

**BEFORE THE TENNESSEE DEPARTMENT OF TRANSPORTATION AND  
UNITED STATES DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY  
ADMINISTRATION, TENNESSEE DIVISION**

re:    **FHWA-TN-EIS-01-02-D, DRAFT ENVIRONMENTAL            )**  
      **IMPACT STATEMENT, PROPOSED ROUTE 475                )**  
      **KNOXVILLE BELTWAY                                        )**

**COMMENTS OF CITIZENS AGAINST THE BELTWAY (CABOL)**

**I.     INTRODUCTION**

These comments on the Draft Environmental Impact Statement (DEIS) for the proposed Knoxville Beltway are submitted on behalf of Citizens Against the Beltway (CABOL), an organization of residents of Knox County who would be directly impacted by the construction of the so-called Orange and Green routes. CABOL opposes any of the alternate routes discussed in the DEIS, but believes that if the No-Action and No-Build options are rejected, the Orange and Green routes represent the least effective means of satisfying the purposes of the project with the greatest environmental impacts.

The DEIS for the Knoxville Beltway is shamefully inadequate for the largest public infrastructure project in East Tennessee in decades. It is also unconscionable that TDOT and FHWA have attempted to fast-track this project and DEIS without any real justification and with little time for public evaluation and comment. While the DEIS builds a superficial case for a Beltway, it hides the fact that little or no real studies have been performed to justify such a large public expenditure that will shape the future of the Knoxville area forever.

Under federal law, an EIS is intended to serve two essential purposes. First, the preparation of an EIS allows federal agencies to thoroughly investigate, evaluate and disclose potential environmental impacts associated with any major federal action in sufficient detail to assist in determining whether and how to proceed with a proposed action. Second, the EIS provides the vehicle for full and accurate disclosure to the public of the likely environmental impacts of a proposed action, thereby encouraging informed public participation in the decision making process. See, e.g., Baltimore Gas & Electric Company v. NRDC, 462 U.S. 87 (1983). We do not believe that the Knoxville Beltway DEIS is adequate to meet either of these fundamental objectives of NEPA.

These comments are supplemental to those that have been submitted on behalf of CABOL to date and to those submitted by individual members of CABOL. Due to the short time in which to comment on such a large and complex project and the lack of availability of background documents upon which the DEIS relied, these comments are not the complete comments of CABOL on the DEIS. Additional comments will be submitted as soon as TDOT furnishes additional background documents that have been requested pursuant to the Tennessee Public Records Act.

For the reasons set out in these comments, CABOL strongly urges the Tennessee Department of Transportation and the Federal Highway Administration to go back to the drawing board on this project and on the DEIS. The Tennessee Department of Transportation should rethink the whole project and, if it decides to proceed, prepare a supplemental draft EIS and submit it to public review and comment before proceeding with the final EIS for this project.

## **II. THE PURPOSE AND NEED FOR A BELTWAY WERE NOT DEMONSTRATED OR PROPERLY DEFINED.**

NEPA regulations for EIS at 40 C.F.R. § 1502.13 provide that “the statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including their proposed action” [emphasis added]. While the underlying purpose may have been stated as “improving the regional transportation network,” the obvious purpose around which everything in the DEIS is centered is to build a Beltway. The DEIS is deficient in not providing any support for many of its statements used to justify the purpose and need, in using numbers and calculation results without revealing their sources and methodologies, and in jumping to conclusions even if the numbers do not support the conclusion.

CABOL has retained a highly-qualified transportation planning firm to review the DEIS and to provide preliminary comments. The comments of Ian M. Lockwood, P.E. of the Glattig, Jackson firm are attached to this document.. These comments particularly question the analysis that went into the purpose and need for a beltway and the lack of any evaluation of the well-recognized phenomenon of induced traffic. CABOL intends to submit additional information from Glattig, Jackson once TDOT makes documents available that were relied upon in the preparation of the DEIS and in the justification for the project.

In addition, CABOL would point out that the whole purpose and needs turns on unreferenced “information provided by the Knoxville Area Chamber of Commerce” that is not the type of analysis that anyone would use to support a \$400 million dollar expenditure that will reshape the Knoxville region forever. CABOL attempted to obtain such background studies from TDOT through Tennessee Public Records Act, but none were made available. CABOL was able to obtain the “information” referred to in the DEIS from the Knoxville Area Chamber Partnership, however, which was a advocacy piece entitled, “Case for a Knoxville Area Beltway.” It is incredible that TDOT would rely on this document without its own independent and scientifically-based analysis of the need for such a significant project.

The DEIS jumps to strongly worded conclusions even if the numbers do not support the conclusion. For instance, the need to reduce crashes is emphasized although the no-build current accident rates are below the statewide averages. When the numbers don’t support the conclusions, the DEIS just states the conclusions as if they are compelling. Although the projected reduction of traffic on I-40/75 are as little as 15%, this is used as a major justification (p. 1-9). Although the accident rates projected for no-build alternatives are currently below state averages, reducing these rates is used a major justification (p. 1-18).

The use of a projected 15% or less reduction in traffic on I-40/75 to justify the project is particularly troubling. But even these numbers appear inflated when the manner in which they were derived is analyzed. It appears that the maximum volume of I-75 bypass traffic estimated to travel the Orange and Green alternates in 2005 and 2025 (Table S-1) are overstated because they are taken from segments on existing alignment that include east bound I-40 traffic. A more equitable measure of bypass traffic is the average daily traffic (ADT) nearest the point of ending (POE) of each alternate. Utilizing the estimated ADT for each alternate (Blue, Orange, Green and No Build) along the Papermill Rd to I-640 segment of I-40/I-75 as a basis of comparison (significance of this location is noted in Section 2.2) the estimated reduction in traffic of all three build alternatives is only 5-9%.

Looking at the Level of Service designations is also revealing. For 2005, none of the three proposed build alternatives have any significant affect on estimated level of service (LOS) along I-40/I-75. West of Cedar Bluff Rd 2005 LOS ranges from D to E, east of Cedar Bluff Rd the LOF for all alternates is F. In 2025 with or without a Beltway the capacity of this entire stretch of interstate is exceeded (LOS-F).

The assessment of “Level of Service” appears to be subjective and inconsistent. Specifically, in Figure 1-2 (“No-Build Alternative) the projected 2025 ADT along the section of Highway 162 (Pellissippi Parkway) from the Clinch River to Lovell Road is 59,900 and the LOS assigned is “D.” In comparison, the section if I-75 between the Clinch River and Highway 61 has a 2025 ADT of 53,250 and an “E” LOS rating. Similarly, Highway 162 between Lovell Road and I-40/75 has a 2025 ADT of 72,900 and a “D” LOS, while I-75 between Highway 131 and Callahan Road has a 2025 ADT of 68,400 and an “F” LOS rating.

The description of the basis for determining LOS ratings appears on page 1-9, and states only that “The LOS takes into consideration three variables: travel speed, traffic density, and vehicle flow rate.” (As an aside, it seems that vehicle flow rate is determined by travel speed and traffic density.) Without a more detailed description of the basis for LOS ratings, it is impossible to determine if inconsistencies between ratings at various road segments reflect differences in access conditions and speed limits.

On page 2-2 the EIS states that “Travel on non-access controlled highways is less efficient and less safe than travel on access-controlled highways. The more efficient travel afforded by the proposed Route 475 would help attain regional transportation goals by decreasing travel time, vehicle operating costs, and accident rates.” In explaining why reduced speeds should not be used for noise abatement (page 4-31), the EIS states “Lowering the speed limit would reduce the level of service provided by Route 475...” Taken together these two statements imply that, at equal or comparable ADT figures, the level of service on an access-controlled highway at interstate speeds should be better than the level on a limited-access or uncontrolled-access highway. Therefore, LOS values should favor interstate highway segments, not Highway 162 which operates at lower speeds and has sections of both limited access (through Hardin Valley) and uncontrolled access (through Solway).

This becomes particularly troublesome when the effect of the Orange Alternative on Pellissippi Parkway is considered. On Figure 1-4, the ADT for Pellissippi Parkway between I-

475 and Lovell road increases to 73,200 (a 22% increase over the no-build alternative) and the LOS is “E.” The ADT for Pellissippi Parkway from Lovell Road to I-40/75 increases to 78,600 (about 8%), and the LOS rating is “F.” Considering the nature of access on the parkway and the traffic rates due to commuting between Knoxville and Oak Ridge, it appears that the Orange Alternative causes near-gridlock. This is not mentioned in the EIS, nor is the potential increase in traffic accidents or fatalities factored into the numbers presented. The EIS also fails to state how the increase in traffic will adversely impact economic development along the Technology Corridor.

A more detailed basis for travel time comparisons (Tables 1-3 and 1-4) is needed. Table 1-4 indicates a year 2025 travel time from the I-40/75 junction to I-640 of 40 minutes. Table 1-3 shows an end-to-end travel time of 173 minutes in 2025. The difference indicates an estimated travel time between I-640 and I-75 north of Knoxville of 133 minutes. Since all data presented in the EIS indicates that the primary area of congestion extends from I-640 to the western I-40/75 junction, it is difficult to believe that a delay of over 2 hours will exist along I-275 and I-75.

There are many unsupported statements used to justify the purpose and need. For instance, the DEIS concludes that additional lanes cannot be constructed on I-40/75 justifying the need for a bypass (p. 1-7). The DEIS also claims without support that construction of the bypass would reduce daily vehicle miles traveled (VMT) (p. 1-8). The conclusion that overall economic development would result from the construction of a bypass is also without support. Bypasses tend to push development to the interchanges but devalue lands located elsewhere. There was also no basis for the underlying assumption that there are no other ways to promote economic development in the area. An expenditure of \$400 million to improve housing opportunities near places of employment and to promote infill development of the City could have more of an impact on reducing traffic congestion in the Knoxville area and in promoting sustainable economic development than building a bypass.

### **III. THE DEIS DID NOT CONSIDER IMPACTS OF INDUCED GROWTH.**

NEPA regulations at 40 C.F.R. § 1508.8 require that agencies consider indirect effects of proposed projects, such as “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.” Federal courts have required that these impacts must be considered. See, e.g., City of Davis v. Coleman, 521 F.2d 661 (9<sup>th</sup> Cir. 1975); Mullin v. Skinner, 756 F.Supp. 904 (E.D.N.C. 1990); Sierra Club, Illinois Chapter v. U.S.DOT, 962 F.Supp. 1037 (N.D.Ill. 1997). The comments of Mr. Ian Lockwood, P.E., attached, discuss the failure to address induced growth in the DEIS.

### **IV. ALTERNATIVES TO A BELTWAY WERE EVALUATED ONLY SUPERFICIALLY.**

NEPA regulations at 40 C.F.R. § 1502.14 dictate that the EIS “rigorously explore and objectively evaluate all reasonable alternatives” to the proposed project, including “reasonable

alternatives not within the jurisdiction of the lead agency,” presenting “the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public.” FHWA’s regulations at 23 C.F.R. §771.123(c) state “[t]he draft EIS shall evaluate all reasonable alternatives to the action and discuss the reasons why other alternatives, which may have been considered, were eliminated from detailed study.”

It is well-established that the analysis of alternatives to the proposed project is the very heart of the NEPA process. The alternatives analysis has been called “the linchpin of the entire (environmental) impact statement,” NRDC v. Callaway, 524 F.2d 79, 92-93 (2d Cir. 1975), citing Monroe County Conservation Society v. Volpe, 472 F.2d 693 (2d Cir. 1972). The lead agency must consider reasonable alternatives even if they achieve only partially the objectives of a proposed action. See, e.g., North Buckhead Civic Ass'n v. Skinner, 903 F.2d 1533 (11th Cir. 1990) (“discussion of alternatives that would only partly meet the goals of the highway project may allow the decision-maker to conclude that meeting part of the goal with less environmental impact may be worth the trade-off with a preferred alternative that has a greater environmental impact”).

The evaluation of no-build alternatives in the DEIS is woefully inadequate under these standards. It is incredible in this case that only four out of two hundred pages were devoted to No-Action or No-Build Alternatives. There is no support for the statements that the Knoxville area has too little population to support public transportation and that public transportation would not reduce vehicle use, particularly in the areas where congestion is the highest (p. 2-14). There is no support for the statement that it “not considered reasonable” to improve existing highway corridors (p. 2-15). Why would widening existing roads be more disruptive than building an entire new road (p. 2-16)? There is no discussion whatsoever about alternative means of stimulating economic development in the area other than spending over \$400 million on the Beltway.

## **V. LIFE-CYCLE COST ANALYSIS SHOULD BE INCLUDED IN THE DEIS.**

The National Highway System Designation Act of 1995 requires that life-cycle cost analyses be prepared for any project segment of the National Highway System which costs more than \$25 million. This analysis of life-cycle costs is defined to include "a process for evaluating the total economic worth of a useable project segment by analyzing initial costs and discounted future costs, such as maintenance, reconstruction, rehabilitation, restoring, and resurfacing costs, over the life of the project segment." 23 U.S.C. § 106(e). Though estimates of the project construction cost have been made, to the best of our knowledge, there has been no public review or discussion of the projected life-cycle costs of the project. That detailed analysis should be completed and included in the supplemental draft EIS before it is made available to the public for review and comment.

## **VI. THE ORANGE AND GREEN ROUTES CONFLICT WITH LOCAL GROWTH PLANS.**

NEPA regulations at 40 C.F.R. § 1508.8 require that agencies consider indirect effects of proposed projects, such as “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.” NEPA regulations at 40 C.F.R. § 1502.16 also require an EIS to address “[p]ossible conflicts between the proposed action and the objectives of Federal, regional, State, and local land use plans, policies and controls for the area concerned.” The DEIS makes a big point that economic development will occur at the interchanges with arterial roads (p. 1-5; pp. 4-1 - 2; p. 4-20). Yet, the DEIS admits that, particularly for the Orange Route, most of the land traversed is designated by the Knoxville/Farragut/Knox County Growth Policy Plan as “Rural Area,” not a “Planned Growth Area.” This creates a serious conflict between the proposed action and regional land use policies and controls. Furthermore, if the local governments exercise their authority to limit growth in these areas, which is recognized as a mitigating factor in the DEIS (p. 4-1 – 2), the claimed economic benefits from development at the interchanges would disappear.

## **VII. NOISE ISSUES HAVE NOT BEEN ADEQUATELY ADDRESSED.**

NEPA regulations at 40 C.F.R. § 1502.14(f) require the consideration of “appropriate mitigation measures.” The noise impacts of the Orange and Green Routes are clearly excessive, yet TDOT claims that the costs of noise abatement would be too expensive for all but one area. The DEIS is not where decisions on noise abatement should be made. The impacts of the noise on the residents and the costs of mitigation must be factored into the consideration of alternatives.

## **VIII. THE REVISED OZONE AIR QUALITY STANDARD MAY THROW KNOX COUNTY BACK INTO NON-ATTAINMENT, AND THIS HAS NOT BEEN ADDRESSED IN THE DEIS.**

The U.S. EPA revised the ground-level ozone air quality standard in 1997. Subsequent litigation has delayed the implementation of the standard, but the U.S. Supreme Court upheld the standard in 2001. The DEIS evaluates this issue from the perspective of the old instead of the new standard, which is more stringent. Knoxville may no longer be a maintenance area and may fall into non-attainment when this new standard is implemented. Yet, the DEIS mentions nothing about this possibility and how that would affect the project.

## **IX. WATER QUALITY AND STREAM FLOODING IMPACTS HAVE NOT BEEN ADEQUATELY ADDRESSED.**

Because water quality impacts are likely to be considerable from interstate highway construction in the area, CABOL retained an expert water pollution consultant, Barry W. Sulkin, who was previously the Manager of Enforcement for the Tennessee Division of Water Pollution Control. Mr. Sulkin reviewed the DEIS and the documents that were made available by TDOT in response to a public records request. He prepared some preliminary comments in the time permitted, which are attached to this document.

In addition, the DEIS does not adequately address impacts on water quality in Beaver Creek in Solway. The proposed Orange Route would parallel the creek for miles and cross the creek in Solway. TVA has listed Beaver Creek in that area as a highly sensitive area. There are several sensitive species in the area that must be protected from the impacts of road construction, including fish of importance to Melton Hill Reservoir and migratory waterfowl. TDOT has a track record of trashing streams during road construction and cannot be relied upon to implement bare minimum erosion controls in its projects.

The Tennessee Department of Environment and Conservation expressed concerns about two public water supplies with recharge areas near the bypass routes and requested that these be evaluated in the EIS (p. 5-14). There was no mention of these drinking water sources in the section dealing with environmental impacts, however. One of these, Fowler Springs, serves a large public water system, Hallsdale-Powell, that services portions of northern Knox County as well as portions of Union County.

Furthermore, the DEIS does not address flooding impacts due to construction and due to the disruption of area flow patterns by the highway. For the Orange and Green Routes, this is of particular concern in Bull Run Valley, where the current plan follows the tops of a line of haystack hills on the south side. Bull Run Creek is well-known to be flood-prone; its valley floor is remarkably flat for miles. Every few years, the creek overflows and floods its valley floor. If the hilltop route is retained, then huge quantities of fill will be required that will disrupt drainage patterns and could create more flooding. If a valley route is ultimately chosen, then at least three miles of fill would be required to build the road above flood levels. Recent flooding of Hickory Creek near Hardin Valley Road also shows that drainage ways are already over stressed in the area. Adding more fill and concrete from road building and increasing the velocity of runoff will only make matters worse.

## **X. PROCEDURAL ISSUES**

The procedures that have been used for circulating and public comment on the DEIS have violated the spirit, if not the letter of NEPA regulations. Such a short time for review of the DEIS for one of the largest road projects ever proposed in Tennessee has hampered meaningful public participation. Insufficient copies of the DEIS have been provided to the public, and the \$75 cost for purchasing additional copies is too high. FHWA regulations at 23 C.F.R. §771.123(f) provide that “[t]he initial printing of the draft EIS shall be in sufficient quantity to meet requirements for

copies which can reasonably be expected from agencies, organizations, and individuals. Normally, copies will be furnished free of charge. However, with Administration concurrence, the party requesting the draft EIS may be charged a fee which is not more than the actual cost of reproducing the copy or may be directed to the nearest location where the statement may be reviewed.” A charge of \$75 per copy would seem to exceed the costs of copying the DEIS.

Furthermore, various appendices are mentioned in the body of the DEIS. But no appendices were included with the copy placed on the TDOT website. This has also made public review difficult.

Finally, CABOL attempted to obtain and review background documents that were relied upon in the preparation of the DEIS pursuant to the Tennessee Public Records Act. After having been given ample notice of the intent to review documents and having been provided with a list of the types of documents for which review was sought, TDOT failed to provide most of the types of documents requested.