Scope & Select Phase

Purpose of Scoping:

Why do we scope projects? We scope to validate the project purpose and potential investment strategies while identifying risks and opportunities in the delivery of the project. The outputs of scoping are used to define the project context, scope, schedule (for funding and programming purposes), budget, opportunities and risks. These outputs are also used to select and plan the delivery of a portfolio of projects. The scoping and selection process often provides early perspectives and identifies expectations for stakeholder input and public involvement.

Triggers for Scoping

Various actions can trigger scoping:
- Project needs and potential wants list
- Legislative and/or public push; stakeholder needs
- Regular funding cycles (STIP, etc.)
- Defining funding buckets
- Need to re-scope a project or need to validate an assumed scope (maintenance, local, etc.)
- Shelf projects
- Emergency projects
- New or unused funding becomes available; left over funds after projects go to bid
- Development Review; major development
- EA/EIS (during planning phase or when funding available)

Inputs to Scoping:

The primary input to the scoping process is the initial Business Case (from “Define Local/State Needs”) which defines the purpose of the proposed project and establishes the project’s need and value, ‘the why.’ The initial needs Business Case is developed by the Funding Program Manager who is responsible for managing the funding program portfolio and ensuring funding program goals are met. After the pre-scoping regional project portfolio meeting, the Project Sponsor is responsible for completing the initial Business Case. Asset data is also an important input to the scoping process. See Project Workflow Diagram for the overall process to initiate a project.

Outputs of Scoping:

Below is a list of key outputs from the scoping process, as required per FHWA & ODOT, in order to open a project EA and initiate project delivery:
- Final Business Case
- Programming request needed to obligate funds (to include projected end date)
- STIP Approval
- Project Key Number
- Executed Funding IGA (when applicable) and required match deposit

Additional outputs of scoping include:
- Scoping documentation
- Draft Project Charter (including draft schedule; after project selection)
The primary purpose of scoping is to develop sufficient and accessible documentation to communicate the scope, schedule, budget, risks and opportunities, along with constraints and assumptions, for project selection purposes. Scoping documentation is critical for use by project teams when it is time to initiate the project, as there is typically a time lag between project selection and project 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.

**Key Questions to be answered by Scoping:**

- **Scope:** What is the scope of the project?
- **Schedule:** What is the schedule/urgency/timeframe of the project? (obligation of funds)
- **Budget:**
  - What is the cost of the project? (by phase - PE, RW, Construction)
  - What funding source will be used? (not specific federal type/color…but source of funds - ODOT vs Local/Other)
  - Did we account for the correct PE cost for the type of project scoped?
- **Opportunities:** To be identified at Pre Scoping meeting and verified at Post Scoping meeting
  - What investment and leveraging opportunities exist? (intermodal, multi-modal, system/corridor improvements, mobility, etc.)
  - Are there opportunities to address related or nearby issues? (i.e. guardrail replacement on a 1R project)
  - Are there opportunities to combine projects?
  - Do we have the right people at the table to fully discuss all possible investment opportunities?
- **Asset Conditions and Features**
  - What is the current condition of the assets and features?
  - What issues could be addressed by the project?
  - Which issues should not be addressed by the project and why?
- **Risk:**
  - What are the risks, assumptions & constraints associated with the project?
  - Has the project received the necessary buy-off (sponsor, stakeholder, approval authority) etc.?
  - Risk Assessment - What issues and/or stakeholders could impact scope, schedule, and/or budget? (environmental, railroads, etc.)
  - Does the project require any specific approvals (deviates from a facility plan, design exception, stakeholder input, etc.)?
  - What standards will be applied and are there any design exceptions required?
  - Are there requirements that don’t directly address the problem? If so, what are they? (Can/should those requirements be modified or exceptions made?)
  - What are the potential staging and mobility issues? Are there opportunities to separate traffic/create a logical detour?
  - What potential work-zone enforcement issues might exist?
  - What are the potential utility and right-of-way impacts?
  - What access management strategies may be needed?
- **Environmental Related Risk:**
  - What is the rough Area of Potential Impact (API) or project limits determined during the scoping phase, if not beforehand through the planning or NEPA process?
  - What natural (wetlands, waters, ESA listed species, etc.) and cultural resources are present within or near the API of the project?
  - How do we avoid or minimize impacts to the natural and cultural resources identified within the API?
Which, if any, of the following may be required for the project?

- Fill/removal permits (wetland delineations, OHWL identification, etc.)
- ESA surveys and documentation
- 401 water quality certification (storm water facilities)
- Historic/archaeology surveys and documentation
- Section 4(f) and/or Section 6(f) documents
- Air Quality and/or Noise analysis and reports
- Hazmat assessments
- Outreach (tribal coordination, environmental justice, visual resources, etc.)
- Environmental commitments (from planning/NEPA)
- Preliminary mitigation

**Investment Strategy:**

- What is the proposed investment strategy?
- Does the proposed improvement address the purpose of the project?
- Do we understand the problem or opportunity? Has our understanding of the problem or opportunity changed? (If so, how?)
- How will the project address the needs?
- Is the project consistent with Sponsor and/or Stakeholder expectations?
- What impacts and alternatives have been analyzed?
- Why was the proposed strategy selected over other alternatives analyzed?

**Practical Design S.C.O.P.E. Values and Key Performance Measures**

- How does the project integrate and address the key practical design S.C.O.P.E. values? (Safety, Corridor Context, Optimizing the System, Public Support, and Efficient Costs)
- How does the project address the Key Performance Measures (KPMs) identified in the Practical Design Strategy? (if any; Traffic Fatalities, Travel Delay, Pavement Condition, Bridge Condition)

**Resources/Tasks: What resources/tasks are needed to accomplish the project?**

- What delivery method is proposed (in house, outsource, local)?
- What opportunities for alternative delivery/contracting exist? (i.e. CMGC, Design-Build, etc.)
- Are consultant services needed?
- Which disciplines are needed?
- What outreach, communication, stakeholder engagement and public involvement may be needed? (internal and external)

**Documentation:** Is the information documented in a consistent and accessible way so it can be utilized by future users? (i.e. practical design, project team initiation, etc.).

- How has scoping validated / invalidated the initial businesscase?
- Where are the answers to these questions being documented? (Business Case, Scoping Notes, FACS-STIP Tool, other)
- How will the information be accessed when time to initiate the project?
- How will the quality of the information be assessed?

**NOTE:** All scoping documentation should be saved in ProjectWise.
**Scoping Activities & Charges**

This chart summarizes the various phases of scoping, the associated activities, the appropriate EA to charge, and the deliverables from each phase.

### Transportation STIP Scoping Phases

<table>
<thead>
<tr>
<th>PLANNING PHASE</th>
<th>PRE-SCOPING PHASE</th>
<th>ACTIVE SCOPING PHASE</th>
<th>SCOPING TRANSITION PHASE</th>
<th>PROJECT INITIATION PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities leading to approved transportation plans (plan development)</td>
<td>Activities leading to 150% needs list (program level)</td>
<td>Activities leading to project selection (100% list)</td>
<td>Activities leading to opening project EA (after selection)</td>
<td>Activities leading to project kick-off (after opening project EA)</td>
</tr>
<tr>
<td>Planning EA</td>
<td>Scoping EA</td>
<td>Scoping EA</td>
<td>Scoping EA</td>
<td>Project EA</td>
</tr>
<tr>
<td>STIP program assessments (bridge, program needs, etc.)</td>
<td>Needs list assessment</td>
<td>STIP development &amp; outreach</td>
<td>Modal Coordination</td>
<td>Funding IGA Executed</td>
</tr>
<tr>
<td>TSPs</td>
<td>Project needs list development</td>
<td>Pre-proposal submittal work</td>
<td>Draft budget/cost estimate (before approved STIP)</td>
<td>Scope validation &amp; refinement</td>
</tr>
<tr>
<td>EIS Tier 1 NEPA</td>
<td>Operational funding, budget determination</td>
<td>Proposal notifications</td>
<td>Cross program coordination</td>
<td>Final project charter &amp; schedule</td>
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<tr>
<td>Facility Plans</td>
<td>Initial Business Case Development</td>
<td>5R safety assessment</td>
<td>Scoping questions answered</td>
<td>Draft project charter, schedule &amp; resources</td>
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<tr>
<td>Phase Deliverables:</td>
<td>Phase Deliverables:</td>
<td>Phase Deliverables:</td>
<td>Phase Deliverables:</td>
<td>Phase Deliverables:</td>
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<tr>
<td>□ Approved Plans</td>
<td>□ Approved 150% needs list</td>
<td>□ Final Business Case*</td>
<td>□ Draft Project Charter and schedule</td>
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<tr>
<td></td>
<td></td>
<td>□ Scoping Documentation</td>
<td>□ STIP/Key Number*</td>
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<tr>
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<td></td>
<td>□ Approved 100% list</td>
<td>□ Executed Funding IGA*</td>
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<td>□ Prospectus* **</td>
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<td></td>
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<td></td>
<td>□ Programming request (to obligate funds)*</td>
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SSLT

April 28, 2015

*= required to open Project EA; **= determine if prospectus still needed
To better capture the costs associated with scoping projects and project costs in the future, use this table to charge scoping activities.

Each Region is responsible for establishing and managing their scoping budgets and setting appropriate sub jobs to track expenditures. The following table shows the Expenditure Accounts (EAs) and sub-jobs that were established for each Region for the 2017-2019 Biennium.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SUB-JOBS</th>
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<td>Region 1</td>
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<tr>
<td>Transition Scoping</td>
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<td>xxx</td>
</tr>
</tbody>
</table>

**Scope Validation (Project Initiation)**

In most cases, a significant time lag occurs between project selection and project initiation (typically two-three years). When a project is ready to be initiated, and a project charter is being finalized, it is important to validate the original scope using the documentation produced in the scoping phase. Determine if any significant changes have occurred to the project parameters and context that impact the scope, schedule, budget, risks, opportunities, assumptions, constraints or practical design implications.

**Scoping Tools and References**

A large variety of tools and references are available to assist in the scoping process. The FACS-STIP Tool and TRANS-GIS are the most common tools for obtaining important scoping data and asset management integration information. An asset management “one-stop-shop” has been developed to provide a comprehensive source for scoping and asset management data: [http://transnet.odot.state.or.us/hwy/SBS/Pages/AM-Resources.aspx](http://transnet.odot.state.or.us/hwy/SBS/Pages/AM-Resources.aspx).

**Additional Reference Information:**

- [Practical Design Website](#)
- [Project Initiation Roles](#)
- [Project Delivery](#)
- [Guidebook](#)