

Mid-America Regional Council's Eco-Logical Project



Linking Environmental and Transportation Planning: An Action Plan

In February, 2008, local officials, transportation planners, and environmental agency representatives participated in a two-day “Linking Conservation and Transportation Planning” Workshop to start work on development of an action plan for improving linkages between the natural environment and transportation planning at the local, regional, and state levels. A draft *Linking Environmental and Transportation Planning Action Plan* emerged from the workshop feedback.

The plan has been refined and finalized through a Federal Highway Administration Eco-Logical grant that was awarded to the Mid-America Regional Council (MARC) in early 2008. The Eco-Logical framework supports making infrastructure, particularly transportation systems, more sensitive to wildlife and ecosystems through greater interagency cooperation and conservation. With this grant, MARC worked with the consulting team of Shockey Consulting Services, LLC; Parsons Brinckerhoff; and Environment International, Ltd. to 1) Conduct research of integrated planning activities from across the nation, 2) Conduct four workshops to further participants’ understanding of the Eco-Logical approach and 3) Finalize the action plan with feedback from the workshops.

This work to shape a strategy for better integrating environmental and transportation planning will not only impact transportation planning at the regional level, including the next long-range transportation plan, *Transportation Outlook 2040*, but it will also serve as a guide for transportation and natural resource agencies at the local and state levels.

The Action Plan is organized by the following three priority areas, with next steps included at the end of the document:

- 1. Align decision-making with a vision.**
{Items specific to plan, policy and funding criteria development}
- 2. Formalize on-going collaboration.**
{Items specific to interdisciplinary collaboration}
- 3. Create a regional mitigation strategy.**
{Items to be considered as part of a regional mitigation strategy}

1. Align decision-making with a vision.

{Items specific to plan, policy and funding criteria development}

- a. **Develop transportation plans within the context of a sustainable vision.** Sustainable transportation systems are those which meet transportation needs in ways that improve economic, environmental and societal conditions with the capacity for continuance into the long-term future.

The following are examples of considerations to be included in sustainable transportation plans:

- Coordination with land use and environmental planning.
- Land use planning which incentivizes transit-oriented development and walkable/bikable communities.
- Balanced, multi-modal transportation systems.
- Water and air quality.
- Economic vitality.
- Restoration and protection of natural resources and open space.
- Quality of life.
- Energy and greenhouse gas emissions.
- Public health.

Lead Agencies: MARC, DOTs, local municipalities, natural resource agencies, transit agencies, others involved in plan development.

MARC Example: MARC is in the process of updating the long-range transportation plan, *Transportation Outlook 2040*. The plan's transportation vision statement is based on a regional vision of sustainability, which was adopted by the MARC Board earlier this year as part of MARC's Strategic Planning process. An additional effort underway related to sustainability is Imagine KC. Both the Strategic Planning process and Imagine KC seek to identify common sustainability themes in local and regional plans, build community support for these strategies, and better align regional and local goals.

Local Example: Overland Park's Vision Metcalf Plan includes this objective, among others: "Make sustainability a theme of future development and redevelopment that guides land use and transportation decisions".

- b. **Assemble and merge transportation, environmental and land use data early in the transportation planning process to support the process and identify high priority natural areas which should be avoided, protected, or restored.**

Lead Agencies: MARC, DOTs, local municipalities, natural resource agencies, transit agencies, others involved in plan and data development.

MARC Example: MARC's GIS Department is developing a tool to use in identifying potential transportation-related impacts on natural resources, specifically those identified in MetroGreen and the Natural Resources Inventory. This tool will be used in the project selection process for *Transportation Outlook 2040*. Regarding land use data, the Technical Forecast Committee is developing two land use scenarios (baseline and adaptive) for transportation modeling and planning purposes.

- c. **Convene interdisciplinary teams to advise decision-making processes.**

Lead Agencies: MARC, DOTs, local municipalities, natural resource agencies, transit agencies, others involved in plan development.

MARC Example: The Linking Environmental and Transportation Planning Advisory Group and Air Quality Forum are advising in the development of *Transportation Outlook 2040*. The Advisory Group has also had an active role in refining the Action Plan.

State Example: KDOT's 5-County Study is being guided by four working groups and a stakeholder advisory panel, each of which includes multiple stakeholders with expertise in a given area (freight, mobility/accessibility/connectivity, economic development/land use, and environment/social equity).

d. Measure success of planning efforts and link these measures with the transportation plan's vision and goals.

Lead Agencies: MARC, DOTs, local governments, natural resource agencies, transit agencies, others involved in plan development.

MARC Example: *Transportation Outlook 2040* will include performance measures which are linked to its vision and goals. These performance measures will also be aligned with indicators that are part of MARC's Strategic Planning Framework.

State Example: MoDOT's *Tracker* includes 18 categories of performance measures which are based on the agency's mission and value statements. The *Tracker* is published quarterly.

e. Align transportation project selection and funding distribution processes with the vision, goals and measures outlined in the transportation plan.

Lead Agencies: MARC, DOTs, local governments.

Partners: Natural resource agencies, transit agencies, community leaders, business community, general public and others.

MARC Example: A call for projects for *Transportation Outlook 2040* will take place during the summer of 2009. The project selection criteria will align with the plan's goals, objectives, and strategies.

f. Coordinate public engagement activities across agencies, where possible, to create efficiencies and synergies.

Lead Agencies: MARC, DOTs.

Partners: Local governments and natural resource agencies.

MARC Example: MARC has been seeking to coordinate its public engagement activities with those of KDOT and MoDOT, and will continue to seek opportunities for collaboration with these agencies.

State Example: KDOT and MoDOT are currently developing several plans which encompass areas within the MARC boundary (i.e. KDOT's 5 County Study and MoDOT's I-70 KC Metro Corridor Study). MARC staff has been included in these planning efforts.

g. Develop new and enhance existing environmental policies for transportation-related construction, operation, and maintenance functions, which would include the following considerations:

- Stormwater and erosion control best management practices.
- Recycled materials.
- Alternative fuels.
- Anti-idling measures.
- Natural products for de-icing and roadway striping.
- Native plantings in rights-of-way.
- Protection of individual significant trees and areas of established vegetation.

- Protection of wildlife corridors and creation of wildlife passages.

Lead Agencies: MARC, DOTs, local governments.

Partners: Natural resource agencies, contractors, and others.

MARC Example: MARC's Clean Air Action Plan and Manual of Best Management Practices for Stormwater Quality (a joint effort with APWA) are available as resources for several items listed above. Additionally, MARC is partnering with area planning and design professionals, the 4A Collaborative, on developing guidance for sustainable streetscapes and parking lots.

State Example: MoDOT is testing soy-based paint for highway striping and uses an anti-icing agent made from sugar beets to help cut down on the amount of salt used in the winter. The agency also diverts waste from landfills, uses recycled tires in construction projects, and uses more ethanol and biodiesel fuel a year than all other state agencies combined.

- h. Advocate for a stronger emphasis on the natural environment, including energy, greenhouse gas emissions, and multi-modal transportation options, in the next Federal Surface Transportation Authorization Bill.**

Lead Agencies: DOTs, MARC, local governments.

Partners: T4America Coalition and others.

MARC Example: The current authorization is set to expire at the end of September, 2009. MARC staff members are working with others to develop recommendations that result in transportation investments which maximize economic benefits, social equity, health promotion and environmental sustainability.

2. Formalize on-going collaboration.

{Items specific to interdisciplinary collaboration}

- a. Develop a process for collecting, sharing, and updating transportation, natural resource, and land use data among agencies. The first order of work is to conduct a data needs assessment. These data needs have been identified thus far:**

- Potential ecological restoration sites.
- Floodplains by soil type.
- Stream quality.
- Better wildlife habitat data.
- A more localized natural resource data set (Version 2.0 of the regional Natural Resources Inventory).
- Greenhouse gas emissions.

Lead Agency: MARC.

Partners: DOTs, natural resource agencies, transit agencies, local governments, other data holders.

MARC Example: A formalized process for collecting and sharing data has not yet been developed. However, through the Eco-Logical process, data needs have emerged. MARC is in the process of identifying resources to update the Natural Resources Inventory.

- b. Encourage transportation and resource agencies to fund a position dedicated to ensuring coordination of transportation, land use and environmental planning.**

Lead Agencies: MARC, DOTs, local governments, natural resource agencies.

MARC Example: In January, 2009, the MARC Board adopted a Strategic Framework that is based on the vision of a sustainable region. As such, program goals have been developed to better align MARC's work with this vision. Several transportation staff members have been tracking the

transportation, land use and environmental linkage throughout the *Transportation Outlook 2040* project.

State Example: KDOT's Bureau of Transportation Planning includes a transportation and land use planning coordinator.

- c. **Develop memoranda of understanding (MOUs) between natural resource and transportation agencies to formalize commitments to integrated planning and ensure on-going communication and collaboration.**

Lead Agency: MARC.

Partners: DOTs, natural resource agencies, local governments.

MARC Example: Components of a possible MOU will be discussed in further detail at a future Linking Environmental and Transportation Planning Advisory Group meeting.

State Example: An inter-agency agreement is in place between MoDOT, the Missouri Department of Natural Resources and the Missouri Resource Assessment Partnership (MoRAP) for the purposes of archeological resource mapping.

- d. **Assist transportation and natural resource agencies in gaining a better understanding of each others' work and planning processes.**

Lead Agency: MARC.

Partners: DOTs, natural resource agencies, local governments.

MARC Example: For more effective collaboration, transportation planners and engineers need to be educated about the work of natural resource agencies and vice versa. The Linking Environmental and Transportation Planning Advisory Group can continue to serve as a forum for educating across disciplines.

- e. **Review committee structure and make up to ensure interdisciplinary representation.**

Lead Agencies: MARC, DOTs, local governments, natural resource agencies.

MARC Example: In 2008, a survey was conducted regarding MARC's transportation-related committee structure. Committees have not been restructured, but this discussion is on-going. Incorporation of the Linking Environmental and Transportation Planning Advisory Group into MARC's formal committee structure is a consideration.

3. Create a regional mitigation strategy.

{Items to be considered as part of a regional mitigation strategy}

- a. **Develop a regional mitigation strategy, which would include the following elements:**
 - A regional mitigation bank which directs mitigation dollars to prioritized ecological areas (MetroGreen priority areas) by watershed.
 - An authority to manage and implement the strategy.
 - Strategies for assisting communities in protecting and restoring natural areas. These include:
 - Compact, mixed-use communities.
 - Redevelopment and infill.
 - Transit-oriented and pedestrian/bicycle-friendly communities.
 - Conservation easements.
 - Stream buffer ordinances.
 - Performance measures and regular monitoring for mitigation sites.
 - Formal documentation (i.e. MOUs) to memorialize agency roles.

Lead Agency: MARC.

Partners: DOTs, Army Corps of Engineers, local governments, natural resource agencies.

MARC Example: Development of a regional mitigation strategy is on-going. MARC staff is in the process of identifying resources to formalize and implement a strategy. Resources have been identified for continued training sessions on this topic.

Local Example: Kansas City, Missouri recently adopted a stream setback ordinance. According to a related fact sheet, the city adopted the ordinance to "...help avoid future liabilities by protecting new development and infrastructure from flood damage, while saving natural resources that provide multiple benefits. Limiting development near stream banks will also improve Kansas City's water quality, reduce erosion and sedimentation, prevent infrastructure damage, and protect riparian corridor habitat and greenways". Additional cities/counties that have adopted stream setback ordinances are: Platte County, Missouri; Lenexa, Kansas; Independence, Missouri; and Overland Park, Kansas.

b. Develop a dedicated, regional funding mechanism to implement the mitigation strategy.

Lead Agency: MARC.

Partners: DOTs, Army Corps of Engineers, local governments, natural resource agencies.

MARC Example: Development of a regional mitigation funding mechanism is on-going. A funding mechanism will be outlined in the mitigation strategy.

NEXT STEPS

- Meet with the Linking Environmental and Transportation Planning Advisory Group to outline a work plan, which will include implementation of the Action Plan, and discuss incorporation of the group into MARC's committee structure.
- Identify resources for continued work on development of a regional mitigation strategy.

MARC would like to thank these contributing organizations and agencies:

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