COR-6 - Approve Range of Solution Sets

Description

A range of approved solution sets for the corridor results from this key decision. The range of solution sets is influenced by the preferred plan scenario in the LRTP and helps to define the full range of alternatives to be evaluated during environmental review.

There is information developed in prior key decisions that informs this step. In order to effectively execute this key decision there is essential information created at COR-2 related to problems and opportunities and COR-3, goals for the corridor.

Purpose

To determine a range of solutions for the identified problems and opportunities that can include transportation, community, and environment goals.

Outcome

A set of solutions for the corridor that can address the identified problems and opportunities.

Partner	Role Type	Description
MPO	Decision Maker (urban), No Role (rural)	Approves a range of solution sets that meet the needs and opportunities within the corridor including non-transportation options.
FHWA/FTA	Advisor	Ensures the range of solutions considered is inclusive and consistent with accepted plans.
State DOT	Advisor (urban), Decision Maker (rural)	Ensures the process is broadly inclusive with options that may be implemented.
Resource Agency	Advisor	Support the use of a combined map of conservation priorities, land uses and solutions sets, if available. Support solution sets that avoid conservation, restoration and enhancement priority areas.
Public Transportation Operator(s)	Advisor	Ensures the process is broadly inclusive with options that may be implemented.

Policy Questions

Questions are a way to elicit information and to validate that the information has been considered. The partners should discuss the listed questions to ensure a broad array of interests is considered at a key decision. Discussions arising from these questions support collaborative decision making.

Questions Partners Discuss

Questions about purpose and roles

- For P3 projects, was the private sector partner involved in the identification of solution sets?
- What partners were involved in the development of the solution sets?

Questions about stakeholders, including modal and operational partners

- Is there support and/or a potential implementing sponsor for the individual solutions?
- What stakeholders, including modal and operational partners, were involved in the development of the solution sets?

Questions about the transportation process supporting the decision

- Do any of the proposed solution sets present a barrier to bicycles and pedestrians or inhibit accessibility for people with disabilities?
- Do the proposed solutions sets support good operational aspects?
- Do the solution sets address mobility, performance and reliability, and accessibility needs beyond the identified deficiencies?
- Does the feasibility of the solution set consider the number of proposed public or private sector partnership projects and their schedules for delivery?
- How well do the proposed solution sets support bicycle and pedestrian network connectivity, accessibility, equity, and safety outcomes? What are the positive and negative impacts?
- How well do the solution sets address system performance and safety?
- How well do the solution sets balance mode choices?
- How well does the range of solution sets address operational outcomes?
- In what ways does the inclusion of P3 projects affect the consideration of solution sets?
- Is the range of solution sets broad enough to address corridor goals?
- Is there data on the level and timeline of private sector funding or revenues that are anticipated?
- What is the justification for eliminating each solution set?

Questions about other phases

- How does this relate to LRTP adopted preferred scenario?
- What is the potential impact on the adopted LRTP including fiscal constraint?

Questions about non-transportation sectors/processes

- Are any solution sets fatally flawed from an ecological perspective? From an economic development perspective?
- Are the solution sets supportive of land use goals?
- Are there interactive effects that should be considered, that is, strategies that work better in combination, or alternatively, work against each other?
- Are there potential strategies that extend beyond transportation decision making? If so, do they require more analysis or study?
- Have smart growth impacts on travel demand, and congestion been considered?
- Have we ensured that the P3 projects being considered are consistent with the community's land use and economic development vision?
- Have we identified how each solution will impact the ability to meet our goals with regard to conservation?
- How cost-feasible are these strategies when combined or when treated separately?
- How should strategies that show impacts over varying time scales (in the short, medium, and long term) be combined to produce the desired impact on GHG emissions?
- How well do the solution sets address freight considerations?
- How were our land use scenarios derived? What are the underlying assumptions?
- How will individual solutions impact the ability to meet economic development goals?
- What corridor investment strategies or other actions that contribute to GHG emissions reduction should be included as part of the solution sets?
- What is the authority or ability of involved agencies to implement specific GHG reduction solutions in the corridor?

Stakeholder Inputs

'Questions to Gather Stakeholder Interests' allow staff to determine which stakeholders have interests at a key decision and to collect those interests for partner consideration. 'Questions to Incorporate Stakeholder Interests' ensure the interests of stakeholders are included in the decision. For more help with stakeholder collaboration visit the Stakeholder Portal

Questions to Gather Stakeholder Interests

- Are there individual solutions that would be unacceptable?
- Do you see other combinations of solutions that should be considered?
- What are the individual solutions that should be included to achieve the goals?

Questions to Incorporate Stakeholder Interests

- Based on preliminary land use and environmental screening, are any of the solution sets fatally flawed?
- Did the stakeholders have strong opposition to any of our suggested solution sets? If so, what was the strong opposition?
- Did the stakeholders identify missing solutions or solution sets? If so, how did we address that?
- What solution sets did the stakeholders suggest?

Data

The following is a list of data needed to support the key decision. Practitioners collect this information for decision makers to consider.

Supporting Data for the Key Decision		
From other phases of transportation decision making	Long Range Planning	Information related to the corridor from the preferred plan scenario
		Information used in long range planning to eliminate scenarios or specific project concepts within the corridor
	Programming	Estimated costs of proposed P3 projects
		Identified cost and schedule for funded projects within the corridor
	Corridor Planning	COR-2: Problems and opportunities
		COR-3: Approved goals for the corridor
	Environmental Review	No Specific Data.
From other sectors and processes	Land Use	Land use scenarios that are supported by land use partners as potential solutions
		Smart growth impacts on travel demand, and congestion (as applicable)
	Transportation Conformity	No Specific Data.
	Natural Environment and Implementing Eco-Logical	Combined map of conservation, restoration and enhancement priorities
	Capital Improvement	No Specific Data.
	Safety and Security	GIS layers or field survey data as well as safety and security plans that inform potential impacts
	Human Environment	GIS layers or field survey data as well as community characteristics that inform potential human environment impacts
	Economic Development	Potential types of economic development implications or constraints of various strategies
	Greenhouse Gas Emissions	Level of GHG-reduction and cost-effectiveness for each strategy or combination of strategies evaluated
		Relative importance of GHG-reduction benefits compared to benefits of other potential corridor solutions
		Sketch-level planning cost for GHG reduction strategies potentially included in scenarios
	Freight	Freight stakeholder support for individual solutions
		Routing needs of various freight stakeholders
		Truck conflict points, access needs and geometric design
From the transportation technical process supporting this key decision	Data to support identification of any fatally flawed or unreasonable solutions	
	Documentation of all screening in order to inform the environmental review process as to eliminated solutions	
	Impact of P3 on number of proposed projects, timing of delivery, and feasibility of solution set	
	Performance measures, objectives and/or targets	
	Planning symposia for collecting information	
	Screening of individual solutions considered to identify those that do not address the approved problems and opportunities fo the corridor	
	Unified GIS data systems (e.g. regional land information systems)	
	Multimodal level of service analysis	
From stakeholder collaboration	Stakeholder and public involvement data	
From public private partnership	No Specific Data.	

Links to Decisions

This table identifies how a key decision is connected to other key decisions. The linkages are a two-way transfer of information.
Understanding and applying these linkages means that partners will recognize how a decision will impact other specific key decisions. Recognizing that the transportation processes are linked will: (1) encourage practitioners to produce information that can be used later and (2) remind them to look at information from previous key decisions.

linkages to other phases of transportation decision making

Key Decision	What is Linked?	Purpose of Linkage
From Long Range Transportation Planning		
LRP-7 - Approve Plan Scenarios	Information used in long range planning to eliminate scenarios or specific project concepts within the corridor	To support consideration of a full range of solutions while precluding those solutions that are inconsistent with region-wide multi-modal improvements
LRP-10 - Adopt LRTP by MPO	Information related to the corridor from the preferred plan scenario and the conformity analysis	To influence the range of solutions that should be considered during the corridor planning process
To Environmental Review/NEPA Merged with Permitting		
ENV-6 - Approve Full Range of Alternatives	Information on the range of solutions identified for the corridor planning process	To help define the range of alternatives for consideration during environmental review/ permitting.

Examples

In-depth case studies of successful practices in collaborative decision making were used to develop the Decision Guide. Links in this table point to a specific paragraph or section of a case study that supports a key decision. It is not necessary to read through an entire case study to find the example; however, full versions are available in the Library.

PlanWorks Case Study Examples

- US 64 Asheboro Bypass - Merged NEPA and Section 404 Permitting Processes

Other Examples

- None

Integrated Planning

Integrated Planning looks at the interaction between the transportation decision making process and other processes. Considering these inputs will ensure that important values and goals outside the transportation process are recognized and considered. For a full understanding of a specific process and how it influences transportation decisions, visit Applications.

Process	Integration Type	Integration Description
Land Use	Data	Land use scenarios that are supported by land use stakeholders as potential solutions
Transportation Conformity	None.	None.
Natural Environment and Implementing Eco-Logical	Data From IEF Step 3 - Create Regional Ecosystem Framework	The combined map of conservation, restoration and enhancement priorities from IEF Step 3 should inform the solution sets developed in corridor planning and approved in COR-6.
	Analysis Between IEF Step 3 - Create Regional Ecosystem Framework and COR-6	These sub steps listed in the IEF are the integrated analysis involving this key decision: Sub-step 3a - Overlay solution sets and combined map of conservation, restoration and enhancement priorities; Sub-step 3b and c - Show and record areas and resources potentially impacted by transportation improvements and potential opportunities for joint action on conservation or restoration priorities; Sub-step 3d - Distribute combined conservation and transportation priorities map layer. This integration cannot occur until there are some solution sets, but it is possible that plan solution sets could be fatally flawed and eliminated through this analysis. Note that the IEF specifies the integration of long range plan scenarios at this step. This link has been revised here to demonstrate that this could be done during corridor planning.
Capital Improvement	Analysis	Information related to the type, location, and prioritizations of improvements included in approved capital improvement plans.
Safety and Security	Data	GIS layers or field survey data as well as safety and security plans that inform potential impacts
Human Environment	Data	GIS layers or field survey data as well as community characteristics that inform potential human environment impacts
Economic Development	Data	Information on economic development implications (or constraints) of various strategies.
Greenhouse Gas Emissions	Data	Information on GHG reduction strategies as potential solutions, including comparison of benefits, emissions reduction levels, cost-effectiveness, and planning-level cost for each strategy.
Freight	Data	Data providing the needs and potential support of freight stakeholders
Bicycles and Pedestrians	Data	Data providing the needs and potential support of bicycle and pedestrian stakeholders.
		Multimodal level of service analysis.

Special Topics

This table provides an overview of the relationship between a key decision and individual special topics. A special topic may be an external process, a new regulation, or any emerging issue requiring collaboration. For a full understanding of a specific topic and how it influences transportation decisions, visit Applications.

Key Decision Relationship to Other Topics

Topic	Description
Public-Private Partnerships	**Identify Options** - Considering the amount of private sector funding and the implementation sequence for projects, determine the feasibility of including P3-specific projects in the solution sets.
	Data Transfer - Feasibility of private sector funding and/or implementation for specific projects and potential impacts in order to inform the selection of a preferred solution set at COR 7 and sequencing of projects at COR 9.
Planning and Environment Linkages	**Using Performance Measures** - Identify the performance measures, objectives and/or targets to apply to various solution sets.
	Data Transfer - Data related to system performance, management and operations.
Performance Measures	**Using Performance Measures** - The selected performance measures are applied to various potentia solution sets to determine a range of reasonable solution sets to be studied.
	Data Transfer - Selected measures are transferred from COR-5. The measures used at COR-6 and COR-7 should be consistent.