

Implementation of Planning and Environment Linkages: Indicators and Available Assistance

Here is a set of indicators designed to help agencies identify areas where they have had success in strengthening planning and NEPA linkages, and areas where further work is needed to strengthen linkages. These indicators are also intended to help agencies identify available assistance and potential FHWA activities that could be undertaken to provide that assistance. Indicators are grouped into five categories:

1. Change Management
2. Data and Analysis Tools
3. Inter- and Intra- Agency Coordination
4. Decision Process Refinement
5. Linkage Activities Undertaken

For agencies interested in monitoring their progress to achieve stronger linkages, the following values might be assigned for each selected indicator on a periodic basis:

- F – Full – indicator fulfilled; linkage item implemented
- I – Intermediate – some or partial success for this indicator but item has not yet been fully implemented
- E – Early – interest has been expressed
- N - No interest in pursuing this linkage item

1. CHANGE MANAGEMENT		
Indicator	Examples/Details	Assistance Available
1.1 Executive-level commitment	Communication from executive management to staff level regarding agency's commitment to strengthening planning and environment linkages, including: internal memoranda, management directives, policy statements, or the like	Read about Effective Practices at http://environment.fhwa.dot.gov/integ/practices.asp Learn about state activities in the State Environmental Streamlining and Stewardship Practices Database at http://environment.fhwa.dot.gov/strmlng/es3stateprac .
1.2 Champions and working groups	<ul style="list-style-type: none"> ▪ Internal leadership workshops ▪ Inter-agency leadership workshops ▪ Specific staffpersons or champions designated in key agency offices to oversee implementation of linkage activities ▪ Internal or inter-agency working groups convened 	Learn about FHWA's Linking Planning & NEPA Workshops at http://environment.fhwa.dot.gov/integ/practices.asp#workshops
1.3 Training and exchanges	<ul style="list-style-type: none"> ▪ Internal training or peer exchanges about linking planning and project development or transportation and land and resource planning ▪ Inter-agency training or peer exchanges about linking transportation, land use, and resource planning 	See Additional Resources at http://environment.fhwa.dot.gov/integ/resources.asp
1.4 Organizational structuring	<ul style="list-style-type: none"> ▪ Staff allocations to support linkages ▪ Interdisciplinary teams ▪ Crossover positions between one or more disciplines 	Read about specific Case Studies at http://environment.fhwa.dot.gov/integ/practices.asp#ase Learn about state activities in the State Environmental Streamlining and Stewardship Practices Database at http://environment.fhwa.dot.gov/strmlng/es3stateprac.asp
1.5 Performance measures	<ul style="list-style-type: none"> ▪ Detailed indicators of progress in strengthening planning and environment linkages ▪ Staff performance criteria that reflect strong planning and environment linkages (e.g., MPO coordination and support responsibilities for state DOT's MPO liaison and/or environment staff) 	<i>Coming soon</i>

2. DATA AND ANALYSIS TOOLS		
Indicator	Examples/Details	Assistance
2.1 Documentation of existing geographic resource data and other information	<p>Example categories of data:</p> <ul style="list-style-type: none"> ▪ Ecological resources ▪ Cultural assets ▪ Land use and development ▪ Demographics ▪ Transportation <p>Factors here might also include the quality and comprehensiveness of data layers.</p>	<p>Visit FHWA's website GIS in Transportation at http://environment.fhwa.dot.gov/integ/resources.asp#gis</p> <p>Learn about state practices on GIS and spatial data in the State Environmental Streamlining and Stewardship Practices Database at http://environment.fhwa.dot.gov/strmlng/es3stateprac.asp (Search under GIS and Spatial Data)</p>
2.2 Continual data sharing among and within agencies	<ul style="list-style-type: none"> ▪ Level of cooperation achieved regarding sharing of data with resource agencies and other potential sources of data ▪ Information systems that support access by multiple agencies and departments within agencies, including updating of data ▪ Inter-agency data sharing agreements 	<p>Learn about research on "Technologies to Improve Environmental Concerns in Transportation Decision Making" (through the National Cooperative Highway Research Program) at http://www.planning.dot.gov/technical.asp#nepa2</p>
2.3 Tool for analysis and/or sharing	<p>Software tool that allows for information to be shared among and within agencies during the transport decision process, including web access and ability to record comments and decisions at multiple points</p>	
2.4 Access to and use of geographic resource data by transportation staff	<ul style="list-style-type: none"> ▪ Planning and environmental staff are given access to data for use in planning and project development functions, and employ the data to conduct analysis and inform decision-making ▪ Factors here might include the frequency with which the data are used 	
2.5 Efforts to improve data	<p>DOT staff engaged in gathering additional data or otherwise improving the quality and comprehensiveness of data</p>	
3. INTER- AND INTRA- AGENCY COORDINATION		
Indicator	Examples/Details	Assistance
3.1 Memoranda of Understanding/ Agreement	<p>MOAs/MOUs stipulating arrangements among agencies regarding:</p> <ul style="list-style-type: none"> ▪ Operating procedures ▪ Funding ▪ Programmatic approaches ▪ Dispute resolution procedures ▪ Other aspects of planning, project development, and reviews 	<p>Learn about state Interagency Agreements (MOAs, MOUs, and Programmatic Agreements) in the State Environmental Streamlining and Stewardship Practices Database at http://environment.fhwa.dot.gov/strmlng/es3stateprac.asp (Search under Interagency Agreements)</p>
3.2 Standing inter- and intra-agency coordination groups	<p>Inter- and intra-agency working groups, task forces, or committees that meet on an ongoing basis to focus on coordinating information exchange and collaborative decision-making</p>	<p>Read the NPCC's Report, Transportation Collaboration in the States, June 2006 http://environment.fhwa.dot.gov/integ/practices.asp#othercase</p>
3.3 Transfer-funded staff positions	<p>Inter-agency funding for staff positions specifically to support environmental considerations in planning (as opposed to only environmental review, consultation, and permitting activities)</p>	<p>Learn about state activities in the State Environmental Streamlining and Stewardship Practices Database at http://environment.fhwa.dot.gov/strmlng/es3stateprac.asp</p>
3.4 Positive staff perceptions of inter-agency coordination	<p>Factors here might include opinions from transportation agency staff and resource agency staff</p>	

4. DECISION PROCESS REFINEMENT		
Indicator	Examples/Details	Assistance
4.1 Documentation of current decision processes	<ul style="list-style-type: none"> ▪ Process mapping or other process analysis tool used to identify the major steps and roles within a decision process ▪ Transportation decision process made available to resource agencies and the public 	<p>Read about specific approaches, data and analysis tools, implementation activities, training, and more on the Additional Resources page at http://environment.fhwa.dot.gov/integ/resources.asp</p>
4.2 Documentation of new procedural or analysis guidance	<p>New procedures and guidance for environment linkages during planning, including analysis methods, procedures for involving key stakeholders, and ‘handing off’ planning products to project development staff, documented in agency publications such as:</p> <ul style="list-style-type: none"> ▪ Corridor, metropolitan, or sub-area plan guidebooks ▪ Statewide plan guidebooks ▪ Project development guidebooks 	<p>Learn about state activities in the State Environmental Streamlining and Stewardship Practices Database at http://environment.fhwa.dot.gov/strmlng/es3stateprac.asp</p>
5. LINKAGE ACTIVITIES UNDERTAKEN		
Indicator	Examples/Details	Assistance
5.1 Stakeholder involvement	<p>Efforts, such as participation plans or consultations, to actively involve stakeholders in the transportation planning process, including:</p> <ul style="list-style-type: none"> ▪ Environmental resource and regulatory agencies ▪ Regional planning agencies ▪ Tribal governments ▪ Interest groups ▪ The greater community 	<p>Read about state practices on public involvement in the State Environmental Streamlining and Stewardship Practices Database at http://environment.fhwa.dot.gov/strmlng/es3stateprac.asp (Search under public involvement)</p> <p>Learn about Florida’s stakeholder involvement in the Defenders of Wildlife’s Conservation-Minded Citizen’s Guide To Transportation Planning at http://www.planning.dot.gov/technical.asp#nepa2</p>
5.2 ‘Hand-off’ planning products using NEPA methods	<p>Planning processes, including long-range, corridor, and sub-area studies, that feature components that use NEPA principles and methods, including:</p> <ul style="list-style-type: none"> ▪ NEPA tiering ▪ Purpose and need statements ▪ Scoping and alternatives identification ▪ Analysis or baselining of environmental conditions or impacts ▪ Evaluation and/or elimination of alternatives ▪ Indirect and cumulative impacts assessment ▪ Preparatory analyses for permitting 	
5.3 Comparisons to resource inventories and plans	<p>Comparisons of transportation plans to natural and cultural resource inventories or plans</p>	

5. LINKAGE ACTIVITIES UNDERTAKEN (continued)

Indicator	Examples/Details	Assistance
5.4 Use of other environmental factors and analysis tools	<p>During planning and programming efforts, analysis of interactions between transportation strategies and:</p> <ul style="list-style-type: none"> ▪ Land use ▪ Economic performance ▪ Natural resources ▪ Air quality ▪ Water quality ▪ Community quality of life ▪ Travel performance <p>Planning analysis tools and approaches, such as context-sensitive solutions, scenario planning, and community impact analysis, are all examples of applying these principles here.</p>	
5.5 Consideration of mitigation opportunities	Exploration of potential mitigation opportunities, including the types of potential mitigation activities and potential areas in which to carry out those activities	
5.6 Design guidance	Principles, approaches, guidelines, standards, or flexibility to be used in designing transportation facilities, such as context-sensitive design	Learn about Context Sensitive Solutions http://environment.fhwa.dot.gov/integ/resources.asp#css
5.7 Planning decisions carried through in project development	Decisions and commitments made during the planning and programming process are not revisited during the project development phase; 'hand-off' products are used for environmental review and permitting with minimal adjustments.	