover of personnel or changing positions	D		
룷		Well-equipped through education and/or training	A		
*	Experience	Good basic level of experience and knowledge and commitment to further development of skills	В		
Program Le adership		Limited experience and knowledge but commitment to further development of skills	С		
Pro		No relevant experience in required areas and/or no commitment to further development of skills	٥		
	Teamwork	Consistently looking for mutually acceptable outcomes	A		
		Reasonable willingness to work with others to achieve mutually acceptable outcomes	В		
		Heeltant to agree with anything that is not clearly in best interest of LG	С		
		Solely interested in winning at expense of others	D		
		Total Overall Risk Score (A, B, C, or D)			
* The d	leacriptions of the Re	ange of Attributes are examples only and do not necessarily	apply to	the LG. The co	omments explain the justification for the risk or

Moderate level of risk to TADOT B High level of risk to TADOT C Unacceptable level of risk to TADOT D  Acknowledgement  Acknowledgement	Low level of risk to TxDOT	A			
commendation: Acknowledgement		_	# 9		
	Unacceptable level of risk to TxDOT	D			
STORAGE STORAG					
	scommendation:			Acknowledgement	



Oversight Level - Special **Approval** 

**Evaluate** 

**New Projects - Form** 



#### **Oversight Level - Special Approval**



- TAC § 15.52 requires the Department to evaluate:
  - Previous LG experience
  - LG capability to perform or manage work following rules
  - Percentage of total project cost to be provided by local government
  - Available Department resources
  - Cost-effectiveness
  - Other considerations

#### **Oversight Level - Special Approval (Continued)**



- Ensures district/LG conversations prior to execution of AFA
  - Program requirements
  - Level of effort for management
  - Discuss strengths/weaknesses
- District evaluates level of risk and set appropriate oversight
- District re-evaluates on periodic basis
- Addresses any State Audit Findings
  - Documentation of compliance with federal requirements
- Increase probability of project success

#### **Oversight Level - Special Approval (Continued)**



- For use on new projects
  - LG will be performing work on SHS or will be reimbursed with federal or state funds
- Part A LG Qualifications
  - Submitted by LG to TxDOT Project Manager
- Part B TxDOT Evaluation of LG Qualifications
  - Review by district personnel
  - Recommendation by DE
  - Approval by Deputy Executive Director



Overview Process
Project Budget

#### **Advance Funding Agreements**



- Process Overview
  - Getting Started (once project specifics determined such as scope and current project estimated costs), drafting AFA (1-2 weeks)
  - LG Review (2-3 weeks)
  - TxDOT Division/Legal review (2-4 weeks)
  - Signatures
    - Local (2-4 weeks)
    - TxDOT (2-3 weeks)
  - TOTAL of approximately 16 weeks

#### **Advance Funding Agreements (Continued)**



- Budget page contains costs allocated based on applicable federal, state, and local funding for applicable phases of the project
  - -Fixed amounts listed are fixed until the maximum obligated amount is reached. State is normally responsible for overruns, subject to change.
  - Specified Percentage percentage amounts until the maximum obligated amount is reached. Local Government is normally responsible for overruns.

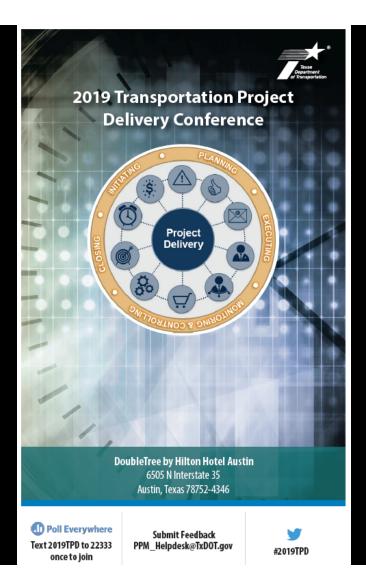
#### **Advance Funding Agreements (Continued)**



- TxDOT determines which funding type is appropriate for the project based upon which party is managing the activity and ability to accurately estimate budgeted amount
- The Local Government is responsible for total cost of all expenditures which are not eligible for federal or state participation
- Direct State Costs (TxDOT reviews, inspections and oversight)



# Thank You



#### Thank You, Exhibitors!





#### **DANNENBAUM**







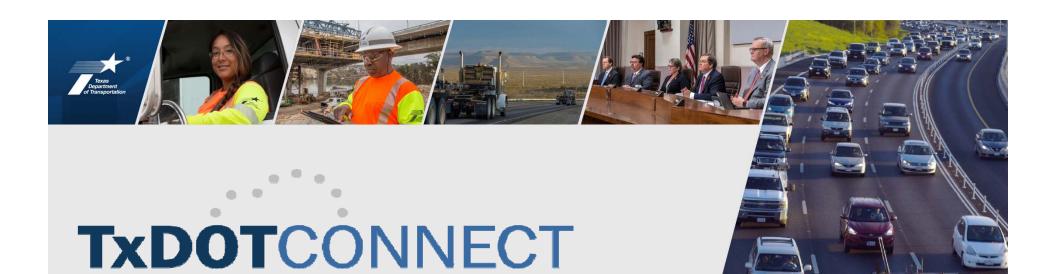












**Project Governance** 

October 2019

#### **Table of contents**



## **What is Project Governance?**



- Many definitions of the term "governance" leading to confusion and ambiguity
- The goal of governance is to achieve business results
- The execution of project governance is about decision making
- Governance focuses on the interaction and intersection of four key areas:
  - Decision rights who makes the decisions
  - Investment decision making
  - Enterprise risk management
  - Compliance and assurance

#### **Governance Leading Practices**



- Involve senior management. Senior business management are the decision makers, and such initiatives should encourage their input and buy-in.
- Prioritize governance goals. Reduce complexity, confusion, and conflict by selecting the most appropriate goals.
- Assign ownership and accountability for project governance. More than an individual, a select group of experienced resources should be assigned to deliver, monitor, and control any governance initiative.
- Provide transparency. Visibility is vital because it builds confidence and understanding of the process.
- Learn, then adopt any redesign. Governance is an evolutionary process. Learn from mistakes and new or improved knowledge.

#### **TxDOTCONNECT Governance Processes**

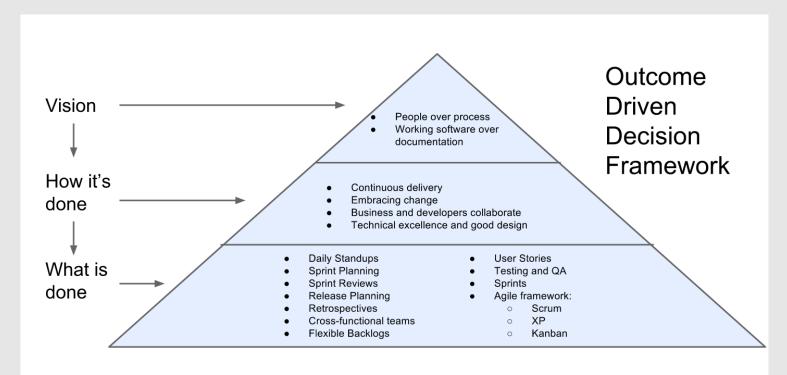


- Sponsor and Decision Making Stakeholders
  - Existing TxDOT governance bodies:
    - Executive Steering Committee, CAB, ARB, DGG, etc.
  - Project specific decision making authority
- Project RACI
- Change Control Process
- Decision Log
- Risk and Issue Management
- Integrated Workplan
- Escalation Process

## **Agile Governance**



• All tasks and approaches to be accountable the question: Does what I'm doing achieve the vision and purpose of what I must accomplish?: Why > How > What?



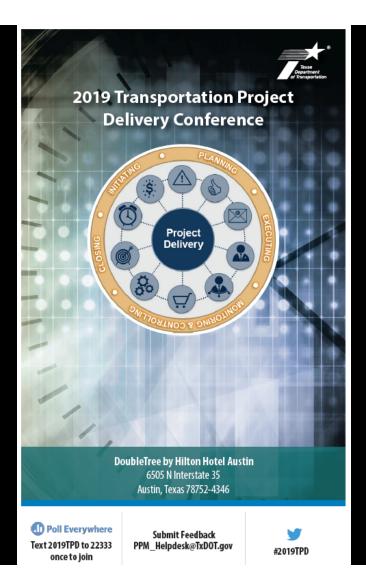
## **Enterprise and Portfolio Governance**



Information and technology-related decisions and investments are being made by a much more diverse and distributed set of business roles leading to a growth in business-led IT

#### Cooperative Options for Business and IT Collaboration





#### Thank You, Exhibitors!





#### **DANNENBAUM**

















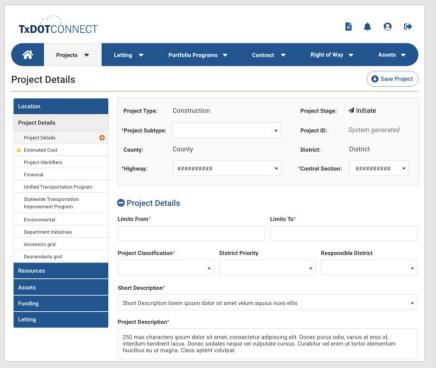


#### **TxDOTCONNECT compared to DCIS**

#### **DCIS**



#### **TXDOTCONNECT**



#### **Vision of the Future State**

# System Capabilities

Design and implementation of new system(s) to enable modernization

# Organizational Capabilities

Improvement of information sharing and collaboration

## **Process Design**

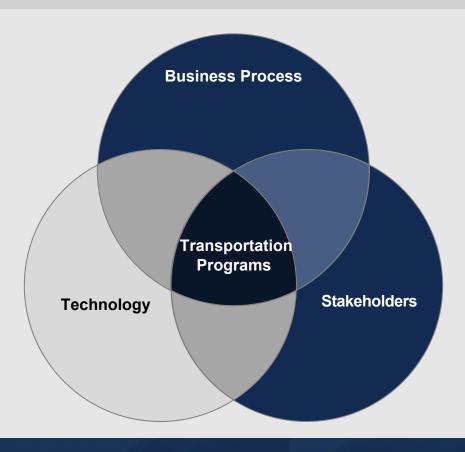
Modification of business processes to reflect the business model TxDOT wishes to pursue

# Decision Support/Analytics

Development of standard rules and reporting tools

## Alignment of People, Processes, and Technology are Critical





#### **Business Processes:**

Agency aligned processes to deliver our Transportation Programs. Training Available:

TPD100: On-line Introduction
TPD101: Instructor Led Overview

TPD102: Project Delivery & Governance TPD103: Performance Based Planning TPD104: Quarterly Review Process

#### **Key Stakeholders:**

TxDOT, Commission, MPOs, consultants and contractors

#### Technology:

TxDOTCONNECT is the solution to enable transportation program planning and delivery.

#### **MPPM Solution**





# **TxDOTCONNECT**

Automating the Delivery of TxDOT's Transportation Programs:

- Program/Portfolio Management
- Project Management
- Right of Way

#### **Project Timeline Revisions**

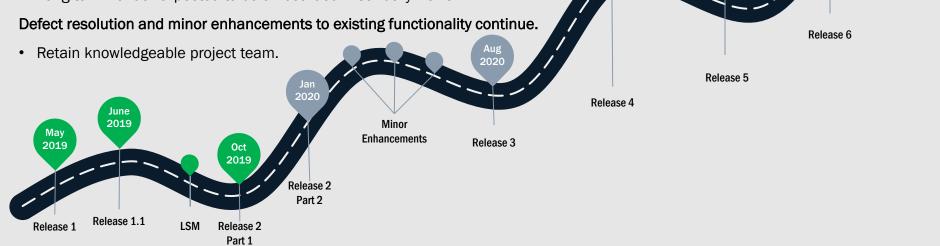


#### Release 2 split into two deployments.

- Engineer's Estimate launched on 10/10/2019.
- Right of Way deployment planned for 01/20/2020.

#### Release 3 -6 deployment dates delayed by 6 months.

- Procurement for long term vendor expected to post by end of the month.
- Long term vendor expected to be on-boarded in January 2020.



#### **Project Release Scope Revision**



Release 1

Construction Projects Release 2

Right of Way

Engineer's Estimate Release 3

Alternative Delivery

Maintenance Project

Unified Transportation Program Release 4

> Feasibility Study

Total Project Cost

STIP/TIP

Pre-letting

Release 5

Project Schedules

Proposals

Division Funding Programs

Legacy Integrations Release 6

Additive Alternative

Division Resource Programs

Project Comments

#### Release 2 October 2019 Deployment for Capability C – Engineer's Estimate

Release 1

Capability A
Construction Projects

Release 2

<u>Capability B</u> Right of Way (Parcels)

Capability C Engineer's Estimate

- Engineer's Estimate
- Specifications List
- Sealing and Summary
- Bid Items Management

#### Release 2 January 2020 Deployment for Capability B – Right of Way



Release

Capability A
Construction Projects

Release 2

<u>Capability B</u> Right of Way (Parcels)

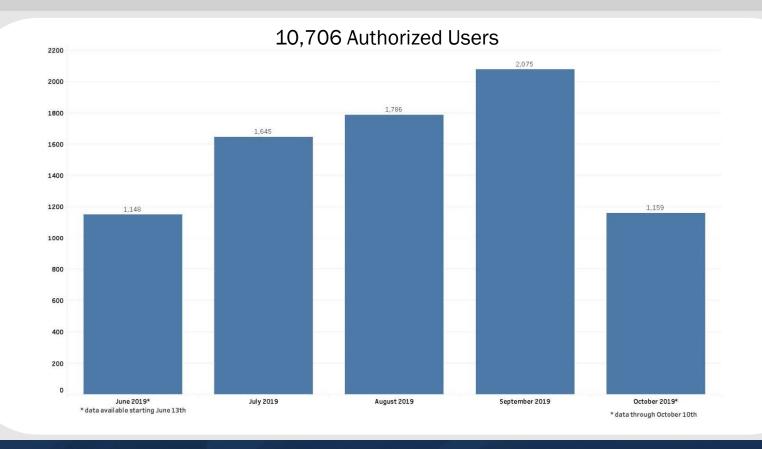
Capability C Engineer's Estimate

- Parcel Mapping
- ROW Project Information
- Utility Project Information
- Invoice Payment
- Introduction of Workflow

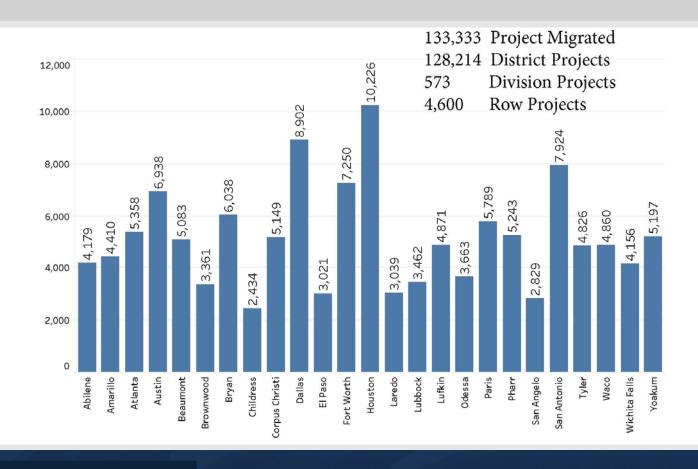
## **TxDOTCONNECT Fun Facts**



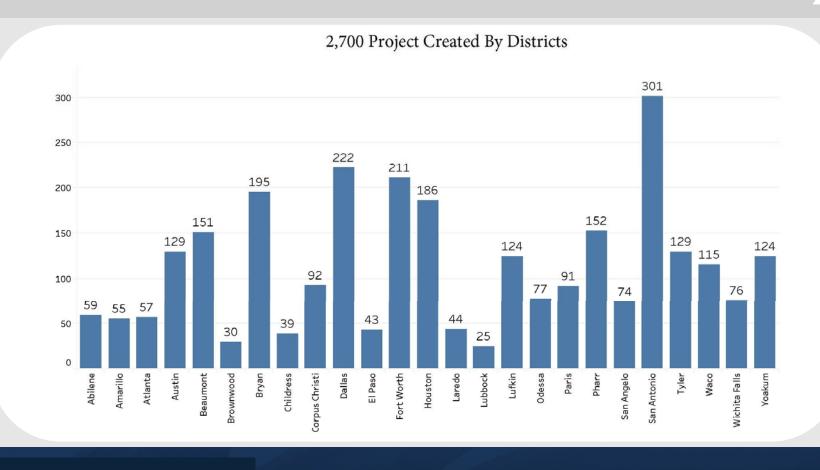
## **Authorized Users by Month**



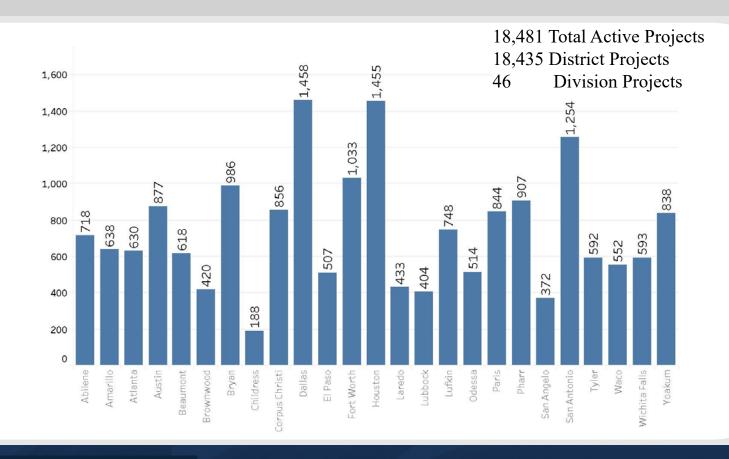
#### **Projects Migrated**



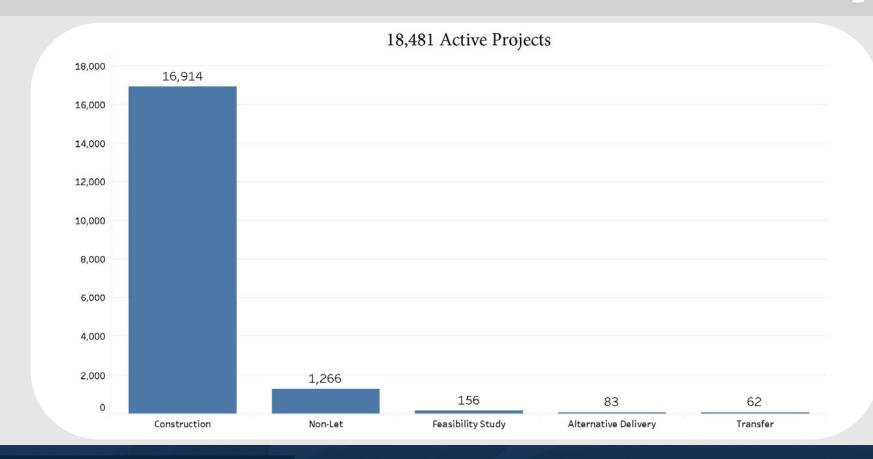
#### **Projects Created by Districts**



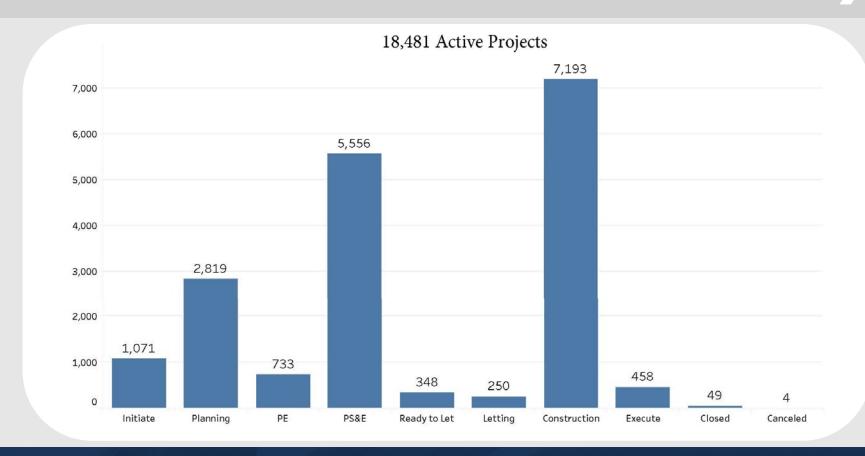
#### **Active Projects**



#### **Active Projects by Project Type**

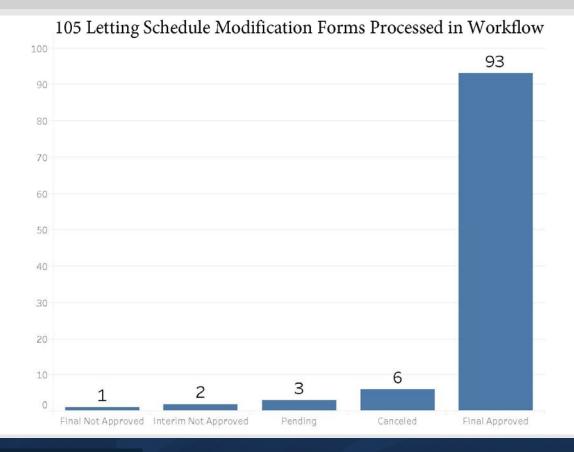


#### **Active Projects by Project Stage**



#### **Letting Schedule Modification Forms in Workflow**

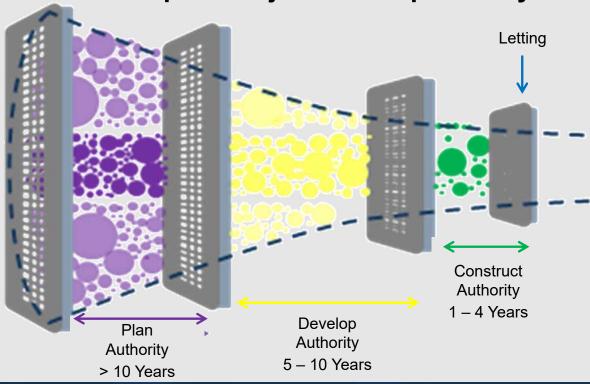




#### **The Funnel**



## **TxDOT's Capital Project Development Cycle**



## **Tableau Demonstration**

**Ben McCulloch** 

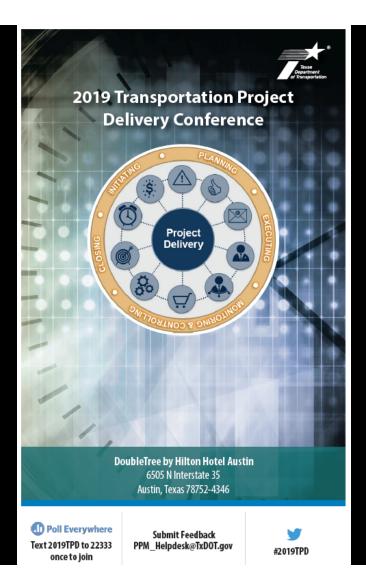




# Thank you!

**Questions or Comments?** 

Contact the TxDOTCONNECT Project Team at TxDOTCONNECT@txdot.gov



#### Thank You, Exhibitors!





#### **DANNENBAUM**

















#### **Keynote Luncheon**





## Commissioner Laura Ryan

**Texas Transportation Commission**