Eight Keys to Legally Sufficient ICI Analyses
Tracy M. White, FHWA Office of the Chief Counsel
June 8, 2010

1. **Key One - Know the difference between cumulative and indirect impacts:** The terms are not synonymous and may not be used interchangeably.

   a. **Indirect Impacts:** Indirect impacts, also called “secondary impacts,” are caused by the proposed project but occur later in time or are farther removed in distance. They include, but are not limited to, land use changes attributable to the project and the environmental impacts resulting from those land use changes. The CEQ regulations explain that indirect impacts:

   Are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. 40 CFR § 1508.8

   b. **Cumulative Impacts:** Cumulative impacts are the direct and indirect effects that the proposed action will have on a given resource together with other past, present, and future impacts from other unrelated projects. The CEQ regulations define “cumulative impacts” as:

   The impact on 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 (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 CFR § 1508.7

   Cumulative impacts analysis is resource specific and generally performed for the environmental resources directly and indirectly impacted by the proposed project. Generally, if a project does not directly or indirectly impact a particular resource, a cumulative impacts analysis of that resource need not be performed. Consult your counsel.

2. **Key Two – Know the relevant legal standards:** Know the cases that illustrate the judicial review standards for ICI analyses.
a. Key case establishing legal standard for indirect impacts analyses: *Sierra Club v. Marsh* (1st Circuit, 1985): The Court reviewed a NEPA challenge to a proposed cargo port and causeway project on Sears Island in Maine. The agency prepared an EA that resulted in a FONSI. The Court found that the agencies failed to “consider adequately the fact that building a port and causeway may lead to the further industrial development of Sears Island, and that further development will significantly affect the environment.” The Court explained that the administrative record made it nearly impossible to doubt that building the causeway and port will lead to further development, particularly since local planners considered the port, causeway and industrial park to be components of an integrated economic development plan. Moreover, the Court found the economic development plans to be precise enough for an EIS usefully to take them into account. In reaching its conclusions, the Court set forth three factors agencies ought to consider in determining whether a particular set of impacts is definite enough to take into account or too speculative to warrant consideration:

i. With what confidence can one say that the impacts are likely to occur?

ii. Can one describe them “now” with sufficient specificity to make their consideration useful?

iii. If the decision maker does not take them into account “now,” will the decision maker be able to take account of them before the agency is so firmly committed to the project that further environmental knowledge, as a practice matter, will prove irrelevant to the government’s decision?

If the answers to 1 and 2 are “yes” and the answer to 3 is “no”, analyze the potential indirect effect. For sensitive or potentially controversial issues, document negative responses particularly well. Use FHWA’s Indirect Effects Analysis Checklist. See page 9 for link.

b. Key case establishing legal standard for cumulative impacts analyses: *Fritiosfson v. Alexander* (5th Circuit, 1985): This case involved an Army Corps of Engineers wetlands fill permit for a relatively small portion of a much larger wetland on a quickly developing West Galveston Island off the Gulf Coast of Texas. Taken alone, the small wetland fill would not have significant environmental impacts. The Court held, however, that the Corps failed to consider the cumulative impact on the estuary of all past fill activities and reasonably foreseeable future fill permits likely to come before the Corps for subsequent development projects, even though there were no such actual permit applications pending at the time. The Court stated that a cumulative impacts analysis must identify:

i. the area in which effects will be felt;

ii. the impacts expected in that area from the proposed project;
iii. other actions - past, proposed, and reasonably foreseeable - that have had or are expected to have impacts in the same area;

iv. impacts or expected impacts from these other actions; and

v. overall impact that can be expected if individual impacts are allowed to accumulate.

Use FHWA’s Cumulative Effects Analysis Checklist. See page 9 for link.

3. **Key Three – Know what is reasonably foreseeable**: The determination or estimation of future impacts is essential to both indirect and cumulative impact analysis. Know the reasonably foreseeable future actions and future impacts to consider. The legal standard is similar for both.

   a. Courts have defined “reasonably foreseeable” as an action that is sufficiently likely to occur, that a person of ordinary prudence would take it into account.

   b. Courts have also established that agencies need not speculate about all conceivable impacts. Possible-but-not-probable actions need not be included in the analysis.

   c. With regard to indirect impacts analyses, CEQ explained:

      [I]f there is total uncertainty about the identity of future land owners or the nature of future land uses, then of course, the agency is not required to engage in speculation or contemplation about their future plans. But, in the ordinary course of business, people do make judgments based upon reasonably foreseeable occurrences. It will often be possible to consider the likely purchasers and the development trends in that area or similar areas in recent years; or the likelihood that the land will be used for an energy project, shopping center, subdivision, farm or factory. The agency has the responsibility to make an informed judgment, and to estimate future impacts on that basis, especially if trends are ascertainable or potential purchasers have made themselves known. The agency cannot ignore these uncertain, but probable, effects of its decisions. “Forty Most Asked Questions Concerning CEQ's NEPA Regulations”, question 18. See page 9 for link.

   d. Agencies need not analyze the impacts to a natural resource of past, present, and reasonably foreseeable actions if the proposed action itself will not directly or indirectly impact that resource. The Court explained that “where numerous studies demonstrated that the Corps’ project to deepen the Columbia River navigation channel and to dredge new sites would have virtually no effect on salinity, Corps was not required to catalogue past projects’ effects on salinity, because that would not have informed assessments about the project and its

e. The purpose and need for a proposed project that includes a development or economic element will probably establish an indirect relationship to potential land use changes or other subsequent actions. If economic development is a “selling point” for the project, be sure to account for the environmental consequences of that development. Courts have ruled against agencies who have touted future economic development to promote a project but have not assessed the indirect impacts of these benefits.

f. Take advantage of formal planning processes, local zoning regulations, land use codes or regulations, and other land use controls. However, keep in mind that planning and land use controls may be susceptible to variance, amendment, or political influence, including that generated from the proposed transportation project.

g. Be consistent. Project proponents should know how reasonable foreseeability has been defined for different projects or impacts in the state. If it becomes a moving target, the Agencies will be called to task.

4. **Key Four – Have an appropriate scope:** Establish appropriate geographical boundaries and timeframes for ICI analyses and know what resources to consider in the analysis.

   a. **Geographical Scope:** Agencies have the discretion to determine the geographical area for the cumulative effects analysis but the decision must be “reasoned.” *Idaho Sporting Cong., Inc. v. Rittenhouse (9th Circuit, 2002).* Project impact zones will likely vary for different resources; therefore, the appropriate geographic scope should be determined on a resource-by-resource basis. The geographic boundary is basically a synthesis of many sub-boundaries into a single ICI analysis boundary. Resource-specific boundaries, areas of traffic influence, census tracts, and planning areas are a few of the sub-boundaries that should be considered in establishing the geographical scope of an ICI analysis.

   CEQ suggests possible geographic boundaries for analysis in its report “Considering Cumulative Effects Under the National Environmental Policy Act.” See page 9 for link.

   b. **Timeframes:** In determining appropriate timeframes, CEQ suggests that the timeframe for the project-specific direct and indirect impacts may also be an appropriate timeframe for a cumulative impact analysis. Keep in mind, however, that project-specific direct and indirect impacts may combine with the impacts of other projects beyond the timeframe of the proposed action and result in significant cumulative impacts. “Considering Cumulative Effects Under the National Environmental Policy Act.” See page 9 for link.
Be sure to include past actions when describing the cumulative impact of the proposed project. Analysis of past actions should be included to the extent it informs agency decision-making. CEQ noted that:

Agencies are not required to list or analyze the effects of individual past actions unless such information is necessary to describe the cumulative effect of all past actions combined. Agencies then look for present effects of past actions that are, in the judgment of the agency, relevant and useful because they have a significant cause-and-effect relationship with the direct and indirect effects of the proposal for agency action and its alternatives. “Guidance on the Consideration of Past Actions in Cumulative Effects Analysis.” See page 9 for link.

With regard to indirect effects, NCHRP 466 notes that most indirect effects studies set a time horizon equal to the design life of a project, which is usually 20 to 25 years. This is also the time horizon used in most MPO- and county-level planning forecasts. See page 9 for a link to NCHRP 466.

c. Resources to consider: Document each resource that could be subject to direct or indirect impacts. At a minimum, the cumulative impact analysis should consider: (i) resources significantly impacted by the project, (ii) resources significantly impacted by other unrelated projects even if the impacts of the transportation project are minor, (iii) “at risk” resources in poor or declining condition.

5. Key Five – Avoid common data problems: Learn from past mistakes and avoid data problems that have resulted in Court losses or other problems.

a. Don’t use old data - While Courts generally recognize that agencies are not obligated to restart the NEPA process every time new information becomes available (Audubon Naturalist v USDOT (Maryland, 2007)), Courts will rule against agencies if they find that the agency relied on outdated data when it set out to prepare the EIS even though more recent data from the agency’s own experts was readily available (Conservation Law Foundation v. FHWA (New Hampshire, 2007)).

b. Have a good baseline - an inventory of current environmental conditions. In most instances, the baseline is the no-build scenario.

i. Village of Bensenville v. FAA (D.C. Circuit, 2006). The Court rejected an argument that FAA used outdated operating procedures and failed to alter its baseline air traffic forecast to account for a recent order limiting flights when analyzing reductions in air traffic delays from proposed airport expansion plan. The Court explained, “[J]udgments regarding development of the baseline against which alternatives would be assessed are the sorts of “expert analytical judgments” to which Courts typically
defer.” Keep in mind that there must be adequate and appropriate record support or Courts will not give deference to agency determinations.

c. **Be careful when using one set of socio-economic projections for both build and no-build scenarios.** Documentation is critical!

i. *North Carolina Alliance for Transp. Reform, Inc. v. U.S. Dept. of Transp (North Carolina, 2001)*: This case involved the Western Section of the Winston-Salem Beltway, a new facility. Defendants justified the use of identical data in analyzing the feasibility of the Build and No-Build scenarios by arguing that the proposed construction would not spur new growth, it would simply accommodate already existing growth or growth that was bound to occur whether or not the Western Section was constructed. The Court rejected this argument and explained:

> Defendants have failed to produce evidence to support their claim that the area to be affected by the Western Section is already accounted for by either existing or committed land uses. The FEIS discusses population trends which indicate that areas in western Forsyth County are growing faster than those closer to central Winston-Salem, but Defendants fail to produce definitive evidence that construction of the Western Section would not spur or accelerate further development. In fact, the FEIS expressly states that the Western Section will attract residential and business development. Therefore, the Court finds that the use of the same statistical data to analyze both the Build and No-Build alternatives fails to provide a reasonable basis for comparison of these alternatives.

ii. *Sierra Club, Illinois Chapter v. United States Dep't of Transportation (Illinois, 1997)*: This case involved a challenge to a 12.5 mile new toll highway (“tollroad”) in Will County, Illinois. The agencies used one socio-economic forecast and applied it to both the no-build and build scenarios. The forecast assumed construction of the tollroad. The Court said:

> [T]he final impact statement in this case relies on the implausible assumption that the same level of transportation needs will exist whether or not the tollroad is constructed. In particular, the final impact statement contains a socioeconomic forecast that assumes the construction of a highway such as the tollroad and then applies that forecast to both the build and No-Build alternatives. The result is a forecast of future needs that only the proposed tollroad can satisfy. As a result, the final impact statement creates a self-fulfilling prophecy that makes a reasoned analysis of how different alternatives satisfy future needs impossible.
iii. *Laguna Greenbelt, Inc. v. United States Dep't of Transportation (9th Circuit, 1994):* The Ninth Circuit found that the defendants acted reasonably in using the same population data to analyze the feasibility of both the Build and No-Build alternatives. The *Laguna* Court's holding hinged on the fact that 98.5% of the land in the area to be affected by the project was “already accounted for by either existing or committed land uses not contingent on construction of the corridor.” In other words, the Court in *Laguna* found that development would occur regardless of whether the tollroad was ever built, and therefore the use of the same data in analyzing the Build and No-Build alternatives was reasonable.

6. **Key Six – Make a good faith effort to explain impacts:** Have an appropriate depth of analysis and comply with CEQ regulations where there is unavailable or incomplete information.

   a. **Depth of Analysis:** Have an appropriate depth of analysis and discussion. Do not rely on unsubstantiated conclusory statements.

   i. *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt (9th Circuit 2004):* “A proper consideration of the cumulative impacts of a project requires some quantified or detailed information; ... [g]eneral statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided.” This review “must be more than perfunctory; it must provide a useful analysis of the cumulative impacts of past, present, and future projects.”

   ii. *Friends of Congaree Swamp v. FHWA (South Carolina, 2008):* “While shorter and less detailed than an EIS, an EA cannot consist merely of conclusory statements. An EA will be deemed to be insufficient if it includes ‘virtually no references to any material in support of or in opposition to its conclusions.’ Conclusions drawn in an EA ‘must be supported by some quantified or detailed information, and the underlying environmental data relied upon to support the expert conclusions must be made available to the public’ to allow for informed public comment on the project.”

   iii. *Neighbors of Cuddy Mountain v. U.S. Forest Service (9th Circuit 1998):* “To ‘consider’ cumulative effects, some quantified or detailed information is required. General statements about ‘possible’ effects and ‘some risk’ do not constitute a ‘hard look’ absent a justification regarding why more definitive information could not be provided.”

   iv. *City of Carmel v. U.S. Dept. of Transportation (9th Circuit 1996):* An EIS must "catalogue adequately the relevant past projects in the area." It must also include a "useful analysis of the cumulative impacts of past, present,
and future projects." This means the EIS must analyze the combined effects of the actions in sufficient detail to be "useful to the decisionmaker in deciding whether, or how, to alter the program to lessen cumulative impacts."

b. **Unavailable or incomplete information**: Information that is relevant or necessary to make an informed decision concerning significant environmental impacts may in some instances be infeasible to collect or analyze due to prohibitive costs, unattainable due to scientific or methodological limitations, or otherwise unavailable or impractical to obtain. Agencies faced with incomplete or unavailable information concerning a reasonably foreseeable, significant environmental consequence must explicitly state that such information is lacking and comply with 40 CFR 1502.22.

i. **Threshold issue**: The agency must find that the incomplete or unavailable information is relevant to a “reasonably foreseeable” and “significant” impact before compliance with 40 CFR 1502.22 is required.

ii. Once the agency has determined the information to be relevant to a reasonably foreseeable and significant impact, two scenarios arise:

1. Scenario 1: Incomplete information is relevant AND costs of obtaining it are NOT exorbitant. Here, the information must be included in the NEPA document. 40 CFR 1502.22 (a).

2. Scenario 2: Incomplete information is relevant, but unknown or costs of obtaining it are exorbitant. Here, four factors must be addressed in the NEPA document:

   a. Information is incomplete or unavailable;
   b. Relevance of the information;
   c. Summary of existing credible scientific information;
   d. Evaluation of impacts based on theoretical approaches or research methods. 40 CFR 1502.22(b).

iii. Need to make good faith effort to address the four factors when there is incomplete or unavailable information.

iv. Be sure to document the analysis and effort. Courts will not give judicial deference if there is nothing in the record.

7. **Key Seven - Have record support**: Courts will review agency decisions on the basis of the administrative record that was before the decisionmaker at the time the decision was made. The record must show that the agency understood the legal standard for ICI analyses, the agency considered the proper information, evaluated all the relevant factors, and appropriately disclosed the information.
a. Document and track the rationale for all components of the ICI analyses, such as a decision concerning the scope, a decision concerning what is reasonably foreseeable and what is not, information concerning the data and assumptions used in the analysis and why it is appropriate. Leave a paper trail!

b. It is especially important to have record support for “negative” conclusions, such the determination that a future project or impact is not reasonably foreseeable or the determination that a proposed project will not contribute to future development or urbanization. See Highway J Citizens Group v. USDOT.

c. Conclusions without factual support are worthless.

d. Make sure that issues and conflicts concerning the ICI analysis are addressed and resolved in writing. If issues are discussed and resolved in meetings or conference calls, make sure there is substantive documentation of those discussions. The record must contain more than a simple declaration that an issue has been resolved. Courts do not like loose ends.

e. Correct documentation problems before issuing a decision document. Write a memo to the file, if necessary, to fully document the analysis.

f. If it is not in writing, it does not exist. If it is not in the record, it did not happen.

8. Key Eight - Engage your partners: During early coordination and scoping, consult resource agencies, experts at FHWA headquarters and Office of Technical Services (formerly the Resource Center), other participants in the NEPA process, and, of course, your counsel.

Helpful Links:

AASHTO Center for Environmental Excellence
http://environment.transportation.org/environmental_issues/indirect_effects/

CEQ, Considering Cumulative Effects Under the National Environmental Policy Act.
http://ceq.hss.doe.gov/NEPA/ccenepa/ccenepa.htm

CEQ, Guidance on the Consideration of Past Actions in Cumulative Effects Analysis
http://ceq.hss.doe.gov/nepa/regs/Guidance_on_CE.pdf

CEQ, NEPA's Forty Most Asked Questions

FHWA’s Cumulative Effects Analysis Checklist
http://nepa.fhwa.dot.gov/ReNepa/ReNepa.nsf/All+Documents/7412AEC9CA4872EF85257108006CB342/SFILE/C EA%20checklist%20FHWA.pdf
FHWA’s Indirect Effects Analysis Checklist
http://nepa fhwa dot gov/ReNepa/ReNepa nsf/All+Documents/7412AEC9CA4872EF85257108006CB342/$FILE/IEA%20checklist%20FHWA.pdf

FHWA’s Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process
http://environment fhwa dot gov/guidebook/qimpact.asp

NCHRP 466: Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects
http://nepa fhwa dot gov/ReNEPA/ReNepa nsf/All+Documents/A486D8045690EB9385256C0E005A6054/$FILE/nchrp_rpt_466.pdf

This handout reflects the views of the panelist and is not intended as agency guidance or to create any enforceable obligations against the agency. Due to space constraints, complex issues have been presented in a simplified format.