ODOT Scoping

Presented By Delivery & Operations Project Management Office

November 16th, 2022

ODOT Scoping

What will be covered today:

- Scoping Program
- Theory and purpose
- Documents
- Process
- Lessons Learned

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Scoping Program - Project Management Office

- Establish high level scope, schedule, and budget for Statewide Transportation Improvement Program (STIP) development.
- Establish and maintain consistency with requirements, documentation, and process for statewide scoping efforts.
- Provide training to project delivery staff involved in scoping efforts.
- Provide consistent process improvement and quality controls for each scoping need.

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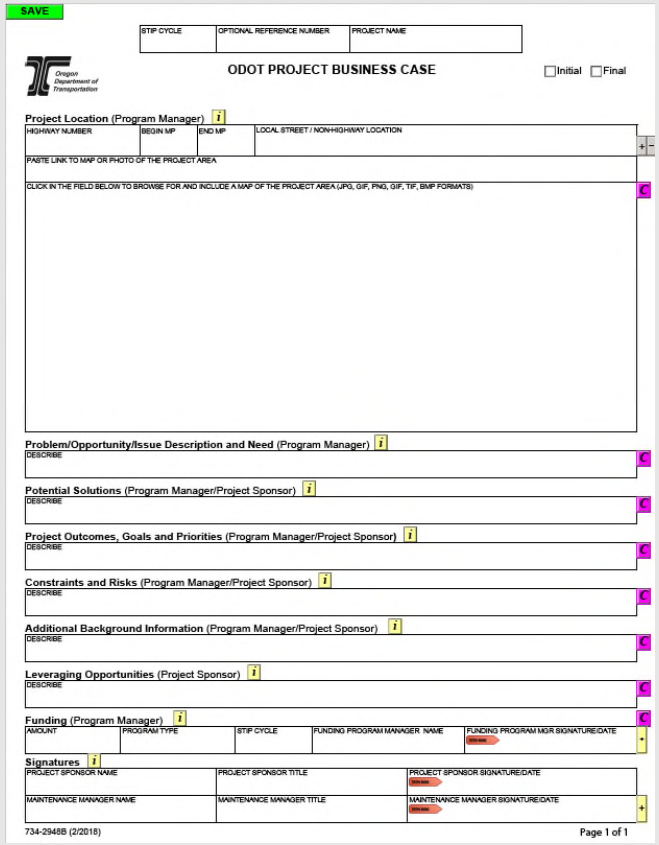
Purpose of Scoping

- Scoping is the process of validating a project purpose and potential investment strategies while identifying risks and opportunities in the delivery of the project.
- Expected outcomes of scoping include:
  - A well defined scope
  - Schedule
  - Budget
  - Identify and mitigate risk
  - Project Delivery Approach
  - Opportunities to Leverage Funding

Scoping Process Documents

- Business Case
  - Establishes high level scope, schedule, budget
  - Initial Needs Business Case prepared by Funding Program Managers before Scoping
  - Final Business case
  - In-house vs Outsourced
  - Alternative Delivery Method

- Draft Project Charter
  - End of scoping, documents in further detail the scope, schedule, and budget to pre-fill the form and address those updates needed when the project starts



SAVE

STIP CYCLE	OPTIONAL REFERENCE NUMBER	PROJECT NAME

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ODOT PROJECT BUSINESS CASE

☐ Initial ☐ Final

Project Location (Program Manager)

HIGHWAY NUMBER	BEGIN MP	END MP	LOCAL STREET / NONHIGHWAY LOCATION

PASTE LINK TO MAP OR PHOTO OF THE PROJECT AREA

CLICK IN THE FIELD BELOW TO BROWSE FOR AND INCLUDE A MAP OF THE PROJECT AREA (JPG, GIF, PNG, GIF, TIF, BMP FORMATS)

Problem/Opportunity/Issue Description and Need (Program Manager)

DESCRIBE

Potential Solutions (Program Manager/Project Sponsor)

DESCRIBE

Project Outcomes, Goals and Priorities (Program Manager/Project Sponsor)

DESCRIBE

Constraints and Risks (Program Manager/Project Sponsor)

DESCRIBE

Additional Background Information (Program Manager/Project Sponsor)

DESCRIBE

Leveraging Opportunities (Project Sponsor)

DESCRIBE

Funding (Program Manager)

AMOUNT	PROGRAM TYPE	STIP CYCLE	FUNDING PROGRAM MANAGER NAME	FUNDING PROGRAM MGR SIGNATURE/DATE

Signatures

PROJECT SPONSOR NAME	PROJECT SPONSOR TITLE	PROJECT SPONSOR SIGNATURE/DATE
MAINTENANCE MANAGER NAME	MAINTENANCE MANAGER TITLE	MAINTENANCE MANAGER SIGNATURE/DATE

734-2948B (2/2018) Page 1 of 1

Scoping Process Documents

- Work zone decision tree
  - Assist with documenting alternatives, devices, and traffic control strategies
- Risk Register, addresses known risks with contingency for schedule and budget (integrated into the CET)
- Cost Estimating Template (CET), basis of cost and assumptions (incorporates the risk register)

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Print Form

Work Zone Decision Tree

Evaluate Separation Opportunities, WZ Concepts, WZ Devices

Project Name (Section) | Key No. | Contract No.

Highway | Project Leader / Project Manager | Agency Project Manager | Region

Phase: ☐ 1 – Scoping ☐ 2 – Project Initiation to DAP ☐ 3 – DAP to Final PS&E ☐ 4 – Construction

Contractor

Opportunities to Evaluate	Phase	Possible / Viable	Impacts	Stakeholders & Input	Status Recommendation (R) / Decision (D)
Road closure (full closure, directional closure)	1				
Crossover/on-site diversion	1				
Rigid barrier (concrete, steel, temporary guardrail)	1				
Daytime / nighttime evaluation	1				
Staged construction with temporary widening	1				
Standard lane closures with channelizing devices	1				
Law enforcement overtime	1				
Smart Work Zone System/Work Zone ITS	1				
Accelerated contracting strategies	1				
Accelerated construction strategies	1				
Automated Flagger Assistance Devices (AFAD)	1				
Temporary Transverse Rumble Strips (TTRS)	1				
Radar speed trailers	1				
Construction Speed Zone Reductions	1				
Increased lateral buffer space	1				
Public information campaigns	1				
Other:	1				
	2				
	3				
	4				

Addressing "The Why"

Business Case

SAVE

STIP CYCLE	PROJECT NAME	PROJECTWISE NO. (IF PREV. SCOPED)

Oregon Department of Transportation

ODOT PROJECT BUSINESS CASE

☐ Initial ☐ Final

Project Location (Program Manager)

ROUTE NAME	HIGHWAY ID	BEGIN MP	END MP	LOCAL STREET / NON-HIGHWAY LOCATION

PASTE LINK TO MAP OR PHOTO OF THE PROJECT AREA

CLICK IN THE FIELD BELOW TO BROWSE FOR AND INCLUDE A MAP OF THE PROJECT AREA (JPG, GIF, PNG, GIF, TIF, BMP FORMATS)

Problem/Opportunity/Issue Description and Need (Program Manager)

DESCRIBE

Potential Solutions (Program Manager/Project Sponsor)

DESCRIBE

Project Outcomes, Goals and Priorities (Program Manager/Project Sponsor)

DESCRIBE

Planned Construction Year (Program Manager/Project Sponsor)

YEAR	NARRATIVE

High Impact Risks (Program Manager/Project Sponsor)

RISK TITLE	DETAILED DESCRIPTION OF RISK

Additional Background Information (Program Manager/Project Sponsor)

DESCRIBE

Leveraging Opportunities (Project Sponsor)

DESCRIBE

Cost Estimate Assumptions and Methodology (Program Manager/Project Sponsor)

CONFIDENCE LEVEL	NARRATIVE

734-2948B (3/2021) Page 1 of 2

Funding (Program Manager)

AMOUNT	PROGRAM TYPE	STIP CYCLE	FUNDING PROGRAM MANAGER NAME	FUNDING PROGRAM MGR. SIGNATURE AND DATE

Signatures

PROJECT SPONSOR NAME	PROJECT SPONSOR TITLE	PROJECT SPONSOR SIGNATURE AND DATE
MAINTENANCE MANAGER NAME	MAINTENANCE MANAGER TITLE	MAINTENANCE MANAGER SIGNATURE AND DATE

Addressing "The What"

Project Charter

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ODOT PROJECT CHARTER

PROJECT NAME	PROJECT KEY NUMBER	DATE PREPARED

Project Description (Purpose and Need)

In-Scope:

Out-of-Scope:

Constraints and Risks

Assumptions

Project Delivery Approach

Project Development Team (PDT) Members

NAME	DISCIPLINE

Project Schedule (Milestones)

MILESTONE	DATE (MM/DD/YYYY)
PE EA Open	
PDT Kickoff	
Project Initiation Phase Complete	
Design Acceptance Phase Complete	
ROW EA Open	
PS&E Submittal	
Bid Opening	
Forecasted 1st Note	
Forecasted 2nd Note	
Forecasted 3rd Note	

Project Budget (Funding)

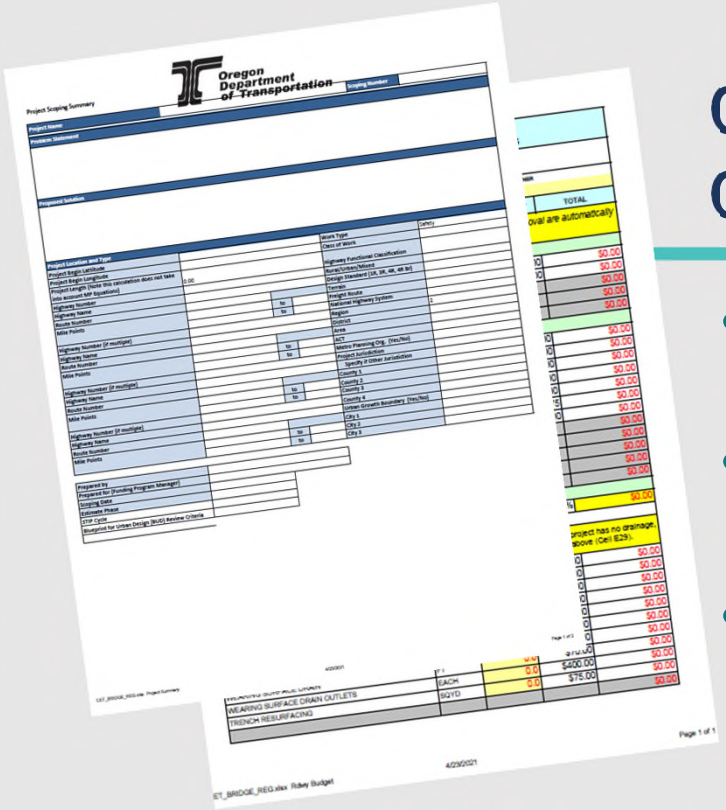
PHASE	PHASE TOTAL ESTIMATED COST	CURRENT ESTIMATE
PL – Planning		
PE – Preliminary Engineering		
RW – Right of Way		
UR – Utility Relocation		
CN – Construction		
OT – Other		
TOTAL		

AMOUNT	PROGRAM TYPE	FUNDING PROGRAM MANAGER NAME	FUNDING PROGRAM MANAGER SIGNATURE/DATE

734-2948A (10/2019) Page 1 of 2

Signatures

PROJECT LEAD PRINT NAME	PROJECT LEAD TITLE	PROJECT LEAD SIGNATURE
AREA MANAGER PRINT NAME	AREA MANAGER TITLE	AREA MANAGER SIGNATURE
PROJECT SPONSOR PRINT NAME (OPTIONAL)	PROJECT SPONSOR TITLE	PROJECT SPONSOR SIGNATURE
TECH CENTER MANAGER PRINT NAME	TECH CENTER MANAGER TITLE	TECH CENTER MANAGER SIGNATURE
MAINTENANCE MANAGER PRINT NAME	MAINTENANCE MANAGER TITLE	MAINTENANCE MANAGER SIGNATURE



Cost Estimating Tool (CET) and Other Scoping Documents

- Every discipline must review the CET and complete their section for every scoped project.
- Delivery method recommendation (in-house, outsourced, or alternatives).
- Additional documentation completed.
  - Work zone decisions documented
    - ODOT's work zone decision tree document
  - Sketches detailing proposed project scope.
  - Photos documenting existing conditions at time of scoping.

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CET- Excel based workbook that is a repository for the following items:

- Cost estimates for each design discipline
  - Some disciplines combines:
- Design checklist for each discipline.
- Risk Register.
- Contingency allocation.
- Alternative Delivery analysis.
- Value Engineering – applicability.
- PE-CE budget calculations.
- Inflation calculations.

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Cost Estimating Template (CET) - Project Risk Register Tab

Key# & Project Name:		Total Project Cost:	$0	Design Sched. Risk =	
TPM/RE-CP:		Construction Cost:	$0	Const. Sched. Risk =	
Area Manager:		Project Schedule:		Total Schedule Risk =	

Cost Risk* = $0.0 K *Cost Risk based on identified risk.

Risk-Based Cont. = #DIV/0!

Risk Identification								Cost Impact - In Thousands				Schedule Impact - In Months					Risk Response Plan					Monitor and Review	
Risk No.	Date Id.	Risk Title	Phase that it impacts	Critical Path?	Nature	Detailed Description of Risk Event	Probability	Min $	Max $	Expected Value $	$ Impact	Min (M)	Max (M)	Expected Value (M)	(M) Impact	Bid Date Variability	Status	Rank	Strategy	Risk Owner	Response action(s) to be taken	Date, Status, and Review Comments	Date Updated
1																							
2																							
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Maps_Photos | Narrative Summary | Cost Estimate | ADS SAW | Contigency | Project Risk Register | Example - PRR | Risk Guidance | Roadway E ...

Identify Risk → Analyze Risk → Prioritize Risk → Plan Risk Response → Implement Response → Monitor & Review Risk

Cost Estimate Contingency

Construction Estimate Summary					
Elements	Amount	Base %	Adjust %	Standard Element Cost Comments	
Roadway	$ 12,726,516	Do not change percentages in this column	Enter positive or negative percentage in this column to adjust Base %		
Structures	$ 698,600				
Traffic (Signs, signals, illum)	$ 260,000				
Hydro (not incl in Roadway or Structures)	$ -				
Geotech (not incl in Roadway or Structures)	$ -				
Hazmat	$ -				
Construction Subtotal	$ 13,685,115.80			Reason for Mob, TC, EC, Survey, Removal adjustments	
Mobilization	$ 1,368,512	10.0%	0.0%		
Traffic Control (excl. Temp/Portable Signal)	$ 1,368,512	10.0%	0.0%		
Erosion Control	$ 68,426	0.5%	0.0%		
Construction Survey	$ 273,702	2.0%	0.0%		
Removal of Structures & Obstructions	$ 410,553	3.0%	0.0%		
Subtotal	$ 17,174,820.33			Increase/Decrease Cont. per Total Cost Risk Reserve below	
				Cost Risk Reserve	Schedule Risk Reserve
Bid Item Contingency	$ 4,294,000	25.0%	0.0%	$ 1,831,693.13	1.55
Construction Bid Item Total	$ 21,468,820.33			Reason for Adjustment	
Construction Contingency (3.5% of BI Total)	$ 479,000	3.5%			
Const. Engineering (% of BI Total + CN Contingency)	$ 1,537,000	7.0%			
Construction Total	$ 23,485,000				

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Contingency from contingency worksheet

Contingency adjustment cell

Cost risk reserve from risk register

ADS Scoping Analysis Worksheet

Purpose:

- Provide high level "filter" for projects that may benefit from alternative delivery.
- Informs scoping team that VE/CRA is either:
  - Not required or recommended.
  - Recommended or required
- Triggers PE adder for VE/CRA.

Question	ADS Scoping Analysis Worksheet - Questions	Input
1	Will this project be delivered by ODOT (not a Certified Local Public Agency, or a Local Public Agency using State funds)?	
2	What is the Project Design Type from Highway Design Manual?	
3	What is the Project Work Type from Highway Design Manual?	
4	What is the project's Total Cost Estimate (in $millions, e.g. $845,000 = .845)?	$.0 million
5	How many months is there until the target PS&E date?	#NUM!
6	Is this project limited to one of the following: Environmental phase only (EA/EIS), ROW only (advance purchase), or Construction only (design previously completed)?	
7	Will the design of the project be outsourced?	No
8	Is the project forecast to include **unique** technical elements requiring special qualifications or unique approach in construction (e.g. tunneling, large drilled shafts, complex fabrication, etc.)?	
9	Will the project have complex or challenging traffic control requirements (e.g. significant detour structure or detour route)?	
10	Does the project fit one (or more) of the following criteria: has a "statewide" area; is part of a Program of similar work occurring across the state; or is part of a Program of similar work occurring across the region (e.g. bridge deck sealing, signing, traffic signal upgrades/retrofit, guardrail end replacements, etc.)?	
11	Is the project Single Function, or does it have only a few simple elements (e.g. signing replacement and guardrail upgrades, etc.)?	
12	How long is the Construction phase duration estimate (in months)?	

Highway Design Manual 1.4.2

Please answer all questions.	Contact ADS
Please answer all questions.	Contact Value Engineering
Please answer all questions.	Contact Risk Management

VE and CRA PE Estimate

Value Engineering and Cost Risk Assessment

- Adds $160k to PE estimate when VE & CRA required.
- Adds $80k to PE Estimate when VE & CRA recommended.

Project Total Estimate by Phase	
Project Phase	Estimate
In-house Preliminary Engineering	$ 3,688,000
Outsourced Preliminary Engineering	$ -
Additional PE for VE study	$ 80,000
Additional PE for Cost Risk Assessment	$ 80,000
Preliminary Engineering	$ 3,848,000

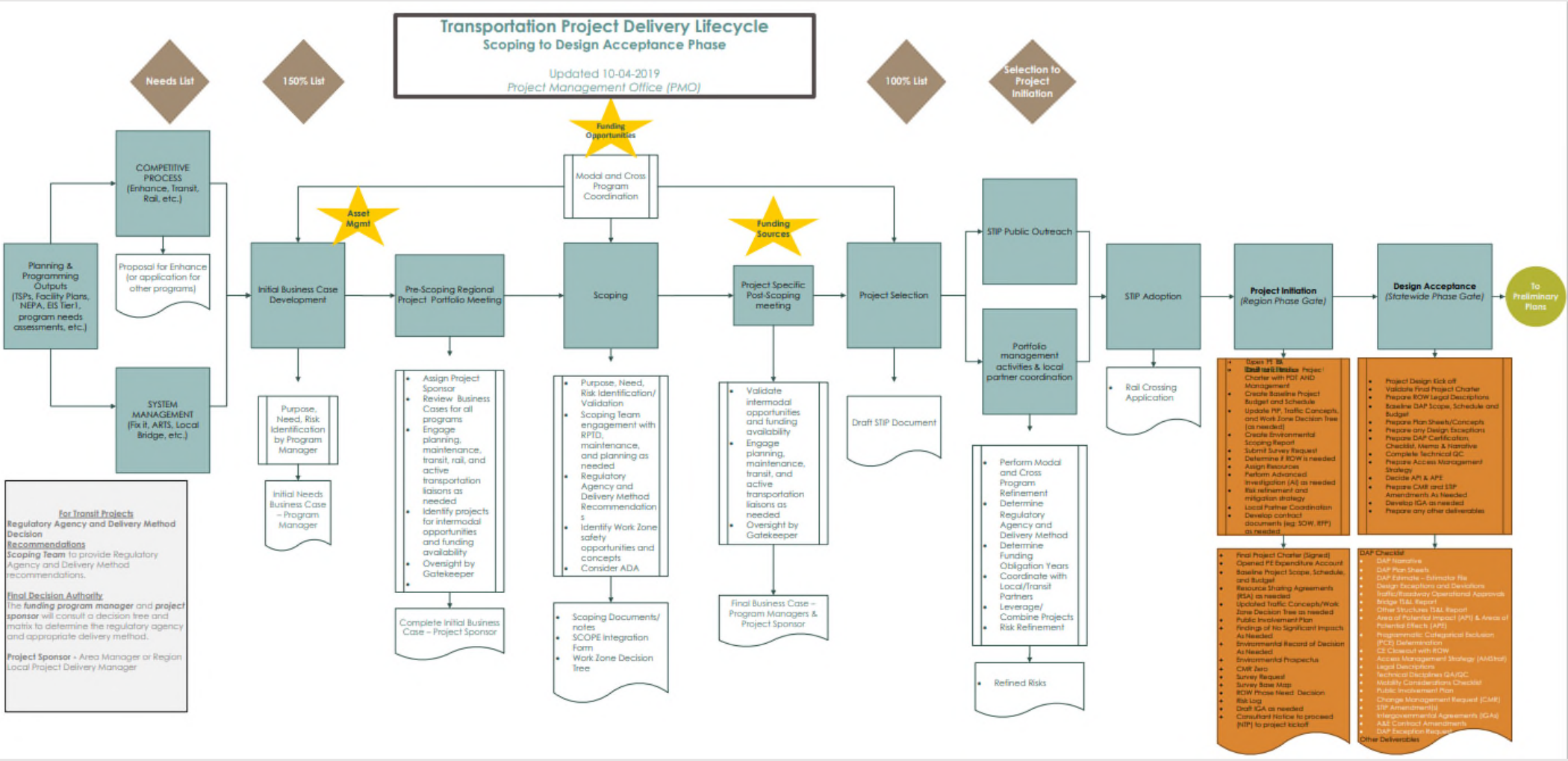
PE "adder" when VE and CRA is required by threshold, or "recommended"

Transportation Project Delivery Lifecycle

Scoping to Design Acceptance Phase

Updated 10-04-2019

Project Management Office (PMO)



Implemented Scoping Process Improvements

- Clearly defined scoping roles
- Implemented Work Zone Decision Tree
  - Captures evaluation of separation opportunities, concepts, and devices in work zones and to determine if Law Enforcement is needed in work zones during construction.

- ProjectWise – central location to store scoping information

- Electronic Signature – to streamline and improve signature process

- Identifying and recommending Advanced Investigation (where applicable)
  - Provide additional resources (time and effort) for additional scoping to address risk.

Roles and Responsibilities

Funding Program Manager

- Responsible for managing the funding program portfolio (primary source for the project)
- Provides the initial business case
- Signs the final business case

Project Sponsor

- Identifies and Completes leveraging opportunities portion of Business Case
- Can be an Area Manager, District Manager, Project Delivery Manager, and Region Maintenance and Operations Manager

Maintenance Manager

- Support to some of the funding managers in developing the initial needs business cases
- Owners of the final product after construction

Scoping Coordinator

- Facilitates/coordinates different funding programs
- Collect and save all scoping documents in ProjectWise
- Responsible for overseeing the scoping process
- Responsible for the pre and post scoping program meetings in the region.

Scoping Coordinator

- Gather background data, if available
- Set up Cost Estimating Tool (CET).
- Schedule desk scoping meetings.
- Clarify scope with Program Manager
- Schedule field scoping.
  - Efficient use of core team's time
  - Safety

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Scoping Lists from Program Managers

- Region receives scoping lists and Initial Business Cases from Program Managers.
- Scoping Coordinator compiles master list of potential projects.

2124_00272	District 8 Signal Upgrades	Replace all signal poles, hardware and equipment at US199 (7th Ave) at Park St. in Grants Pass and OR99 (Main St) at Laurel Ave. in Ashland. Improve ADA ramps.	8	REDWOOD;ROGUE VALLEY	US-199;OR-99;I-5;OR-140	-	-	OPERAT
2124_00273	I5:Sexton, Smith, & Stage Rd Pass Var. Speed Signs	Install Variable Speed Limit (VSL) and Variable Message Signs (VMS) on Sexton, Smith, Stage passes on I-5.	8	PACIFIC	I-5	-	-	OPERAT
2124_00274	OR42: Mile 49.5 Slide	Mitigate slide with a shear key rock buttress and repave eastbound "B" Lane.	7	COOS BAY-ROSEBURG	OR-42	49.46	49.54	OP-SLD
2124_00275	OR42: MP 50 Rockfall/US101: Anderson Rockfall	Hwy 42, MP 49.94 to 50.21: Install 42" barrier mounted rock protection screen. Widen pavement to accommodate barrier without reducing shoulder width. Hwy 101, MP 334.3: Install 42" barrier mounted rock protection screen. Widen pavement to accommodate barrier without reducing shoulder width.	7	COOS BAY-ROSEBURG	OR-42	50.00;334.30		OP-SLD

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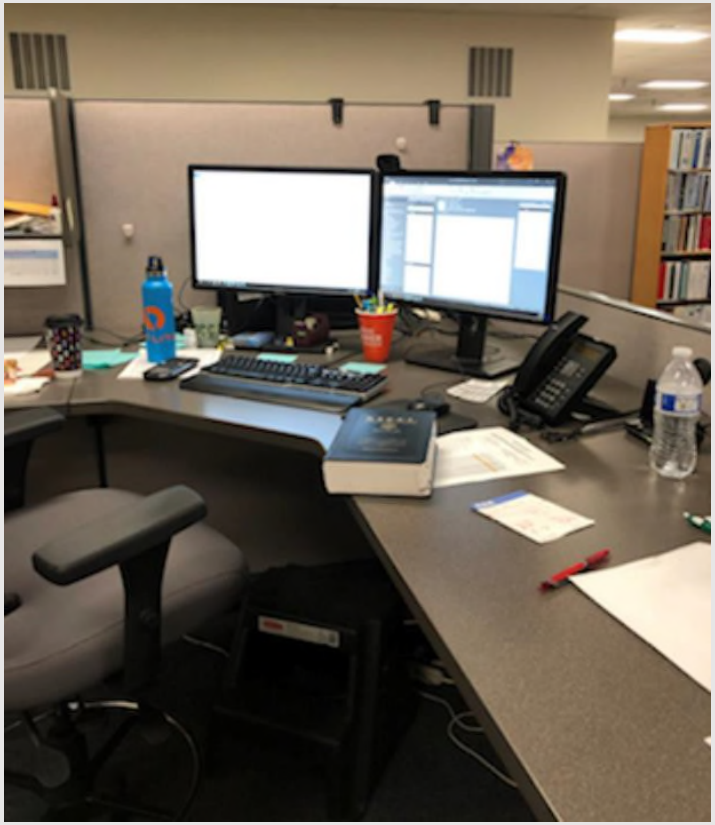
Scoping Team

- All Disciplines are represented on scoping team.
  - Tech Center (all technical discipines)
  - Planning
  - District/Maintenance
  - Area
- Strategically assembled core team conducts field scope.
- Every team member contributes to the scoping effort of every project.



Scoping Team Responsibilities

- Review Business Cases and program desk scoping estimates.
- Gather existing information.
  - Right of way maps
  - As-constructed plans
  - Culvert inventory information
  - Environmental research (Active channel width, in water work period, etc.)
- Conduct pre-meeting site visit, as needed.
- Research design standards and legal requirements to overall scope.
- Come prepared to scope.

Timelines

January 2021	February 2021 – September 2022	December 2022/January 2023	February 2023 – March 2023	Summer 2023	September 2023
OTC Approves funding allocations	Program development, scoping and project selection	Draft STIP is approved by OTC for Public Review	Public Comment Period	OTC approves Final STIP for submittal to FHWA/FTA	Federal approval of the 2024-2027 STIP for a start date of 10/1/2023

Desk Scoping Meeting

- Introduction to projects.
- Clarify Scope and likely design alternative, such as:
  - Construction staging
  - Flagger vs Signal
  - Mobility Accommodations
- Prepare for field scoping.
- Perform Scoping of “Desk Scope” only projects.
- Verify Funding Program Practical Design recommendations.
- Identify and document Practical Design opportunities.

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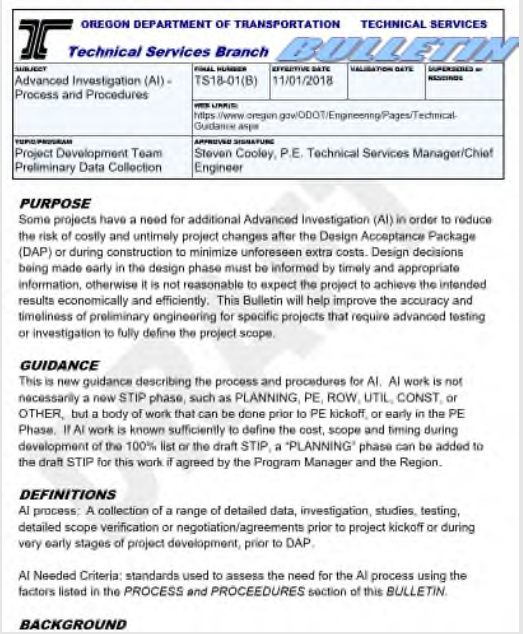
Process – AI and BCA

Advanced Investigation (AI)

- Identify Projects that will potentially require advanced investigation after STIP is approved.
- Use the business case and project charter to capture the information.
- Include a line item for AI in the scoping estimate for that will potential require AI.
- See *Advanced Investigation Technical Bulletin (TS18-01(B))* for more information.

- Benefit Cost Analysis (BCA) – Section 13 of HB 2017
  - Any highway modernization transportation project or capacity building transportation project estimated to cost at least $15 million needs a BCA.
  - Criteria For BCA
    - Is not an earmarked project in the 2017 Keep Oregon Moving Act
    - Proposed for OTC approval in the Construction-STIP (C-STIP)
    - Focused on capacity or modernization
    - Total project costs at least $15 million <u>or</u> amendment result in total project costs ≥ $15 million



OREGON DEPARTMENT OF TRANSPORTATION TECHNICAL SERVICES

Technical Services Branch BULLETIN

SUBJECT	FINAL NUMBER	EFFECTIVE DATE	VALIDATION DATE	SUPERSEDES or REVISES
Advanced Investigation (AI) - Process and Procedures	TS18-01(B)	11/01/2018		
	WEB LINK(S): https://www.oregon.gov/ODOT/Engineering/Pages/Technical-Guidance.aspx			
TOPIC/PROGRAM: Project Development Team Preliminary Data Collection	APPROVED SIGNATURE: Steven Cooley, P.E. Technical Services Manager/Chief Engineer			

PURPOSE

Some projects have a need for additional Advanced Investigation (AI) in order to reduce the risk of costly and untimely project changes after the Design Acceptance Package (DAP) or during construction to minimize unforeseen extra costs. Design decisions being made early in the design phase must be informed by timely and appropriate information, otherwise it is not reasonable to expect the project to achieve the intended results economically and efficiently. This Bulletin will help improve the accuracy and timeliness of preliminary engineering for specific projects that require advanced testing or investigation to fully define the project scope.

GUIDANCE

This is new guidance describing the process and procedures for AI. AI work is not necessarily a new STIP phase, such as PLANNING, PE, ROW, UTIL, CONST, or OTHER, but a body of work that can be done prior to PE kickoff, or early in the PE Phase. If AI work is known sufficiently to define the cost, scope and timing during development of the 100% list or the draft STIP, a "PLANNING" phase can be added to the draft STIP for this work if agreed by the Program Manager and the Region.

DEFINITIONS

AI process: A collection of a range of detailed data, investigation, studies, testing, detailed scope verification or negotiation/agreements prior to project kickoff or during very early stages of project development, prior to DAP.

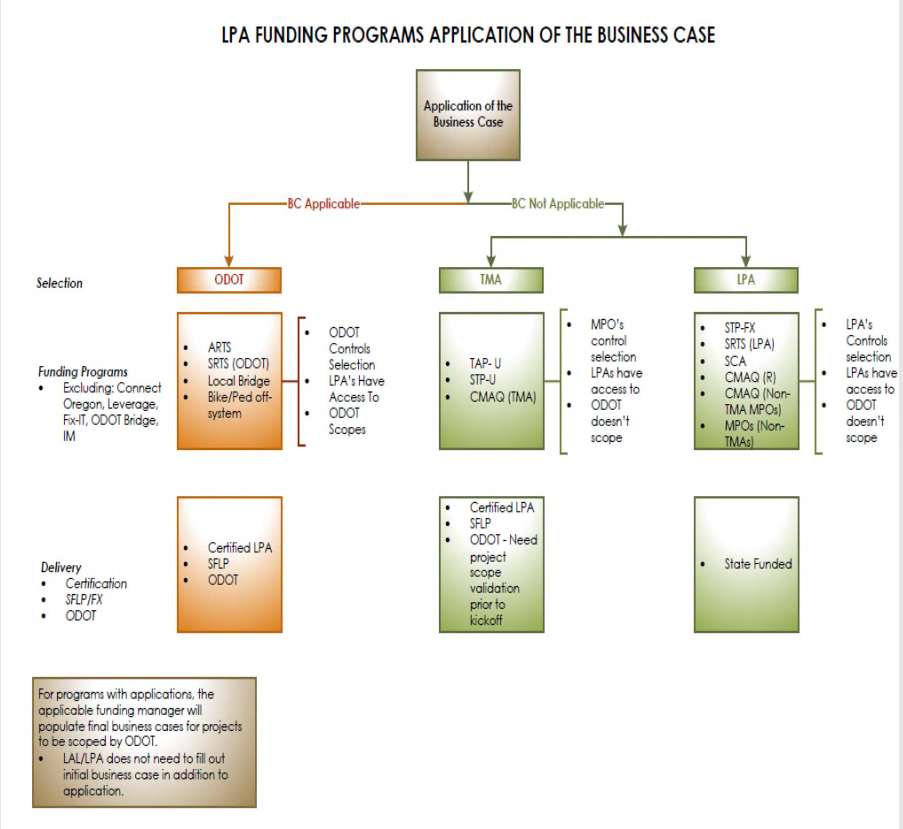
AI Needed Criteria: standards used to assess the need for the AI process using the factors listed in the *PROCESS and PROCEEDURES* section of this *BULLETIN*.

BACKGROUND

Process – Application of the Business Case

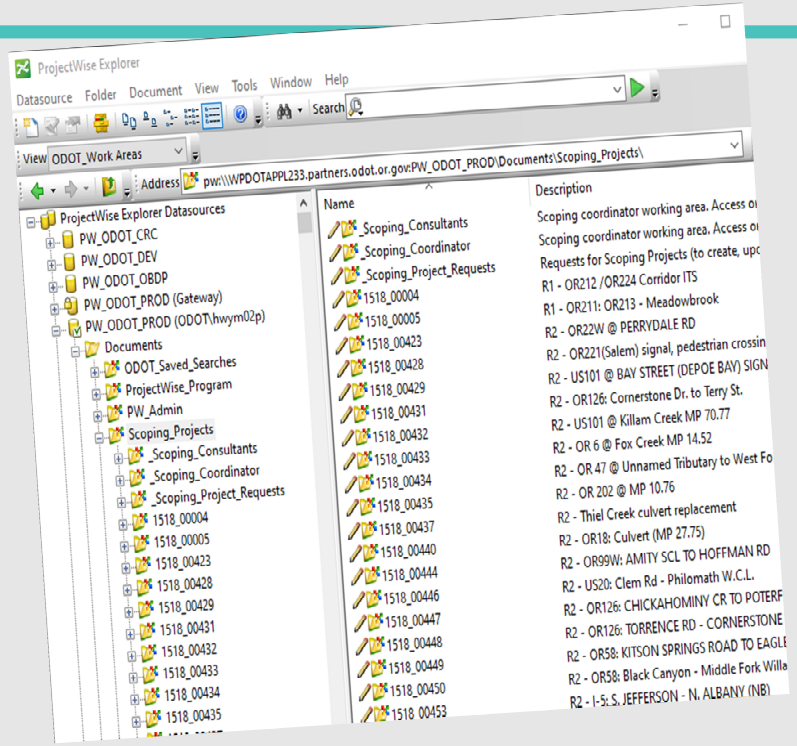
- Application of Business Case by Local Agency Funding Programs
  - If ODOT controls the selection process and scopes projects, the Business Case must be used.
  - If ODOT doesn't control the selection process, but is responsible for project delivery, validating the project scope, schedule, budget prior to project kick off through ***Local Project Technical Scoping Sheet*** is required.

    Selection Categories
    - ODOT Selection
    - Transportation Management Area Selection
    - Local Public Agency Selection



ProjectWise, folders and Documents

- Projects are requested by Scoping Coordinators in each region.
- Projects numbers are generated by ProjectWise.
- All data is entered by Scoping Coordinators.
- All data is updated by Scoping Coordinators.

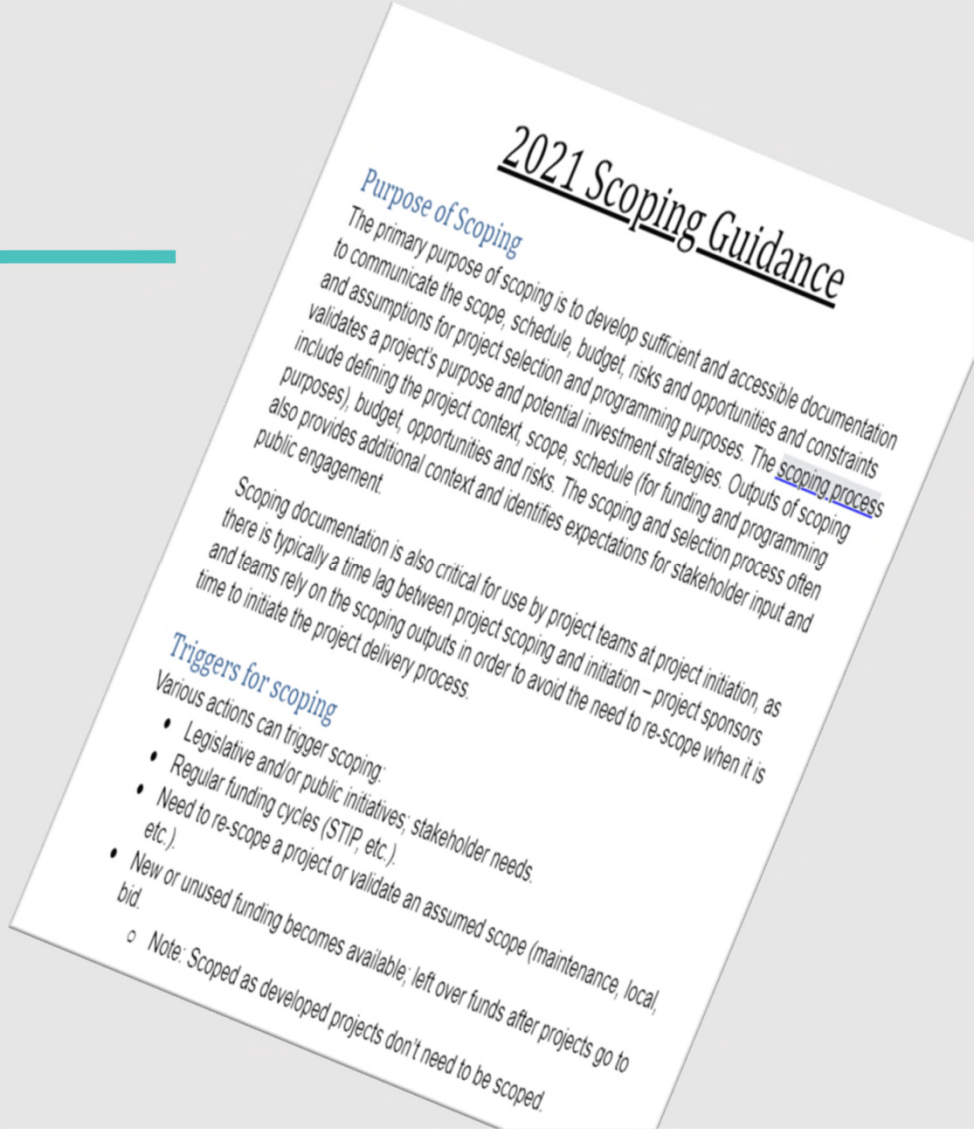


Scoping Guidance

- Scoping is housed in Project Management Office (PMO).
- PMO led an effort to create one document to clarify the scoping process at a high level across the agency.

What does it cover?

- Purpose of Scoping
- Program Level Scoping
- Region Level Scoping
- Inputs/Outputs to scoping
- Roles and Responsibilities
- ProjectWise Storage
- Scoping Considerations



2021 Scoping Guidance

Purpose of Scoping

The primary purpose of scoping is to develop sufficient and accessible documentation to communicate the scope, schedule, budget, risks and opportunities and constraints and assumptions for project selection and programming purposes. The scoping process validates a project's purpose and potential investment strategies. Outputs of scoping include defining the project context, scope, schedule (for funding and programming purposes), budget, opportunities and risks. The scoping and selection process often also provides additional context and identifies expectations for stakeholder input and public engagement.

Scoping documentation is also critical for use by project teams at project initiation, as there is typically a time lag between project scoping and initiation – project sponsors and teams rely on the scoping outputs in order to avoid the need to re-scope when it is time to initiate the project delivery process.

Triggers for scoping

Various actions can trigger scoping:

- Legislative and/or public initiatives; stakeholder needs.
- Regular funding cycles (STIP, etc.).
- Need to re-scope a project or validate an assumed scope (maintenance, local, etc.).
- New or unused funding becomes available; left over funds after projects go to bid.
  - Note: Scoped as developed projects don't need to be scoped.

What does it NOT cover

- Step by step of how to conduct scoping.
- Region specific requirements.
  - Example, narratives outside of the CET.

Document focuses on statewide minimum standards

2021 Scoping Guidance

Purpose of Scoping

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Minimum Standards for Scoping

- Program Level Scoping
  - Clearly defined **Initial Business Case.**
  - **Be available to clarification.**

- Region Level Scoping
  - Confirm initial business case assumptions with program manager.
  - **Field scoping**, unless there is a justifiable reason to omit.
  - **Desk Scoping.**
  - Clearly defined **Final Business Case**, written such that the project could be easily understood by all.

Desk Scope Only

- Confirm with Funding program manager if only desk scoping.
  - Bridge program requests all projects are field scoped.
- Considerations for desk scope only.
  - Safety.
  - Ease of project.
  - Cost/time savings.
  - Remote work.
- Use our technology (point cloud, Google Maps, etc.).
- Perform desk scope in a team environment.

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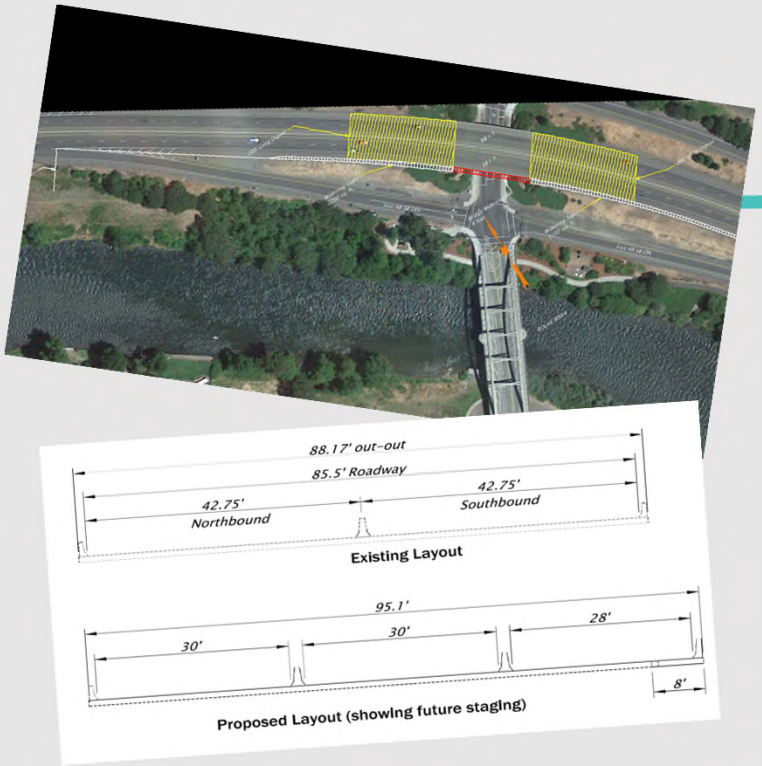
Field Scoping

- Core team attends field trips together.**
- Conduct ‘Tailgate’ meeting to discuss:
  - Review scope and likely design alternative.
  - Core team details concerns/information.
    - Right of way width.
    - In water work windows.
    - Temporary traffic restrictions.
  - Team identifies items for field investigation.
  - Safety is discussed at each site.



Iterative Scoping Process

- What if:
  - There are multiple viable solutions to achieve the proposed Scope?
  - The scoping process identifies an issue that complicates the proposed Scope?
- Scoping team is to perform iterative and collaborative post field visit scoping effort.

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QA/QC

- Each discipline responsible for their QC.
- Designee performs QA/QC review.
  - Confirm all disciplines have completed their section.
  - Review narratives for consistency in scope and likely design alternative.
  - Adjust PE from standard percentage, if needed.

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Phases of Project Risk Management

Identify Risk

- Threat or Opportunity?
- Detailed description

Analyze Risk

- Probability of the risk occurring
- Cost impact
- Schedule impact

Prioritize Risk

- Risk score
- Rank risks

Plan Risk Response

- Avoid, transfer, or mitigate threats
- Exploit, share, or enhance opportunities
- Accept risk

Implement Response

- Take risk response action

Monitor & Review Risk

- Discuss and document what actually happened

New Directives on Climate

- EO 20—04 (2020) directs ODOT to develop and apply a process for evaluating the GHG emissions impacts from transportation projects as part of STIP capital planning.

- Report on process due to Governor's Office in June 2021.

Office of the Governor
State of Oregon

EXECUTIVE ORDER NO. 20-04

DIRECTING STATE AGENCIES TO TAKE ACTIONS TO REDUCE AND REGULATE GREENHOUSE GAS EMISSIONS

WHEREAS, climate change and ocean acidification caused by greenhouse gas (GHG) emissions are having significant detrimental effects on public health and on Oregon's economic vitality, natural resources, and environment; and

WHEREAS, climate change has a disproportionate effect on the physical, mental, financial, and cultural wellbeing of impacted communities, such as Native American tribes, communities of color, rural communities, coastal communities, lower-income households, and other communities traditionally underrepresented in public processes, who typically have fewer resources for adapting to climate change and are therefore the most vulnerable to displacement, adverse health effects, job loss, property damage, and other effects of climate change; and

WHEREAS, climate change is contributing to an increase in the frequency and severity of wildfires in Oregon, endangering public health and safety and damaging rural economies; and

WHEREAS, the world's leading climate scientists, including those in the Oregon Climate Change Research Institute, predict that these serious impacts of climate change will worsen if prompt action is not taken to curb emissions; and

WHEREAS, the Intergovernmental Panel on Climate Change has identified limiting global warming to 2 degrees Celsius or less as necessary to avoid potentially catastrophic climate change impacts, and remaining below this threshold requires accelerated reductions in GHG emissions to levels at least 80 percent below 1990 levels by 2050; and

WHEREAS, Oregon, as a member of the U.S. Climate Alliance, has committed to implementing policies to advance the emissions reduction goals of the international Paris Agreement; and

WHEREAS, GHG emissions present a significant threat to Oregon's public health, economy, safety, and environment; and

GHG Index and Survey Tool

Link to online survey sent out & posted

Oregon Department of Transportation

GHG Index Data Collection

APRIL 2021

GHG INDEXING OF STIP PROJECTS AND PROGRAMS STARTS NOW

To kick off Phase II, the Climate Office is collecting information about proposed projects using an online survey tool in order to calculate the GHG Index. Based on feedback received from program and project delivery staff, this overview document answers a few basic questions about the data collection process, roles and responsibilities, timelines, and expected outcomes.

ONLINE SURVEY TOOL

The online survey tool is designed to capture project information needed to calculate GHG Index scores. Program managers and/or their delegates responsible for completing initial business cases should complete the survey for each project on their 120%-150% list. **The deadline for completing the surveys is June 15, 2021.**

WHICH PROGRAMS/PROJECTS APPLY

Since this process is meant to inform decision-making during project selection, we have shifted our focus from ODOT-delivered projects to ODOT-selected projects. To that end, if ODOT is responsible for project selection, scoping, and prioritization then the survey must be completed for all projects on the 120%-150% lists regardless of what agency ultimately delivers the project, ownership of the facility, or program-specific policy objectives and asset management systems (i.e. Fix-it, ARTS, etc...).

PROGRAMMATIC GHG INDEX REPORT

The purpose of the GHG Index Report is to inform program managers how their initial project lists score based on emissions impact potential and how those scores compare to our analysis of projects adopted in the 2021-2024 STIP. The reports will also be shared with scoping teams to help facilitate improved outcomes by providing examples of high and low scoring projects and to inform potential leveraging opportunities to be considered during project field scoping.

Though each project will receive a GHG Index score, the results will be aggregated by region and program in the GHG Index Reports we share back with program managers and scoping teams later this summer and fall.

The goal of this new process is to identify more projects that support outcomes like fewer vehicle miles traveled, system efficiencies, and transition to lower carbon modes. More information on outcomes that support GHG reduction and specific GHG-friendly scoping ideas (supportive attributes) are included in the STIP GHG Emissions Primer.

TIMELINE

In the coming weeks the Climate Office

analysis and GHG Index Report finding

Our goal is to provide this information

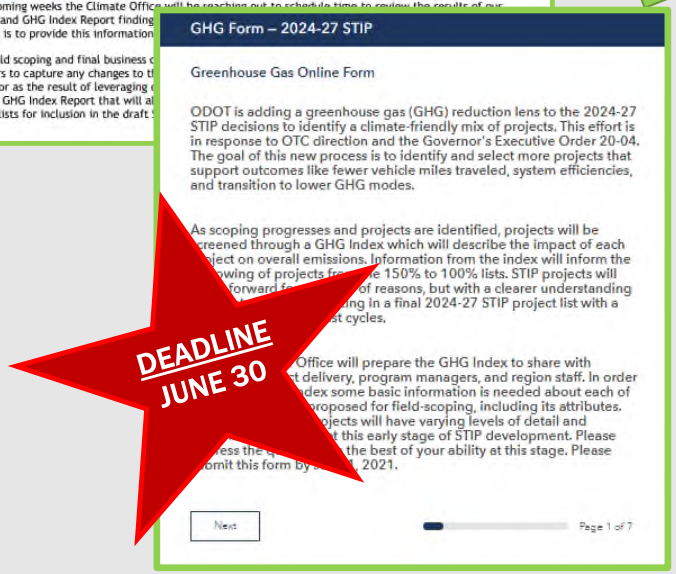
Once field scoping and final business c

managers to capture any changes to t

scoping or as the result of leveraging

updated GHG Index Report that will a

project lists for inclusion in the draft



GHG Form – 2024-27 STIP

Greenhouse Gas Online Form

ODOT is adding a greenhouse gas (GHG) reduction lens to the 2024-27 STIP decisions to identify a climate-friendly mix of projects. This effort is in response to OTC direction and the Governor's Executive Order 20-04. The goal of this new process is to identify and select more projects that support outcomes like fewer vehicle miles traveled, system efficiencies, and transition to lower GHG modes.

As scoping progresses and projects are identified, projects will be creened through a GHG Index which will describe the impact of each ject on overall emissions. Information from the index will inform the owing of projects fr e 150% to 100% lists. STIP projects will forward f of reasons, but with a clearer understanding ng in a final 2024-27 STIP project list with a st cycles.

Office will prepare the GHG Index to share with t delivery, program managers, and region staff. In order dex some basic information is needed about each of proposed for field-scoping, including its attributes. jects will have varying levels of detail and t this early stage of STIP development. Please ess the the best of your ability at this stage. Please omit this form by , 2021.

Next

Page 1 of 7

DEADLINE JUNE 30

Why GHG Index analysis in STIP project scope and select?

- The GHG Index will help us understand project emissions impacts on a relative scale for similar projects.

What's the purpose of the GHG Index?

- Inform Program Managers and scoping teams about project GHG performance and tangible mitigation options.
- Identify leverage opportunities that are beneficial to GHG/ climate outcomes.

Why online survey tool?

- A simplified, easy to use tool has been created to collect basic project information needed to prepare the GHG index.

ODOT Office of Social Equity
How Does Equity Apply to Scoping?

The Office of Social Equity's charge is to:

- Institutionalize equity, diversity, and inclusion practices in ODOT's programs, policies, performance, and priorities.
- Place an equity lens on transportation decisions within communities and in funding decisions.
- Develop equity and inclusion as a vital workforce skill.
- Ensure that contractors, consultants and advisory structures reflect Oregon's diversity.
- Ensure equitable project and service delivery for all of Oregon's communities with a specific focus on communities of color and other communities historically marginalized by government policies.

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ODOT Office of Social Equity
Questions asked in the Development of Business Cases

- How have or will historically excluded communities be informed, consulted, or involved?* What methods or tools were used for this engagement, be specific?
- In what ways does this program/project address the needs expressed by historically excluded communities?
- Is this project in a high social equity index area? If so, is there an opportunity to provide equity solutions to address economic or social equity?
- Is there an opportunity to increase safety and access to non-drivers that do not directly address the purpose of the project? If so, what is the cost or risk to ODOT? How do we mitigate the cost and/or risk?

**Historically excluded communities are those that have been systemically discriminated against or excluded from transportation planning and decision making. Specifically we are talking about people living with disabilities, people over the age of 65, people living in poverty, people with limited English proficiency, people who identify as BIPOC. BIPOC is Black, Indigenous, and People of Color which also includes Latino/a/x, Tribal Nations, Asian, Asian Pacific Islander, and Native Alaskan. Engaging these communities can be providing them with clear, concise, and objective information (inform), obtaining and utilizing feedback in analysis, alternatives, and decisions (consult), or working with the community throughout the project to ensure their desires and concerns are understood and addressed (involved).*

ODOT Office of Social Equity
Questions for Scoping Teams

Utilizing the context provided on the prior slides, Scoping Teams may choose to consider the following…

- Are there social equity opportunities or challenges related to design choices?
- Are there social equity opportunities or challenges associated with setting the project footprint?
- Does the Project Scoping Team have suggestions for ways to address social equity considerations
  - within the context of the project business case?
  - beyond the context of the project business case?

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Prior Lessons Learned

- Adequate resources (scoping team members) are needed for proper scoping
- Involving needed technical disciplines SMEs early in scoping for better scope, schedule, and budget.
- Integrate **risk assessments, scheduling** and **cost estimating** using consistent statewide templates to improve project budget and schedule
- Statewide program portfolio review of projects for taking advantage of leveraging opportunities (ie. local/state projects or bundling)

New Lessons Learned

- High level guidance is not enough,
  - need straight forward and detailed processes
  - Statewide templates, with guidance and context of each document, not only providing the template
  - Detailed roles and responsibilities, accountability for each role
- Provide flexibility through guidance
- Consistent process, templates, and guidance across the state, providing flexibility within the process to allow for regional differences.

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PROJECT SCOPING CHECKLISTS & SUMMARY

Instructions: This spreadsheet contains discipline-specific worksheets for documenting project scoping. The worksheets are to be completed by each scoping team member for their discipline. Complete the checklist with a short narrative, as well as assumptions and potential risks that may impact the project scope, schedule, budget, approach and resourcing.

Do not apply markups for PE, CE, and Contingencies to your cost estimates; the Construction Cost Total sheet applies those markups automatically.

Please consult with the Transportation Project Manager before adding or deleting rows or otherwise modifying the worksheet.

Project Summary Sheet: The Transportation Project Manager will complete the Project Summary sheet.

When you have completed your information save the file back to the ProjectWise folder and notify the Transportation Project Manager you have completed scoping for this project.

Updates: V21.2

Updated the Inflation Caluclation to a FV of money calculation. This will calculate inflation between a series of years by phase. See comments on cost sheet.
Updated the Risk Register sheet to account for bid date variability
Added a Discipline Sheet for Hazmat related items and cost.
Added Scoping Analysis worksheet (renamed to contigency to avoid confusion) tab for high level Alternative Delivery Analysis and VE/CRA determination - 2.24.21 ZWD
Added Value Engineering and Cost Risk Assessment PE cost inputs on cost estimate tab - 2.24.21 ZWD
Added Scoping Risk Worksheet tab for contigency evaluation - 2.24.21 ZWD

V21.3LAHC 03242021
Corrected the ADS SAW link to cost estimate by using the Total Cost Estimate, before the addition of VE or CRA $ in the SAW, included adjustment to Reference Data
Moved time calculation for PS&E to dropdowns tab for ADS SAW #5. Made ADS SAW #7 outsourcing linked to Cost Estimate cell B24
Integrated the ProposedCalcTable for PE % and associated formulas in the cost estimate cells B7:C8. Provided input notes: only in-house or outsourced PE calculates.
CE for in-house projects in line with PD-08 NTE, outsourced CE set to 17% NTE. Allow for adjustment with comment.
Edited Reference Data for project work type choices, also VE and CRA

V21.4 JPW
Updated inflation tables to current rates. Added work zone traffic control to roadway budgets.
Added Public Involvement Work Sheet with Cost.

V21.5
Inserted Climate Worksheet
Inserted new bridge scoping worksheets
Inserted Constructability Worksheet- Construction Narrative

Please see frequently asked questions.
https://www.oregon.gov/odot/Business/Documents/Cost%20Estimating%20Template%20FAQs.doc

Project Scoping Summary

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Project Name		Scoping Number	

Problem Statement (Business Case)

Proposed Solution

Project Location and Type					
Project Begin Lattitude				Work Type	
Project Begin Longitude				Class of Work	
Project Length (Note this calculation does not take into account MP Equations)	0.00			Highway Functional Classification	
Highway Number				Rural/Urban/Mixed	
Highway Name				Design Standard (1R, 3R, 4R, 4R Br)	
Route Number				Terrain	
Mile Points		to		Freight Route	
		to		National Highway System	
Highway Number (if multiple)				Region	
Highway Name				District	
Route Number				Area	
Mile Points		to		ACT	
		to		Metro Planning Org. (Yes/No)	
Highway Number (if multiple)				Project Jurisdiction	
Highway Name				Specify if Other Jurisdiction	
Route Number				County 1	
Mile Points		to		County 2	
		to		County 3	
Highway Number (if multiple)				County 4	
Highway Name				Urban Growth Boundary (Yes/No)	
Route Number				City 1	
Mile Points		to		City 2	
		to		City 3	

Prepared by	
Prepared for (Funding Program Manager)	
Scoping Date	
Estimate Phase	
STIP Cycle	
Blueprint for Urban Design (BUD) Review Criteria	

Project Name	0

Project Assumptions
1.
2.
3.
4.
5.

Advanced Investigation Issues
1.
2.
3.
4.
5.

Project Scoping Contacts	
0	Roadway
0	Bridge
0	Active Transportation
0	Traffic
0	Environmental
0	R/W
0	Access Management
0	Survey
0	Hydraulics
0	Geotech
0	Utilities
0	Planning
0	Transportation Project Manager

Project Name	0

Project Name	0

Maps	Photos

Narrative Summary by Discipline

Project Name	0	Scoping Number	0

Roadway
0
Bike- Ped & Transit Facilities
0
Traffic
0
Environmental
0
ROW
0
Access Management
0
Survey
0
Utilities
0
Hydraulics
0
Geology-Geotech
0
Planning
0
District- Maintenance
0
Bridge
0

Use this sheet for any additional information that was not captured in the CET worksheet. Please provide links t

ProjectWise Links

Examples: Links to projectwise narratives or documents, changes to intial business case as a result of scoping

o other documents that are not inclusive of the CET.

Other Project Notes

Project Cost Summary (Totals are rounded up to nearest 1,000s)

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CURRENT ESTIMATE YEAR 2021

Project Name	0	Scoping Number	0

Project Total Estimate by Phase

Project Phase	Estimate	%*	Adjust	Inflated Estimate
In-house Preliminary Engineering	$ -	0.0%		
Outsourced Preliminary Engineering	$ -	0.0%		
Additional PE for VE study	$ -	N/A	N/A	
Additional PE for Cost Risk Assessment	$ -	N/A	N/A	
Preliminary Engineering	$ -			
Right of Way	$ -			
Utility Reimbursement	$ -			
Construction	$ -			
Other	$ -			
Public Involvement	$ -			
Planning	$ -			
Advanced Investigation	$ -			
Leverage Construction	$ -			
Leverage additional PE cost	$ -			
Non-Leverage Construction	$ -			
Non-Leverage additional PE cost	$ -			
Total Project Estimate	**$0**			**$0**

PE minimum of $100,000 is applied if the calculated PE is less than $100,000 before adjustments when CN Total <$1,000,000.
Make further adjustments if needed and provide reason below

Reason for PE Adjustment or Other Phase

Outsource PE?	No
Outsource CE? If Yes, CE is calculated at PD-08 max for outsourcing.	No
Proposed Preliminary Engineering Year	
Proposed Right of Way Year	
Proposed Utility Reimbursement Year	
Proposed Construction Year	
Proposed Other Year	
Proposed Planning Year	
Proposed Advanced Investigation Year	

Link to Projectwise Scoping Schedule

ADA Ramps		QTY	COST
Addl PE required	$ -	0	$ 3,000
Addl R/W required	$ -		
Add $3000 Per Ramp for PE			

Construction Estimate Summary

Elements	Amount	Base %	Adjust %	Standard Element Cost Comments
Roadway	$ -	Do not change percentages in this column	Enter positive or negative percentage in this column to adjust Base %	
Structures	$ -			
Traffic (Signs, signals, illum)	$ -			
Hydro (not incl in Roadway or Structures)	$ -			
Geotech (not incl in Roadway or Structures)	$ -			
Hazmat	$ -			
Construction Subtotal	**$ -**			**Reason for Mob, TC, EC, Survey, Removal adjustments**
Mobilization	$ -	10.0%	0.0%	
Traffic Control (excl. Temp/Portable Signal)	$ -	10.0%	0.0%	
Erosion Control	$ -	0.5%	0.0%	
Construction Survey	$ -	2.0%	0.0%	
Removal of Structures & Obstructions	$ -	3.0%	0.0%	
Subtotal	**$ -**			**Increase/Decrease Cont. per Total Cost Risk Reserve below**
				Cost Risk Reserve / **Schedule Risk Reserve**
Bid Item Contingency	$ -	20.0%		$ - / 0
Construction Bid Item Total	**$ -**			**Reason for Adjustment**
Construction Contingency (3.5% of BI Total)	$ -	3.5%		
Const. Engineering (% of BI Total + CN Contingency)	$ -	0.0%		
Construction Total	**$ -**			
		49.0%	0.0%	

Add-on Cost Summary (Advance Investigation, Leverage, Other)

Advance Investigation		AI Comments
Bridge AI Cost (List tasks & associated cost below)	**$ -**	
	$ -	
	$ -	
Geotech AI Cost (List tasks & associated cost below)	**$ -**	
	$ -	
	$ -	
Pavement AI Cost (List tasks & associated cost below)	**$ -**	
	$ -	
	$ -	
Culvert AI Cost (List tasks & associated cost below)	**$ -**	
	$ -	
	$ -	
Other AI Cost (List tasks & associated cost below)	**$ -**	
Design Survey	$ -	
	$ -	

Leverage Items (Active Transp., Highway, Safety)	BI Cost	BI+Const Factors	Add'l PE	Leverage Funding Comments
Active Transp Leverage Cost (List items & cost below)		**$ -**	**$ -**	**Const Factors = Total of Cells C38 and D38**
		$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
Highway Leverage Cost (List items & cost below)		**$ -**	**$ -**	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
Safety Leverage Cost (List items & cost below)		**$ -**	**$ -**	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	

Non-Leverage Items (Culverts, Guardrail, ect.)	BI Cost	BI+Const Factors	Add'l PE	Non-Leverage Funding Comments
Non-Leverage Cost (List items & cost below)	**$ -**			**Const Factors = Total of Cells C38 and D38**
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
Adjust cell refs (Col. B & C) as needed for each item.		$ -	$ -	

Question	ADS Scoping Analysis Worksheet - Questions	Input
1	Will this project be delivered by ODOT (not a Certified Local Public Agency, or a Local Public Agency using State funds)?	
2	What is the Project Design Type from Highway Design Manual?	
3	What is the Project Work Type from Highway Design Manual?	
4	What is the project's Total Cost Estimate (in $millions, e.g. $845,000 = .845)?	$.0 million
5	How many months is there until the target PS&E date?	#NUM!
6	Is this project limited to one of the following: Environmental phase only (EA/EIS), ROW only (advance purchase), or Construction only (design previously completed)?	
7	Will the design of the project be outsourced?	No
8	Is the project forecast to include **unique** technical elements requiring special qualifications or unique approach in construction (e.g. tunneling, large drilled shafts, complex fabrication, etc.)?	
9	Will the project have complex or challenging traffic control requirements (e.g. significant detour structure or detour route)?	
10	Does the project fit one (or more) of the following criteria: has a "statewide" area; is part of a Program of similar work occurring across the state; or is part of a Program of similar work occurring across the region (e.g. bridge deck sealing, signing, traffic signal upgrades/retrofit, guardrail end replacements, etc.)?	
11	Is the project Single Function, or does it have only a few simple elements (e.g. signing replacement and guardrail upgrades, etc.)?	
12	How long is the Construction phase duration estimate (in months)?	

Highway Design Manual 1.4.2

Please answer all questions.	Contact ADS
Please answer all questions.	Contact Value Engineering
Please answer all questions.	Contact Risk Management

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Scoping Risk Worksheet

Risk Factors				Enter 1-4 4 - Red, 3 Orange, 2 Yellow, 1 Green
1. Complexity				
4R Modernization Complex Bridges Complex Staging	4R Rural Modernization Single Span Bridges	3R Preservation	1 R Pave Only	
Comments:				
2. Right of Way / Access Management				
Urban R/W Significant Access Mgmt.	Rural R/W	Scope May Include R/W	Scope includes no R/W Access Management Exemption Construction Easements not req'd	
Comments:				
3. Environmental Factors				
Regulated Areas / In Water Work Hazmat / Archy Sites	Minimal In-Water Work Pre-Identified Archy Sites	Shoulder Work CAT Ex.	Project within Existing Rdwy	
Comments:				
4. Estimating Confidence				
Appx. Quantities Used "Lump Sum" Placeholders			Detailed Scope / Detailed Estimate Actual Pavement Widths Used	
Comments:				
5. Scope Creep / Change				
Urban Project / Unclear Scope	ADA Ramps Present Unidentified Staging	Clear Problem Statement Limited Leverage Opportunities	Rural Pave Only	
Comments:				

50% Risk Reserve

20% Risk Reserve

☐ Agency

☐ Consultant

Name:

Title:

Date:

Suggested Contigency **20%**

734-2760 (01/2018)

Project Risk Register

Key# & Project Name:		Total Project Cost:	$0	Design Sched. Risk =		Cost Risk* = $
TPM/RE-CP:		Construction Cost:	$0	Const. Sched. Risk =		Risk-Based
Area Manager:		Project Schedule:		Total Schedule Risk =		Cont. = #D

Risk Identification								Cost Impact - In Thousands				Schedule Impact - In Months						
Risk No.	Date Id.	Risk Title	Phase that it impacts	Critical Path?	Nature	Detailed Description of Risk Event	Probability	Min $	Max $	Expected Value $	$ Impact	Min %	Max %	Expected Value %	% Impact	Bid Date Variability	Status	Rank
1																		
2																		
3																		
4																		
5																		
6																		
7																		
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Project Risk Register

Risk Identification								Cost Impact - In Thousands				Schedule Impact - In Months						
Risk No.	Date Id.	Risk Title	Phase that it impacts	Critical Path?	Nature	Detailed Description of Risk Event	Probability	Min $	Max $	Expected Value $	$ Impact	Min ☒	Max ☒	Expected Value ☒	☒ Impact	Bid Date Variability	Status	Rank
33																		
34																		
35																		
36																		
37																		
38																		
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46																		
47																		
48																		
49																		
50																		

Project Risk Register

0.0 K *Cost Risk based on identified risk.

DIV/0!

Risk Response Plan			Monitor and Review	
Strategy	Risk Owner	Response action(s) to be taken	Date, Status, and Review Comments	Date Updated

Project Risk Register

Risk Response Plan			Monitor and Review	
Strategy	Risk Owner	Response action(s) to be taken	Date, Status, and Review Comments	Date Updated

Project Risk Register

Key# & Project Name:	K12345 Example Project	**Total Project Cost:**	$15,000,000	**Design Sched. Risk =**	**3.3 Mths**
TPM/RE-CP:		**Construction Cost:**	$10,000,000	**Const. Sched. Risk =**	0.6 Mths
Area Manager:		**Project Schedule:**	36 Mths	**Total Schedule Risk =**	3.9 Mths

Cost Risk* =

Risk-Based Cont. =

Risk Identification								Cost Impact - In Thousands				Schedule Impact - In Months					
Risk No.	**Date Id.**	**Risk Title**	**Phase that it impacts**	**Critical Path?**	**Detailed Description of Risk Event**	**Nature**	**Probability**	**Min $**	**Max $**	**Expected Value $**	**$ Impact**	**Min ⧖**	**Max ⧖**	**Expected Value ⧖**	**⧖ Impact**	**Bid Date Variability**	**Status**
1	9/10/2020	Bidding Climate - Volume of Work	Construction	no	High quantity of ODOT statewide projects being bid for 2022 construction may result in higher than expected bid prices due to capacity of industry and availability of contractors.	***Threat***	50%	$100 K	$1.0 Mil	***$437.5 K***	**High**	0.0 Mths	0.0 Mths	***0.0 Mths***	**Very Low**		Active
2	9/20/2020	Value Engineering study @10% design	Construction	yes	VE studies on average reduce project cost 20% and commonly produces construction schedule savings. If a VE study is conducted then the project cost and schedule may decrease.	***Opportunity***	50%	$0 K	$5.0 Mil			0.0 Mths	6.0 Mths				Retired
3	11/25/2020	High water table & stormwater facilities	Design	yes	Design deviation is being pursued for the construction of water quality and quantity facilities within a known high water table. If not approved, other off-site facilities that require ROW would need to be considered. The driver of the high-end costs are acquisitions of additional ROW to construct additional treatment facilities. In terms of schedule, an additional 12 months could be incurred for the additional ROW acquisitions.	***Threat***	30%	$0 K	$600 K	***$165.0 K***	**Moderate**	0.0 Mths	12.0 Mths	***3.3 Mths***	**High**	**Red**	Active

Project Risk Register

Risk Identification								Cost Impact - In Thousands				Schedule Impact - In Months					
Risk No.	Date Id.	Risk Title	Phase that it impacts	Critical Path?	Detailed Description of Risk Event	Nature	Probability	Min $	Max $	Expected Value $	$ Impact	Min ⌛	Max ⌛	Expected Value ⌛	⌛ Impact	Bid Date Variability	Status
4	11/25/2020	Utility Potholing	Design	yes	Potholing is currently scheduled; however, the required data for utility owners may not be received in time. The risk is that the utility owners do not complete the potholing in a timely manner to support the project design development. This will result in additional cost to the project for potholing to capture the data.	*Threat*	50%	$0 K	$50 K	*$21.3 K*	Very Low	0.0 Mths	1.0 Mths	*0.4 Mths*	Very Low	Green	Active
5	11/25/2020	Contract Length of Deep Foundations	Construction	no	Foundation lengths have been assumed to be a certain length and may not meet the formal recommendations being developed and to be provided regarding Geotechnical capacity. This could result in an increased foundation length, thereby increasing project costs.	*Threat*	70%	$0 K	$50 K	*$28.8 K*	Very Low	0.0 Mths	0.0 Mths	*0.0 Mths*	Very Low		Active
6	11/25/2020	Stormwater Facility Sizing	Construction	yes	Further refinement of water quality and detention facility design may cause increases in facility cost. This could include the introduction of an additional detention facility. The risk is that the plan does not materialize as intended for the subsurface detention facility and there is a need to introduce an additional detention facility on the south side of ODOT Blvd. This item is affected by roadway design element updates, hydro resourcing, and project schedule.	*Threat*	30%	$50 K	$250 K	*$72.5 K*	Very Low	0.0 Mths	2.0 Mths	*0.6 Mths*	Very Low		Active
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	

Project Risk Register

Risk Identification								Cost Impact - In Thousands				Schedule Impact - In Months					
Risk No.	Date Id.	Risk Title	Phase that it impacts	Critical Path?	Detailed Description of Risk Event	Nature	Probability	Min $	Max $	Expected Value $	$ Impact	Min ⌛	Max ⌛	Expected Value ⌛	⌛ Impact	Bid Date Variability	Status
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
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39																	
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41																	
42																	
43																	
44																	
45																	
46																	
47																	
48																	
49																	
50																	

Project Risk Register

$1.28 Mil *Cost Risk based on identified risk.

12.8%

Risk Response Plan				Monitor and Review	
Rank	Strategy	Risk Owner	Response action(s) to be taken	Date, Status, and Review Comments	Updated
1	Mitigate	Project Manager	1) Place DAP/advance plans out on a web link to allow contractors to evaluate the work in progress, as well as local suppliers to plan. 2) Perform outreach to construction contracting industry to provide information on the project, including out of state contractors. 3) Coordinate to determine how to publicize any DAP/advance plans. 4) Conduct evaluation of anticipated material volumes for timing of construction and perform outreach to suppliers.		
	Mitigate	Hydro Lead	Contact VE program for project evaluation	VE study conducted resulting in $5 million in cost savings and 4 months of construction savings. Base estimate and schedule adjusted to reflect savings.	2/3/2021
2	Mitigate		1) ODOT hydro team to submit design deviation for water table depth at water quality and detention facilities. 2) ODOT and Consultant Design team to coordinate on format and information to be provided as part of design deviation information. Updates to be incorporated to facilitate reviews and approval.		

Project Risk Register

Risk Response Plan				Monitor and Review	
Rank	Strategy	Risk Owner	Response action(s) to be taken	Date, Status, and Review Comments	Updated
4	Mitigate	Utilities	1) ODOT Utility specialist actively working with utilities on potholing efforts. 2) Engage in regular communication/coordination on utilities where there is a need for potholing/information.		
5	Mitigate	Geotech Lead	1) Coordination and communication between Geotechnical and Structures for SB lanes in order to develop correct foundation lengths. 2) Once determination is made, update estimate accordingly and retire risk.		
3	Mitigate	Hyrdo Lead	1) Finalize roadway design including pavement sawcut lines; allow sufficient time for hydraulics design. 2) Continue to analyze and revise the tank design for the subsurface stormwater detention facility, including costs/benefits of proprietary tank vendors. 3) Explore options and seek to identify approaches to reduce the size of the tank requirements. 4) Finalize South Roadway Design to allow for progression and finalizing of Stormwater Design.		

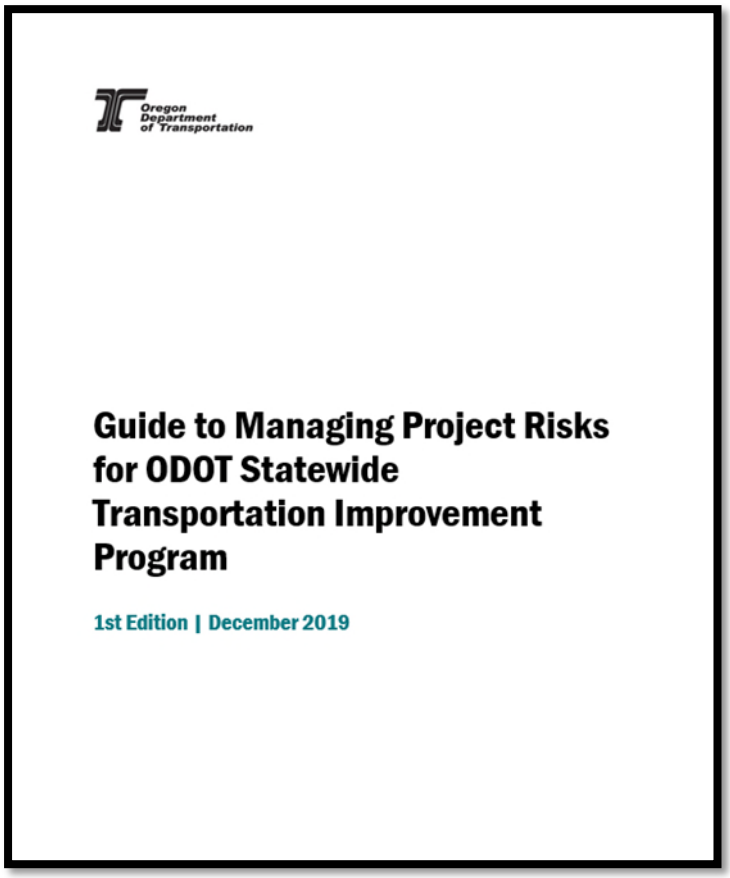
Project Risk Register

Risk Response Plan				Monitor and Review	
Rank	Strategy	Risk Owner	Response action(s) to be taken	Date, Status, and Review Comments	Updated

Email the program with questions and/or feedback:

Select link >>>> PRM@ODOT.state.or.us

Proper use of this tool assumes familiarity with Project Risk Management concepts. A guide has been developed to assist users in managing projects risks: https://www.oregon.gov/ODOT/Engineering/Pages/VE-RM.aspx



Oregon Department of Transportation

Guide to Managing Project Risks for ODOT Statewide Transportation Improvement Program

1st Edition | December 2019

E

Threat Risk Response Actions

Avoid: of occurrence of a risk to 0%). [Risk avoidance] may be appropriate for high-priority threats with a hig large negative impact" (PMI, 2017).

"There are two types of avoidance action: (1) remove the cause of the risk (risk trigger), or (2) execut while still aiming to achieve project objectives. Not all risks can be avoided or eliminated, and for othe expensive or time-consuming. However, this should be the first strategy considered for each risk and for high probability or high impact risks" (Hillson, 2004).

Avoidance action should be taken on risks that have a high probability of occurrence and a high impac

Transfer: "Transfer involves shifting ownership of a threat to a third party to manage the risk and to bear the in transfer often involves payment of risk premium to the party taking on the threat.
We can transfer risk through a range of actions that include, but are not limited to, the use of insuran warranties, guarantees and so on. Agreements may be used to transfer ownership and liability for spe (PMI, 2017).

Mitigate: Take risk response action to reduce impact or probability of occurrence of a risk event.
"In risk mitigation, we take action to reduce the probability of occurrence and/or impact of the threat common risk response strategy.

Accept: Risk acceptance acknowledges the existence of a threat, but no proactive action is taken. This strateg priority threats, and it may also be adopted where it is not possible or cost-effective to address a thre can be either active or passive.

"The most common active acceptance strategy is to establish a contingency reserve, including amoun to handle the threat if it occurs. Passive acceptance involves no proactive action apart from periodic r that it does not change significantly" (PMI, 2017).

"Risks that are uncontrollable (no response actions are practical) are also accepted" (Hillson, 2004).

Acceptance is a common strategy for risks that have a low probability of occurrence. However, accept

Opportunity Risk Response Actions

Exploit: The exploit strategy may be selected for the high-priority opportunities where the organization wants is realized. This strategy seeks to capture the benefit associated with a particular opportunity by ensu increasing the probability of occurrence to 100%.

"Examples of exploiting responses may include assigning an organization's most talented resources to to completion, or using new technologies or technology upgrades to reduce cost and duration" (PMI,

Opportunity risks that have high positive impact on project objectives, known as golden opportunities

Share: Sharing involves transferring ownership of an opportunity to a third party so that it shares some of th occurs. It is important to select the new of owner of a shared opportunity carefully so they are best al for the benefit of the project.

"Risk sharing often involves payment of a risk premium to the party taking on the opportunity. Examp forming risk-sharing partnerships, teams, special-purpose companies, or joint ventures" (PMI, 2017).

"Transferring threats and sharing opportunities are similar in that a third party is used. Those to whor the liability and those to whom opportunities are allocated should also be allowed to share in the pot

nhance: The enhance strategy is used to increase the probability and/or impact of an opportunity. Early enhar effective than trying to improve the benefit after the opportunity has occurred.

"The probability of occurrence of an opportunity may be increased by focusing attention on its cause increase probability, an enhancement response might increase the impact by targeting factors that dr benefit" (PMI, 2017).

"This response aims to modify the size or scope of the positive risk. We enhance the opportunity by ir or both, thereby maximizing benefits realized for the project. If the probability can be increased to 10 response" (Hillson, 2004).

Accept: Accepting an opportunity acknowledges its existence, but we do not take proactive steps to realize it. "This strategy may be appropriate for low-priority opportunities, or those in which it is not possible o opportunity in any other way" (PMI, 2017).

h probability of occurrence and a

e the project in a different way
ers this approach may be too
should be the primary strategy

ct on project objectives.

npact if the threat occurs. Risk

ce, performance bonds,
ecified risks to another party"

t" (PMI, 2017). This is the most

y may be appropriate for low-
eat in any other way. Acceptance

ts of time, money, or resources
review of the threat to ensure

ted risks that have a very low to

s to ensure that the opportunity
ring that it definitely happens,

the project to reduce the time
2017).

s, should be exploited.

e benefit if the opportunity
ble to capture the opportunity

oles of sharing actions include

n threats are transferred take on
ential benefits" (Hillson, 2004).

ncement action is often more

s. Where it is not possible to
rive the size of the potential

ncreasing its probability, impact
0% this is effectivity an exploit

r cost-effective to address an

CLIMATE - GHG Emissions Reduction and Adaptation/ Resilienc

Project Name	

Funding Program Mgr		**Date:**
Project Manager Contact		

Information About Applying the Climate Lens to Projects
Greenhouse Gas Reduction Primer
Greenhouse Gas Reduction Background

GHG EMISSIONS REDUCTION: As ODOT applies the climate lens to scoping d
possible. ODOT project managers responsible for developing the initial busi
that help to offset and mitigate greenhouse gas (GHG) emisssions; and 2. w
vehicle miles traveled (VMT), out of direction travel, or create more stops/s

Please provide details about whether this project:
Supports reduced vehicle miles traveled (VMT) and single occupancy vehicles travel, by investments in transit, biking, walking, or transportation options programs.
Incorporates intelligent transportation system (ITS) elements that reduce incidents and smooth speeds, leading to improved fuel efficiency.
Addresses non-recurring congestion (design mitigates traffic congestion due to non-recurring causes), such as safety constraints, curve corrections, or truck pullouts.
Increases connectivity and/or reduce out-of-direction travel to shorten trip lengths and reduce VMT.

Incorporates construction practices, such as on-site material recycling/reuse, and/or lower-carbon materials that reduce GHG emissions.

Directly supports transition to zero emission electric vehicles or low carbon alternative fuels.

Narrative - GHG Emissions Reduction

Are additional project elements being considered that contribute to GHG reductio mitigation is included in the project, will leverage funding opportunties be puruse

CLIMATE ADAPTATION/ RESILIENCE: In addition to GHG mitigation, the Clin resilience of our transportation infrastructure to impacts of extreme weathe culverts, roadway/ pavements, unstable slopes and other managed highway erosion, landslides, and wildfires.

Narrative - Climate Adaptation/ Resilience

Does your project incorporate scope or design features that increase climate resil If not included, please indicate whether due to funding/ budget limitations.

e

0

	Project Number	0

If you need assistance or clarification on the Climate section, please contact Geoff Crook, geoff.s.crook@odot.state.or.us, or Kat Silva, katherine.silva@odot.state.or.us

ecisions we need to document how projects may advance these goals, where ness cases need to: 1. seek out additional opportunities to incorporate attributes henever practicable, minimize project attributes that may result in increased tarts.

Included in Project: Yes	No	Comment/Description
☐	☐	
Included in Project: Yes	**No**	**Comment/Description**
☐	☐	
Included in Project: Yes	**No**	**Comment/Description**
☐	☐	
Included in Project: Yes	**No**	**Comment/Description**
☐	☐	

Included in Project: Yes	No	Comment/Description
☐	☐	

Included in Project: Yes	No	Comment/Description
☐	☐	

n? Please describe. If funding/ budget constraints are determining factor in whether GHG
d?

nate Office will assess how we invest in climate change adaptation, to increase the
er events and climate change. The most affected programs include Fix-It (bridges,
y assets) which are most vulnerable and at risk to the impacts of storms, flooding,

iency? Are you seeking additional funding for resilience improvements? Please describe.

Equity Lens

Project Name	

Funding Program Mgr		**Date:**
Project Manager Contact		

Information About Applying the Equity Lens to Projects
Office of Social Equity

Comparing the initial business case to the Final Business Case, document any

Comments:

Questions in light blue section below are to be answered by Funding Program Manager at the beginning of scoping for how project needs lists were created and how projects prioritized for scoping were chosen.
Is this project is in a High Social Equity Index Area? If yes, describe opportunities to provide an equity solution(s). Please use the link provided below (row 16) to ensure consistency. (Filled Out by Funding Program Manager)
https://arcg.is/0TvfTX0
If this project is outside a high social equity area, does it serve a high social equity index area? If yes, describe opportunities to provide an equity solution(s). (Filled Out by Funding Program Manager)

Have historically excluded communities* (defined row 46) been informed, consulted, or involved? If yes, describe methods or tools used for this engagement. (Filled Out By Funding Program Manager)
Does this project address the needs expressed by historically excluded communities? If yes, describe the needs and how addressed. (Filled Out By Funding Program Manager)
Questions in the light orange section below are to be answered by Scoping Team during scoping. Responses will be considered when completing the final business cases and selecting projects for the 100% lists.
Is there an opportunity to make improvements to support people who are not driving that does not directly address the purpose of the project? If yes, describe the cost or risk and how ODOT might mitigate the cost and/or risk. (Filled Out By Scoping Team)
Are there social equity opportunities or challenges related to engagement (outreach)? If yes, please describe. (Filled Out By Scoping Team)
Are there social equity opportunities or challenges related to design choices? If yes, please describe. Example: Intervenes in current disparities or produces unintended consequences. (Filled Out By Scoping Team)
Are there social equity opportunities or challenges associated with setting the project footprint? If yes, please describe. (Filled Out By Scoping Team)

Questions in the light green section below are to be answered by Project Design Team during project development prior to DAP completion. Responses will be addressed through Area Manager, Funding Program Manager and Office of Social Equity collaboration.

Are there social equity opportunities or challenges related to engagement (outreach)? If yes, please describe. (Filled Out By Design Team)

Are there social equity opportunities or challenges related to design choices? If yes, please describe. Example: Intervenes in current disparities or produces unintended consequences. (Filled Out By Design Team)

Is there an opportunity to make improvements to support people who are not driving that does not directly address the purpose of the project? If yes, describe the cost or risk and how ODOT might mitigate the cost and/or risk. (Filled Out By Design Team)

Are there social equity opportunities or challenges associated with setting the project footprint? If yes, please describe. (Filled Out By the Design Team)

Narrative - Equity (Filled Out by Funding Program Manager before Scopin

Provide brief summary below of the responses to questions above. Also note if any

**Historically excluded communities are those that have been systemically discriminated against transportation planning and decision making. Specifically we are talking about people living wi over the age of 65, people living in poverty, people with limited English proficiency, people who is Black, Indigenous, and People of Color which also includes Latino/a/x, Tribal Nations, Asian, and Native Alaskan. Engaging these communities can be providing them with clear, concise, and (inform), obtaining and utilizing feedback in analysis, alternatives, and decisions (consult), or w community throughout the project to ensure their desires and concerns are understood and ada*

Please contact Office of Social Equity (socialequity@odot.state.or.us), for additi

/ changes here that were made to address social equity. (Filled out by

Select all that apply to the project area(s). Can be multiple sel		
	High Social Equity Index Area:	
Low (.30-.70)	LowMed (.70-.94)	MedHigh(.94-1.22)
☐	☐	☐
	Included in Project:	
Yes		
☐		

Yes	Included in Project:
☐	
Yes	Included in Project:
☐	
Yes	Included in Project:
☐	
Yes	Included in Project:
☐	
Yes	Included in Project:
☐	
Yes	Included in Project:

☐	
Yes	Included in Project:
☐	
Yes	Included in Project:
☐	
Yes	Included in Project:
☐	
Yes	Included in Project:
☐	

g; By Scoping Team during Scoping; By Project Design Team during

y of the responses require additional budget.

t or excluded from
ith disabilities, people
identify as BlPOC. BIPOC
Asian Pacific Islander,
d objective information
vorking with the
dressed (involved).

Project Number	

onal information, suggestions or guidance pertaining to this sheet.

/ Program Funding Manager or their Assignee)

ections.	
High (1.22-1.94)	**Comment/Description**
No	**Comment/Description**

No	Comment/Description
☐	
No	**Comment/Description**
☐	
No	**Comment/Description**
☐	
No	**Comment/Description**
☐	
No	**Comment/Description**
☐	
No	**Comment/Description**

□	
No	Comment/Description
□	
No	Comment/Description
□	
No	Comment/Description
□	
No	Comment/Description
□	

project development)

Example of a project decision that was made as a result of social equity consid

Some examples include leveraging active transportation improvements; illumination; moving a pedestrian bridge downstream; additions and locations of paths and crossings; adjusting signal timing for crossings; consideration of the types and locations of community facil they are safely accessed; including elements that reflect cultural and historic engagement and re are artistic elements; etc. Engaging community in the process through focus groups has also bee variable as the communities we serve.

lerations:

lities in the project area and how
epresentation – sometimes these
en a result. The possibilities are as

ROADWAY ELEMENTS

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Functional Class.	0
Jurisdiction	0
Design Standard	0
Design Speed	

Contact for Project:			
Prepared By:		Date:	

Typical Section:

Sidewalk	Parking	Shoulder	Bike Lane	Lane 3	Lane 2	Lane 1	Median	Lane 1	Lane 2	Lane 3	Bike Lane	Shoulder	Parking	Sidewalk
EXISTING														
STANDARD														
PROPOSED														

Check "Yes" if that Design Element exists in the project, Check "No" if that Design Element does not exist in the project. For all "Yes" responses briefly describe if the existence of that Design Element has the potential to cause cost concerns for the project and whether this is a new or existing element.

Design Elements	Yes	No	Comment/Clarification
Terrain	☐	☐	
Freight Route	☐	☐	
Perm. Capacity Reduction (ORS366)?	☐	☐	
If Yes, has the reduction been approved? (Check with Region Planning Section and Region Mobility Liaison)	☐	☐	Who:
Substandard Horizontal Elements	☐	☐	
Substandard Vertical Elements	☐	☐	
Hazardous Rock Slopes	☐	☐	
Hazardous Cut/Fill Slopes	☐	☐	
Hazardous Slopes or Objects in Clear Zone	☐	☐	
Roadside Curbs	☐	☐	
Roadside Barriers (Guardrail, Conc. Or Cable)	☐	☐	
Median	☐	☐	
Concrete Median	☐	☐	
Access Roads	☐	☐	
Fence	☐	☐	
Mailboxes	☐	☐	
Cold Plane Pavement Removal	☐	☐	
Unusual Elements	☐	☐	

Intersections	Yes	No	Comment/Clarification
Interchange	☐	☐	
Signalized intersections	☐	☐	
If NEW, has Traffic verified the signal warrants?	☐	☐	Who:
Unsignalized intersections	☐	☐	

ADA Facilities	Yes	No	Comment/Clarification
Replace existing ramps	☐	☐	
Add new ramps	☐	☐	
Upgrade pedestrian buttons	☐	☐	
Add/upgrade pedestrian signal heads	☐	☐	
Other? (specify in Comments)	☐	☐	

Active Transportation	Yes	No	Comment/Clarification
Add Bike Lane	☐	☐	
Add Bike Path	☐	☐	
Add Sidewalk	☐	☐	
Confirmed items with Bike/Ped Coordinator?	☐	☐	Who:
Add Transit facilities (Describe in Comment section)	☐	☐	
Confirmed items with Transit Coordinator?	☐	☐	Who:

Oregon Department of Transportation

Drainage Facilities	Yes	No	Comment/Clarification
Ditches	☐	☐	
Culverts	☐	☐	
Storm Sewer	☐	☐	
Pump Stations	☐	☐	
Water Quality	☐	☐	
Special Drainage	☐	☐	

Structures	Yes	No	Comment/Clarification
Existing Structures	☐	☐	
New Structures	☐	☐	
Illumination	☐	☐	

Railroads	Yes	No	Comment/Clarification
Within 500 feet of work area	☐	☐	
Distance to Track:			
Crossings	☐	☐	
Right of Way Impact	☐	☐	
Has Rail Crossing Div. been contacted?	☐	☐	Who:

NOTE: ODOT Rail Unit must be notified of any project within 500 feet of a rail line and must issue a regualtory crossing order for new RR crossing or modifications to an existing one. A crossing order has the force of law and generally takes a minimum of one year to obtain. If construction activities will require crossing railroad right-of-way, an easement will be required and must be obtained through Salem ROW.

Erosion Control	Yes	No	Comment/Clarification
Ground disturbance	☐	☐	
Erosion control	☐	☐	

Traffic Control	Yes	No	Comment/Clarification
Lane closures	☐	☐	
Temporary Structures	☐	☐	
Staged Construction	☐	☐	
Vehicle Detour	☐	☐	
Bicycle/Ped Detour routes			
Temporary Signals	☐	☐	
School Bus route	☐	☐	
Bicycle/Ped Traffic	☐	☐	
Other	☐	☐	
Assumed min. lane width during construction:			
Confirmed assumptions with Traffic?	☐	☐	
Initial mobility Decision Tree completed?	☐	☐	

Other:	Yes	No	Comment/Clarification
Schools	☐	☐	
Parks	☐	☐	
Work Zone Law Enforcement (Consult w Traffic Unit)	☐	☐	If WZLE is included in work zone decision tree, include estimated quantity in RDWY BUDGET Alternative Items, 1-2% of Est Items Ty

Narrative (To start a new paragraph within to a cell, press Alt/Enter)

Assumptions

Oregon Department of Transportation

SCOPING - COST ESTIMATE

OREGON STATE HIGHWAY DIVISION - ROADWAY ENGINEERING

SECTION			COUNTY	
0			0	
KIND OF WORK	LENGTH (mi)	DATE	ROADWAY DESIGNER	
0	0	1/0/00	0	
ITEM DESCRIPTION	**UNIT**	**AMOUNT**	**UNIT COST**	**TOTAL**

Note: Percentages for Mobilization, Traffic Control, Erosion Control, Const Survey, and Removal are automatically calculated on the **Construction Cost Totals** *sheet.*

TRAFFIC CONTROL SIGNALS (Consult with Traffic Unit)				
PORTABLE SIGNAL (2 Units for 2 Lane Road)	EACH	0.0	$30,000.00	$0.00
TEMPORARY SIGNAL W/VIDEO DETECTION (Intersection)	EACH	0.0	$110,000.00	$0.00
				$0.00
				$0.00
				$0.00
ROADWORK				
CLEARING AND GRUBBING	ACRE	0.0	$6,000.00	$0.00
GENERAL EXCAVATION	CUYD	0.0	$15.00	$0.00
EMBANKMENT IN PLACE	CUYD	0.0	$15.00	$0.00
ACP REPAIR	SQYD	0.0	$70.00	$0.00
SUBGRADE STABILIZATION	SQYD	0.0	$25.00	$0.00
SUBGRADE GEOTEXTILE	SQYD	0.0	$1.75	$0.00
RIPRAP	CUYD	0.0	$75.00	$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
DRAINAGE AND SEWERS				
Estimate for Drainage & Sewers by Percentage	LS	All	0.00%	$0.00
Will drainage be complex (Detention, Water Qual., Etc.)	No			
OR *Estimate for Drainage & Sewers by Itemization*	If estimating by Items rather than by % or project has no drainage, enter "0" in the lump sum unit cost above (Cell E29).			
CONCRETE MANHOLES	FT		$4,000.00	$0.00
CONCRETE INLETS, TYPE CG-3	EACH	0.0	$2,000.00	$0.00
CONCRETE INLETS, TYPE G-2	EACH	0.0	$2,000.00	$0.00
CONNECTION TO EXISTING STRUCTURES	EACH	0.0	$500.00	$0.00
MINOR ADJUSTMENT OF MANHOLES/ INLETS	EACH	0.0	$1,000.00	$0.00
18 INCH CULVERT PIPE, 5 FT DEPTH	FT	0.0	$100.00	$0.00
18 INCH STORM SEW PIPE, 5 FT DEPTH	FT	0.0	$85.00	$0.00
WEARING SURFACE DRAIN	FT	0.0	$70.00	$0.00
WEARING SURFACE DRAIN OUTLETS	EACH	0.0	$400.00	$0.00
TRENCH RESURFACING	SQYD	0.0	$75.00	$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
BASES				
COLD PLANE PAVEMENT REMOVAL, 2 INCH DEEP	SQYD	0.0	$2.00	$0.00
COLD PLANE PAVEMENT REMOVAL, 4 INCH DEEP	SQYD	0.0	$3.00	$0.00
COLD PLANE PAVEMENT REMOVAL, 6 INCH DEEP	SQYD	0.0	$4.00	$0.00
AGGREGATE BASE/ SHLDR AGG	TON	0.0	$30.00	$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00

Look-up Tables	% EC	% Drainage		
1R	0.20%	0.50%		
3R	0.50%	2.00%	Urban	Yes
4R	2.00%	10.00%	Rural	No
4R, Bridge Replacement	1.00%	0.80%	Mixed, Urban & Rural	

1R	0.20%	0.50%
3R	2.50%	2.00%
4R	12.50%	10.00%
4R, Bridge Replacement	1.00%	0.80%

Urban	2	1	
Rural	0.8	0.8	
Mixed, Urban & Rural	1	1	
0.05	0.08		
Construction Items Subtotal, excluding % Drainage Cost)	$0.00	Yes	1.00
Construction Items Subtotal, including % Drainage Cost)	$0.00	No	1.00
Alternative Items Total	$0.00		
Roadway Construction Items Total	$0.00		

Oregon Department of Transportation

WEARING SURFACES				
EMULSIFIED ASPHALT IN TACK	TON	0.0	$400.00	$0.00
ASPHALT CONCRETE PAVEMENT	TON	0.0	$40.00	$0.00
ASPHALT IN ACP	TON	0.0	$400.00	$0.00
EXTRA FOR ASPHALT APPROACHES	EACH	0.0	$1,000.00	$0.00
PLAIN CONCRETE PAVEMENT, DOWELED, 9 INCHES THICK	SQYD	0.0	$75.00	$0.00
CONCRETE CURBS OR CURBS AND GUTTER	FT	0.0	$20.00	$0.00
CONCRETE ISLANDS	SQFT	0.0	$10.00	$0.00
CONCRETE DRIVEWAYS	SQFT	0.0	$9.00	$0.00
CONCRETE WALKS	SQFT	0.0	$7.00	$0.00
CONCRETE RAMPS	EACH	0.0	$3,500.00	$0.00
AC Bonus/Smoothnes Bonus	LS	All	7.50%	$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
PERMANENT TRAFFIC CONTROL AND GUIDANCE DEVICES				
GUARDRAIL, TYPE 2A	FT	0.0	$20.00	$0.00
GUARDRAIL, TYPE 3	FT	0.0	$50.00	$0.00
GUARDRAIL ANCHORS	EACH	0.0	$700.00	$0.00
GUARDRAIL END PIECE	EACH	0.0	$150.00	$0.00
GUARDRAIL TRANSITIONS	EACH	0.0	$2,250.00	$0.00
GUARDRAIL CONNECTIONS	EACH	0.0	$2,500.00	$0.00
GUARDRAIL TERMINALS, NON-FLARED	EACH	0.0	$2,800.00	$0.00
EXTRA FOR LONG POSTS	EACH	0.0	$30.00	$0.00
ADJUST GUARDRAIL	FT	0.0	$5.00	$0.00
CABLE BARRIER	FT	0.0	$20.00	$0.00
CONCRETE BARRIER, STANDARD	FT	0.0	$60.00	$0.00
CONCRETE BARRIER, TALL	FT	0.0	$80.00	$0.00
IMPACT ATTENUATOR	EACH	0.0	$30,000.00	$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
TOTAL ROADWAY ITEMS (Construction)				**$0.00**

Roadway PE Estimate	

ALTERNATIVE ITEMS

ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
WORK ZONE LAW ENFORCEMENT	MONTHS	0.0	$10,000.00	$0.00
		0.0		$0.00
		0.0		$0.00
		0.0		$0.00
		0.0		$0.00
		0.0		$0.00
		0.0		$0.00
		0.0		$0.00
		0.0		$0.00
		0.0		$0.00
TOTAL ALTERNATIVE ITEMS (Construction)				**$0.00**

ACTIVE TRANSPORATATION WORKSHEET

Oregon Department of Transportation

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Bike & Ped Contact:		Date:	
Transit Contact:		Date:	

Required bicycle and pedestrian improvements per ORS 366.514?	Yes	No	Explain why ORS is/isn't applicable
	☐	☐	

Indicate specific improvements & whether included in scope by Roadway	Yes	No	Comment/Clarification
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

Opportunities to incorporate additional bicycle improvements?	Yes	No
	☐	☐

List specific improvements and indicate if additional funding will be pursued	Pursuing funding?		Comment/Clarification
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

Opportunities to incorporate additional pedestrian improvements?	Yes	No
	☐	☐

List specific improvements and indicate if additional funding will be pursued			Comment/Clarification
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

Narrative
Assumptions

Are there opportunities to include Transit improvements on this project?	Yes	No	Comment/Clarification
List specific improvements and indicate if additional funding will be pursued			
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

TRAFFIC ELEMENTS WORKSHEET

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Contact for Project:			
Prepared By:		Date:	

Traffic Volumes		
ADT:	Existing	Future
Number		
Year		

Workzone Decision Tree (Insert Projectwise Link in the Comment)	Yes	No	N/A	Comment/Clarification
Mobility Impacts	☐	☐	☐	

Traffic Issues for Project Team Review:	Yes	No	N/A	Comment/Clarification
Channelization	☐	☐	☐	
Curve Realignment	☐	☐	☐	
Fixed Object Removal	☐	☐	☐	
Guardrail or Median Barrier	☐	☐	☐	
Delineation	☐	☐	☐	
Signal Installation or Improvement	☐	☐	☐	
Pavement Markings	☐	☐	☐	
Illumination	☐	☐	☐	
Pedestrian Improvements (RRFB/Paths/SW/etc)	☐	☐	☐	
If Yes, have they been coordinated w/ Roadway & Bike/Ped?	☐	☐		
Bicycle Lanes	☐	☐	☐	
If Yes, have they been coordinated w/ Roadway & Bike/Ped?	☐	☐		
ADA Concerns/Signal "Triggers"		☐	☐	
If Yes, have they been coordinated w/ Roadway & Bike/Ped?	☐	☐		

Lanes and Striping	Yes	No	N/A	Comment/Clarification
Capacity Analysis	☐	☐	☐	
Striping Plan	☐	☐	☐	

Traffic Tasks (Check those required for project)	Yes	No	N/A	Comment/Clarification
Traffic Counts	☐	☐	☐	
Traffic Analysis	☐	☐	☐	
Work Zone Analysis	☐	☐	☐	
STE & RTE Approvals	☐	☐	☐	

Safety Data - Overall Project Summary		
Crash Summary:		Comments
Number of Crashes		
Number of Injuries		
Number of Fatalities		
Accident Rate:		
# Top 10 SPIS Sites within Project Area		

Narrative (To start a new paragraph within a cell, press Alt/Enter)
Assumptions (Traffic Control, Mobility, ADA, etc.)

TRAFFIC BUDGET

Oregon Department of Transportation

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Contact for Project:			
Prepared By:		Date:	

Item Description	Unit	Quantity	Unit Price	Total
SIGNAL REMOVALS	LS	0	$0	$0.00
Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts		☐ **Yes**	☐ **No**
SIGNAL UPGRADES	LS	0	$0	$0.00
Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts		☐ **Yes**	☐ **No**
NEW SIGNALS *(Note: Traffic control signals included on the Roadway Budget sheet.)*	LS	0	$0	$0.00
Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts		☐ **Yes**	☐ **No**
PRESERVATION PROJECTS - LOOP DETECTION REPLACEMENT	LS	0	$0	$0.00
Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts		☐ **Yes**	☐ **No**
ILLUMINATION	LS	0	$0	$0.00
Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts		☐ **Yes**	☐ **No**
NEW FLASHING BEACONS/RRFB's	LS	0	$0	$0.00
Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts		☐ **Yes**	☐ **No**
NEW INTERCONNECT/NETWORKING/COMMUNICATION INSTALLATION	LS	0	$0	$0.00
Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts		☐ **Yes**	☐ **No**
ITS FEATURES *(Cameras, VMS Signs, ATR's, Weather Stations, Etc.)*	LS	0	$0	$0.00
Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts		☐ **Yes**	☐ **No**
STRIPING & DELINEATORS	LS	0	$0	$0.00
******Additional Cost for Inlaid Wet Weather Tape on IM Projects******	FT	0	$2	$0.00
Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts		☐ **Yes**	☐ **No**
Delineators - $30 ea *Thermoplastic Striping - $1.25/ft* *Legends - $225 ea*				
GROUND MOUNTED SIGNS	LS	0	$0	$0.00

Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts	☐ **Yes**	☐ **No**	
OVERHEAD SIGNS	LS	0	$0	$0.00
Assumptions (Show work & justify the cost. List all assumed bid items, quantities, and unit costs.)	*Potential R/W Impacts	☐ **Yes**	☐ **No**	

***Note: If potential R/W impacts exist, list these impacts on the "Traffic Elements" tab under Assumptions. Communicate with the R/W agent regarding the potential impacts.**

****Construction Cost Does Not Include Traffic Control**	****Total Traffic Const. Costs**	**$0**

ENVIRONMENTAL SCOPING WORKSHEET

Oregon Department of Transportation

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Contact for Project:			
Prepared By:		Date:	

Environmental Classification:	

Applicable NEPA Documents	Yes	No	N/A	Provide explanation
Is the project associated with any completed NEPA documents (EA or EIS) or Alternative Selection process? (Explain)	☐	☐		
Does the project completely or partially fulfill the related FONSI or ROD? (Explain)	☐	☐	☐	
Does the NEPA document need to be updated based on time or changed conditions before design can proceed?	☐	☐	☐	
Is the project a Class 2 action that falls within the API of a NEPA document and is not subject to the FONSI or ROD? (Explain)	☐	☐		

Air Quality	Yes	No	N/A	Comment/Clarification
Non-Attainment or Maintenance Area	☐	☐	☐	
CO	☐	☐	☐	
Ozone	☐	☐	☐	
PM10	☐	☐	☐	

Other Considerations	Yes	No	N/A	Comment/Clarification
Additional Lanes	☐	☐	☐	
Signalization	☐	☐	☐	
Channelization	☐	☐	☐	
Alignment Changes	☐	☐	☐	

Archaeology	Yes	No	N/A	Comment/Clarification
	☐	☐	☐	
Potentially sensitive areas	☐	☐	☐	
New ground disturbance	☐	☐	☐	
BLM & USFS known sites	☐	☐	☐	
Subsurface proping needed	☐	☐	☐	

Biology							
US Quad Name:		T		R		Section	

ODFW Contact Made	Yes	No	N/A	Comment/Clarification
	☐	☐	☐	
T&E Species present	☐	☐	☐	
Streams impacted	☐	☐	☐	
Essential Salmonid Habitat	☐	☐	☐	
Medium or High Priority fish passage culverts	☐	☐	☐	
In-Water Work Period (specify in Comments)	☐	☐	☐	

Oregon Department of Transportation

Energy:	Yes	No	N/A	Comment/Clarification
Speed zone changes	☐	☐	☐	
Traffic pattern changes	☐	☐	☐	
Traffic volume changes	☐	☐	☐	

Geology:	Yes	No	N/A	Comment/Clarification
Drilling required	☐	☐	☐	

Hazardous Materials	Yes	No	NA	Comment/Clarification
Documented hazmat sites	☐	☐	☐	

Hazmat	Yes	No	N/A	Comment/Clarification
Gas Stations, Industrial Sites	☐	☐	☐	
Repair, Land Fill Facilities	☐	☐	☐	

Historical Resources	Yes	No	N/A	Comment/Clarification
Historic Resources*	☐	☐	☐	
Listed Goal 5 Resources	☐	☐	☐	

*National Register of Historic Places, State of Historic Preservation, Structures of 50 years in age?

Land Use	Yes	No	N/A	Comment/Clarification
In UGB	☐	☐	☐	
Forest or EFU Lands	☐	☐	☐	

Noise	Yes	No	N/A	Comment/Clarification
New or changed alignment	☐	☐	☐	
Additional lanes	☐	☐	☐	

	Yes	No	N/A	Comment/Clarification
Section 4F	☐	☐	☐	
Section 6F	☐	☐	☐	

Socioeconomics	Yes	No	N/A
Building displacements that are key to economy/neighborhood.	☐	☐	☐

Number of Displacements:	0

General use of adjacent land:		Number
Residential	☐	
Commercial	☐	
Farm/Range	☐	
Public	☐	
Other	☐	

List:

Visual Resources Impacts	Yes	No	N/A	Comment/Clarification
Major Cuts /Fills	☐	☐	☐	
Bridges or Retaining Walls	☐	☐	☐	
Scenic Waterways	☐	☐	☐	
Wild and Scenic Waterways	☐	☐	☐	
Adjacent to Federal Lands	☐	☐	☐	
Federal Enhancement	☐	☐	☐	
Scenic Byway Program	☐	☐	☐	
Oregon Historic Highway (ORS 377.100)	☐	☐	☐	
Oregon Scenic Area (ORS 377.505)	☐	☐	☐	
Scenic-Forest Practices Act (ORS 527.755)	☐	☐	☐	

Oregon Department of Transportation

Waterways & Water Quality	Yes	No	N/A	Comment/Clarification
Within 100-year Floodplain	☐	☐	☐	
Within FEMA Regulated Floodway	☐	☐	☐	
Water quality limited streams impacted	☐	☐	☐	
Active wells impacted	☐	☐	☐	
Navigable waterways impacted	☐	☐	☐	
New impervious surface area > 1000 sq yd	☐	☐	☐	
Impacts irrigation district	☐	☐	☐	
T&E species in receiving water	☐	☐	☐	
Existing storm drainage system	☐	☐	☐	
Stormwater Management Plan required	☐	☐	☐	
	☐	☐	☐	

Wetlands	Yes	No	N/A	Comment/Clarification
Wetlands present	☐	☐	☐	
Wetland mitigation needed (estimate cost in Comments)	☐	☐	☐	
Wetland-related Permits:				**Comment/Clarification**
US Army Corp of Engineers Section 10 / Section 404	☐	☐	☐	
DSL Removal/Fill	☐	☐	☐	
DEQ Indirect Air:	☐	☐	☐	
PUC Railroad:	☐	☐	☐	
NPDES (Pollutant Discharge Elimination):	☐	☐	☐	
Other	☐	☐	☐	

Coast Guard	Yes	No	N/A	
Coast Guard coordination required	☐	☐	☐	
Coast Guard permit required	☐	☐	☐	

Clearances Required:	Yes	No	N/A	Comment/Clarification (Note required documentation)
ESA (BA, BO)	☐	☐	☐	
SHPO (Historical)	☐	☐	☐	
SHPO (Archaeological)	☐	☐	☐	
Fish passage plan	☐	☐	☐	
Noise	☐	☐	☐	
DEQ Noise	☐	☐	☐	
Air Quality	☐	☐	☐	
Hazmat	☐	☐	☐	

Narrative (To start a new paragraph with a cell, press Alt/Enter)

Assumptions

HAZARDOUS MATERIALS WORKSHEET

Oregon Department of Transportation

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Contact for Project:			
Prepared By:		Date:	

General Use of Adjacent Land	Yes	No	Comment/Clarification
Residential	☐	☐	
Commercial	☐	☐	
Industrial	☐	☐	
Farm	☐	☐	
Range	☐	☐	
Other	☐	☐	

Hazardous Materials Site Information	Yes	No	NA	Comment/Clarification
Documented DEQ or EPA listings on property	☐	☐	☐	
Documented DEQ or EPA listed sites nearby	☐	☐	☐	
ODOT project or spills reports available	☐	☐	☐	
Adjacent service station, industrial sites, landfill or other suspect property use	☐	☐	☐	
Other	☐	☐	☐	

Are there Hazardous Materials issues on this project?				
Features in Project	**Yes**	**No**	**N/A**	**Comment/Clarification**
Bridges	☐	☐	☐	
Sign Bridges, Signal Poles	☐	☐	☐	
Cuts, Sliver Fills, Embankments	☐	☐	☐	
Roadway Widening	☐	☐	☐	
New Alignments	☐	☐	☐	
Culverts, Utilities	☐	☐	☐	
Swales	☐	☐	☐	
R/W Needed	☐	☐	☐	
Other	☐	☐	☐	
Hazardous Materials issues	**Yes**	**No**	**N/A**	**Comment/Clarification**
Shoulder soil	☐	☐	☐	
Cadmium, chromium, lead paint	☐	☐	☐	
Asbestos	☐	☐	☐	
USTs	☐	☐	☐	
PCBs	☐	☐	☐	
Groundwater	☐	☐	☐	
Wells, UICs	☐	☐	☐	
Other	☐	☐	☐	

Documentation Needed				
Level 1 Report (HMCS or MAM)	☐	☐	☐	
Clean Fill Determination/Shoulder Soil Investigation	☐	☐	☐	
Structure Survey (lead paint, asbestos)	☐	☐	☐	
Site Specific Assessments (Phase I, Level 2 PSI, other)	☐	☐	☐	
Other	☐	☐	☐	

Hazardous Materials Construction Costs (items not relflected in Bridge or Roadway items)

ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
Contaminated Shoulder Soil	Ton			$0.00
Lead Management Plan	Each	0.0		$0.00
		0.0		$0.00
		0.0		$0.00
		0.0		$0.00
		0.0		$0.00
		0.0		$0.00
Total Construction Costs				**$0.00**

Narrative (To start a new paragraph within a cell, press Alt/Enter)
Assumptions

RIGHT OF WAY SCOPING WORKSHEET

Oregon Department of Transportation

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

				R/W Cost Estimate	
Contact for Project:				R/W Subtotal	$ -
Prepared By:		Date:		Access Mgmt Subtotal (from AM Sheet)	$ -
				Total R/W Estimate	$ -

RIGHT OF WAY REQUIRED	Yes	No	N/A	Comment/Clarification
Fee Parcels	☐	☐	☐	
Permanent Easement(s)	☐	☐	☐	
Temporary Easement(s)	☐	☐	☐	
Rights of Entry	☐	☐	☐	
Archy, Geo, Enviro	☐	☐	☐	
Other	☐	☐	☐	
Access Remedies	☐	☐	☐	
Roadway	☐	☐	☐	
Slopes	☐	☐	☐	
Drainage	☐	☐	☐	
Utilities	☐	☐	☐	
Sign(s)	☐	☐	☐	
Signals	☐	☐	☐	
Aerial	☐	☐	☐	
Sidewalk	☐	☐	☐	

Temporary Easements	Yes	No	N/A	Comment/Clarification
Construction	☐	☐	☐	
Demolition	☐	☐	☐	
BLM	☐	☐	☐	
Forest Service	☐	☐	☐	
Corp of Engineers	☐	☐	☐	
DSL Lands	☐	☐	☐	
Airport	☐	☐	☐	
Section 4F/6F Properties	☐	☐	☐	
Parks	☐	☐	☐	
Schools	☐	☐	☐	
Wildlife Refuges	☐	☐	☐	
Historic Buildings	☐	☐	☐	
Recreational Areas	☐	☐	☐	
Other	☐	☐	☐	

Oregon Department of Transportation

Right of Way Acquisition Impacts to Consider

	Yes	No	N/A	Comment/Clarification
Gas Stations	☐	☐	☐	
Repair Shops	☐	☐	☐	
Industrial Sites	☐	☐	☐	
Landfills	☐	☐	☐	
Fuel Tanks	☐	☐	☐	
Privately Owned Wells	☐	☐	☐	
Water Rights	☐	☐	☐	
Irrigation Ditches	☐	☐	☐	
Septic Systems	☐	☐	☐	
On-Premise Signs	☐	☐	☐	
Outdoor Advertising Signs	☐	☐	☐	
Cell Tower Sites	☐	☐	☐	
Public Utilities	☐	☐	☐	
Special Relocate Considerations	☐	☐	☐	
Miscellaneous Features with Significant Impacts	☐	☐	☐	

Are there Land Services considerations such as

	Yes	No	N/A	Comment/Clarification
Exisitng Frontage Roads	☐	☐	☐	
Proposed Frontage Roads	☐	☐	☐	
Access Roads	☐	☐	☐	
Cattle or Equipment Passes	☐	☐	☐	
Major Irrigation Installations	☐	☐	☐	
Other (specify)	☐	☐	☐	

Current Access Control	☐	☐	☐	
Access Control Proposed	☐	☐	☐	
Permitted Access	☐	☐	☐	
Grandfathered Access	☐	☐	☐	
Reservations of Access	☐	☐	☐	
Indentures of Access	☐	☐	☐	
Has the RAME been contacted regarding any access modifications?	☐	☐	☐	

Known property owners concerns:

Other right of way comments, concerns or considerations:

Number and Type of Right of Way Acquisitions:		
Total Files:		Comment/Clarification
Simple Acquisitions:		
Complex Acquisitions:		
Residential Relocations:		
Business Acquisitions:		
Hardship Relocations:		
Railroad Acquisitions:		
Government Acquisitions		

Narrative

Assumptions

ACCESS MANAGEMENT ELEMENTS WORKSHEET

Oregon Department of Transportation

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Contact for Project:			
Prepared By:		Date:	

Access Management Elements	Yes	No	N/A	Comment/Clarification
Official Project Access List Worksheet (OPAL) required?	☐	☐	☐	
Access Management Strategy required?	☐	☐	☐	
Access Management Memo required?	☐	☐	☐	
Access Management Plan required	☐	☐	☐	
Interchange Access Management Plan (IAMP)	☐	☐	☐	
Highway Corridor Plan	☐	☐	☐	
Existing Access Control	☐	☐	☐	
Proposed Access Control	☐	☐	☐	
Permitted Approaches to be modified and or removed	☐	☐	☐	
If Yes, how many?				
Unpermitted driveways to be modified and or removed	☐	☐	☐	
If Yes, how many?	☐	☐	☐	
Have required modificaitons been coordinated with Roadway?	☐	☐	☐	
Have modificaitons been discussed with Right of Way?	☐	☐	☐	

Approach Modification or Removal Estimate	Unit	Quantity	Unit Price	Total
Permitted Approach modification or removal, ***without*** Remedies	LS	0		**$0.00**

Narrative (To start a new paragraph within a cell, press Alt/Enter)
Assumptions

SURVEYING SCOPING WORKSHEET

Project Name	0				**Project Number**	0	
		Begin	**End**	**Begin**	**End**		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	**County**	0	**City**	0	**MPO?**	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Contact for Project:			
Prepared By:		**Date:**	

	Yes	No	N/A
Is survey required on this project?	☐	☐	☐
Aerial Photography required?	☐	☐	☐
Usable existing field survey?	☐	☐	☐

Beginning of Project Latitude:	
Beginning of Project Longitude:	

Existing ODOT R/W Drg No.(s):	
Existing Filing Maps:	

Narrative **(To start a new paragraph within a cell, press Alt/Enter)**

Assumptions

UTILITIES SCOPING WORKSHEET

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Contact for Project:			
Prepared By:		Date:	

Utilities	Yes	No	N/A	Comment/Clarification
Utility Impacts	☐	☐	☐	
Reimbursable Utilities	☐	☐	☐	
If Yes, cost estimate:	$ -			

List of Expected Utilities	
Utility Name	Comment/Clarification

Narrative (To start a new paragraph within a cell, press Alt/Enter)
Assumptions

HYDRAULICS WORKSHEET

Oregon Department of Transportation

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Contact for Project:			
Prepared By:		Date:	

	Yes	No
Are there Hydraulic issues on this project?	☐	☐

Issues to be addressed	Yes	No	N/A	Comment/Clarification
Bridge	☐	☐	☐	
Culvert	☐	☐	☐	
TMW	☐	☐	☐	
Water Quality	☐	☐	☐	
Detention	☐	☐	☐	
Fish Passage	☐	☐	☐	
100 yr Floodplain	☐	☐	☐	
R/W Needed	☐	☐	☐	
Special Drainage	☐	☐	☐	
	☐	☐	☐	
Documentation Needed				
Hydro Report	☐	☐	☐	
SWMP	☐	☐	☐	
Stormwater Report	☐	☐	☐	
"No Rise"	☐	☐	☐	
	☐	☐	☐	

Hydraulic Construction Costs (items not relflected in Bridge or Roadway items)

ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL	Comment/Clarification
REMOVAL OF PIPES	FT	0.0	$20.00	$0.00	
REMOVAL OF INLETS	EACH	0.0	$1,000.00	$0.00	
REMOVAL OF MANHOLE	EACH	0.0	$1,500.00	$0.00	
REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	0.0	$5,000.00	$0.00	
ADJUST INLET	EACH	0.0	$1,200.00	$0.00	
ADJUST MANHOLE	EACH	0.0	$1,400.00	$0.00	
MAJOR ADJUST MANHOLE	EACH	0.0	$4,000.00	$0.00	
TEMP WATER MANAGEMENT	LS	0.0	$50,000.00	$0.00	
CLEARING AND GRUBBING	ACRE	0.0	$7,500.00	$0.00	
MATTING, TYPE E	SQYD	0.0	$4.00	$0.00	
DITCH EXCAVATION	CUYD	0.0	$25.00	$0.00	
LOOSE RIPRAP CLASS 50	CUYD	0.0	$80.00	$0.00	
LOOSE RIPRAP CLASS 100	CUYD	0.0	$100.00	$0.00	
MAINLINE VIDEO INSPECTION	FT	0.0	$4.00	$0.00	
TRENCH RESURFACING	SQYD	0.0	$110.00	$0.00	
18 INCH CULVERT PIPE, 5 FT DEPTH	FT	0.0	$100.00	$0.00	
18 INCH STORM SEW PIPE, 5 FT DEPTH	FT	0.0	$130.00	$0.00	
CONCRETE MANHOLES	EACH	0.0	$5,000.00	$0.00	
EXTRA FOR MANHOLE OVER EXISTING	EACH	0.0	$1,500.00	$0.00	
CONCRETE INLETS, TYPE CG-3	EACH	0.0	$3,000.00	$0.00	
CONCRETE INLETS, TYPE G-2	EACH	0.0	$3,000.00	$0.00	
CONCRETE INLETS, TYPE D	EACH	0.0	$3,000.00	$0.00	
CONNECTION TO EXISTING STRUCTURES	EACH	0.0	$1,200.00	$0.00	
PAVED CULVERT ENDSLOPE	SQFT	0.0	$50.00	$0.00	
WEARING SURFACE DRAIN OUTLETS	EACH	0.0	$500.00	$0.00	
Water Qualit treatment Facility	LS	0.0	$40,000.00	$0.00	
STREAMBED ENHANCEMENT	LS	0.0	$75.00	$0.00	
		0.0		$0.00	

Total Construction Costs		**$0.00**

Hydro PE Hours Estimate	**500**

Comment/Clarification

ALTERNATIVE ITEMS (Risks)

ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL	Comment/Clarification
water Qualit treatment Facility	EACH	0	$250,000.00	$0.00	Solving the treatment triggers on this project may trigger the need for offsite mitigation, ROW, traffic
		0		$0.00	
		0		$0.00	
		0		$0.00	
		0		$0.00	
		0		$0.00	
		0		$0.00	
		0		$0.00	
		0		$0.00	
		0		$0.00	
TOTAL ALTERNATIVE ITEMS (Construction)				**$0.00**	

Narrative (To start a new paragraph within a cell, press Alt/Enter)

Assumptions

GEOLOGY/GEOTECH SCOPING WORKSHEET

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Contact for Project:			
Prepared By:		Date:	

Issues to be addressed	Yes	No	N/A	Comment/Clarification
Disposal Site Required	☐	☐	☐	
Site Available (specify location in comment section)	☐	☐	☐	
Material Source Required	☐	☐	☐	
Site Available (specify location in comment section)	☐	☐	☐	
Structure Added or Modified	☐	☐	☐	
Bridge	☐	☐	☐	
Retaining Wall	☐	☐	☐	
Sound Wall	☐	☐	☐	
Culvert	☐	☐	☐	
Sign/Signal	☐	☐	☐	
VMS	☐	☐	☐	
Other	☐	☐	☐	
	Yes	No	NA	Comment/Clarification

Instability (Landslide or Rockfall)	☐	☐	☐		
Roadway Failure (Sinkholes etc.)	☐	☐	☐		
Groundwater Problems	☐	☐	☐		
Drainage Concerns	☐	☐	☐		
Subsurface Investigation Required	☐	☐	☐		

Narrative (To start a new paragraph within a cell, press Alt/Enter)
Assumptions

GEOTECHNICAL COSTS (for elements not included in structures)

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Estimator		Date	

Items (Add rows if needed)	Unit	Quantities		Cost		
		Substructure	Superstructure	Total	Rate	Amount
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
				0		$0
Total Geotechnical Cost						**$0**

PLANNING SCOPING WORKSHEET

Project Name	0				Project Number	0	
		Begin	End	Begin	End		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	County	0	City	0	MPO?	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				
Functional Classification	0						

Contact for Project:			
Prepared By:		Date:	

Consistency with ODOT Plans	Yes	No	N/A	List Applicable Document(s)
Is the project listed in any ODOT Corridor or Facility plans? If Yes, list Plans and page numbers.	☐	☐	☐	
Is the project covered by an Interchange Area Mgt Plan (IAMP) or Access Management Plan (AMP)? If Yes, list Plans and page numbers.	☐	☐	☐	
If No, is an IAMP or AMP required for this project?	☐	☐		

Consistency with the RTP	Yes	No	N/A	Jurisdiction/Clarification
Does the project fall within an MPO?	☐	☐		
Is the project listed on the RTP financially constrained project list?	☐	☐	☐	
If No, does the project need to be amended into the RTP?	☐	☐		
Does the MPO need to complete an air quality conformity analysis for this project?	☐	☐	☐	
	☐	☐	☐	

Consistency with Local Plans	Yes	No	N/A	List Jurisdiction(s) & Document(s)
Is the project consistent with local TSP(s)?	☐	☐	☐	
Is the project listed in a local TSP?	☐	☐	☐	
If No, does the project need to be amended into any local plans?	☐	☐		
Are there related or adjacent projects that may impact this project?	☐	☐		
Is the project consistent with the Federal Highway Functional Classification? (Classification is shown in the header section above.)	☐	☐		

Oregon Department of Transportation

Land Use Actions, Permits, Approvals	Yes	No	Comments/Clarification
List the Jurisdiciton and adjacent zoning.	☐	☐	
Related overlays that may affect the project (e.g., Coastal Zone, estuary management, etc.)?	☐	☐	
Are any of the following actions required for this project as scoped?			
UGB Adjustment	☐	☐	
Goal Exception	☐	☐	
TSP Amendment	☐	☐	
Zone change	☐	☐	
Conditional Use Permit	☐	☐	
No Rise Certificate	☐	☐	
Other	☐	☐	
Applicable zoning limitations? If so, what actions must be taken?	☐	☐	
Sea Level Rise (SLR) data sheet information?	☐	☐	

Related Agreements	Yes	No	Comments/Clarification
Any IGAs, MOUs, or CIAs in place that may affect the project?	☐	☐	
Has the local jurisdiction agreed to participate in the project (financially or in-kind)? (Explain)	☐	☐	
OTC approved highway designations that may affect the project design? (STA, UBA, CC, Expressway, etc.)	☐	☐	
Any agreements resulting Development Review that may affect the project?	☐	☐	
If Yes, will the Developer participate in funding the project? (Explain)	☐	☐	
	☐	☐	
Does the project result in a permanent capacity reduction (ORS366)?	☐	☐	
If Yes, has the reduction been approved? (Consult with the Region Mobility Liaison)	☐	☐	

General Comments **(To start a new paragraph within a cell, press Alt/Enter)**

Assumptions

PUBLIC INVOLVEMENT SCOPING WORKSHEET

Project Name	0				**Project Nu**	0	
		Begin	**End**	**Begin**	**End**		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	**County**	0	**City**	0	**MPO?**	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				
Functional Classific	0						
Contact for Project:							
Prepared By:			**Date:**				

Duration (months)				
Task	**PE**	**CN**	**Total**	**Comments**
PI Plans and Logs			$ -	
Materials			$ -	
Stakeholder Outreach			$ -	
Digital, Advertising, Misc.			$ -	
Total	$ -	$ -	**$ -**	

Narrative Summary

DISTRICT SCOPING WORKSHEET

Project Name	0				**Project Number**	0	
		Begin	**End**	**Begin**	**End**		
State Route #		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
		0.00	0.00	0.00	0.00		
Type of Project	0	**County**	0	**City**	0	**MPO?**	0
Work Type	0		0		0		
Rural/Urban/Mixed	0		0		0		
Terrain	0		0				

Contact for Project:			
Prepared By:		**Date:**	

	Yes	No
Specific District concerns?	☐	☐

Specific Issues (To start a new paragraph within a cell, press Alt/Enter)

NARRATIVE

BRIDGE SCOPING NARRATIVE

Project Name		**Scoping No.**	
Bridge Design Category			
Scoped by		**Scoping Date**	
Reviewed by		**Review Date**	

Bridge No.	Structure Name	Highway	MP

Narrative

Assumptions

Risks

BRIDGE SCOPING NARRATIVE

Project Name		Scoping No.	

Sketches

BRIDGE SCOPING NARRATIVE

Project Name		Scoping No.	

Photos

COST ESTIMATE SUMMARY

PROJECT

SCOPING No.

				ESTIMATED ITEMS			BID ITEMS			
ITEM No.	BRIDGE No.	SPEC GROUP	SPEC	MEASURE.	QTY	UNIT COST	SPEC UNIT	QTY	UNIT COST	TOTAL

COST ESTIMATE SUMMARY

PROJECT

SCOPING No.

				ESTIMATED ITEMS			BID ITEMS			
ITEM No.	BRIDGE No.	SPEC GROUP	SPEC	MEASURE.	QTY	UNIT COST	SPEC UNIT	QTY	UNIT COST	TOTAL
									SUBTOTAL	$ -

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		
									3784.00	
				L ex bridge	132.00	FT				
				b ex bridge	28.67	FT				
				A ex bridge	3784.00	SQFT				

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		

ESTIMATED BIDDING QUANTITIES

PROJECT

SCOPING No.

Item Number	Bridge Number	Spec. Number	Item Description	Quantity						Spec Unit
				Item	Qty	Unit	Number	Total		