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Expedited Project Deadlines & NEPA Compliance

The Problematic Use of Categorical Exclusions

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Abstract

The National Environmental Policy Act (NEPA) of 1969 was intended to ensure that the federal government consider the environmental effects of its actions whenever such actions may significantly affect the quality of the human environment. However, the environmental protections provided by NEPA, as implemented by the Council on Environmental Quality during the past four decades, have been vastly eroded through the increased application of programmatic categorical exclusions. The American Recovery and Reinvestment Act of 2009 (ARRA) through its NEPA compliance reporting requirements has highlighted the overwhelming application of categorical exclusions (CE). This paper examines the use of CEs by agencies within the Department of Transportation, with a specific focus on the Federal Highway Administration. Ultimately, the findings highlight the erosion of robust environmental reviews, in favor of timelier project delivery, and insufficient FHWA monitoring of state actions.

Background

Genesis of NEPA

The nexus of environmental protection in the United States came in the late 1960s early 1970s when the writings of Rachel Carson and Aldo Leopold took the first steps towards bringing the issue of environmental health and the impacts of human behavior on the natural world, into the national consciousness. From this increased awareness, legislative action followed, the Clean Air Act Amendments of 1970 and the Clean Water Act (1972) emerged as two of the most widely recognized federal laws seeking to address environmental quality.

However, in 1969 Congress also passed the National Environmental Policy Act (NEPA) intended as a “basic national charter for the protection of the environment”.¹ The general purpose of NEPA is to assure a “safe, healthful, productive and aesthetically and culturally

¹ Nowlin, Michelle B. “NEPA and Environmental Justice.” *ALI-ABA Business Law Course Materials Journal*, 2007: 31-35.

pleasing” environment for all Americans.² To accomplish this goal the Act requires the federal government to document the environmental effects whenever it takes an action ‘significantly affecting the quality of the human environment’, with the intention of ensuring that the federal government consider the environmental impact of its actions. The language of NEPA was broad and sweeping in its intentions but has been criticized for the degree of interpretation this language allows and the resulting inconsistencies in enforcement.

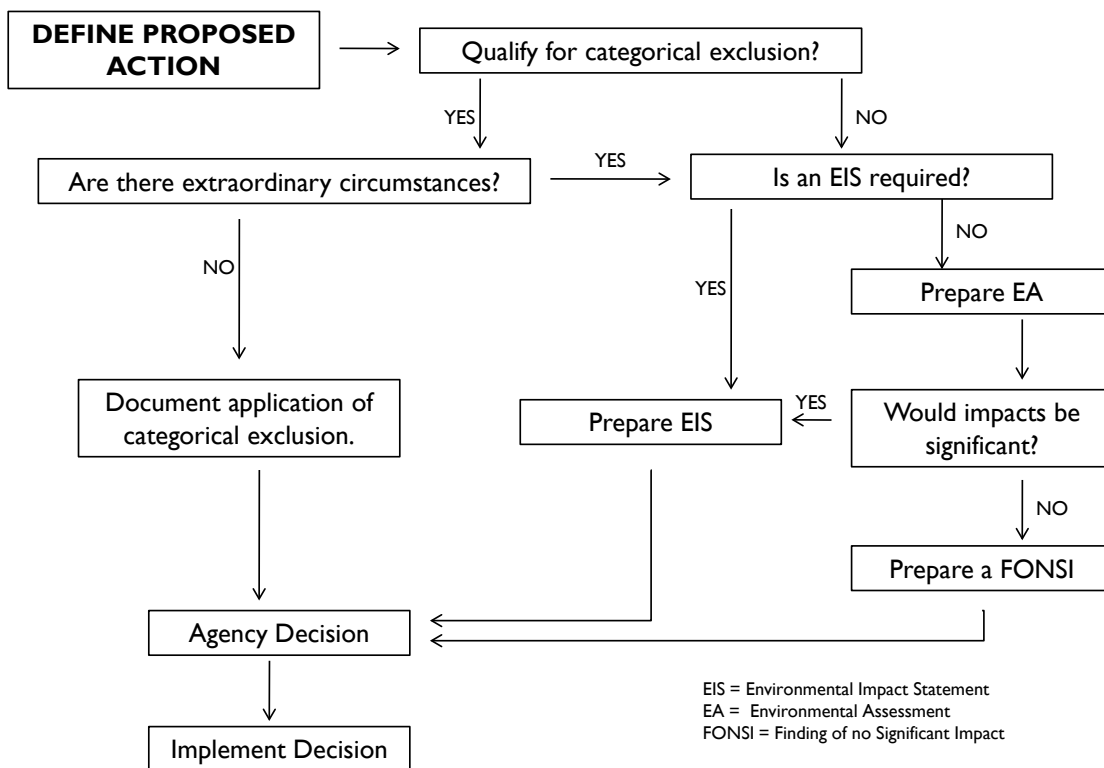
Senator Henry Jackson introduced Senate Bill No. 1075, what would become the National Environmental Policy Act of 1969, to the 91st Congress on February 18, 1969. The original drafting of the bill did not contain a broad statement on the need for a national environmental policy, nor did it include any forced action provisions for the implementation of such policy, it merely authorized ecological research by the Secretary of the Interior and established a Council on Environmental Quality within the executive branch of government.³ The principle amendment, added after extensive Senate committee hearings, sought the inclusion of three new elements: (1) a declaration of national environmental policy, (2) a statement that each citizen had a fundamental right to a healthful environment, and (3) the requirement that the responsible official report on the probable environmental impacts of any major federal action.⁴ While under debate in the house, the Senate bill was amended to include a requirement of a “detailed statement” and a discussion of “alternatives to proposed action”. The Senate and House agreed to the final draft of the legislation and passed it on December 20 and 23rd, respectively. President Richard Nixon signed the legislation into law on January 1, 1970.

² Holland, Maria C. “Judicial Review of Compliance with the National Environmental Policy Act: An Opportunity for the Rule of Reason.” *Boston College Environmental Affairs Law Review*, 1985.

³ Frank, Robert P. “Delegation of EIS Preparation: A Critique of NEPA’s Enforcement.” *Boston College Environmental Affairs Law Review*, 1985.

⁴ United States Code Congressional and Administrative News, 91st Congress, First Session at 2751 – 2733 (1969).

Figure I: Typical NEPA Decision Flowchart



NEPA Requirements

The National Environmental Policy Act establishes environmental policies that apply to the federal government, but it is perhaps best known for its imposition of environmental review procedures on federal agency actions. These review procedures encompass all federal actions, including those that have corresponding private actions. The emphasis of these reviews is on communicating with and informing the public. NEPA allows the Council on Environmental Quality (CEQ) to establish the protocols for ensuring compliance, as long as the procedures follow the framework and requirements established within the legislation.

The NEPA framework requires the use of “a systematic, interdisciplinary approach using natural and social sciences and environmental design in planning and decision making.”⁵ The most important of these practices are outlined in Section 102(C) of the statute, requiring a report by the responsible official on:

- i. the environmental impact of the proposed action,

- ii. any adverse environmental effects which cannot be avoided should the proposal be implemented,
- iii. alternatives to the proposed action,
- iv. the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and
- v. any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.⁶

This is the extent of the implementation guidance provided for within the legislation, everything else associated with NEPA compliance was set forth by the CEQ in rule making procedures published in the Federal Register (43 FR 55990). The Environmental review, as the CEQ had it structured, can take one of three forms: (1) a categorical exclusion (CE); (2) an environmental assessment (EA); or (3) an environmental impact statement (EIS). The form applied depends on the circumstances and likely degree of environmental

⁵ NEPA § 102(A); 42 USC § 4332(2)

⁶ NEPA § 102(C); 42 USC § 4332(2)

degradation. A flow chart showing the selection process used in determining the appropriate analysis form can be found in Figure 1.

A categorical exclusion is used for actions that have been determined not to have a significant effect on the human environment. Typically, these are used for minor actions that an agency undertakes regularly and are known to have no environmental impacts. This determination must be done before an action is completed and well documented. Often agencies will publish a list of actions that fall into this 'categorical exclusion', examples can include landscaping around federal buildings, the purchase of tools, and the construction of bike and pedestrian lanes along existing roadways.⁷

Environmental assessments are completed in order to determine whether or not an EIS is required or if a finding of no significant impact (FONSI) is appropriate. EAs are intended to be a rather concise version of an EIS addressing the need for the project, the environmental impacts and potential alternatives.⁸

An environmental impact statement (EIS) is the most robust form of analysis, required when the federal action may have a significant effect on the environment. These documents often receive the most scrutiny of any of the environmental assessments, and must consider all alternatives to the project, and the direct, indirect and cumulative impacts of the government action. Most successful EISs illustrate the process through which the agency made its decision.

Why is NEPA Relevant to ARRA?

Concerns have been raised regarding the environmental implications of projects funded by the American Recovery and Reinvestment Act of 2009 (ARRA). In order to expedite the projects and get Americans back to work as quickly as possible, many worried that NEPA requirements could be glazed over or sidestepped altogether.

⁷ Council Environmental Quality. Terminology and Index Section 1508.4. 2009. <http://ceq.hss.doe.gov/nepa/regs/ceq/1508.htm>

⁸ Council Environmental Quality. Terminology and Index Section 1508.9. 2009. <http://ceq.hss.doe.gov/nepa/regs/ceq/1508.htm>

The tight time line of ARRA provides a perfect circumstance for assessing the effectiveness of streamlining the NEPA process, and whether an adequate environmental review can be done under such time constraints. Those in the field of transportation planning may be able to learn something from the NEPA/ARRA experience that could be later applied to subsequent NEPA actions. ARRA may demonstrate that adequate environmental assessments can be done on a shorter time line, or it might highlight the environmental pitfalls of a rushed process to be avoided in the future.

Statement of Research Question

This paper will examine the NEPA compliance of projects receiving ARRA funding, and the measures taken to expedite the process. The hypothesis being that the use of a CE occurred with greater frequency in 2009 than in years prior. Analysis regarding the types of projects falling under a CE will attempt to balance the streamlining benefits of a CE against the environmental protection intentions of NEPA. An examination of several DOT agencies' CE process will attempt to determine if the necessary and proper oversight is being employed. Ultimately, this paper will address the environmental implications of pervasive CE use, and how NEPA could be improved upon to both modernize and expedite the process, without sacrificing its environmental protection intentions.

Pacifying the Environmentalists

ARRA & NEPA Exemption

ARRA was intended to inject federal stimulus funds into the economy as quickly as possible, to this end Congress considered exempting ARRA projects from NEPA requirements. The debate began when Senator John Barrasso (R-WY), backed by the U.S. Chamber of Commerce and at least 20 other business groups, pushed for an amendment that would have allowed stimulus funded projects to receive a NEPA waiver if the appropriate environmental review could not be

completed within 270 days.⁹ This proposal is not entirely surprising as Republicans have long argued that the NEPA process does more to stall projects (and hence the economy) than protect the environment.¹⁰ On January 5, 2009, California Governor Arnold Schwarzenegger wrote then President-Elect Obama asking him to “Waive or greatly streamline NEPA requirements [for transportation projects]”.¹¹

In contrast, Senator Barbara Boxer’s (D-CA) proposed amendment sought adequate resources within ARRA be devoted to ensuring that all applicable environmental reviews under NEPA be completed, albeit on an expeditious basis with preference given to the shortest existing applicable process.

Ultimately, Boxer was able to argue there were more than enough “shovel-ready” projects in the pipelines that would not be impeded by the NEPA process. Consequently the final bill did not contain a NEPA exemption. Instead, Section 1609(b) of ARRA applies the language proposed within Boxer’s amendment, requiring federal agencies to devote “adequate resources” to ensure that the administrative review of ARRA projects be “completed on an expeditious basis” using the “shortest existing [NEPA] applicable process.”

The requirement that environmental review be “expeditious” and use the “shortest” applicable process is a clear signal to federal agencies to favor the use of categorical exclusions and environmental assessments with findings of no significant impact, rather than full-blown environmental impact statements. Which ultimately erodes Boxer’s intentions of securing a full environmental review of all ARRA projects, although it is incrementally better than the alternative of NEPA exemption.

⁹ Lovley, E. (2009, February 5). Stimulus Changes May Roil Enviros. Retrieved April 3, 2010, from Politico: <http://www.politico.com/news/stories/0209/18451.html>

¹⁰ Inhofe (R-OK), Barrasso (R-WY). (October 2009). Letter to CEQ Chair Nancy Sutley. CEQ Guidance on NEPA Analyses. Washington D.C.

¹¹ Schwarzenegger, A. (2009). Letter to President-Elect Obama Regarding Federal Economic Stimulus Proposal. Sacramento, CA: Office of the Governor.

Reporting NEPA Status to Congress

To ensure that NEPA reviews did not unduly delay the dispersal of federal stimulus funds, and to provide greater governmental transparency, ARRA section 1609(c) required executive branch departments and agencies receiving ARRA funding to file a quarterly report on NEPA status and process to the CEQ. Included in the initial reports were the title/program, project/activity description, quantity and type of NEPA actions, status of action, number of completed actions, number of pending actions, date NEPA was completed, and whether all federal reviews were finished. These reports serve as the main data source for the analysis found within this paper.

A memorandum sent by Nancy H. Sutley on November 20, 2009, just after having released the third quarterly NEPA status reports to Congress, called for two additional items to be reported on:

(1) An explanatory note for projects and activities where the NEPA process was reported as “pending” for more than one reporting period, providing the reasons why the NEPA actions remained pending; and (2) An explanatory note providing examples of the benefits provided as a result of the NEPA action. Potential examples given were the use of funds to protect sensitive resources like a protected species or historic structures, or where changes were made in constructing facilities to increase their energy efficiency.¹²

As of February 1, 2010 reports from the Federal Highway Administration, Federal Transit Authority and Federal Rail Administration still lacked the inclusion of either of these two additional requirements, perhaps indicating that the preponderance of CEs left very few projects with a status of pending and very little “benefit” gained from the application of a CE to be reported.

¹² Sutley, N. H. (2009, November 20). Additional Reporting On NEPA Status and Progress for ARRA. Memorandum. Washington, DC: Executive Office of the President.

Figure 2: NEPA Reviews Completed After February 2009

| | | Number of CE | Number of EA | Number of EIS | Total Reviews Done Post 2/28/2009 | Number Pending |
|-------------|--------------|--------------|--------------|---------------|--------------------------------------|----------------|
| FHWA | Total: | 5477 | 164 | 39 | 5677 | 1807 |
| | Percentages: | 96.48% | 2.89% | 0.69% | | 31.83% |
| FTA | Total: | 4318 | 8 | 0 | 4326 | 0 |
| | Percentages: | 99.82% | 0.18% | 0.00% | | 0.00% |
| FRA | Total: | 569 | 0 | 0 | 569 | 0 |
| | Percentages: | 100.00% | 0.00% | 0.00% | | 0.00% |

Figure 3: All NEPA Reviews Completed Under ARRA as of February 2010

| | | Number of CE | Number of EA | Number of EIS |
|-------------|--------------|--------------|--------------|---------------|
| FHWA | Total: | 12,795 | 593 | 227 |
| | Percentages: | 93.98% | 4.36% | 1.67% |
| FTA | Total: | 4318 | 8 | 0 |
| | Percentages: | 99.82% | 0.18% | 0.00% |
| FRA | Total: | 606 | 1 | 0 |
| | Percentages: | 99.84% | 0.16% | 0.00% |

Analysis of the Data

Initial Evaluation

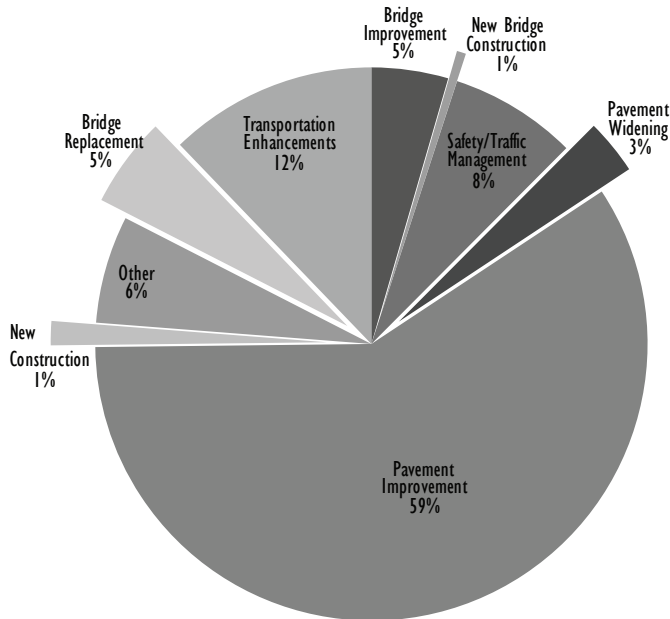
ARRA funded projects within the Department of Transportation are divided into activities by the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Federal Aviation Administration (FAA), Federal Railroad Administration (FRA), Maritime Administration (MARAD) and the Office of the Secretary of Transportation. The scope of this paper's research will be limited to projects within the FHWA, FTA and FRA due to time constraints.

Data was compiled from the February 1, 2010 NEPA status report submitted to Congress, sorted to evaluate only those projects that completed the NEPA process after ARRA passage in February 2009, as these were the projects subjected to the tightest time line. Figure 2 shows the counts and percentage of CE, EA and EIS completed after ARRA passed. Note the high percentages of CEs within all three agencies. The

FHWA had 96.48 percent of its projects reviewed post ARRA passage employing a CE; FTA and FRA had rates of 99.82 and 100 percent respectively. Ultimately this finding is not entirely surprising considering the directives from Congress stressed the use of the CE and the time necessary to complete a more involved EA or a full EIS review was just not plausible with ARRA's deadlines.

As a base of comparison all ARRA projects within these three agencies, regardless of when their review was completed, were evaluated for the NEPA process employed. See Figure 3. Of the 13,615 FHWA projects reported to Congress in the February NEPA report, 12,795 or 93.98 percent were CEs, the FTA and FRA had CE percentages of over 99 percent. State DOTs clearly followed the Congressional guidance that "the shortest existing applicable process under the National Environmental Policy Act shall be utilized", which again is not entirely surprising considering the ARRA deadlines, the DOT agencies were left with little choice.

Figure 4: FHWA ARRA Project Breakdown by Type



Kinds of Projects Receiving ARRA Funds

In order to assess whether this higher rate of CEs usage affected the quality of the environmental review it became imperative to know the kinds of transportation projects receiving ARRA funds. Given the volume of projects completed under ARRA this analysis only considered FHWA projects.

According to the April 2, 2010 obligation report published by the FHWA, 12,388 projects received ARRA money, totaling 26.49 billion dollars. Pavement improvement projects comprised the majority of the projects, 59.1 percent. Pavement improvements are projects involving resurfacing, reconstruction, curb repair, seal coating, crack sealing, manhole risers, traffic control measures and the like. The second most frequent type of projects were transportation enhancements, with 12.2 percent. The list of twelve activities that qualify as transportation enhancements all have a relationship to surface transportation. They are—the provision of facilities for pedestrians and bicycles, safety and education activities for said pedestrians or cyclists, acquisition of scenic easements or historic sites, landscaping, historic preservation, rehabilitation and operation of

historic transportation buildings or facilities, preservation of abandoned railway corridors, inventory of outdoor advertising (including control and removal measures), archaeological planning and research, environmental mitigation, and the establishment of transportation museums.¹³ The FHWA specifically states that this list is to be considered “exclusive, not illustrative”; if the project does not directly pertain to any of these activities then it does not qualify for TE funds. Other major project categories were bridge improvements, new bridge construction, and safety and traffic management. For the full project type breakdown, see Figure 4.

Implications of Higher CE Rate

Agency CE Process

While major projects involving new construction typically undergo the more robust environmental impact statement and hence get the most attention, both at the administrative and public level, close to 90 percent of all transportation projects in most states are considered “routine” projects, completed frequently by an agency and viewed as having “few, if any, environmental impacts”.¹⁴ Consequently, most agencies develop a list of projects that are pre-approved for the use of a CE. The FHWA outlines these CE projects within Title 23 of the Code of Federal Regulations under section 771.117(C), including planning and research activities, landscaping, acquisition of scenic easements, ridesharing activities and installation of noise barriers among the list. For a complete listing, see Figure 5. It is interesting to note that this listing of pre-approved CE projects does not include the typical FHWA project completed with ARRA funds. Pavement improvements, pavement widening, transportation enhancements, bridge improvement or replacement do not appear on this listing.

Historically, eligibility for CE status on routine projects not appearing on the pre-approved list

¹³ 23 U.S.C. 101(a)(35)

¹⁴ TransTech Management, Inc. & Atkin, Gump, Strauss, Hauer and Feld, LLP. (2002). Delegation of Federal Environmental Responsibilities for Highway Projects. Washington, DC: American Association of State Highway and Transportation Officials Standing Committee on Highways.

Figure 5: FHWA Pre-approved CEs

| | |
|----|---|
| 1 | Planning and research activities |
| 2 | Utility installations along or across a transportation facility |
| 3 | Construction of bicycle and pedestrian lanes, paths, and facilities |
| 4 | Activities included in the State's <i>highway safety plan</i> under 23 USC 402 |
| 5 | Transfer of Federal lands pursuant to 23 USC 107(d) |
| 6 | Installation of noise barriers |
| 7 | Landscaping |
| 8 | Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices |
| 9 | Emergency repairs under 23 USC 125 |
| 10 | Acquisition of scenic easements |
| 11 | Determination of payback for property previously acquired with federal aid |
| 12 | Improvements to existing rest areas and weigh stations |
| 13 | Ridesharing activities |
| 14 | Bus and rail car rehabilitation |
| 15 | Alterations to facilities or vehicles in order to make them ADA compliant |
| 16 | Program administration, technical assistance and operating assistance to transit authorities to continue existing service or increase service to meet routine changes in demand |
| 17 | Purchase of vehicles where the use of these vehicles can be accommodated by existing facilities or by new facilities which are within a CE |
| 18 | Track and railbed maintenance and improvements within the existing right-of-way |
| 19 | Purchase and installation of operating or maintenance equipment to be located within the transit facility with no significant impacts off site |
| 20 | Promulgation of rules, regulations, and directives |
| 21 | Deployment of electronics, photonics, communications or information processing used to improve the efficiency or safety of a surface transportation system or to enhance security or passenger convenience. |

was determined on a project-by-project basis, with state transportation agencies providing FHWA with sufficient documentation showing that the environmental impacts of the project would not rise above the CE threshold (i.e. have no significant impact on the human environment). Projects typically subjected to review on this individualized basis are listed within Title 23 of the Code of Federal Regulations under section 771.117(d), see Figure 6. While this kind of review can be conducted by the FHWA rather quickly, it can still add a time delay to the project.

Beginning in 1989, and increasing in frequency since 1992, for projects listed in section 23 CFR 771.117(d), and other projects deemed “routine”, responsibility for federal environmental compliance has been largely delegated to state agencies through the use of a third option, a programmatic CE. These agreements are seen as key to streamlining the environmental process. To this end, DOT agencies have allowed states to develop programmatic CEs, eliminating individual federal review of such routine projects. Instead, states create a standardized documentation process for each project type. These standardized

Figure 6: FHWA CEs Subject to Administrative Approval

| | |
|----|---|
| 1 | Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders or adding auxiliary lanes (e.g. parking, weaving, turning, climbing) |
| 2 | Highway safety and traffic operations improvement projects |
| 3 | Bridge rehabilitation, reconstruction or replacement or the construction of grade separation to replace existing at-grade railroad crossings |
| 4 | Transportation corridor fringe parking facilities |
| 5 | Construction of new truck weigh stations or rest areas |
| 6 | Approvals for disposal of excess right-of-way |
| 7 | Approvals for changes in access control |
| 8 | Construction of new bus or rail storage and maintenance facilities in areas used predominantly for industry and transportation purposes, located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic |
| 9 | Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users. |
| 10 | Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic. |
| 11 | Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and where there is no significant noise impact on the surrounding community. |
| 12 | Acquisition of land for hardship or protective purposes; advance land acquisition loans under section 3(b) of the UMT Act. |

documents are then reported to the FHWA, who can conduct audits at will to ensure the projects are in compliance with the agreed upon programmatic CE listing. However, the day-to-day responsibility of ensuring environmental compliance is in the hands of the states. States with programmatic agreements in place estimate that anywhere between 55 and 95 percent of CEs can be reviewed through this expedited process, with time savings claimed to be anywhere from a few weeks to a few months per project.

Controversial Projects Utilizing CEs

Reviewing the listings of CE eligible projects, especially those for the FHWA, it becomes apparent that the majority of the ARRA project types, do not fall within the Section 771.117(C) listing of pre-approved CEs, but rather the Section 771.117(D) listing of CEs requiring administration approval. Projects like pavement resurfacing, lane additions, bridge rehabilitation or replacement, construction of parking facilities in the transportation corridor fringe, and construction of new truck weight stations or rest areas were all historically subject to administrative approval,



From this...



To this...

Project Spotlight South Punalu'u Bridge Replacement

The \$15.3 million dollar project, funded entirely through ARRA, replaced the existing 83-year-old bridge in with wider lanes for vehicular traffic and an added pedestrian walkway.

Phase I of the project involved the creation of a temporary diversion route on the Makai side of the existing bridge for detoured traffic during the bridge replacement.

Phase II involved the construction of a new concrete bridge that included wider 8 foot shoulders and a separated pedestrian path. Upon completion traffic would be diverted back to the new bridge and the temporary diversion route removed.

Both phases of this project were conducted under categorical exclusions according to reports filed with the CEQ by FHWA.

but with the increased use of programmatic CEs, individual project oversight no longer occurs at the federal level despite the use of federal funding.

In a memorandum released by FHWA dated March 30, 1989 from the Director of the Office of Environmental Policy the listing of qualifying CEs under Section 771.117(D) were subject to several conditions which if not satisfied additional environmental documentation would be required.¹⁵ Such conditions included no significant impacts on planned growth or land use for the area, do not involve significant air, noise or water quality impacts or involve any work in wetlands.

Based on these conditions if there were one type of project that would seem to warrant an EA at the very least, if not a full EIS, it would be

ARRA projects within the 'New Construction' classification. Yet as of April 2, 2010 FHWA reported 84 of the 175 'New Construction' projects (48%) were listed as CEs. Add to this the number of 'New Construction' projects lacking a NEPA status report, some 14 projects, and we have 56% with suspect environmental reviews.

'Pavement Widening' projects are also of suspect class considering not only their consumption of land, but also increased impervious surfaces and runoff. Of the 400 'Pavement Widening' projects, 63 percent were CEs. Add to this the 7 percent of widening projects without a recorded NEPA review and we have 70 percent of our Pavement Widening projects as environmentally suspect. Additionally, the largest category of projects, 'Pavement Improvements', included some 232 project descriptions that included the words 'roadway widening'.

¹⁵ Federal Highway Administration. (1989, March 30). NEPA and Project Development. Retrieved April 29, 2010, from NEPA Documentation: <http://www.environment.fhwa.dot.gov/projdev/docuceda.asp>

Other classes of suspicious CE usage are ‘New Bridge’ construction and ‘Bridge Replacement’, especially when the project area is over wetlands, one of the most environmentally sensitive land classifications. Of the 588 ARRA funded ‘Bridge Replacement’ projects, 90 percent were given a CE. Perhaps even more environmentally suspect is the 23 percent of ‘New Bridge’ projects receiving a CE. Just as with ‘New Construction’ and ‘Pavement Widening’, bridge projects also have missing data, some 80 projects (12 percent) had no reported NEPA status.

In Alabama alone there were fourteen instances of bridge replacement, construction or rehabilitation either directly over or within close proximity to river and creek beds, obvious instances of projects occurring within wetlands areas that are being completed under a CE, or without a NEPA status report, a clear violation of one of the conditions stipulated within the FHWA memorandum.

Environmental Impacts of Transportation Projects

The main environmental aspects associated with transportation projects and the lasting infrastructures they create are generally grouped into seven effects:

1. Animal mortality from road construction,
2. Animal mortality from collision with vehicles,
3. Modification of animal behavior and movement patterns,
4. Alteration of the physical environment (e.g. soil erosion, deforestation, etc.),
5. Alteration of the chemical environment (e.g. air pollution, roadway runoff, etc.)
6. Spread of exotics , and
7. Increased development of land due to increase human mobility leading to habitat fragmentation.¹⁶

¹⁶ Doyle, M.W. (2009). Infrastructure and the Environment. Annual Review Environmental Resources , 349-373.

While roadways only directly cover a small percentage of the total landscape, about 1 percent, the corridor of potential environmental impact is much greater, estimates range from 15 to 20 percent of the entire U.S. land area.¹⁷ Increased road infrastructure equates to increased impervious surfaces, the runoff from which can cause local hydrologic effects—nearby water sources receive increased water flow and sediment impacts from increased erosion. The runoff from roadways is often chemically contaminated with anything from petroleum, sodium and calcium, to rubber particulates, which pose a real threat to the discharge area’s water quality.

To promote projects involving the widening of a roadway, the reconstruction/replacement of a bridge, parking facilities or the reconstruction of roadways, as potential CEs with no significant environmental impact, is an assault on the environmental protection intentions of NEPA. A more detailed investigation into the ARRA projects that filed a CE, when perhaps a more intensive environmental review was warranted, is needed in order to determine if ARRA really complied with the NEPA. If findings indicate that ARRA did not comply with NEPA than it may be an indication that FHWA has not been diligent in ensuring NEPA compliance for hundreds of thousands of highway projects occurring in recent decades.

While not all of these suspicious cases of CE use definitely have significant environmental impacts, it seems likely that at least some of them are having impacts not being considered during project development and execution. If the ultimate goal of NEPA is to produce a better informed, higher quality agency decision, then it would seem that the expansive use of CEs, especially the proliferation of programmatic CEs within the DOT, are leading to an increasingly less nuanced environmental analysis by the FHWA.

¹⁷ Forman, R.T. (1998). Roads and Their Major Ecological Effects. Annual Review Ecological Systems , 207-231.

How Has ARRA Informed NEPA?

The Problem with Programmatic CEs

During the course of the research, it became apparent that any attempt to assess the rate at which CEs were applied to ARRA projects, a baseline of CE use in a typical year would need to be established. However repeated attempts to secure such historical data, especially the Section 771.117(D) CEs utilized, proved fruitless from the CEQ, FHWA, and DOT.

With relative little objection it can be said that the project typologies listed in Section 771.117(C) have minimal to no environmental impact and can employ the CE without compromising the integrity of NEPA. The projects under Section 771.117(D) seem the most problematic. They are suppose to be employed only when approved by the administration, but with increased delegation to state authorities, this no longer occurs on a project by project basis at the federal level, it is left to state's discretion. The FHWA has the power to audit a project that has employed a CE under Section 771.117(D) for its suitability, but no records could be found of them ever having done so.

The purpose of NEPA was to establish a federal environmental policy—for the federal government to consider the environmental effects of its actions. By delegating nearly all oversight on the environmental effects of the majority of federally funded projects to individual states, and then not adequately monitoring state's compliance, the DOT has eroded the intentions of NEPA and potentially compromised the integrity of the environment for the ease of a less involved, timelier process.

Recommendations to Improve the NEPA Process

While it is a little beyond the scope of this paper to make definitive statements on how to improve upon NEPA or to argue for its replacement, during the course of the research certain aspects regarding the notion of effective environmental review became apparent.

The major concern regarding the NEPA review process seems to be with the subsequent delay of project delivery due to environmental review. To this end, policies attempting to streamline the process have encouraged the expanded application of CEs, which draws into question the quality of the review. Rather than employing a policy of review avoidance, which CEs most certainly are, in situations where a previous EIS has been completed, the environmental review of subsequent periodic maintenance or expansion, should build off the existing EIS, much like an amendment process. This way the environmental review is not starting from scratch, so it has the potential to be a much quicker process while still acknowledging the environmental impacts that existed with the original project.

As it stands NEPA does not dictate that the agency decision be based on what is “best” for the environment, just that it consider all the impacts and alternatives in its decision-making process. Therefore, there are instances where a less than environmentally desirable project is implemented and the true effects are rarely documented. If mandatory monitoring on the environmental outcomes of projects were required, not only could mitigation be implemented if warranted, but the outcomes of one project could more accurately inform future projects of a similar nature. Thereby creating a more accurate baseline for determining what truly constitutes a CE in terms of environmental impacts, rather than just assuming the frequency with which an agency undertakes that action serves as an indication of its CE suitability.

A sweeping rewrite of NEPA or the drafting of entirely new environmental review legislation will no doubt be a lengthy process. In the meantime, it is imperative for the DOT to ensure that its agencies are adequately reviewing the states usage of programmatic CEs. As every state writes their own programmatic agreement with the agency and creates their own ‘standardized documentation’ recording their use, the potential for uneven or inadequate environmental review is high. At the very least agencies need to be utilizing their power to audit state programs on a regular basis.

Conclusion

In its nearly forty year history NEPA and the procedural requirements governing environmental review procedures have evolved subject to the interpretations of various administrations, CEQ leadership and the federal court system. Established during the early days of the environmental movement, NEPA represented the first attempt at a broad and ambitious federal environmental policy initiative. But somewhere along the way the robustness of the environmental review has dwindled. While ‘categorical exclusion’ does not appear within the language of NEPA, it has become the largest category of review. Employing a CE to say that the widening of a 4-lane highway to six lanes, or the widening of an existing bridge has no significant environmental impact is illogical and incongruent with the intentions of NEPA.

ARRA has drawn attention to the problematic time delays associated with the current NEPA process and the subsequent reliance on a review process that only serves to minimize the environmental analysis rather than being informed by it.

NEPA was a good first step but after four decades, it is time for the federal government to take the next step. Rather than perpetuating a reactive process bogged down in lawsuit concerns and review loopholes, the time has come for a more proactive solution, where the federal actions undertaken inform each other and environmental assessments build off one another and continued monitoring becomes just as important as the initial review.

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