

# Executive Summary

## OKI Environmental Consultations with Local Agency Consultations, 2010-2011

OKI environmental consultations bring new insights to transportation planning. Consultations expand opportunity for transportation investments to advance sustainable development and reduce negative and costly environmental impacts.

As a new process, the consultations involve new agencies in the transportation plan's development and provide opportunity to consider:

- the cumulative environmental effects of transportation improvements (in addition to project-level impacts),
- options for avoiding impacts that result in mitigation and related costs,
- the extent and vulnerability of the region's least impaired environmental resources,
- the potential for local development and stormwater management strategies to reduce environmental impacts, and
- the local effects of state conservation plans and programs.

This report is a summary of OKI's consultations process and discussion with local agencies that includes:

- an explanation of the requirement for consultations and its intent,
- the schedule, participation, and format for OKI consultation sessions,
- lists of least impaired streams and species at-risk by county,
- local agency comments on the transportation plan's environmental effects,
- environmental impacts of major concern to state agencies,
- local practices to conserve stream corridors, reduce impervious cover and stormwater runoff, and manage roadway runoff,
- local agency views of the effectiveness of county development, stormwater management, and conservation strategies to reduce environmental impacts,
- a map for comparing "regionally significant environmental resources" with the developed area and recommended transportation improvements, and
- results of a survey of local agency familiarity and use of state conservation plans and programs (to be provided to state agencies).

Highlights of OKI consultations with local agencies are presented below.

### Process for Environmental Consultations

- Federal requirements call for metropolitan planning organizations (MPOs) like OKI to conduct environmental consultations that involve a comparison of the transportation plan with environmental resources identified for state conservation or protection.

- Consultations are intended to result in better decisions for improving transportation that more fully account for environmental effects and their financial consequences. They provide opportunity to avoid negative and costly environmental impacts that can result from highway expansion and conventional development trends and practices.
- OKI consultations involved seven sessions and 44 agencies with conservation, land use planning, parks, storm water management, or water resource management responsibilities (34 agencies participated in discussions).
- Each session featured an explanation of information used for the comparison and a discussion of where and how environmental resources may be adversely affected by the transportation plan and related development – and how adverse effects might be avoided.

### **Environmental Resources Considered**

- OKI identified environmental resources for their regional significance based on state investments, regulations, or policies, which in turn indicate where transportation projects are likely to require mitigation and incur increased costs for impacts not avoided and where resources warrant conservation.
- Regionally Significant Environmental Resources are classified into five categories: State-Conserved Area (state parks, wildlife areas, and preserves), Scenic River (the Little Miami River), Regionally Significant Streams, Wetlands, and Endangered, Threatened, and Rare Species.
- OKI identified each county's Regionally Significant Streams and the information in state wildlife plans, water quality standards, water quality Integrated Reports, or antidegradation policy that document the value of these streams for conservation.
- OKI identified the native species per county that are listed at federal or state levels as endangered (in danger of extinction), threatened (likely to become endangered within the foreseeable future), or otherwise at risk.

### **Conclusions from Discussion of Local Strategies**

- Environmental impacts from transportation improvements and related development that are of major concern to state agencies include concerns that:
  - forested tracts remain intact,
  - stream corridors remain functional for wildlife movement,
  - roadway runoff be diverted from direct entry into streams (and highway projects avoid infringement on riparian zones),
  - streams not already impaired be protected, and
  - the growth of impervious surface be constrained.

- Local development strategies do not effectively address state agencies' major environmental concerns, as indicated by:
  - a general lack of development practices that conserve forested areas, stream corridors, stream quality, and stream channels and of provisions to protect unaltered or high quality streams,
  - few requirements or incentives to reduce impervious surface (may be the development impact of greatest concern),
  - infilling of streams or piping streams into culverts as common practice, and
  - prevalent use of curb-and-gutter systems that discharge roadway runoff into streams.
  
- Stormwater management strategies offer new potential for addressing major environmental concerns, as indicated by local initiatives that include:
  - expanded use of stream buffers to manage stormwater (these conserve the stream corridor and benefit wildlife),
  - development of local performance data and consideration of incentives to encourage use of green infrastructure for managing stormwater,
  - increased use of watershed-based planning for stormwater management,
  - use of roadway reconstruction and expansion projects to reduce stormwater impacts and/or restore impaired resources, and
  - planning for Union in Boone County to potentially have below-ground parking and stormwater storage areas.
  
- Stormwater management strategies for roadways are and will be major determinants of environmental resource conditions, as indicated by these individual and summarized comments:
  - "Federal and state highway projects do not operate with the same stormwater rules as local projects" (state transportation departments are responsible for determining how roadway runoff from federal and state facilities is managed).
  - "The positive side of federal and state transportation projects is the opportunity to fix existing stormwater problems. To retroactively deal with stormwater impacts is more costly than dealing with impacts on the front end."
  - The environmental impacts and financial costs of curb-and-gutter, which is standard practice for managing roadway runoff, could be reduced through greater use of alternative practices, but this is a back-burner issue for most local agencies.
  
- Strategies that could be more effective in reducing costly environmental impacts include:
  - Local development codes could increase the use of best management practices (BMPs), but code changes of any kind are difficult to implement.
  - Comprehensive plans could be strengthened for protecting environmental resources, although their role as guidance documents limits their effectiveness.
  - Conservation easements would be used more frequently if property owners were provided with property tax reductions or other effective financial incentives.
  - Watershed-based planning is increasing for stormwater management, but the greater challenge is to guide development on a watershed basis (watershed-based planning and

zoning is complicated by the need for multi-jurisdictional cooperation; the Balanced Growth Plan for the Middle East Fork in Clermont County could result in a model for other areas).

- To entice developers to use best management practices, incentives have to be part of the picture.

At the federal level, the financial implications of increased mitigation and continued development trends are the basis for the requirement for consultations. These financial implications are also relevant at the local level, as indicated by this comment:

*- "Interest in conserving natural resources is increasing because of the economic angle – protection is in the interest of the pocketbook. The cost of replacing or restoring natural resources should make it a no-brainer to see the need to protect them."*

At the local level, agencies that understand the value of better environmental protection face numerous obstacles to their efforts to develop more effective strategies. Obstacles include the other demands and responsibilities addressed by local agencies, the need for demonstration projects and education to increase public understanding, and the need for incentives to encourage changes in conventional practices. In spite of obstacles, progress is indicated by this comment:

*- Environmental concerns are now at the table – they are being discussed and considered.*

The core issue of the consultations is also key to sustainable development and environmental stewardship and the OKI Strategic Regional Policy Plan: the need for development to occur differently if unimpaired environmental resources are to be maintained and costly impacts avoided. The consultations provide for a comparison of the transportation plan with environmental resources, but the outcomes will depend on local response and initiatives.

Transportation influences where development occurs. OKI's transportation plan and local governments play a role in determining how the transportation system grows and -- to differing degrees -- how development impacts are managed.

- In the outlying areas where the region's least degraded environmental resources are located, local governments have the opportunity to put measures in place and take initiatives for avoiding or reducing the environmental and financial consequences of traditional development.
- In developed area where environmental resources are impaired, local governments may use transportation improvements, re-development projects, and stormwater management as opportunity to restore resources and revitalize communities – to remove streams from pipes (replace culverts with overpasses), replace gray infrastructure with green infrastructure for infiltrating runoff, restore trees and native vegetation, and set development back from the stream edge.
- This current round of consultations will be used by OKI to make future consultations more effective. In the future, consultations will provide insights for considering proposals for improving transportation before projects are recommended.