Streamlining Transportation Reviews: Path to Stewardship or Short-Circuiting Environmental Protections?

Presentation by Michael Replogle
To Transportation Research Board Mid-Year Meeting, September 2005, Santa Fe, NM

ENVIROMENTAL DEFENSE
finding the ways that work
Better Stewardship in Transportation
Project Reviews: 6 Principles

1. Facilitate early, effective, continuous involvement of stakeholders, resource agencies
2. Foster interagency coordination, resource sharing
3. Properly classify and scope project reviews
4. Consider array of alternatives: partial build, demand management, pricing, smart growth, mode choices, seeking to avoid and minimize adverse impacts
5. Effectively consider secondary, cumulative, indirect impacts, induced demand, health, equity
6. Better integrate transportation, natural and community resource planning
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3 Key Ways Transportation Plans and Project Reviews Go Wrong

- **Neglect alternatives that could reduce/avoid adverse impacts:** Overly narrow purpose and need statements, disjointed planning and project reviews, premature frame of “project inevitability”

- **Ignore indirect impacts** on land use, induced traffic, emissions, PM hot spots, health impacts, distribution of benefits and burdens among different groups, with deficient analysis tools, excessively segmented projects

- **Discourage stakeholder engagement:** too many fragmented, uncoordinated project reviews, spurning of stakeholder input, withholding data
What Progress on Streamlining and Environmental Stewardship?

- Extensive training and outreach to improve interagency understanding, process development
- Project reviews being done in shorter time
- Agencies developing Environmental Management Systems, better tools to appraise/manage impacts (but many models still far short of good/best practice – even after extended quite critical independent expert review)
- Inadequate resources still plague resource agencies
- Progress on DOT stewardship remains highly uneven
High Priority Expedited Project Reviews: Executive Order 13274

- September 2002 Executive Order sought “to enhance environmental stewardship and streamline the decision-making process in connection with major transportation projects”

- US DOT has selected 19 projects for priority list (15 now active, 4 graduated to transition list)
Does Streamlining Deliver Better Stewardship?

- 2004 Environmental Defense/NRDC report
- Evaluated first 13 projects selected for priority list
- Assigned projects red, yellow, or green light ratings based on adequacy of project review process in advancing stewardship
First Year of Experience Under Executive Order: Stewardship At Risk

Only one project received green light: project review achieves good stewardship (Montana US 93)

6 projects received yellow light
Certain aspects of these projects should be reconsidered

6 projects received red light
Project review not adhering to basic principles of good stewardship
Red Light for Circ Highway

- Proposed 16-mile Burlington, VT freeway
- 8/02: Original EA completed
- 9/02: EPA Region 1 calls for SEIS
- 10/02: Selected for EO Priority List
- 11/02: Stakeholders denied access to meetings to discuss revised EA
- 5/03: Revised EA issued, followed by ROD
- 5/04: Federal court rules project approval violated NEPA by not adequately analyzing environmental impacts or alternatives
Circ Highway: Getting Back On Track - Yellow light

- 2004: FHWA/Vtrans started new EIS and must:
  - Solicit and respond to public input
  - Consider alternatives to a new highway
  - Evaluate impacts, including sprawl

- 2005: Alternatives being screened include No-Build, TDM, improved transit and bike/ped facilities, improving existing roads, and building a new road
I-93 NH: Enough Mitigation, Consideration of Alternatives?

- 20-mile widening from 4 to 8 lanes
- 2002: DEIS issued
  - Inadequate public involvement and consideration of alternatives in DEIS
  - DEIS shows widening will attract 40,000 new residents & 100,000 acres of new development: conflict over adequacy of mitigation
- 2004: Project gets red light from Environmental Defense/NRDC

Enhancing Transportation Stewardship

DRAFT ENVIRONMENTAL IMPACT STATEMENT EXECUTIVE SUMMARY

Interstate 93 Improvements Salem to Manchester IM-IR-93-1(174)0, 10418-C

Salem to Manchester,
New Hampshire

Prepared for New Hampshire Department of Transportation and Federal Highway Administration

Prepared by VSAV; Vanasse Hangen Brustlin; Inc.
Redding, NH

September, 2002
I-93 Widening-New Hampshire

- 2005: FEIS shows little or no improvement
- ROD selects widening as Preferred Alternative
- According to Conservation Law Foundation:
  - Streamlining resulted in a project that overlooks important environmental and community concerns, including the need for a more balanced and sustainable transportation system that includes rail and transit-oriented development
Intercounty Connector: Failing to Consider Alternatives, Impacts

- Proposed 18-mile $2.4+b toll road in Maryland rejected twice by federal/state decision-makers in 1980s and 90s for its “unmitigatable” adverse impacts to parks and key headwater streams.
- Project review earned red light rating from Environmental Defense/NRDC, and continues to fail to address core stewardship concerns.
Critic Faulted Intercounty Connector DEIS for Many Problems

- Seriously flawed traffic model
- Underestimated water quality and stormwater impacts
- Land use impacts on traffic and air quality disregarded
- Air quality and public health impacts not evaluated
- Parklands, habitat, and 4(f) impacts
- Greenhouse gas emissions/oil use
- Environmental justice and equity
Intercounty Connector DEIS Flawed by Failure to Consider Alternatives

- Narrow purpose and need statement excludes consideration of reasonable alternatives that could avoid or minimize adverse impacts.
- Agencies disregarding stakeholder input about alternatives and enhancement of travel models that could foster broader support for review process.
Considering a Proper Range of Alternatives

- Independent review of ICC evaluated alternatives already being studied separately but omitted from DEIS
- Identified four cheaper, better performing alternatives that might avoid the ICC’s serious adverse environmental impacts
- Laws require project review to consider such options
Alternatives Evaluated for ICC Study

1. **No Build**: The baseline for all comparisons as in the state’s DEIS, it includes currently planned improvements.

2. **ICC Build**: This alternative would add the ICC to the region’s road network.

3. **Transit Oriented Land Use and Investment**: Build additional transit including the Purple Line and express bus with more jobs and housing near stations and improve the local job-housing balance.

4. **Add Toll Lanes & Express Bus**: Create toll lanes from new and some existing lanes. The fees would vary, based on congestion, but would be free to buses and van pools.

5. **High Occupancy Toll (HOT) Lanes**: Create toll lanes from some existing lanes, but high occupancy carpools of 3 or more would not be charged for use of the toll lanes.

6. **Hybrid**: Transit Oriented-HOT Lane-Rail and Express Bus: A hybrid scenario that combines expanded rail transit and transit oriented land-use (Alternative #3) and HOT lanes (Alternative #5).
## Rank Ordering of Alternatives

<table>
<thead>
<tr>
<th>SCENARIOS</th>
<th>Avg. Rank</th>
<th>Vehicle Hours Of Travel</th>
<th>Vehicle Hours Of Delay</th>
<th>Vehicle Miles Traveled (VMT) All Facilities</th>
<th>VMT Local Roads</th>
<th>VMT Major Arterials</th>
<th>Total Transit Trips</th>
<th>Work Trip Transit Share</th>
<th>Travel Speed</th>
<th>Air Quality</th>
<th>Total Cost</th>
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<tbody>
<tr>
<td>Hybrid: Transit Oriented Hot Lane Rail and Express Bus</td>
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<td>1</td>
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<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>Transit Oriented Land Use And Investment</td>
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<td>3</td>
<td>2</td>
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<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>5</td>
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<tr>
<td>Add Toll Lane-Express Bus</td>
<td>3.3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Convert HOT Lane-Express Bus</td>
<td>3.6</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>2</td>
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<tr>
<td>No Build</td>
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<td>ICC Build</td>
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<td>6</td>
<td>4</td>
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<td>6</td>
<td>6</td>
<td>4</td>
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</table>
ICC DEIS Failed to Consider Potential for Pollution Hotspots

% Change in Emissions Relative to the No Build Alternative

ICC Study Area

- Hybrid: Transit Oriented-HOT Lane–Rail and Express Bus
  - Hydrocarbons: -6.7%
  - Nitrogen Oxides: -6.7%
  - Carbon Monoxide: -6.3%

- Convert HOT Lane-Express Bus
  - Hydrocarbons: -8.0%
  - Nitrogen Oxides: -7.7%
  - Carbon Monoxide: -6.5%

- Add Toll Lane-Express Bus
  - Hydrocarbons: -0.6%
  - Nitrogen Oxides: -0.8%
  - Carbon Monoxide: -1.2%

- Transit Oriented Land Use and Investment
  - Hydrocarbons: -0.4%
  - Nitrogen Oxides: -0.8%
  - Carbon Monoxide: -2.4%

- ICC Build
  - Hydrocarbons: 9.3%
  - Nitrogen Oxides: 7.1%
  - Carbon Monoxide: 10.0%
## ICC DEIS Underestimated Impervious Cover Growth by Factor of 4 to 5

Forecast change in residential development: DEIS Expert Panel vs. independent University of Maryland/Woods Hole ICC water quality impact study

<table>
<thead>
<tr>
<th></th>
<th>Residential area (acres)</th>
<th>Growth 2000 to 2030 (acres)</th>
<th>Percent Growth</th>
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<tr>
<td>2000 Land Cover</td>
<td>136,979</td>
<td>-</td>
<td></td>
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<tr>
<td>2030 <strong>DEIS ELUP</strong></td>
<td>147,754</td>
<td>10,775</td>
<td>8%</td>
</tr>
<tr>
<td>2030 <strong>Smart Growth</strong></td>
<td>182,064</td>
<td>45,085</td>
<td>33%</td>
</tr>
<tr>
<td>2030 <strong>Current Trends</strong></td>
<td>198,426</td>
<td>61,447</td>
<td>45%</td>
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SAFETEA-LU: More Power for Highway Agencies, But With Limits

• Highway agencies can limit consideration in EISs of alternatives to building new roads to some degree.

• But resource agencies still must consider alternatives to avoid or minimize adverse harms to water quality, air quality, historic resources, and endangered species.

• Challenges to transportation project environmental approvals must be filed within 180 days of a ROD - compelling law suits to challenge projects often years before there is funding to build them.
SAFETEA-LU Clean Air Protections: Weakened But Still Intact

- Applicability of conformity to hotspots reaffirmed for public health protection
- 20 year conformity planning horizon intact, unless state and local officials decide to adopt 10 years
- Reduced frequency of accounting for air quality impacts of transportation plans will enable road funds to flow for years longer to projects that cause failure of air quality control plans
SAFETEA-LU: Section 4(f) Protections Weakened, Reaffirmed

- *de minimus* exemption for Section 4(f) protection for historic resources, parks, wildlife/waterfowl refuges, recreation areas
- Public notice and comment required whenever exemption is sought
- No exemption from Section 4(f)(2) requirement for all possible planning to minimize harm to protected non-historic resources
Delegation of Federal Role for Environmental Reviews

- Pilot program delegating federal role in environmental review to 5 designated states
- Options for delegation of CE, TE reviews
- Requirements for continued public involvement, judicial review, federal oversight
State and Local Leadership More Key Than Ever in Stewardship

- State/local agencies and private sector feel less federal pressure for environment, public health stewardship

- But public support for clean air, clean water, health protection undiminished

- Pricing and public-private partnerships could help open door to enforceable performance agreements regarding environment, health, accessibility, community and equity impacts
Building and Sustaining Real Stewardship

- **Green Highways**: designing investment packages that avoid and fully mitigate adverse impacts by managing corridor traffic growth, land use impacts, and remediation of impacts from current system.

- **Sustainable Transportation Systems**: cleaner vehicles, cleaner fuels, better options for walking, biking, public transport, ridesharing, communications, smart growth, smart travel pricing, affordable housing.

- **Integrated Planning for Smart Investment and System Operations**: linking housing, economic development, natural resource, public health, and transportation.