Components of Plans and Studies

WORKING DRAFT REVISED 5/21/2018

Major Categories of Planning Activities

The following list summarizes the major categories of activities that take place during transportation planning. Each section below contains a more detailed explanation of the discrete work steps, external and internal engagement activities, data collection and analysis that takes place in each category, along with products and decisions that are made along the way.

- **Pre-Study Scoping**
- **Establish Consistency with Existing Plans and Visions**
- **Document Existing Conditions**
- **Project Future Conditions**
- **Identify Issues and Opportunities**
- **Formulate Potential Solutions**
- **Evaluate and Compare Potential Solutions**
- **Define, Package and Prioritize Alternatives for Advancement**
- **Document Decisions and Prepare Action Plan**

Potential Planning Challenges and Starting Points

Typical Components of a Plan or Study	We want to analyze data to determine what, if anything, is needed.	We know there is a need, but want to refine our understanding of it and investigate possible solutions.	We've defined the need and want to evaluate a range of alternate solutions.
Pre-Study Scoping	✓	✓	✓
Establish Consistency with Existing Plans and Visions	✓	✓	✓
Document Existing Conditions	✓	✓	
Project Future Conditions	✓	✓	
Identify Issues and Opportunities	✓	✓	
Formulate Potential Solutions		✓	✓
Evaluate and Compare Potential Solutions		✓	✓
Define, Package and Prioritize Alternatives for Advancement		✓	✓
Document Decisions and Prepare Action Plan	✓	✓	✓

Pre-Study Scoping

Key Decisions to Be Made and Documented

- What is the overall motivation for conducting a study? Why does a study or other planning effort need to be conducted?
- What are the goals and objectives of this study?
    - What level of effort is required to achieve the study goals and objectives? Do we have enough FDOT resources, or do we need to budget to hire consultants to help complete the study?
- What is the planning horizon for the study? Are we focusing on near-term solutions to immediate issues or longer term visions for the future, or both?
- What do we expect to produce, and how should we communicate our intent and expectations to people outside FDOT?
    - What next steps could follow the study? Is this planning effort likely to identify alternatives that will advance into a Project Development and Environmental (PD&E) study that complies with National Environmental Policy Act (NEPA) requirements?
    - What key milestones, potential interim products, and decision points do we need to specify to make sure we proceed at the right pace?
    - Does this effort need to be divided into phases or geographical segments or subareas?
- Is there sufficient information, internal support, and external support to launch this effort and carry it through to completion? What risks or challenges might we face along the way?
    - What is our starting point? What relevant transportation plans or studies have been done before by FDOT or others? Are FDOT's partners leading any studies in parallel? What information and data sources can we leverage? Do we need to do any preliminary analysis to set the stage for this study before we launch?
    - Is a regional or area-wide vision in place to help establish guiding principles for transportation investments?

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Study Purpose, Goals and Objectives: Documentation and internal dissemination of the motivation for the study, overall goals, expectations for products, potential next steps of this effort, and how FDOT will decide whether to move forward with those next steps.

Scope of Work for Existing and Future Conditions: Documentation of existing relevant plans and studies, assessment of existing data sources and analysis tools, and comparison of available information, data and analysis tools to those needed to achieve the project's

objectives. Include needs for data compilation (from online and electronic sources), field data collection, modeling, and other analysis to support the study goals and objectives. Recommend whether to conduct preliminary data collection and analysis to set the stage for the study and refine the scope of work.

Public Involvement Plan with specification of public and partner engagement expectations, level of effort, and timing, as well as communications and social media strategy, if applicable.

Notice of Intent to engage in a NEPA analysis, stating that the data collection, analysis, and public involvement conducted in this plan or study is intended to support a future NEPA analysis. (Will not be needed for all planning efforts.)

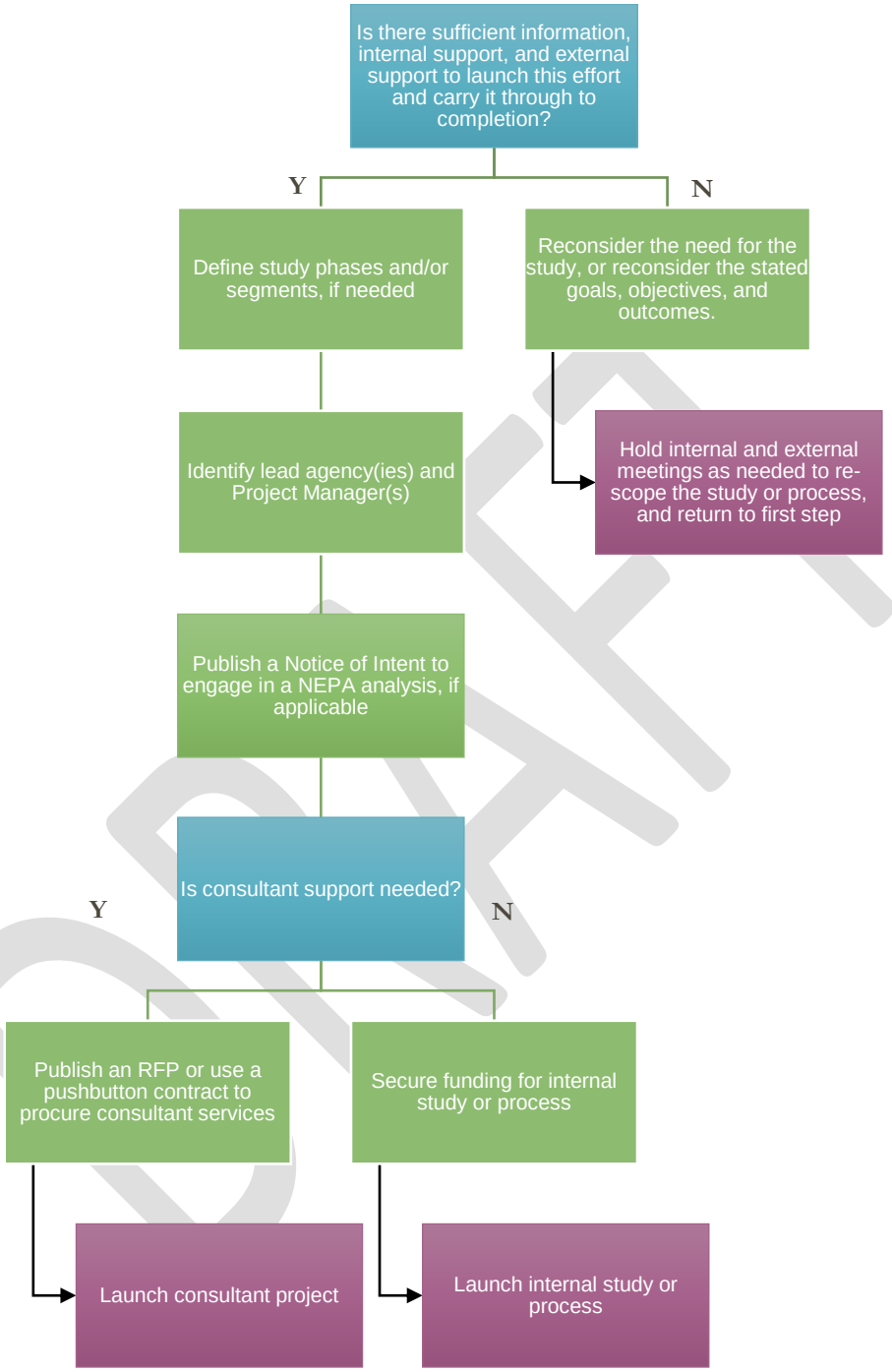
Preliminary Scope of Work, Estimated Schedule, and Estimated Budget: Develop an outline-level scope of work with major work steps, parameters like planning horizon and geography (project limits), and assumptions about data collection and extent of involvement needed with the public and external agencies. Estimate the number of months need to complete the work. Estimate the level of effort for internal staff and the consultant budget (if consultant support is needed).

Examples of Activities Undertaken

- **Hold an internal kickoff meeting**: Coordinate internally with other FDOT offices to discuss and agree on:
  - The need for a plan or study, and the basis for proceeding;
  - Elected officials and organizations that have expressed support for a plan or study, and those who have expressed concerns (e.g., on the basis of safety, accessibility, environmental stewardship issues, community or sociocultural sensitivities, and other issues that will need to be given close consideration);
  - Overall goals and objectives and expectations for products and next steps. For example: Discuss whether this planning effort could and should lead to a PD&E study, whether the intent is to advance quickly into design, whether Planning and Environmental Linkages requirements need to be considered and addressed, and other factors that may impact scope, complexity of data collection and technical analysis, and degree of public involvement and other external engagement required.
  - Planning horizon(s) (immediate [push button or Emergency Relief], 0-5 years [Work Program], 5-20 years [Long Range Transportation Plan horizon], more than 20 years [Vision])
  - Geography of study area (project limits), jurisdictions impacted, origin-destination flows, and (for more detailed studies) the range of facilities to be assessed (e.g., specific modes and parallel routes);

    - Other key parameters that may affect scope, schedule, and budget;
    - Potential risks to schedule, scope and budget, and ways to mitigate them;
    - Mechanisms and timing of internal coordination between plan/study team and other offices (modes and functional areas);
    - Touch points between Central Office and Districts;
    - Roles and responsibilities in carrying out technical work and external engagement, and points of contact for information needed from internal sources.
- **Engage with external partners** to discuss and get feedback on:
    - Project objectives, scope of work, and technical approach;
    - Potential risks and ways to mitigate them;
    - Mechanisms to engage partners during the study, including both executive/policy level and technical staff level;
    - Need for, and appropriate mechanisms for, and timing of public involvement;
    - Need for, and content of, a communications and social media strategy; and
    - Regional and local visions and plans that are relevant to the planning effort or study, and why.
- **Develop an outline or framework for a Public Involvement Plan** and accompanying communications and social media strategy. The types and timing of activities should be appropriate for the context and overall goals and objectives of the effort.
- **Compile a list of recently completed projects and studies** that may contain useful findings and information to support the motivation for this planning effort;
- **Compile a list of related upcoming work** to be performed by FDOT and other transportation agencies in the area, including those to be completed via pushbutton contracts; and
- **Discuss, document, and compile data, projections, and analysis tools** that may be useful in carrying out the study, and known gaps in data and tools;
- **Determine if any preliminary work is required before proceeding**, such as development of a regional vision to help guide decisions about transportation needs and priorities, or additional data collection;
- **Draft a preliminary scope of work, schedule, and budget.** Circulate the preliminary scope, schedule, and budget to appropriate reviewers inside and outside FDOT.

Possible Next Steps: Decision Tree [CONCEPT]



Establish Consistency with Existing Plans and Visions

Key Decisions to Be Made and Documented

- What components of existing plans and visions support this study's objectives?
- What goals, objectives, performance measures, and performance targets do FDOT and our partners use to measure progress toward desired outcomes, and how might these existing policy frameworks influence how we make decisions in this planning effort?
- What are the parameters of the existing conditions analysis? What information is important to FDOT and our partners in assessing existing conditions for this planning context? What data sources and analysis tools are available and appropriate to support existing conditions analysis?
- What are the parameters of the future conditions analysis? What is the planning horizon? What information is important to FDOT and our partners in assessing future conditions for this planning horizon? What data sources and analysis tools are available and appropriate to support future conditions analysis, including projections, models, and sketch planning?
- What are potential sources of uncertainty in the future over the established planning horizon? Do existing plans and visions express desired future outcomes or suggest a range of plausible and acceptable futures?

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- **Literature review of related plans and visions:** Statements of support or need for this planning effort, as well as relevant adopted goals, objectives, performance measures, and performance targets
- **Performance framework:** Project-specific goals, objectives, relevant performance measures, and relevant short-term and longer-term performance targets.
- **Parameters of existing conditions analysis:** Types of data to be collected in order to assess current conditions relative to the project goals and objectives, and relative to specific performance targets if established. In some cases it may be necessary to establish criteria weights based on the values expressed in existing plans and visions.
- **Parameters of future conditions analysis:** Types of projections and forecasts to be produced to assess future conditions relative to the project goals and objectives, and relative to specific short-term and longer-term performance targets if established. In some cases it may be necessary to establish criteria weights based on the values expressed in existing plans and visions.

Examples of Activities Undertaken

- **Review existing plans and visions.** Research and document statements of support or need for this planning effort, as well as relevant adopted goals, objectives, performance measures, and performance targets, in:
  - The Florida Transportation Plan;
  - Other key statewide plans and visions, such as Florida's Strategic Plan for Economic Development;
  - Metropolitan Planning Organization Long Range Transportation Plans;
  - Regional plans and visions;
  - Existing and future transportation and land use elements of local comprehensive plans; and
  - Other relevant local plans and visions.
- **Establish and document the performance framework for this study**, including, as appropriate, project-specific goals, objectives, performance measures, and targets (directional or specific numerical targets). These may suggest parameters that will be used to assess current conditions and make projections of future conditions, so that there is sufficient information to establish what the issues and opportunities are in the study area. This performance framework also can suggest evaluation criteria for potential solutions.
- **Set the parameters of the existing conditions analysis**, considering environmental, economic, social, and transportation-specific factors. Specifically, identify information that is relevant to Complete Streets Context Classification.
- **Set the parameters of the future conditions analysis,** considering variables of interest for future demand for transportation and variables that may impact the surrounding context of the study area. Match future conditions expectations to available data sources, and tools and models for projecting future conditions.

Possible Next Steps

- Stop here and work with partners to clarify and better align statewide, regional, and local visions and policies before proceeding with further plans and studies
- Pause to build consensus around goals, objectives, performance measures, and targets as needed before proceeding
- Document existing conditions
- Project future conditions
- Identify issues and opportunities

Document Existing Conditions

Key Decisions to Be Made and Documented

- What existing conditions do not meet the goals and objectives of the study, or specific performance targets if established?

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- **Existing conditions assessment:** Technical report, map book, GIS story map, website with graphics *[examples of notable practices to be provided]*
- **Summary of public engagement:** Feedback from the public and partner agencies on issues that are important to them, and gaps in data and documentation of existing conditions

Examples of Activities Undertaken

- **Assemble data from existing studies, plans, and data sources** *[list of data needs for various types of plans and studies to be provided]*
- **Conduct additional research and analysis, and undertake field data collection, as appropriate.**
- **Prepare an assessment of existing conditions** relative to project-specific goals, objectives, relevant performance measures, and relevant short-term and longer-term performance targets.
- **Conduct public engagement** to review, vet, and collect feedback on existing conditions information.
- **Fill gaps in existing conditions data**, or develop recommendations for filling the gaps in a future project phase.

Possible Next Steps

- Decide if existing conditions assessment supports the original assessment of issues that motivated this plan or study. If not, consider terminating the study, collect additional data, or conduct external engagement to build consensus around the need for continued planning.
- Project future conditions
- Identify issues and opportunities

Project Future Conditions

Key Decisions to Be Made and Documented

- What do adopted plans and visions say about the desired future for the study area? Can differences and inconsistencies between these plans and visions be addressed?
- What are potential risks to future outcomes?
- What are other plausible scenarios for the future not considered by adopted plans and visions?
- Can we project future conditions across all of the performance measures and scenarios defined for this study?

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- **Results of projections of future conditions:** Technical report, map book, GIS story map, website with graphics. *[examples of notable practices to be provided]*
- **Vulnerability and risk assessment** that looks across multiple hazards that may impact the ability to meet performance targets, from natural to human-made disasters to economic and demographic risks.
- **Opportunity assessment** that looks at opportunities to improve economic, social, and environmental outcomes of transportation investments and aligns transportation planning with other parallel planning efforts.
- **Risk and opportunity matrix** summarizing internal and external risks to achieving short-term and longer-term performance targets. *[examples of notable practices to be provided]*
- **Summary of public engagement:** Feedback from the public and partner agencies on issues that are important to them, and gaps in data and documentation of future conditions projections.

Examples of Activities Undertaken

- **Assemble information about future conditions** from existing plans and visions
- **Conduct a vulnerability and risk assessment (if needed).**
- **Conduct an opportunity assessment** to determine how transportation investments can support relevant economic, social, and environmental goals.
- **Draft and refine a risk and opportunity matrix** to inform future planning and project development.
- **Develop plausible future scenarios** including those not considered by adopted plans and visions.
- **Develop projections of future conditions**, based on models and sketch planning tools.
- **Conduct public engagement** to review, vet, and collect feedback on future conditions information**.**

Possible Next Steps

- Decide if future conditions projections support the original assessment of issues that motivated this plan or study. If not, consider terminating the study, collect additional data, or conduct external engagement to build consensus around the need for continued planning.
- Identify issues and opportunities

Identify Performance Gaps and Opportunities

Key Decisions to Be Made and Documented

- What specific existing conditions and projected future conditions are not consistent with the goals and objectives of the study, or specific performance targets if established?
- What are the major problems and opportunities that could be addressed by transportation investments, management and operational strategies, and policy changes in the study area?
- Are there opportunities to coordinate transportation, land use, economic, environmental, and community/social strategies to achieve better outcomes?
- Is there information to develop a compelling preliminary statement of purpose and need for transportation investments?

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- **Summary of public engagement:** Feedback from the public and partner agencies on needs assessment
- **Vulnerability and risk assessment**
- **Opportunity assessment**
- **Results of performance gap assessment**
- **Preliminary statement of purpose and need**

Examples of Activities Undertaken

- **Conduct public engagement** to review existing and future conditions information and collect input on potential issues and opportunities that can be addressed by transportation investments, management and operational strategies, and policy changes in the study area**.**
- **Conduct vulnerability and risk assessment** to identify current hazards and potential future threats to achievement of study area goals and objectives over the planning horizon.
- **Conduct opportunity assessment** to identify potential for alignment of transportation, land use, economic, environmental, and community/social goals
- **Identify performance gaps** comparing existing and future conditions to adopted performance targets (quantitative analysis), comparing conditions to more general goals and objectives (qualitative analysis), and using management systems, where available (e.g., to determine where pavement and bridge conditions warrant resurfacing, rehabilitation, or replacement/reconstruction of infrastructure).
- **Draft a preliminary statement of purpose and need** to guide formulation of solutions and evaluation of alternatives.

Possible Next Steps

- **Decide whether to proceed with the study** based on results of existing conditions assessment, projections of future conditions, and identification of issues and opportunities. Determine if additional data collection or analysis is needed to better define the problem and develop a more solid preliminary statement of purpose and need before exploring potential solutions.

Formulate Concepts and Strategies to Address Identified Performance Gaps and Opportunities

Key Decisions to Be Made and Documented

- What range of transportation improvements and policy changes could potentially address the issues (performance gaps and other needs) and opportunities that have been identified?
- What has been studied before and may be relevant to the project context?
- What types of solutions have worked in this area and in other similar areas? What types of solutions have not worked?
- Is the no build option preferable to any potential transportation solution?

Examples of Activities Undertaken

- **Solicit expert input from FDOT staff and transportation and planning agencies** who are familiar with the study area.
- **Conduct public engagement** to solicit ideas about potential concepts and strategies.
- **Review previous analyses** of needs, concept development studies, and alternatives analyses to determine if any previous work may be relevant.
- **Examine the results of previously implemented projects and policies** to review whether outcomes were consistent with projections. **Diagnose** why or why not, and any lessons that may be applicable to this study area.
- **Develop new concepts and strategies** not previously considered. Specifically consider reasonable multimodal improvements and Transportation Systems Management and Operations (TSMO) strategies.
- **Compile and organize all potential concepts and strategies**.

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- **Results of needs assessment**
- **Summary of public engagement:** Feedback from the public and partner agencies on needs assessment

Possible Next Steps

- Evaluate and compare potential solutions.
- Determine if there are non-transportation strategies that would be effective in addition to, or in place of, the transportation strategies identified to address these issues.

Evaluate and Compare Potential Solutions

Key Decisions to Be Made and Documented

- Which alternatives or groups of alternatives should be advanced to project development in order to best meet the goals and objectives of the study area?
- What are immediate opportunities for making improvements to transportation facilities and services with low cost and little risk?
- What alternatives require further study or development before they can be advanced?

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- **Evaluation report** with results of analysis and well defined alternatives for advancement
- **Recommendations for further study** for alternatives that are not ready to advance

Examples of Activities Undertaken

- **Develop screening and evaluation criteria**. These should be linked to the overall goals, objectives, performance measures, and performance targets established earlier.
- **ETDM Planning Screen** engaging the Environmental Technical Analysis Team in a review of work completed to date and proposed solutions to identified needs.
- **Initial fatal flaw/policy screening** to eliminate concepts and refine remaining alternatives.
- **High level financial feasibility analysis** that considers potential revenue streams to pay for capital and operating costs, financing mechanisms, and life cycle capital, operating, and maintenance costs of potential solutions.
- **Internal, cross-office coordination** in conducting preliminary assessment and defining viable alternatives to advance. This should include high-level constructability analysis and coordination with design, drainage, right of way, maintenance, operations, and other offices.
- **Detailed evaluation across criteria** using a variety of analysis tools, including benefit cost analysis.
- **Scenario planning, risk management and sensitivity analysis** to address resiliency of the potential solutions to uncertain future conditions
- **External engagement** in evaluation criteria development, screening, and evaluation
- **Refine preliminary purpose and need** and develop a NEPA-compliant Purpose and Need statement, if sufficient information and justification is available.

Possible Next Steps

- Determine if there are any viable transportation solutions, and consider whether to conduct additional analysis of transportation alternatives that need more definition.

- If there are immediate quick fixes that are low cost and low risk, advance them quickly into design and implementation.
- Define, package, and prioritize other alternatives for environmental review (if needed), further project development, and advancement.

Define, Package and Prioritize Alternatives for Advancement

Key Decisions to Be Made and Documented

- Which project alternatives can be advanced in the near term given available funding and support?
- What are long-term strategies that can build on initial investments and policy changes and support the long term vision for the study area?
- What are intermediate strategies that can help advance the study area toward its goals when funding is available and other conditions are in place (e.g., land use changes, demand, or other triggers)?
- Are there operational strategies that can be used in place of or in combination with other investments to maximize the efficiency of the transportation system?
- What projects (multimodal transportation and non-transportation infrastructure investments) can be coordinated to minimize disruption and improve efficiency of project delivery?
- What are the expectations for managing existing and new assets over their useful lives, including repair, rehabilitation and replacement activities? How much will each activity cost over the useful life of the assets? Is there information about up-front capital costs and long-term maintenance costs that may assist in the detailed design of the project?

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- **Financial plan** specifying funding sources, potential revenue streams, and financing mechanisms.
- **Packages of alternatives** specifying Purpose and Need, which projects correspond to which goals, and timing of investments.
- **Life cycle operations and management strategic plans**. At a high level, define the operations and management strategies that could be considered in design and implementation of alternatives.

Examples of Activities Undertaken

- **Package alternatives into groups** by geography, time frame, and contribution to advancing common goals. Specify responsibilities in advancing each project to implementation, and develop life cycle management and operations plans.
- **Match funding to alternatives and determine financial feasibility** of advancing each alternative given funding constraints.
- In more complex planning scenarios with longer planning horizons, consider developing a **Master Plan** specifying triggers (e.g., development approvals or observed travel demand) for advancement of medium term and longer term solutions.

- **Work with non-transportation agencies** to determine if there are other transportation projects and other infrastructure projects to be undertaken in the area that provide opportunities for coordinated construction.
- **Engage with external partners** to inform and maintain buy-in for implementation plan.

Possible Next Steps

- If there are no viable transportation alternatives to advance, stop the study. Viability could be determined by financial feasibility, political support, community support, and environmental issues and uncertainties.
- Document decisions and prepare an action plan for advancing alternatives to PD&E, design, and implementation.

Document Decisions and Prepare Action Plan

Key Decisions to Be Made and Documented

- Which alternatives can and should advance quickly into design and implementation?
- Which alternatives require PD&E? Are there additional pre-PD&E activities that need to take place before these alternatives advance?
- Are there alternative delivery mechanisms that could speed project implementation?
- Which agency is best positioned to deliver each alternative? Who should lead the next steps?

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- Refined Purpose and Need statement(s)
- Data and information
- Implementation strategy
- Scopes of work for next phase
- Documentation of external engagement
- Internal lessons learned document
- Results of pass the torch meeting

Examples of Activities Undertaken

- Refine Purpose and Need statement and make a class of action determination.
- Finalize packaging, dissemination, and archiving of data and information generated by the project.
- Develop an implementation strategy that identifies specific actions, roles, responsibilities, and timing.
- Develop scopes of work for next phase(s)
- Conduct external engagement around the implementation strategy
- Conduct internal review of process and products and document lessons learned
- Pass the torch meeting

Possible Next Steps

- Publication of Action Plan.
- PD&E, design, and implementation.
- Revisions to the planning process based on lessons learned.