

## **Indirect and Cumulative Effects Task Group**

March 2, 2006

FDOT Urban Office  
Orlando, Florida

### **Attendees:**

Larry Barfield, Pete McGilvray, Josh Boan, CEMO  
Bobby Downey, FDOT Legal  
Elizabeth Rockwell, Miami-Dade MPO  
Victor Jordan, WFRPC  
Gary Donaldson, DCA  
Bob Gleason, FDOT D5  
Brian Yates, SHPO  
Scott Sanders, FFWCC  
Louise Fragala, PFA  
John Wrublick, USFWS  
Alexis Thomas, GeoPlan  
Ken Hardin, Janus Research  
Madolyn Dominy, US EPA R4  
Ann Broadwell, FDOT D4  
Gwen Pipkin, Mark Schulz, Dick Combs, FDOT D1  
Lauren Milligan, Chris Stahl, FDEP  
Joe Walsh, USFWS  
Jason Spinning, USACOE  
Joy Giddens, FDOT D3  
Pat Webster, SRWMD  
Cathy Owen, FDOT D6  
Wendy Lasher, Steve Love, FDOT D7  
Mark Easley, Frank Kalpakis, Erin Degutis, URS Corporation

*Meeting agenda and PowerPoint presentation provided under separate cover.*

**The meeting commenced at approximately 9:05 am.**

### **Welcome and Introductions**

Larry Barfield welcomed the Task Group and thanked members for their commitment to the effort over the next several months. He stated that the overall objective was to develop a framework and methodology for evaluating indirect and cumulative effects within the ETDM Process that works for all involved agencies in Florida.

The following resource documents were provided on FTP site in preparation for the meeting:

- June 2004 White Paper – Assessing Secondary and Cumulative Effects within the ETDM Process

- January 2006 AASHTO synthesis of requirements and mitigation for Indirect and Cumulative Effects Evaluation
- June 30, 2005 Guidance for Preparers of Cumulative Impact Analysis
- January 1997 CEQ Handbook for Considering Cumulative Effects under NEPA

### **Project Approach**

Frank Kalpakis reviewed the schedule for meetings with subgroups and the full task group. *See attached project approach provided under separate cover.*

Pete McGilvray provided an overview of how Indirect & Cumulative Effects are currently evaluated using the Environmental Screening Tool. Several ETAT members are providing commentary about potential indirect effects to resources. ETAT members have not yet provided commentary about potential cumulative effects to resources.

### **Previous Work on Indirect and Cumulative Effects**

Frank provided an overview of the recommendations provided in the June 2004 White Paper: “Assessing Secondary and Cumulative Effects within the ETDM Process”. The White Paper summarizes the work of the previous SC&E Task Group that included representation from FDOT, FHWA, MPO’s, and federal and state environmental agencies. Sub-groups were formed to focus on specific resource issues. The Task Group’s recommendations for conducting indirect and cumulative effects evaluations within the ETDM process include both process recommendations and enhancements to the Environmental Screening Tool. These recommendations provide a good base from which to begin our efforts with this Task Group. Roles and responsibilities will also need to be a focus of this Task Group.

### **Definitions – from Council on Environmental Quality**

Direct Effects: Those effects that occur as a direct result of an action and occur at the same time and place as the action.

Indirect Effects: Reasonably foreseeable effects that occur as a result of an action but occur later in time or are removed from the action.

Cumulative Effects: The impact to the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other action.

The group discussed examples of indirect and cumulative effects. For example, land use and development can be an indirect effect of providing transportation access. At the same time, transportation improvements can be an indirect effect of land use decisions. Cumulative effects evaluations need to consider both land use and transportation actions on a particular resource. The group discussed identifying the “tipping point” whereby future actions cause the sustainability of a resource to be in question.

The previous task group suggested that “reasonably foreseeable” should include a twenty-year planning horizon, consistent with comprehensive planning and Long Range Transportation Plan requirements. A cumulative effects evaluation should also include

reviewing past aerial photography to gain an understanding of how past actions have impacted a resource and what could happen if the trend continues.

The group agreed that we need to stay within the confines of CEQ / NEPA definitions, and we should meet the intent of these definitions in the development of a framework and method for conducting indirect and cumulative effects evaluations.

Bobby Downey: The Comprehensive Plan sets stage for development; SB 360 establishes the policy of “pay as you grow” proportionate share on state roadway facilities.

Ordinances are being drafted by communities: there may be a disconnect between evaluating effects from local roads and the state highway system. However, the local communities should be responsible for impacts on local highway systems.

### **Impacts v. Effects**

Larry described why we are using the term “effects” instead of “impacts” to also account for positive effects of a transportation project. An example of a beneficial effect is the revitalization of a downtown, improvement of traffic flow, or adding capacity to an evacuation route. Transportation projects and related features could benefit a community, such as providing landscaping to improve aesthetics or improving access to a park.

### **Environmental Screening Tool Enhancements**

We need to identify ways to improve data sets provided with the EST to be more effective in identifying resources such as the last historic swing bridge is in your district or in the state. The subgroups will recommend enhancements to the EST to facilitate indirect and cumulative effects evaluations.

The analysis area for each resource needs to be defined, as well as the analyses that can be accomplished on the EST and those that should be conducted “off-system” (not on the EST). Cumulative effects analysis has to be conducted from the perspective of each resource.

### **Are the expressway authorities going to put their projects in for indirect and cumulative effects EST evaluation?**

Not now, but expressway projects should be considered in a cumulative effects evaluation. Expressway Authority projects and other local projects should be provided and used in the EST as part of the cumulative effects evaluation.

### **Thoughts from a recent Transportation Research Board meeting**

Alexis Thomas indicated that many areas in the country are struggling with how to conduct cumulative effects evaluations. Most of the work involving cumulative effects evaluation has been research initiatives, but these initiatives have not been effectively implemented. At a recent workshop, North Carolina DOT conceded that they did not effectively address cumulative effects; their process was project-based. Using a systems-level approach with agency interaction such as that being proposed in Florida will allow us to evaluate cumulative effects. This task group will be the first to implement cumulative effects evaluations from a systems level.

### **Suggested General Process for Evaluating Cumulative Effects – from previous Task Group**

- Identify natural, cultural or sociocultural resources of concern.
- Define the area of effect. This could vary from resource to resource. *How do we handle areas that are multi-jurisdictional with the EST?*
- Document rationale used to determine area of effect.
- Use the Environmental Screening Tool to locate projects/resources within/near the area of effect.
- Review results of direct and indirect effect evaluations for each transportation project in the planning area.
- Review land use plans, DRIs, urban service areas and consider the effect of land use decisions to the resources in question.
- Consider the results of studies and other information that is not on the EST.
- Consider carrying capacity of the resource in an attempt to assess “resource sustainability”.
- Provide commentary on cumulative effects of all proposed transportation and land use actions. Use other data sets, resource management plans, and your professional knowledge to make comments on indirect and cumulative effects.

The framework for cumulative effects evaluation should be at the system level during the planning phase. Results of cumulative effects analyses need to be provided to planners and agencies responsible for developing comprehensive plans, including future land use maps/policies.

Consideration: DCA is responsible for reviewing future land use plans, and cumulative effects evaluation should be an important consideration in the development of land use plans. DCA could serve as the clearinghouse to provide the results of cumulative effects evaluations to local comprehensive planning agencies so that these analyses can be effectively considered in the development of future land use plans. Therefore, the cumulative effects of the land use and transportation actions included in the comprehensive plans influence future land use and transportation decisions.

### **Indirect Effects Evaluations**

- Project level evaluation conducted during planning and programming screens.
- ETAT should evaluate indirect effects to the resource that their agency is responsible for protecting/managing.
- Comments should include methods to avoid/minimize negative effects and describe potential mitigation/compensation opportunities.
- Three to five mile buffers for standard GIS analysis.
- Comment forms and summary reports should be similar in look and function to those used for direct effects evaluation.

### **Any consideration in separating indirect and cumulative impacts?**

Yes. The previous task group suggested that indirect analysis and cumulative effects analysis were different evaluations. Indirect evaluations are project specific and cumulative effects evaluations should be system-wide. It was suggested to separate the

analyses in the EST. Recommendations from the first group have not been implemented in the tool yet.

### **Responsibility – shared responsibility for Cumulative Effects Evaluation**

Agencies responsible for evaluating effects to natural and cultural resources.

MPOs, FDOT and CLCs responsible for evaluating effects to community resources.

FDOT, MPOs, FHWA, FTA and DCA should be a reviewing agency for cumulative effects for all resources.

**Chairpersons will be assigned at the first subgroup meetings.** They will be responsible for running the meetings, making assignments, and working with staff to get things done.

### **Sub Group Objectives**

- Identify data sets needed for evaluation (DRI, FLU, Comp plans, etc)
- Identify supporting data sets on the EST – which ones can be used as an off-system analyses? Where are the data gaps? How important is this information and who will maintain it? We should not be in a data collection mode.
- Prioritize data needs for Indirect and Cumulative evaluations.
- Determine if the existing comment screens in the EST should be modified.
- Define expected graphic or tabular output for each analysis
- Define functional revisions to the EST.
- Determine responsibility for indirect and cumulative effects evaluations.
- Identify how to engage local governments in considering indirect and cumulative effects during the local planning process. Land use planning is critical for indirect and cumulative effects evaluation.

**Challenge:** To develop a framework and methodology for evaluating indirect and cumulative effects within the ETDM process that works for Florida.

**Sub-group assignments:** Refer to resource documents mini-CD; come to the sub-group meeting with ideas, stay focused and resist tangents. What is the role of each resource agency? Talk to people within your resource group.

- Review resource documents
- Consider data needs
- Consider geographic extent of analysis
- Consider your agency role
- Communicate with your group

The project team will acquire, compile and summarize information/summary from the three subgroups. A draft framework will be prepared for discussion at the full group meeting in July.

**End goal:** better planning and environmental preservation.