



Streamlining the project development process for state-funded projects

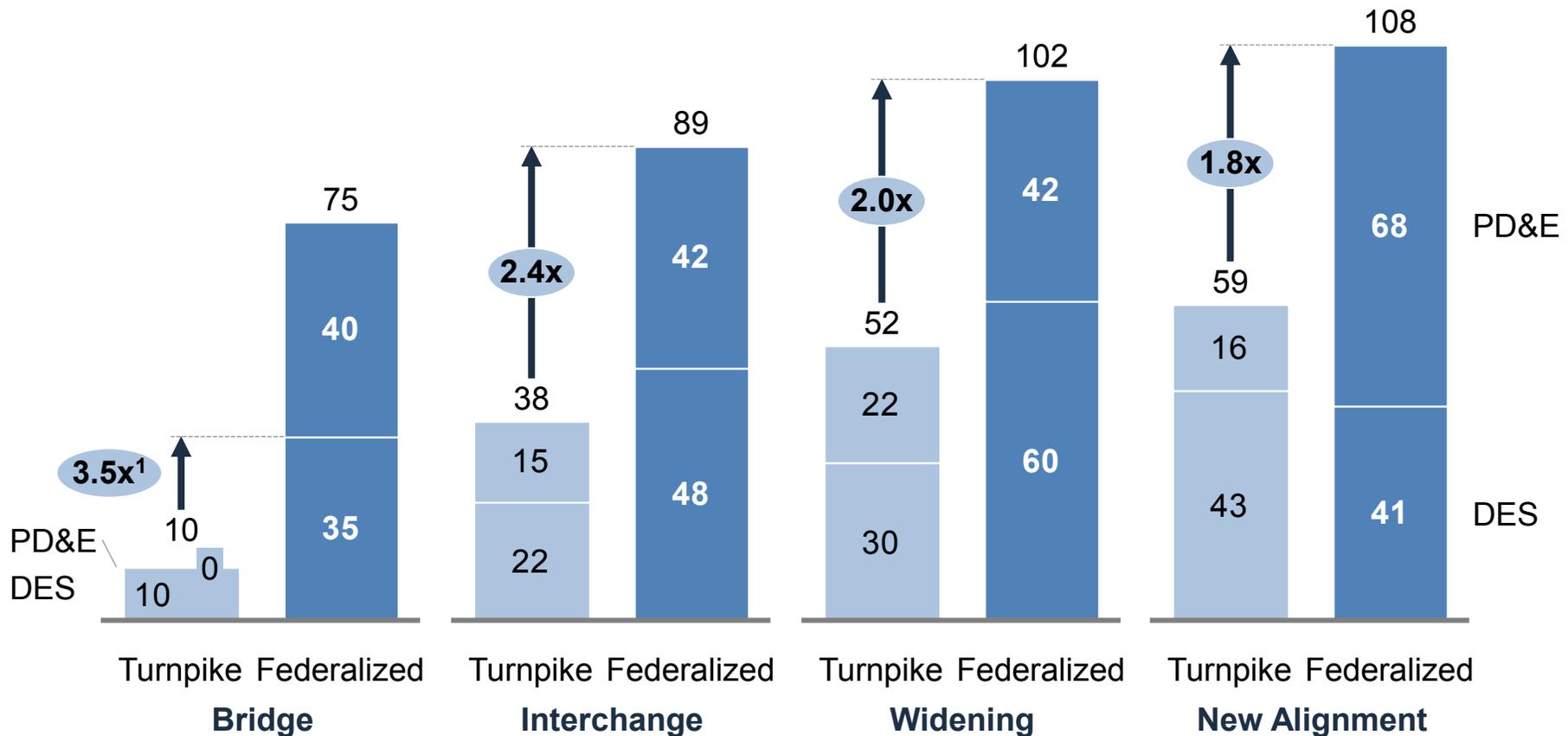
December 16, 2014

Our goals

- FDOT leadership set out to significantly reduce the time it takes to complete pre-construction for road and bridge projects
- We've met with each district, and consistently we have heard excitement about the opportunity to make the state process easier and more efficient
- FDOT has an opportunity to be innovative and a leader among state DOTs
- Over the last several months, based on insights from each district and Central Office, we've identified three opportunities for streamlining the project development process:
 - 1 **Increase the share of state-funded projects**, given projects in the federal process take 1.8-3.5 times as long as projects following a state process
 - 2 **Streamline documentation requirements** for both environmental and design processes for state-funded projects
 - 3 For state-funded projects, **combine the Planning, PD&E and Design phases** into a tightly-scoped, well-coordinated and overlapping process
- We are now defining the implementation plan for each opportunity and will be working with you in the weeks to come

1 We found that federalized projects in the sample submitted by districts lasted 1.8x-3.5x longer in pre-construction than State projects

Average length of pre-construction for project samples
Months

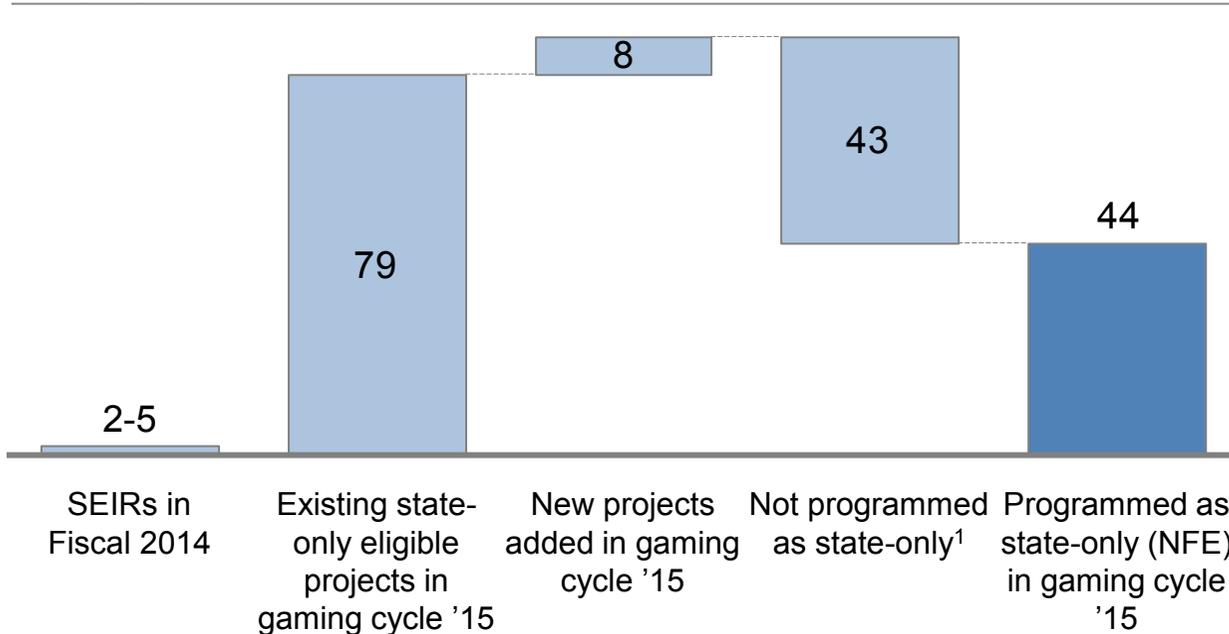


1 No PD&E was available for Turnpike projects, so the 3.5x difference is calculated only during the Design phase

1 As a result, districts selected 44 projects to be programmed as state-funded in the current gaming cycle, resulting in an estimated 97 years of time saved

Projects identified for state-only funding

of projects across all districts



These projects should be expected to save a total of 97 years of pre-construction timing²

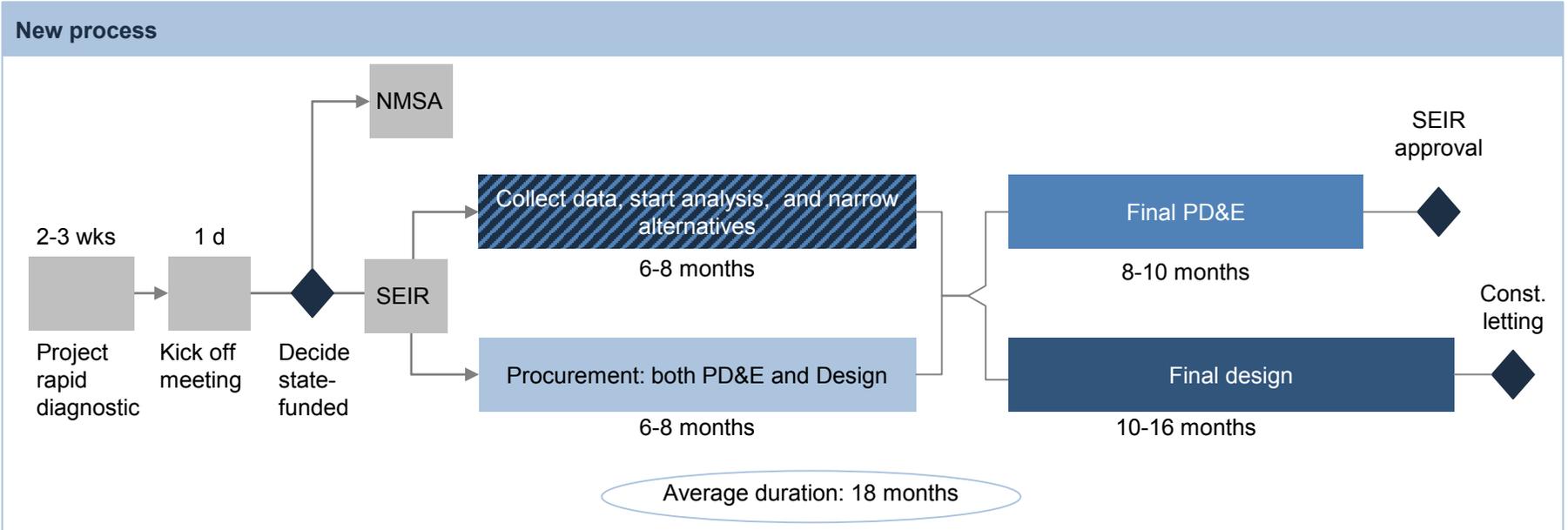
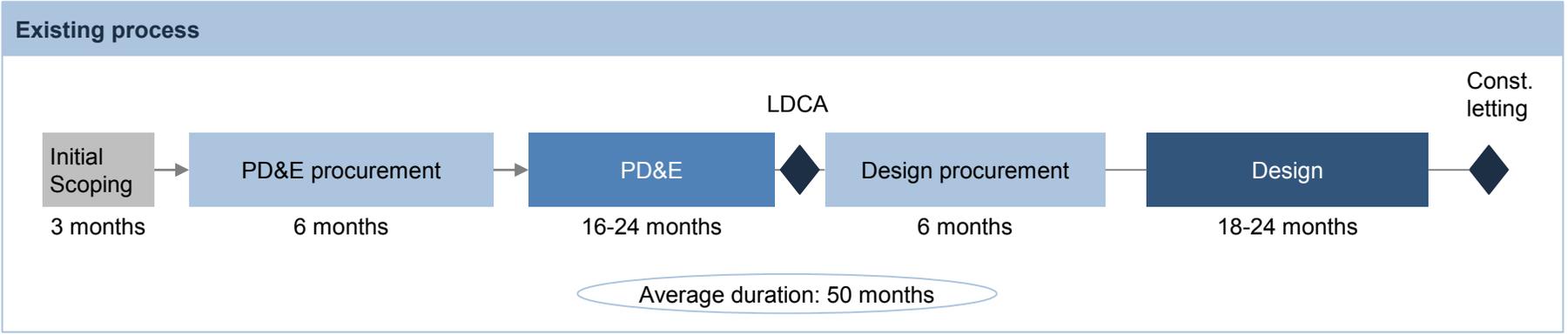
1 Projects removed from state-only eligibility at the discretion of the districts due to: uncertainty of future funding needs, availability of current or future eligible state funds, existing plans to use federal funds
 2 Based on comparison of expected environmental class of action for all 45 selected projects to savings derived from Turnpike projects used in original project sample

2 Districts identified opportunities to streamline paperwork requirements, resulting in time savings

Existing	Change to consider	Impact
<ul style="list-style-type: none"> ▪ Separate PER and SEIR documents 	<ul style="list-style-type: none"> ▪ Combine PER and SEIR into a single SPEER (State Preliminary Environmental and Engineering Report) comprised of non-overlapping sections of each 	<ul style="list-style-type: none"> ▪ Saves ~1-2 months of FDOT review time associated with PER and reduces cost
<ul style="list-style-type: none"> ▪ Statement of purpose and need re-written for each approval document 	<ul style="list-style-type: none"> ▪ Create a single statement of purpose and need in the scoping phase and agree to use it for all approval docs ▪ Create formal mechanism for changing purpose and need 	<ul style="list-style-type: none"> ▪ Discourages scope creep that occurs when each document author re-writes statement ▪ Encourages alignment with multiple disciplines throughout project team ▪ Saves time spent on re-writing/editing statement for each approval doc
<ul style="list-style-type: none"> ▪ Separate wetlands and species assessments 	<ul style="list-style-type: none"> ▪ Create a Natural Resources Evaluation that combines the essential elements of multiple environmental reports into a single document 	<ul style="list-style-type: none"> ▪ Captures efficiency of evaluating the same environmental area for multiple impacts simultaneously (e.g. reduces multiple site surveys into one) ▪ Facilitates inter-agency coordination by providing complete resources evaluation to each relevant agency
<ul style="list-style-type: none"> ▪ Scoping document is built without input from programming screen 	<ul style="list-style-type: none"> ▪ Adapt scoping document template so it uses fields from the programming screen output 	<ul style="list-style-type: none"> ▪ Improves quality of scoping document to fully leverage work that was already done in the programming screen and eliminate unnecessary environmental reports

3 District workshops over the last few months identified further time savings for the state process through tight scoping and overlap of PD&E and Design

Procurement
 PD&E activity
 Design activity
 Project management



3 The new process can reduce the average pre-construction length to 18 months

Pre-construction duration

months

Current Fed
Type II CE
Average + Design

82

“Best practice”
Fed Type II CE + Design¹

50

-32

Current average
Turnpike SEIR + Design

40

-42

Aspiration for
SEIR process + Design

18

-64

Very few Turnpike projects have PD&E and Design in parallel, and those that do only overlap ~10% of PD&E and Design

Aspiration is achieved through 75% overlap of PD&E and Design²

¹ Based on recent value engineering exercise done by D6 and D4 on Type II CE project schedule; without concerted state-only transformation plan, this is a likely benchmark for state-only goals

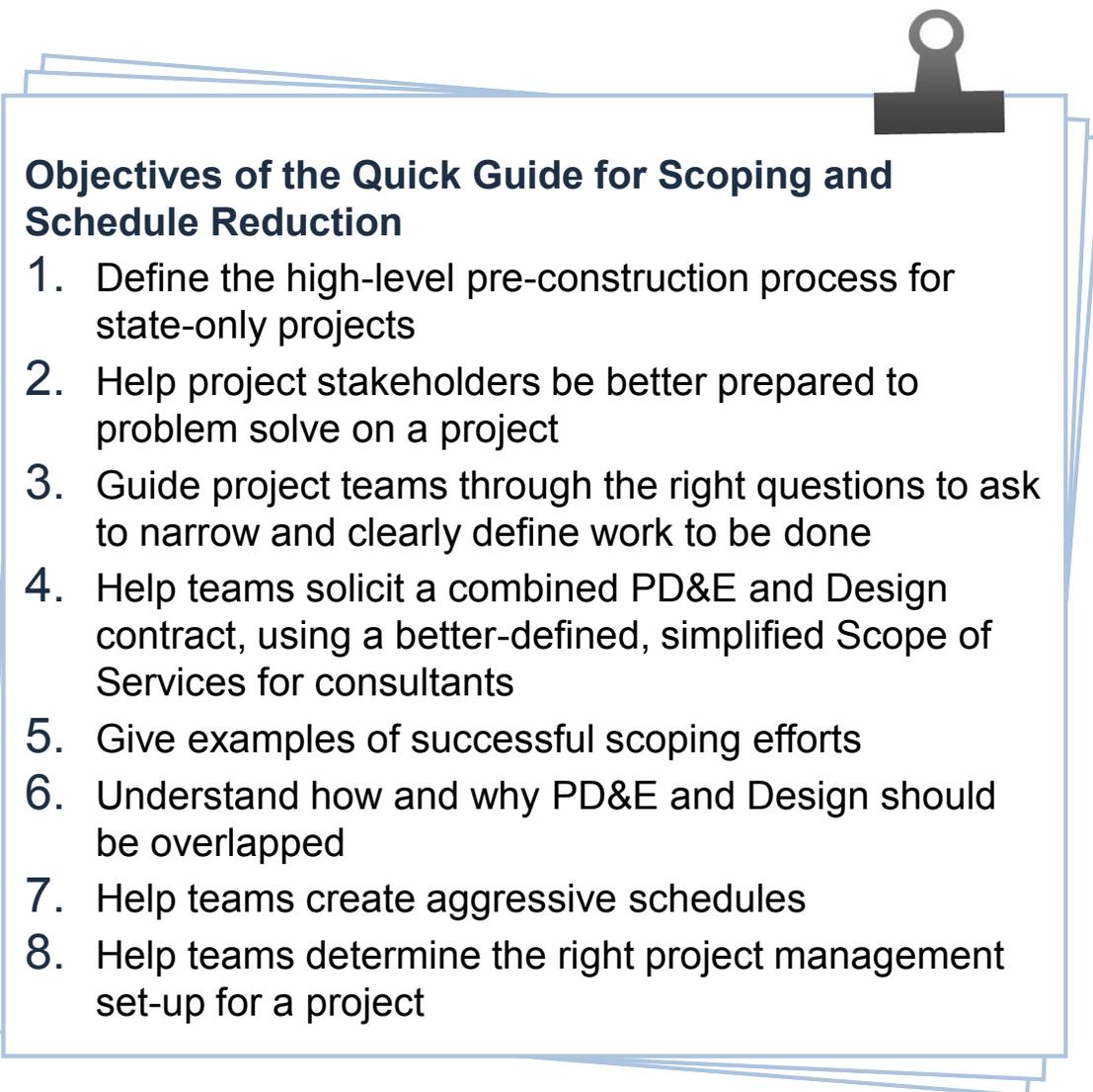
² For projects where both phases are planned in succession

3 Expected pre-construction durations and documentation vary based on the project's characteristics

Environmental complexity	High	<p>Potential duration: 18-24 months</p> <p>Example project types</p> <ul style="list-style-type: none"> ▪ Bridge crossing over navigable waters ▪ Widening into new ROW 	<p>Potential duration: 24-30 months</p> <p>Example project types</p> <ul style="list-style-type: none"> ▪ New alignment ▪ Project in environmentally and/or politically sensitive area that requires new ROW
	Low	<p>Potential duration: 10-12 months</p> <p>Example project types</p> <ul style="list-style-type: none"> ▪ Widening within existing operational ROW 	<p>Potential duration: 14-18 months</p> <p>Example project types</p> <ul style="list-style-type: none"> ▪ Intersections or bridges in well developed areas
		Low	High
		Design ambiguity	

- After the initial kick-off, the project PM can make an assessment of the design ambiguity and environmental complexity of the project, and calibrate the project schedule accordingly
- SEMO can pressure-test the PM's assessment with an outside expert perspective

Over the next two months, we will host workshops at each district and create a simple guide to the new process



Objectives of the Quick Guide for Scoping and Schedule Reduction

1. Define the high-level pre-construction process for state-only projects
2. Help project stakeholders be better prepared to problem solve on a project
3. Guide project teams through the right questions to ask to narrow and clearly define work to be done
4. Help teams solicit a combined PD&E and Design contract, using a better-defined, simplified Scope of Services for consultants
5. Give examples of successful scoping efforts
6. Understand how and why PD&E and Design should be overlapped
7. Help teams create aggressive schedules
8. Help teams determine the right project management set-up for a project

- We would like **your input** on how to ensure successful implementation of the streamlined process
- We'll host a **workshop with you in January** to hear your ideas and co-create the guide
- In the workshop, we'll focus on a **specific project from each of your districts** – which projects are the right ones?
- We'll also be working with Central Office to create a **system to track time savings and continue to identify state-funded projects**

We'd love to hear your ideas

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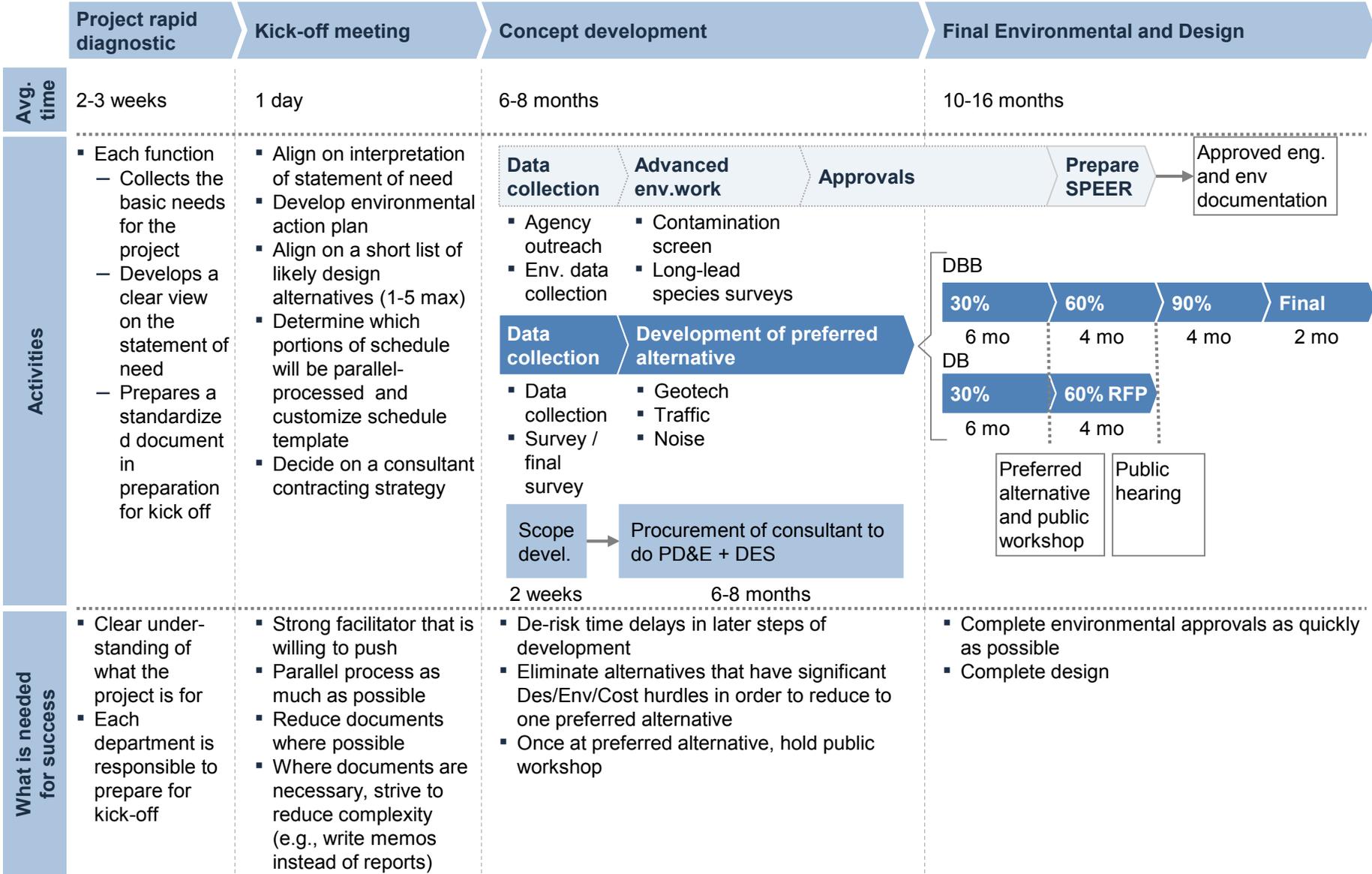
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Appendix

1 We have a blueprint for the new process...

— Design — PD&E



1 ...now we must further refine each step and develop tools to support implementation

Phase	Purpose	Activities	Owner
Project rapid diagnostic	<ul style="list-style-type: none"> Each functional area independently prepares for the project kickoff meeting <ul style="list-style-type: none"> Clear view on the purpose and need Initial screen for likely alternatives 	<ul style="list-style-type: none"> Align on interpretation of statement of need Develop environmental action plan Align on a short list of likely design alternatives (1-5 max) Decide on a consultant contracting strategy 	<ul style="list-style-type: none"> ISD / Planning
Kick-off meeting	<ul style="list-style-type: none"> Bring all stakeholders in the same room to align on preliminary key project priorities, scheduling, and documentation Use cumulative experience and common sense to eliminate all but highly likely alternatives Make a preliminary list of documents and processes that can be skipped 	<ul style="list-style-type: none"> Develop environmental action plan Align on a short list of likely design alternatives (1-5 max) Determine which portions of schedule will be parallel-processed and customize schedule template Establish a purpose and need (high level summary in 2-3 paragraphs) Decide on a consultant contracting strategy 	<ul style="list-style-type: none"> ISD / Environmental PM
Concept development	<ul style="list-style-type: none"> Begin initial PD&E and Design activities in parallel Advance work during procurement period for a consultant 	<ul style="list-style-type: none"> Scope development for consultant procurement Develop a preferred alternative PD&E activities: data collection, advanced environmental work, beginning approvals Design activities: data collection, survey work, geotech, traffic, noise 	<ul style="list-style-type: none"> Environmental and Design PM
Final PD&E	<ul style="list-style-type: none"> Finish necessary approvals as quickly as possible Approve environmental documentation before the 60% design milestone 	<ul style="list-style-type: none"> Combine preparation of PER and SEIR (SPEER) Deliver preferred alternative and hold public workshop and hearing 	<ul style="list-style-type: none"> Environmental
Final Design	<ul style="list-style-type: none"> Drive to 30/60/90 designs and public hearings more quickly due to collaboration with PD&E and consultants 	<ul style="list-style-type: none"> Deliver final design 	<ul style="list-style-type: none"> Design