Mainstreaming Environmental Stewardship into Planning and Project Development

Across the country, transportation agencies have initiated a variety of activities that help link transportation and environmental planning. These efforts include context sensitive solutions, intra-agency coordination to connect plans and projects, streamlining of the NEPA process, and comprehensive mitigation plans. In addition, SAFETEA-LU’s Section 6001 consultation requirements have encouraged agencies to incorporate environmental considerations in the early stages of transportation planning. Federally-sponsored initiatives to bridge transportation and environmental planning include FHWA’s Planning and Environmental Linkages (PEL), Linking Planning and NEPA, and Eco-Logical programs.

Table 1 below lists the many possible actors involved in approaches to more formally linking transportation and environmental planning. These actors span governmental levels as well as three policy domains: transportation, natural resources and land use.

### Table 1: Actors in Linking Transportation and Environmental Planning

<table>
<thead>
<tr>
<th>Scale</th>
<th>Transportation</th>
<th>Policy Domain</th>
<th>Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>-U.S. DOT (FHWA, FTA)</td>
<td>-U.S. Environmental Protection Agency</td>
<td>-Bureau of Land Management</td>
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<td></td>
<td>-U.S. Legislative and Executive Branch</td>
<td>-U.S. Army Corps of Engineers</td>
<td>-U.S. Department of Agriculture</td>
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<tr>
<td>State</td>
<td>-State Department of Transportation</td>
<td>-State Elected Officials</td>
<td>-State Natural Resource Agency</td>
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<td>-State Elected Officials</td>
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<td>-State Environmental Conservation Agency</td>
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<td>-State Environmental Laws</td>
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<td>-State Courts</td>
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<tr>
<td>Regional</td>
<td>-Metropolitan Transportation Organization</td>
<td>-Municipal government</td>
<td>-Regional Planning Agency</td>
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<td></td>
<td>-Regional Transit Authority</td>
<td>-Council of Government (COG)</td>
<td>-Regional Land Conservation Boards</td>
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<td>-County public works</td>
<td>-Regional Planning Agency</td>
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<td></td>
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<td>-Regional Conservation Commission</td>
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<tr>
<td>Local</td>
<td>-Municipal and local public works</td>
<td>-Local Government (Water, Waste, Etc.)</td>
<td>-Local zoning, conservation, and planning boards</td>
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<td></td>
<td>-Local transportation/ transit agency</td>
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<td>-Land owners</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>-Local elected officials</td>
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<td></td>
<td></td>
<td></td>
<td>-Comprehensive land use plans</td>
</tr>
</tbody>
</table>

*Download the full report and other informational materials from [http://environment.transportation.org](http://environment.transportation.org)*
Basic Ingredients of Successful Integration Processes

Key considerations for integrated planning include:

- Consultation and partnerships
- Public outreach
- Data and tools
- Connection between planning and project development
- Land use connection
- Comprehensive Mitigation
- Funding and resources
- Streamlining and environmental strategies
- Outcomes
- Agency Culture

The map at the right is an example of how agencies are using GIS data to integrate transportation and environmental planning. Source: San Antonio-Bexar MPO

“Rules of the Road”

Maximizing the potential for successfully linking transportation and environmental planning means having a well-articulated process that addresses the integration of the transportation, environmental and land use planning processes. While each agency has a unique set of circumstances within which it operates, following certain “rules of the road” will help transportation agencies make progress toward integrating environmental considerations into the transportation planning process:

- Build relationships and trust
- Share data
- Connect planning and projects
- Use integrated, systems planning for mitigation
- Pay attention to the land use connection

“"It is tough to integrate environmental and regional transportation planning, especially considering that land use decisions remain at the local level. Land use is a prerequisite for linking transportation and the environment." -MPO Respondent

The Purpose and Need Statement in a NEPA document is where the planning and projects most clearly intersect. Planning process should shape the P & N and shape the range of reasonable alternatives that go into the NEPA process. -DOT Respondent

Approaches to Success: Notable Examples

Across the nation, a variety of transportation agencies have undertaken integrated planning techniques and efforts that provide notable and informative examples from which others can learn. Examples are organized into nine areas:

- Consultation & Public Outreach
- Data, Maps, and Decision-making Tools
- Design
- Planning-Project Connection
- Land Use
- Systems-level/Integrated Planning
- Mitigation
- Streamlining
- Outcomes and Measures
Approaches to Success: Notable Examples

**Consultation & Public Outreach**

**Puget Sound Regional Council (PSRC) (Washington State)**
- Consults extensively with resource agencies and works with several regional and non-profit environmental groups and municipal resource agencies.
- Encourages a high level of public participation and has developed introductory guides on environmental analysis for the public.

**Data, Maps, and Decision-making Tools**

**The Tri-County Regional Planning Commission (Illinois)**
- Uses the Illinois Department of Transportation's the Ecological Compliance Assessment tool (EcoCAT) to help select projects for the long range plan and TIP.
- Part of Peoria County Environmental Inventory Project, a watershed-based planning project.
- Uses environmental data for planning-project connection.

**Land Use**

**Sacramento Area Council of Governments**
- Regional Blueprint plan for land use, transportation and the environment developed with a high level of public and stakeholder involvement. Works closely with local jurisdictions to implement plans at project-level to ensure that the Blueprint principles are adopted and the regional vision is followed through.

**Design**

**Capital District Transportation Committee (New York)**
- In partnership with New York State MPO Association, produced guidance for policymakers, planners, designers, and engineers to connect transportation and community design and enhance environmental quality.
- Is currently working to mainstream context sensitive solutions into local government decision-making.

**Planning-project Connection**

**Oregon DOT**
- Collaborative Environmental and Transportation Agreement on Streamlining (CETAS) program to join stakeholders and processes.
- Uses CETAS to ensure both transportation planning and programming staff help develop Purpose and Needs statement.
- Uses CETAS to help develop statewide mitigation bank, resource mapping, tracking NEPA projects, and the integration of NEPA and systems planning.

**Systems-level/Integrated Planning**

**Riverside County Transportation Commission**
- Part of one the nation’s earliest and most ambitious efforts in integrated planning—the Riverside County Integrated Project.
- Project included coordinated land use, environmental, and transportation plans: a General Plan for land use, a Multiple Species Habitat Conservation Pan for the environmental, and the Community and Environmental Transportation Acceptability Process (CETAP) for transportation.

**Streamlining**

**North Central Texas Council of Governments (Dallas-Ft. Worth, Texas)**
- Employs an environmental streamlining program called Transportation Resource Agency Consultation & Environmental Streamlining (TRACES).
- Streamlining efforts include an agreement with U.S. Army Corp of Engineers Fort Worth District to fund Army Corps personnel with transportation agency dollars to work on hundreds of permits for specific regional priority projects.

**Mitigation**

**The Delaware Valley Regional Planning Commission**
- Uses out-of-kind (e.g. preserve large habitat) and in lieu mitigation techniques (e.g. one time payment to preserve wetlands) to plan for comprehensive ecosystem based mitigation.
- Mitigation techniques have the potential to improve environmental outcomes and streamline the project development process by minimizing the project-level mitigation management time.
- Also considering a wetlands bank or registry that could further reduce cost and time for project developers to further avoid costly, isolate, and poorly planned mitigation sites.

**Outcomes and Measures**

**Florida DOT**
- Has observed streamlining improvements to the project development process.
- Benefits include early identification of critical flaws, reduction in the amount of technical studies, and more comprehensive mitigation efforts.
- Early environmental consideration has assisted the NEPA process and extensive consultation has integrated the planning and project phases.

**The Capital District Transportation Committee**
- Has successfully connected its regional planning efforts with local development projects through its Transportation and Community Linkages program.
Overcoming Challenges to Success

This section provides examples of how agencies overcame challenges to linking transportation and environmental planning. Key obstacles and challenges were mainly due to lack of communication—either between agencies or within agencies. Other obstacles arose from processes that can impede integrated planning efforts, including project-specific mitigation, local land use authority, and lack of funding and resources.

1. Poor relationship between resource agency and transportation agency - Initially, resource agencies were skeptical of the San Antonio-Bexar County MPO’s ability to conduct adequate environmental analysis. Extensive consultation has drastically improved the agencies relationship and they are now regularly sharing data with each other.

2. Funding/staff resources at resource agency - The California DOT pays for resource agency staff to specifically focus on transportation permitting and the NEPA process. This benefits the Sacramento Area COG since some projects receive more focused attention in the NEPA process.

3. Resource agencies have single environmental issue or permitting focus (not systems or long range level) - Through a diligent consultation process, the Greensboro Urban Area MPO has encouraged resource agency staff to understand the importance of a systems-level approach to planning, the long range analysis, and an integrated planning process.

4. Early environmental planning - The Pike’s Peak Area Council has leveraged large amounts of resource data for long range planning through its watershed partnerships with resource agencies. Pike’s Peak is also a participant in FHWA’s Eco-Logical Program and uses NatureServe software.

5. Disconnect between planning and projects - The McLean County RPC had created a technical committee with representatives from cities and counties to work together in the pre-project development phase. A development review checklist serves as an assessment tool for transit, street design, connectivity, and environmental sensitivity. The RPC also connects transportation planning and projects by using thorough environmental analysis for the development of the TIP.

6. Demonstrating benefits of streamlining - The Florida DOT has developed an ETDM Performance Management Plan consisting of qualitative and quantitative measures to monitor the progress of ETDM programs. Benefits include early identification of critical flaws and reduced need for technical studies.

7. Agency stovepipes - Oregon DOT’s CETAS committees help link long range planning processes with program development and project-level decision-making processes.

8. Fragmented/project-level mitigation - The Southwest Florida RPC develops mitigation plans for projects using county-level master mitigation plans which enables to RPC to develop comprehensive, eco-system based mitigation sites.

9. Achieving Environmentally-beneficial outcomes - The Mid-America Regional Council is developing sustainability performance measures and is working to incorporate community-developed environmental goals into the transportation planning process.

10. Locally controlled land use decisions - The Cape Cod Commission developed a Regional Conservation Policy Plan that must be adhered to by local jurisdictions and developers. All local plans must coordinate with regional plan. This ensures that land use and transportation development is carried out in accordance with broad regional planning goals based on comprehensive ecosystems analysis.

11. Meaningful public participation - SACOG’s Blueprint planning process actively engaged the public in planning for the region’s future. Blueprint participants produced a set of goals, principles, and strategies that are being adopted by local governments.

Taking the Next Step

- Review existing planning and project development processes to assess existing level/quality of early consideration of environmental issues/needs
- Identify “gaps” in existing planning and project development processes
- Identify “gaps” that could be closed through low-cost/low-effort means (e.g., additional inter-unit staff collaboration, sharing of information on available GIS layers, etc.)
- Pursue opportunities for closing low-cost/high-impact “gaps” and monitor and report on results and benefits
- Continue to identify “gaps” that may require greater effort/more resources to close (e.g., inter-agency memorandum of agreement, staff training, etc.) and develop phased, prioritized strategy for addressing them over time

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