

LINKING TRANSPORTATION AND ENVIRONMENTAL PLANNING

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A REGIONAL PHILOSOPHY / VIEWPOINT

Over the past several decades as the transportation planning process has evolved and continued to develop programs to encourage public exchange of ideas, a continual and an ever awareness call from community organizations to have a more thorough discussion and understanding of the relationship between transportation and the environment has emerged. Our knowledge and understanding between the complexities of our natural resource environment and culture-made environment is a continuous process. This connection between these two settings has resulted in new areas of environmental science that needs to be considered and discussed as it pertains and interacts with the impacts and growth of our infrastructure development.

Over the past several decades, “history has clearly demonstrated that the quality of life and the sustainability of human settlements is dependent on the stewardship of natural resources.” To respond to this issue, Metropolitan Planning Organizations (MPOs) are developing strategies to include this activity into the area’s overall transportation planning process, but more specially, into the development process of the area’s long-range transportation plan (LRTP). For the RATS MPO, this issue is discussed in **Section 10.7 – Planning and the National Environmental Protection Act Process**. However, with the February 14, 2007 planning regulations issued jointly by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) require a more detailed policy approach to concentrate on the significance between biodiversity and other environmental impacts and the proposed transportation projects that are included in the RATS LRTP.

RATS APPROACH TO LINKING WITH NEPA

When the SAFETEA-LU planning regulations were issued, RATS adopted RATS Resolution 2007-7 which identified three additional planning efforts that were attached to this resolution, one of which was a framework planning approach for this topic. Listed below is the complete attachment.

RATS Planning, Coordination and Consulting Plan with Resource Agency

In order to comply with 23 CFR 450, Section 6001 it is important for MPOs to coordinate with State and Federal resource agencies, sharing information and creating a planning process that looks at environmental issues as a regular task item. In most cases the resource agencies can provide plans, maps and databases, often in GIS-ready format. Often information is available from resource agency websites that complements the work of the MPO planner. In particular, the following is available from the respective resource agencies:

1. US Army Corps of Engineers – GIS based mapping of permit activity, mapping of wetland mitigation areas and banks.
2. US Fish and Wildlife – Consultation on Federal endangered species lists and compliance with the Endangered Species Act. Soon to be available GIS coverage’s of habitat.
3. US Environmental Protection Agency / IL EPA – Powerful web-based tools that provide a range of environmental conditions and features within MPO areas. Watershed assessment tracking and environmental results. Envirofacts data warehouse for air, water and land. Air data and NEPA compliance.
4. IL Department of Natural Resources – State list of endangered species and statewide conservation plans.
5. IL Historic Preservation Agency – Access to the HAARGIS system that provides detailed information on historic properties and structures from a web-based environment.
6. IL Department of Agriculture – Compliance with the Farmland Preservation Act. Updated soils information on a county by county basis. Land use planning assistance to ensure compact and contiguous development in urban areas, minimizing the conversion of agriculture land to non-agriculture uses. Information available through the regional Soil & Water Conservation Districts.
7. Winnebago Soil & Water Conservation District
8. Rockford Park District
9. Winnebago County Forest Preserve District
10. Boone County Conservation District
11. Belvidere Park District
12. Village of Winnebago Park District
13. Natural Land Institute

MPOs can assist the resource agencies by providing transportation and land use planning data in GIS-ready format for easy and seamless data integration.

During September 2007, FHWA and FTA conducted a certification review of the RATS transportation planning process. In March 2008, FHWA and FTA issued a report of this review. One of the findings of this review was that the "Rockford MPO shall amend the current LRTP to include a discussion on potential environmental mitigation activities at the policy and/or strategic levels."

In Section 6001 of SAFETEA-LU, MPOs LRTP require a fundamentally different discussion for mitigation efforts that are typically contained in the NEPA documents. This new requirement is more of a broad-based planning approach for reviewing the "types of potential mitigation activities and potential areas to carry out these activities" for MPOs. This was the framework that RATS used in RATS Resolution 2007-7. Described later in this section are some specific planning projects that RATS is planning, coordinating and consulting with environmental resource agencies. But as the resolution described, RATS has and will continue to assist in the planning and preparation of the resource materials that are currently being used by traditional transportation agencies that are responsible for the actual preparation of the NEPA documents. Since RATS staff is located within the Public Works Department of the City of Rockford, the staff and the planning materials and documents are easily available for City and RATS staff to check with when issues arise.

To meet the intent of Section 6001, RATS staff, voting members, non-voting members and other participating agencies who receive federal funds have and will continue to follow the National Environmental Policy Act (NEPA) process. However, one of the planning approaches that SAFETEA-LU is stressing is for MPOs to shift towards a more broad and strategic involvement with a wide base of agencies, organizations and the public who might not have been traditionally connected with the overall transportation planning process, the role, and /or functions of RATS. One of the important attempts will be to work with these new connections to identify new approaches that will cause the least disruption of environmental sensitive areas, such as wetlands and known locations of endangered species. From this strategic view, one of the overall objectives should highlight environmental benefits, as well as impacts. Accordingly, the geographic area to be used will be the ecosystem of the northern Illinois / southern Wisconsin area so that regional issues can be addressed in the planning level stages.

The types of mitigation activities that will be appraised for mitigating the impacts are those that have been traditionally used. These activities are wetlands replacement, avoidance of habitat fragmentation, preservation of habitat for endangered species, replacement of trees and other types of flora, identification and creation of mitigation banks within the watersheds of possible projects, planting native vegetation, buffer existing parks, forest preserves and other existing parkland properties from high-impact land use development and working with the land use controls of the local units of government to adopt policies that would avoid existing environmental fragile areas and to develop landscaping plans and other amenities that would restore and enhance the ecological values of the land. Another management activity might be the creation of an in-lieu fee program where developers and other users could impact certain environmental areas contributing to a third-party conservation organization for those agencies attempting to restore, acquire or develop high-value natural areas.

The overall purpose of this section is to provide a means to discuss and disclose environmental effects and efforts that recognize the potential impacts in the transportation planning process and engineering and construction phases. During the planning process, the main emphases are the lines of communication to other agencies who have direct authority and information on environmental issues and to have open and continuous discussions with those agencies and the general public. These relationships are very critical to ensure that the transportation planning process follows the 3-C (Cooperation, Coordination and Comprehensive) principles.

For the area to have an on-going dialogue of environmental and transportation planning issues, several efforts have been done to allow these subjects to come together to discuss these interests so that information can be assembled to identify concerns and programs early in the overall planning process. Besides the partners listed above that are primarily in the government sector, non-governmental organizations and other interest groups / individuals have been included and involved in this process. While these organizations / groups have different responsibilities and information, the type of information is very valuable in the continual dialogue and development of environmental information. MPOs are at the "cross-roads" of being able to pull together these different community resources to ensure that issues are known and documented to allow good planning procedures, information and reports to transpire. While some community organization agenda's might have a

no-growth attitude, the reality is that growth will continue to occur in the greater Winnebago County – Boone County. The proper planning procedure is to consider the long term consequences of our growth as those actions impact green infrastructure. As the urbanized area of the Rockford and surrounding environs continue to grow, it will require a disciplined planning process to recognize that providing economic growth can be done that will protect and ensure a balance between nature and development.

Over the past several decades, there has been a sporadic dialogue on how to link the MPO / state responsibility transportation planning process with / into the Federal review process with NEPA. This issue of making an easy, smooth and seamless merger with NEPA is one of the key guidelines that is included with the SAFETEA-LU planning regulations. But this joining of these two steps in the overall process of constructing transportation projects is a critical one because the MPO planning process and NEPA steps are at the early stages of the project development process and that if issues and topics are not fully identified and investigated, the implementation of those projects are delayed or are extended to the point that the project cost exceeds the original estimate. If these delays occur, the general public and elected officials concerns are raised regarding the MPOs/States/Federal ability to get these projects done in an acceptable time period. In the public informational open houses and other public presentations that RATS have held and given, one of the issues that have been heard is the length of time it takes to get projects done. One of the reasons is the funding process in today's time. But another is the time that transportation projects are listed in a MPOs 20+years long-range plan and the implementation schedule for each specific project. Primarily because of the funding cycle and other priorities that local and state governments are facing with regards to revenues, the seamless transition (regarding no time gap) between the transportation planning process and NEPA mostly does not happen.

While SAFETEA-LU stated that mitigation strategies and activities are “intended to be regional in scope, and may not necessarily address potential project level-impact” should be included in a MPOs long-range plan, one of the principle goals of this discussion on environment mitigation is to explain how to include much of the MPOs planning products to be considered and included in the NEPA process. Since the NEPA process is a federal requirement, the critical issue is that the resource agencies to be included and assist the MPO process to determine what information is allowed so that a duplication of efforts can be minimized. Also, since the NEPA process is directly related to specific project-level impacts and the intended in SAFETEA-LU is an overview of the metropolitan planning area of an MPO, this discussion / dialogue essentially becomes one of including and involving the agencies and their review processes and what information they do or might consider in the NEPA process.

The approach that RATS has used in the past when issues like this have been presented is to take this vision and to implement a planning task / work element to set forth this idea. This was exactly the planning approach that RATS used when the area wanted a more thorough and complete discussion on the common community vision for having a bicycle / pedestrian system that would offer the communities a viable transportation option/choice. As a result of this goal, RATS set-forth a planning effort to explain the vision to implement a safe and efficient bicycle and pedestrian system. To implement a regional bikeway system, RATS participated and assisted the local and states agencies involved in this process:

- (1) to develop a network system displaying the routes and type of bike facilities that could be built, stripe and sign,
- (2) to research and determine the requirements of different types of revenue sources that could be used to develop a grant proposal to build such bike facilities, and
- (3) to assist the local units of government in writing and preparing such grants.

A copy of the steps of public participation in this planning effort is shown at the end of this document. Based upon the public involvement and response to this planning approach, RATS will attempt to follow this pattern for all future planning documents that have a broad regional focus.

For this discussion on environmental mitigation, several efforts have been done and are currently underway that has/will allow citizens the opportunity to visualize these specific issues being developed and be able to participate in these planning projects. For several of these tasks, RATS has participated and taken an active role in the development of these planning efforts.

- **Boone and Winnebago Regional Greenway Plan** – The development of this plan provides a framework to allow local and state organizations, along with private organizations and individuals, an opportunity to not only participate in this planning effort, but also have discussions on the value of the relationships between environmental resources and growth management. With the completion of the original greenway plan in 1997 and an updated version in 2004, this planning process provides a basis for agencies involved with transportation, water quality, storm and floodwater, parklands and forest preserves, and other environmental and conservation responsibilities to address planning coordination. Through this effort, interagency consultation has continued.

In the development of the Regional Greenway Plan, numerous layers of data were included in the GIS-format mapping process. Some of these layers are:

- Bedrock geology
- Bedrock topography
- Streams
- Wetlands
- Floodzones
- Bedrock aquifers
- Public water supplies
- Surface waters
- Landcover
- Forest resources
- Archeological sites
- Cemeteries
- Federal lands
- Natural areas and preserves
- State fish and wildlife areas
- State parks
- County and local parks, and
- Privately owned known environmental critical areas (such as property which has been enrolled in Conservation Reserve Program or which has a conservation easement)

This Greenway Plan has been used extensively by the participating agencies as a tool for planning open space acquisition, protection of natural areas, development of pathways and other transportation systems. It has been an important resource in meeting grant application requirements, especially Illinois Department of Natural Resources (IDNR), IDOT grants (C-2000 and Transportation Enhancement) and Open Space Land Acquisition and Development (OSLAD) programs. As the Regional Greenway Plan was being developed, the local and state agencies essentially created a consortium to develop a collaborative work-effort that has continued throughout the past several years.

- **FHWA / IDOT's Enhancement Program** – Another example of this effort is the regional cooperation on the submissions of enhancement applications. The two principal planning documents that are used in this effort are the RATS Year 2035 LRTP and the area's Greenway Plan. The majority of projects that have been submitted, awarded and constructed in the RATS MPA are regional shared-use path facilities. Particularly, are two major north-south routes that have been completed in the area which are the Rock River Path and the Perryville Path. One of the objectives of the recently completed Bicycle / Pedestrian Plan was the identification of existing streets to connect to the area's several shared-use path facilities. Using the traditional transportation system management philosophy of low-cost transportation improvements, this planning approach of using low-volume streets to safely accommodate bicycling would create a mobile and accessible transportation option/choice in the RATS MPA. By the regional cooperation on the submission of several of these grants by several of the local agencies identified above and the construction of these transportation facilities, the area is now in the position of implementing an on-street bicycle network.
- **Winnebago County Natural Resource Inventory** – As part Winnebago County 2030 Land Resource Management Plan, a natural resource inventory will be developed to list the types of natural resources whose

locations and characteristics should be identified and mapped will be done in a GIS format. WinGIS is requesting information about private or public natural resources that may not have been previously recorded by local, state, federal, or private agencies, but which are still considered great assets of the residents of Winnebago County. This inventory will be used to help protect and manage these precious assets in the future. The foundation for this work effort is the State of Illinois Natural Area Inventory. This 30-year old inventory identified high-quality remnant natural communities and grades them according to their ecological integrity. As part of County's 2030 Land Resource Management Plan, the Winnebago County Geographic Information System (WinGIS) has contracted with a consulting team to (1) create an inventory of scarce natural resources, (2) assess the ecologic significance of the natural resources, (3) recommend a management strategy to maintain, restore and protect the natural resources and (4) provide the inventory and strategy data in an approved GIS format. RATS assisted WinGIS in developing the project overview and purpose of this activity.

- **Principles of Balanced Growth** – Beginning in January 2002, Winnebago County began a planning initiative “to inform public and private decision-makers in Winnebago County on the concept and benefits of balance growth; to encourage implementation of projects and policies or actions which reflect the principles of balanced growth and to become a model for other counties in Illinois.” This project had several objectives, but the overall theme was to educate the principles and to explain some of the best practices on Balanced Growth. As with all planning tasks, the final report includes a multi-level approach to involve most of the important issues that challenges urban communities across the United States. These topics that were described included Economic Development, Fiscal Stability, Natural Resources, Agriculture, Open Space, Viable/Livable Communities, Infrastructure and Coordination.
- **Rock River Valley “Green Communities” Environmental Vision: *Facilitation of Cooperative Conservation*** – This environmental visioning effort integrated many government and other resource agencies to develop a community understanding on the importance of protecting and preserving our natural resources. This process included investigating the physical, ecological and cultural dimensions of the local environment, identifying issues and preferences through surveys and public meetings, creating strategies to address issues and generating an action plan. The goals of this effort were to:
 - (1) – cultivate and preserve historical and cultural resources,
 - (2) – protect, preserve and enjoy natural resources and ecosystems,
 - (3) – link the natural world to hands-on learning and physical activity through recreational and environmental education,
 - (4) – implement environmentally sound land use strategies and
 - (5) – develop a system that encompasses all forms of transportation in a safe, interactive manner.

The action plan that was published by the Rock River Valley Green Communities included ten critical action areas and follow-up issues for the region to consider and incorporate into the area's planning process and documents. A chart displaying the steps to implement the ten issues that were identified in this visioning planning process listed local and regional planning documents like the greenway and trails plan, park and open space plan and the RATS LRTP, including a specific reference to have a more detailed planning analysis on bicycling and pedestrian transportation.

- **Illinois Department of Natural Resources Ecosystems Program: *Ecosystems Partnerships*** – The purpose of this state-wide effort “is to integrate the interests and participation of local communities and private, public and corporate landowners to enhance and protect watersheds through ecosystem-based management.” In the RATS Metropolitan Planning Area are three of these ecosystem partnerships:
 - Upper Rock River
 - * Kishwaukee River
 - * Sugar – Pecatonica Rivers

The strategy of these partnerships is to ensure that habitat and other environmental-sensitive areas are maintained and managed to enhance biological diversity and to establish human and economic and recreational conditions that will be compatible with local and regional interests. Since more than 90% of the

state's land area is privately owned, a new approach was initiated to have a cooperative effort to protect, enhance and restore natural resources through private management and public support and encouragement.

- **Illinois Wildlife Action Plan** – To develop a comprehensive plan to manage public and private lands, the Illinois Department of Natural Resources (IDNR) undertook a detailed, science-based approach to conserve our state's wildlife. The planning approach included an inventory of species, but also developed a plan to address the particular needs of wildlife that are declining so that these species can be stabilized and then increased. To address the eight federally-congressionally required elements of this wildlife conservation plan and strategy, IDNR's method involved more than 150 federal, state, and local agencies, partnerships, institutions, and nongovernmental organizations. Through a wide-variety of other public events and announcements, an estimated 600 people were reached throughout the state.

The fifteen natural land divisions of Illinois, defined by biological and geological characteristics, were used to geographically divide the state into sections to consider wildlife and habitat conservation areas. To assess each of these land division areas, thirteen major and minor categories were used in the environmental – ecosystem review. Two of these fifteen areas are included in the RATS Metropolitan Planning Area, the Rock River Hill and Northeastern Morainal Nature Divisions.

Finally, included in the state's Wildlife Action Plan is a section on *Green Cities Campaign*. As a result of increasing population growth in several of the 102 counties that are in Illinois, this plan discussed several actions steps for developing areas to have an understanding of and appreciation for wildlife, habitat, natural communities, ecological processes and disturbance regimes. Knowledge of these issues and related subjects are important for urban residents to support scientifically driven conservation priorities. These steps that were outlined are:

1. Minimize the adverse effects associated with development on wildlife and habitats.
2. Integrate wildlife and habitat conservation in developing areas, as possible or appropriate.
3. Increase water quality education efforts in areas under high development pressure and/or within fragile geographic zones (i.e. karst terrain).
4. Make natural areas conservation, ecology and environmental education a mandatory part of school curricula.
5. Fill information gaps and develop conservation actions to address stresses.
6. Increase access to open lands and waters within and near urban areas for wildlife-related recreation.

VIEWING FORWARD

As noted in numerous publications and studies, the importance of land conservation and incorporating environmental and community principles into the transportation planning and decision-making process can be beneficial to improving the quality of life for the citizens and visitors to the Rockford Metropolitan Planning Area. With the continuous changes occurring in the human landscape that is effecting our natural environment, SAFETEA-LU is asking metropolitan planning organizations (MPO) like RATS to develop an on-going discussion between local organizations to coordinate with State and Federal resource agencies to begin a dialogue to share information and create a planning process that will serve to avoid, minimize, or compensate the impacts to our natural heritage. This consultation process with non-traditional transportation planning partners in the federally-funded MPO process seeks to include and involve other types of resources that are affected by transportation in the Rockford metropolitan area, like economic development, conservation and agricultural organizations.

This new SAFETEA-LU planning requirement to have MPOs develop a regional scope and strategy to address the issues that are a part of the NEPA process really is not that new to RATS. As presented and discussed above, the topics that the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) are asking MPOs to participate with resource agencies that are included in the NEPA review process are currently underway in the RATS area. The critical point in any community planning process is to take that vision (plan) and to identify the steps and resources needed to materialize that visualization.

Steps for Public Participation

