



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

June 26, 2009

CAROLANN WICKS, P.E.
SECRETARY

Mr. Hassan Raza
Division Administrator
Federal Highway Administration
300 South New Street, Room 2101
Dover, DE 19901-6726

JUN 29 2009

Dear Mr. Raza:

The attached information supports the Department's Project Development Committee's environmental determination based on a revised evaluation for the following project:

29-090-02 RRA-N056(38)
I-95 Newark Toll Plaza

This project will be administered under the FHWA Stewardship Agreement. Your approval in this determination is requested as per 23 CFR Part 771. Please provide a copy of the signed approval form to Terry Fulmer, Environmental Studies Manager at DelDOT. Thank you.

Sincerely,

Natalie Barnhart
Chief Engineer

NB:gs

Attachments

cc: Kathy English, Director, Finance
Drew Boyce, Assistant Director, North Project Design, Transportation Solutions
Tom Clements, Assistant Director, North Construction, Transportation Solutions (ARRA Coordinator)
Terry Fulmer, Environmental Studies Manager, Transportation Solutions
Darren O'Neill, Project Manager, North Project Design, Transportation Solutions
Beth Alexander, Senior Accountant, Finance
Stephanie Johnson, Senior Fiscal Management Analyst
Beverly Swiger, Controller, Finance
Charlanne Thornton, Senior Accountant, Finance
Earle Timpson, Assistant Director, Finance

CATEGORICAL EXCLUSION EVALUATION
PROJECT CHECKLIST AND PROJECT LEVEL DETERMINATION FORM

Project: I-95 (NEWARK) TOLL PLAZA

State Contract No.:29-090-02

Federal Contract No.: RRA-N056(38)

ADVERSE IMPACTS/EFFECTS	None	Possible	Probable	Comment
Right-of-Way Requirements				
A. Private	x			
B. Public	x			
C. 4(f)	x			
D. 6(f)	x			
Relocations				
A. Homes	x			
B. Businesses	x			
C. Non-Profit	x			
Social Impacts				
A. Local	x			
B. Regional	x			
Environmental Justice				
A. Minority	x			
B. Low-Income	x			
Economic Impacts				
A. Local	x			
B. Regional	x			
C. Statewide	x			
Cultural Resources (Listed, nominated, eligible)				
A. National Register	x			SHPO approved finding of No Adverse Affect - July 2005
B. State Listing	x			
C. Other	x			
Air Quality				
A. Local	x			
B. Statewide	x			
Noise				
A. Residential			x	mitigation not feasible due to cost or ROW constraints
B. Commercial	x			
C. Sensitive Receptors	x			
D. Other	x			
Hazardous Waste	x			
Water Quality				
A. Surface Water		x		5.62 ac of new impervious surface; BMPs will be used
B. Ground Water		x		
Hydrological Impacts				
A. Stream relocation			x	0.078 square feet of permanent impacts; mitigation on-site or at Glenville site
B. Stream channelization	x			
C. Stream stabilization	x			

ADVERSE IMPACTS/EFFECTS	None	Possible	Probable	Comment
D. Flood Plain	x			
Fish & Wildlife				
A. Endangered Species	x			
B. Habitat	x			
Wetlands				
A. Project Area			x	0.097 acres of permanent wetland impacts (0.003 of PSS and 0.094 of PEM); mitigation on-site or at Glenville site
B. Up or Down Stream	x			
Land Use				
A. Direct	x			
B. Secondary	x			
Natural Resources				
A. Farm Lands	x			
B. Woodlands	x			
C. Conservation Areas	x			
D. Coastal Zone	x			
Modal Choice				
A. Pedestrian	x			
B. Bicycle	x			
C. Mass Transit	x			
Access				
A. Maintenance of Traffic			x	Lane closures expected throughout the duration of construction; Transportation Management Plan (TMP) will be in effect. MOT and Public Notification will follow Delaware MUTCD
B. Elderly	x			
C. Handicapped	x			
D. Children	x			
E. Pedestrians	x			
F. Bicyclists	x			
G. Public Transit & those who depend upon it	x			
Permits				
A. ACOE			x	NW 23 (Categorical Exclusions)
B. Coast Guard	x			
C. DNREC			x	Subaqueous Lands Permit
D. County	x			
E. City or Municipality	x			

mfw 8/24/09

Categorical Exclusion Recommendation per 23 CFR 771.117(d)(1.) & (2)

Concurrence: Federal Highway Administration

Daniel Monty
Division Administrator

8/28/09
Date

Comments: _____



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

800 BAY ROAD
P.O. Box 778
DOVER, DELAWARE 19903

CAROLANN WICKS, P.E.
SECRETARY

August 21, 2009

Mr. Hassan Raza
Federal Highway Administration
300 South New Street, Room 2101
Dover, DE 19904

Dear Mr. Raza:

The purpose of this letter is to present a review of the environmental consequences of modifications to the Newark Toll Plaza, DelDOT Contract No 29-090-02, Federal Aid Project No. RRA-N056(38). A Finding of No Significant Impact (FONSI) was issued by the Federal Highway Administration (FHWA) for an earlier project (known as Delaware Turnpike Improvements, I-95/Newark Toll Plaza) on October 27, 2005. The currently proposed improvements are known as Newark Toll Plaza - Highway-Speed E-ZPass Lanes. The Delaware Department of Transportation (DelDOT) recommends a Categorical Exclusion (CE) for the project.

The Environmental Assessment (EA) (titled Delaware Turnpike Improvements, I-95/Newark Toll Plaza, New Castle County, Delaware and dated August 2005) which resulted in the FONSI considered the no-build (Alternative 1) and three build alternatives:

- Alternative 2 – New Plaza at Existing Location,
- Alternative 3 – New Plaza between the Existing Plaza and Otts Chapel Road, and
- Alternative 4 – New Plaza between Otts Chapel Road and State Line).

Alternative 2 was broken out into two design options. Design Option A would have replaced the toll plaza access tunnel and constructed a set of gantries to mount the highway-speed toll collection equipment. Design Option B would have constructed a new overhead walkway/gantry to replace the existing tunnel as the access path for toll takers and to support the highway-speed toll collection equipment. Alternative 2B was identified by DelDOT and approved by FHWA as the Preferred Alternative because of its relatively low environmental impacts and public support, and because it could be constructed, maintained and operated in a reasonably cost-effective manner. The current project has a single alternative that is a modified version of Alternative 2B. The differences are discussed in the sections that follow and are summarized in Table 1, which appears on page 3.

This CE recommendation takes into account the following changes to the project since approval of the August 2005 EA:

- Reduction in overall project impacts based on a smaller construction footprint.
- Revisions to the PM2.5 National Ambient Air Quality Standards (NAAQSs) that became effective December 18, 2006.
- A detailed analysis of noise impacts and possible mitigation measures.
- Revisions to stormwater management facilities due to design modifications.



PROJECT STATUS

The improvements covered under the current project will include:

- Construction in the median of two barrier-separated, highway-speed E-ZPass lanes in each direction
- Construction of a toll gantry over the highway-speed E-ZPass lanes with overhead access for toll collectors
- Removal of the main plaza lanes 6-13, leaving seven (7) southbound CASH/E-ZPass lanes
- Retrofitting the existing northbound satellite plaza to provide seven (7) CASH/E-ZPass lanes with overhead access for toll collectors (between lanes 5 and 6)
- Construction of stormwater management facilities
- Converting the existing piers of the Welsh Tract Road overpass to web walls
- Installing new signing and pavement marking
- Upgrading the lighting systems
- Construction of a reinforced concrete slab over the existing toll collector access tunnel within the limits of the highway-speed E-ZPass lanes
- Replacement of the five (5) northbound and seven (7) southbound toll booths that remain in service

The current project area remains within the original I-95/Newark Toll Plaza project limits. The highway-speed E-ZPass lanes will extend from the Otts Chapel Road overpass to the SR896 (College Avenue) interchange. Roadway construction will be confined to these limits within right-of-way owned by the State of Delaware. Advance signing and pavement marking work will extend along I-95 from the MD 279 Interchange in Maryland to the Delaware House Service Area in Delaware, for a total project length of 5.7 miles. The length of roadway construction is now 2.0 miles, compared to the 2.6 miles proposed for the 2005 EA concept.

PREFERRED ALTERNATIVE FROM 2005 EA/FONSI

Alternative 2B, the Preferred Alternative identified by DelDOT for improvements at the Newark Toll Plaza, included the following: two new highway-speed E-ZPass lanes, with provision for a future third highway-speed E-ZPass only lane; and an overhead walkway providing access to the electronic toll collection equipment gantry and the southbound toll booths (abandoning the current tunnel). That design required the replacement of the Otts Chapel Road Bridge and the Welsh Tract Road Bridge to provide for the future third highway-speed E-ZPass lane.

At the time of the initial design, it was anticipated that the project would open in 2008 with two highway-speed E-ZPass lanes in each direction, sufficiently accommodating the projected traffic volumes. These two highway-speed E-ZPass lanes in each direction would become inadequate to accommodate the projected volumes within the ten years following their opening, thereby requiring the proposed third highway-speed E-ZPass only lane. The third E-ZPass lane would be constructed on a widened outside shoulder (24 feet).

POST-FONSI MODIFICATIONS 2009 CE RECOMMENDATION (CURRENT DESIGN CONCEPT)

The current design concept is similar to the previous design in that it will provide two barrier-separated, highway-speed E-ZPass lanes in each direction. Unlike the previous design, it will add two new northbound (NB) CASH/E-ZPass lanes at the existing satellite plaza, with overhead access for toll collectors (steps connecting the overhead walkway to the Lane 5 island). In addition, seven, rather than five, of the existing southbound (SB) CASH/E-ZPass lanes will be retained at the main plaza. The current design concept does not include the future third highway-speed E-ZPass lane thereby avoiding the

necessity of widening I-95 in the vicinity of the Otts Chapel Road and Welsh Tract Road overpasses and consequent bridge replacement at both locations.

With the provision of highway-speed E-ZPass lanes at the I-95 Newark Toll Plaza, it is not unrealistic to assume that within an 8-10 year timeframe, E-ZPass usage will escalate from the current level of 50-55% to 70-75%. In a recent study conducted for the State of North Carolina, a usage level of approximately 80% has been identified as an acceptable level for implementing cashless operations. At such time, DelDOT will consider converting the Toll Plaza to Open Road Tolling (ORT) as a long-term solution to plaza congestion. The current design concept allows ample space to accommodate ORT operation in the future without additional right-of-way acquisition.

Due to the cost of the original project and the anticipated conversion to open road tolling at this location, the scope of the project has been scaled back. The current design concept comprises a smaller footprint with fewer impacts to natural resources. Since it does not include the demolition and reconstruction of Otts Chapel Road and Welsh Tract Road bridges, the time to build the new toll plaza will be considerably shorter, leading to reduced disruption to users and significant dollar savings. The differences in the scope of construction between the original design and the current design concept are summarized in Table 1.

Table 1: Construction Differences

Feature	Current (2009) Design Concept	Alternative 2B (2005 Design)
Number of E-ZPass Lanes in Each Direction	2	3
Length of Roadway Construction	2.0 miles	2.6 miles
Areas of Roadway Widening beyond Existing Outside Shoulder	Southbound between SR 896 and the Southbound Plaza	Throughout project limits
New Impervious Surface	5.62 acres	13.96 acres
Number of Roadway Overpasses Lengthened or Reconstructed	0	2
Toll Plaza Modifications	Remove eight lanes at the main plaza; construct reinforced slab over existing tunnel; expand satellite plaza by two lanes; construct overhead walkway and gantry at the satellite plaza	New facility with overhead walkway – would support overhead toll collection equipment and serve as a gateway feature
Estimated Cost	\$50.9 M*	\$86.5 M**

* 2009 Dollars

** 2005 Dollars

ENVIRONMENTAL IMPACTS

Environmental impacts associated with the current design concept are evaluated and compared to those identified in the 2005 EA for Delaware Turnpike Improvements, I-95/Newark Toll Plaza. As stated previously, the new footprint is smaller than the previously approved concept. Most of the anticipated impacts associated with the previous design are commensurately less with the new concept. Specifically, the previous concept would have created 13.96 acres of new impervious surface, while the current design concept creates 5.62 acres. Impacts to non-tidal wetlands have been reduced from 0.12 acres to 0.09 acres, and impacts to forest acres have been reduced from 3.0 acres to 1.55 acres. Natural resources impacts are summarized in Table 2.

Table 2: Comparison of Resource Impacts¹

Resource	Current Design Concept, 2009	Initial EA, 2005
Floodplains	No impacts	No impacts
Stormwater Management		
New Impervious Surface/Impervious Surface Treated (New and/or Old)	6.53 acres/ 19.07 acres	13.96 acres/23.09 acres
SWM Treatment Capacity Provided	31.98 acres	31.76 acres
Waters of the US (Total ACOE)		
Permanent wetland impacts (non-tidal)	0.097 acres	0.13 acres
Permanent wetland impacts (tidal)	None	None
Permanent impacts to areas other than wetlands (tidal)	None	1,623 LF
Permanent impacts to areas other than wetlands (non-tidal channels, drainage ditches)	893 linear feet	3,751 linear feet
Mitigation Required	0.035 acres	0.38 acres
Forest	1.22 acres	3.0 acres
Air Quality	No violations, Low Potential MSAT Effects	No anticipated impacts
Noise	No feasible mitigation	No feasible mitigation
Residential or Business Relocations	None	None
Property Acquisition	None	None

¹ The impacts/mitigation listed in the right column are excerpted directly from Delaware Turnpike Improvements EA, 2005 prepared by RK&K.

Waters of the US

Activities affecting Waters of the United States are regulated by the United States Army Corps of Engineers (ACOE) pursuant to Section 404 of the Clean Water Act of 1977, as amended. The term "Waters of the United States" incorporates deepwater habitat, vegetated wetlands, and special aquatic sites as defined by the Environmental Protection Agency's (EPA) Section 404(b) 1 guidelines (40 CFR 230.4-230.5). Wetland delineations were performed in 2001, 2002, and 2005. An ACOE Jurisdictional Determination was conducted in June 2007. This determination is valid until June 2012.

The anticipated impacts of the current design concept will require the replacement or restoration of nontidal waters of the US and nontidal wetlands. The impacts will require 0.019 acres of wetland mitigation at a 1:1 ratio, and 0.003 acres of wetland mitigation at a 2:1 ratio. The total wetland mitigation of 0.025 acres will be accomplished at DelDOT's Glenville Site. Most stream impacts will be mitigated with adjacent in-kind replacement, but 0.01 acres will be mitigated at the Glenville Site. There will also be 0.032 acres of temporary wetland impacts and 0.066 acres of temporary stream impacts. Temporary impacts do not require mitigation.

A resources agency meeting was held on February 25, 2009, followed by a pre-permitting application site visit with representatives from the Delaware Department of Natural Resources and Environmental Control (DNREC), ACOE, and FHWA to discuss proposed project impacts (see Attachments A1 and A2). As a result of the meetings, ACOE indicated that a Nationwide Permit 23 – Categorical Exclusion would need to be authorized for this project. DNREC indicated a Sub-aqueous lands permit application would be required for impacts to DNREC jurisdictional streams. Both ACOE and DNREC agreed to the use of the DelDOT Glenville mitigation site for impacts to wetlands within the project area. DNREC and ACOE recommended riparian corridor enhancement for streams that have been relocated.

Forests

The forest impacts with the current design concept will be reduced from 3.0 acres to 1.22 acres. No significant loss of woodland habitat is expected. Impacts will be mitigated in accordance with Delaware Senate Bill 234, the Landscaping and Reforestation Act, which passed in 2002. DelDOT is required to incorporate landscaping and reforestation into the design of road construction and improvement projects. The Delaware Code sets forth minimum standards for the amount of landscaping or reforestation required, how the activities must be planned, and the amount of money that must be allocated to ensure landscaping and reforestation activities take place. Before construction begins, an analysis is required to determine the total area of trees that will be cut, removed, or cleared in order to complete the project. Reasonable efforts must be made by DelDOT to preserve large, mature trees. Clearing and cutting of trees/shrubs must be kept to the minimum number necessary to complete the project and remain consistent with safe design practices. These requirements will be incorporated into the current design concept.

Water Quality/Stormwater Management

The current design results in an increase of 6.53 acres of impervious surface, a reduction of 7.43 acres from the 13.96 acres proposed in the 2005 EA. Two stormwater management (SWM) best management practices (BMPs) have been designed within the project limits. They will provide both water quality and water quantity treatment to accommodate the proposed increase in impervious area while also treating areas of existing impervious material. The proposed BMPs treat a total impervious area, including both existing and proposed, of 19.07 acres. According to the 2005 EA/FONSI, the total impervious treatment provided was 23.09 acres.

Proposed BMP 1 is located adjacent to I-95 SB, immediately south of the Otts Chapel Road overpass. BMP 1, as proposed, treats 8.52 impervious acres with an overall contributing drainage area of 20.15 acres. BMP 2 is located in the I-95 SB to SR 896 SB loop ramp, outside the limits of the jurisdictional waters of the U.S. running through the area. BMP 2 treats 10.55 acres of impervious area and has an overall contributing drainage area of 11.83 acres. The current overall combined treatment capacity, or combined contributing drainage area, from both BMPs 1 and 2 is 31.98 acres. The proposed treatment capacity in the 2005 EA/FONSI was 31.76 acres. The proposed stormwater facilities are summarized in Table 3.

Table 3: Stormwater Management Facilities and Capacity

SWM Facilities	Impervious Area Treated	Total Area Treated
BMP 1	8.52 acres	20.15
BMP 2	10.55 acres	11.83
TOTAL Stormwater Management Capacity	19.07 acres	31.98 acres

Fish and Wildlife Habitat

According to DNREC's *Natural Heritage and Endangered Species Program*, there are currently no records of state-rare federally listed plants, animals or natural communities at this project site. This project does not lie within a State Natural Heritage Site, nor does it lie within a Delaware National Estuarine Research Reserve.

DNREC stated that two species of rare salamander, the four-toed salamander (*Hemidactylum scutatatum*) and the spotted salamander (*Ambystoma maculatum*), had been documented in the project area. It is anticipated that the proposed SWM facility at Otts Chapel Road will drain into the stream that feeds the spotted salamander habitat area. It is the intent of the stormwater management design to meet DNREC requests that SWM facilities minimize increases in sedimentation and chemical runoff into receiving streams.

Previous coordination with DNREC, undertaken as part of the August 2005 EA, indicated that rare plants species were documented beyond the northbound lanes of I-95 at the intersection of SR 896 and I-95. The proposed project limits of the current design concept do not extend into the areas where the rare plant species were identified.

Floodplains

The current design concept will not impact floodplains.

Traffic Analysis

Traffic operations through the I-95 Newark Toll Plaza Project were quantified primarily in terms of queuing and user-delays based on the results of a project-specific queue estimation spreadsheet. This method applied a basic first-in-first-out queue model over the course of a 24-hour day while incorporating detailed arrival, departure, and related traffic assumptions to reflect many of the complex and variable conditions through the toll plaza. Future year traffic volumes were projected using DelDOT's Peninsula Model, which showed no significant differences between build and no-build conditions.

Analyses were conducted for nine different daily traffic scenarios to encompass typical operations at various times throughout the year as follows:

- Scenarios 1 & 2 – Winter Weekdays & Weekends
- Scenarios 3 & 4 – Spring/Fall Weekdays & Weekends
- Scenario 5 – Summer Weekdays
- Scenarios 6 & 7 – Early Summer Weekend & Peak Summer Weekend
- Scenarios 8 & 9 – Holiday Weekend & Holiday Max Travel

Scenario 5 (Summer Weekdays) most closely approximates the project's "average" conditions and an Average Annual Daily Traffic (AADT) volume of 78,500 vehicles per day (vpd) in the Base Year 2009. In both the build and no-build scenarios, volumes are expected to increase by 1.4% to 2.3% per year to reach an Interim Year 2020 AADT of 97,000 vpd or a Design Year 2030 AADT of 117,500 vpd.

Scenario 7 (Peak Summer Weekend) most closely approximates the project's "30th highest hour" conditions and a Design Hour Volume (DHV) of 8,200 vehicles per hour (vph) in the Base Year 2009. In both the build and no-build scenarios, volumes are expected to increase to an Interim Year 2020 DHV of 10,200 vph or a Design Year 2030 AADT of 12,400 vph.

Qualitatively, as compared to the existing toll plaza, the addition of highway-speed E-ZPass lanes coupled with reconfiguration of the cash booths and approach lanes will vastly improve overall traffic operations, efficiency, and effective capacities of the NB and SB toll plazas by:

- Directly increasing the available cash collection capacity of the plaza from six NB and seven SB cash lanes, to seven cash lanes in each direction.
- Reducing the frequency of E-ZPass lane blockages by relocating and positively channelizing a dedicated cash/E-ZPass lane split from approximately 800 feet upstream to almost 1-mile upstream.
- Relocating most E-ZPass traffic, and especially the E-ZPass trucks, out of the mixed-used cash/E-ZPass lanes and into the highway-speed E-ZPass lanes.
- Promoting more evenly distributed utilization of all open cash booths and their available queue storage lanes.
- Reducing erratic maneuvers and last-minute lane changes approaching the plaza, thereby also improving safety and reducing incident-related delays.

Specific quantitative comparisons based on traffic analysis of the Build versus No-Build toll plaza configurations are summarized below:

- *Opening-Year 2011 Queuing* – Queues under the proposed Build configuration are estimated to be less than 1 mile per direction for all but 3 days per year. By comparison, No-Build queues could exceed 5-10 miles for up to 74 days per year.
- *Interim Year 2020 Queuing* – Queues under the proposed Build configuration are estimated to be less than approximately 1-mile in either direction for all but 24 peak summer weekends (5-7 mile queues) and 3 Holiday Max Travel weekends (at least 10-mile queues). By comparison, No-Build queues could reach 8-10 miles or more for up to 122 days per year.
- *Design Year 2030 Queuing* – Heavy volumes and "severe" over-capacity conditions are anticipated for most weekend scenarios, and the current spreadsheet method of queue estimation and its results begin to breakdown under both the No-Build and Build configurations. These breakdowns include over-capacity travel through the two proposed highway-speed E-ZPass lanes in either direction. While the specific analysis results become somewhat unrealistic at such "severe" levels of congestion, DelDOT anticipates that before 2030, the Newark Plaza will be converted to cash-free, open road tolling operation and, therefore, the predicted conditions should never occur.

- *E-ZPass Blockages* – The number of hours per year in which the dedicated E-ZPass lanes are potentially blocked by cash lane queuing is reduced by more than 95% in the Opening Year and 70-80% in the Interim Year.
- *Upstream Interchange Impacts* – The number of hours per year in which toll plaza queues potentially impact the nearest upstream interchange, including MD 279 to the south and DE 896 to the north, is reduced by more than 95% in the Opening Year and 75-85% in the Interim Year.
- *Annual Delay* – Total annual vehicle-hours of delay through the toll plaza are reduced by more than 90% in the Opening Year and 80-90% in the Interim Year. Assuming a dollar value of time equivalent to the amount used in DelDOT's Statewide Travel Demand Model (Mode Choice Model), this delay reduction amounts to a \$29 million savings in estimated user-delay costs for the Opening Year alone.

Based on these findings, the proposed highway-speed E-ZPass lane configuration will allow the toll plaza to accommodate traffic growth at least through Year 2020 for all but the busiest 24 Peak Summer Weekend and 3 Max Travel Holiday days. For those 27 busiest days, conditions are expected to improve significantly in the Opening Year, but to then degrade and eventually surpass existing levels of congestion sometime prior to 2020.

Noise (See Attachment B for the complete report)

Noise analyses were conducted for the 2005 EA, in accordance with guidelines published in Title 23 of the Code of Federal Regulations (CFR) Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise*. Highway traffic noise studies, noise abatement procedures, coordination requirements and design noise levels in CFR Part 772 constitute the noise standards mandated by 23 U.S.C. 109(i). During the initial analysis, no berms or barriers were determined to be both feasible and reasonable (cost-effective) abatement for noise impacts.

Because design changes modified the construction footprint, a new noise analysis was performed for this CE recommendation. The guidelines of CFR 772 were again followed. Details on the criteria for determining noise impacts, noise monitoring, noise modeling, impacts, and mitigation feasibility are provided in the Project Memorandum for Noise Analysis (Attachment B).

Four receptors are considered impacted at current noise levels because the loudest one-hour equivalent sound levels (Leq) exceed 66 dBA. These four receptors will continue to be impacted in the 2030 design year, under both the Build and No-build scenarios. Two additional receptors will be impacted under the Build scenario, again due to loudest hour Leq exceeding 66 dBA.

Both berms and barriers were evaluated for abatement of noise impacts. However, noise abatement for Build alternative impacts to residences in the Newark Toll Plaza area did not meet DelDOT's criteria for cost-effectiveness, which is no more than \$20,000 per benefited residence, or was not feasible due to right-of-way restrictions.

Air Quality (See Attachment C for the complete report)

CO Analysis

The January 2004 Air Quality Analysis predicted emission factors for 2005 and 2025 using the EPA's MOBILE6 (Version 6.2.01) emissions model. These emissions factors were recalculated for 2012 and 2030 using the current version of MOBILE6 (Version 6.2.03). The maximum 2025 1-hour carbon monoxide (CO) concentration determined by the January 2004 analysis was 2.2 parts per million (ppm)

and the maximum 2025 8-hour concentration was 1.8 ppm. The maximum estimated 2030 1-hour CO concentrations based on the current design concept is 2.8 ppm and the maximum estimated 2030 8-hour concentration is 2.4 ppm. The 1-hour NAAQS for CO is 35.0 ppm and the 8-hour NAAQS is 9.0 ppm.

A review of the above demonstrates that construction of the I-95 Newark Toll Plaza will not result in violations of the NAAQS for CO, based on the following:

- No CO violations were predicted to result from the No-Build or Build alternative in the January 2004 Air Quality Analysis. The maximum 1-hour concentration was only 7.7% of the 1-hour NAAQS and the maximum 8-hour concentration was only 23.3% of the 8-Hour NAAQS.
- No CO violations were predicted to result from the No-Build or Build alternative in the current design concept. The maximum estimated 1-hour concentration is only 8.0% of the 1-hour NAAQS and the maximum estimated 8-hour concentration was only 26.6% of the 8-Hour NAAQS.
- The study area is not within a CO non-attainment or maintenance area.

MSAT Analysis

FHWA *Guidance on Air Toxic Analysis in NEPA Documents*² requires analysis of Mobile Source Air Toxics (MSAT) under specific conditions. MSAT are substances that are a known or probable carcinogen, or that can cause chronic respiratory effects. The EPA has designated six MSAT as priorities: Benzene; Acrolein; Formaldehyde; 1,3-Butadiene, Acetaldehyde; and Diesel Exhaust (Diesel Exhaust Gases and Diesel Particulate Matter). The I-95 Newark Toll Plaza project would “serve[s] to improve operations of highway, transit or freight without adding substantial new capacity or without creating a facility that is likely to meaningfully increase emissions”.³ Therefore, this project is considered a *Project with Low Potential MSAT Effects*. As demonstrated by traffic analysis, the 2030 Build traffic volumes are not significantly greater than the 2030 No-Build traffic volumes, and the project will not result in any meaningful changes in traffic volumes, vehicle mix, or any other factor that would cause an increase in emissions impacts. As such, this project will generate minimal air quality impacts for the Clean Air Act criteria pollutants and will not result in any special MSAT concerns.

PM_{2.5} Analysis

This project is located in the PA-NJ-DE Particulate Matter _{2.5} (PM_{2.5}) non-attainment area. In 2006, EPA issued amendments to the Transportation Conformity Rule to address localized impacts of particulate matter. The amendments require the assessment of localized air quality impacts of federally funded or approved transportation projects deemed to be Projects of Air Quality Concern in PM₁₀ and PM_{2.5} non-attainment and maintenance areas. Concerns are enumerated in 40 CFR 93.123(b)(1).

DelDOT has prepared the following analysis of the current design concept for the I-95 Newark Toll Plaza project:

- The project is considered under 40CFR 93.123(b)(1)(i), which includes “New or expanded highway projects that have a significant number of or significant increase in diesel vehicles.” However, it does not meet the criteria to be considered a Project Of Air Quality concern because it affects an expanded highway that does not have a significant increase in diesel vehicles. Refer to Table 3 in 40 CFR 93.123.
- The Toll Plaza reconstruction will improve traffic flow and reduce congestion. Thus, it would be expected to have a neutral or positive influence on PM_{2.5} emissions.

² Interim Guidance on Air Toxic Analysis in NEPA Documents, February 3, 2006

³ *ibid*

- The construction will not result in any meaningful changes between No-Build and Build traffic volumes, vehicle mix, or location of the existing facility.
- Section 176(c) of the Clean Air Act and the federal conformity rule require transportation plans and programs to conform to the intent of the state air quality implementation plan through a regional emissions analysis in PM_{2.5} non-attainment areas. The PA-NJ-DE PM_{2.5} non-attainment area is under the jurisdiction of the Wilmington Area Planning Council (WILMAPCO), the federally recognized Metropolitan Planning Organization for transportation planning in New Castle County, Delaware, and Cecil County, Maryland. The FY 2009 – 2012 WILMAPCO staff and member agencies created Transportation Improvement Program (TIP) and the 2030 Regional Transportation Plan (RTP). The WILMAPCO Council adopted the 2030 RTP in March 2007, and the FY 2009-2012 TIP was adopted in April 2008⁴. Emission totals calculated for each analysis year were tested against the 2002 Base Year budget for PM_{2.5}; thus there is a currently conforming transportation plan and TIP in accordance with 40 CFR 93.114. The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93. This project is included in the TIP and the regional emissions analysis, and there have been no significant changes in the project's design concept or scope used in the analyses. Therefore, this project comes from a conforming plan and program in accordance with 40 CFR 93.115.

Based on the analysis above, the I-95 Newark Toll Plaza reconstruction meets the Clean Air Act and 40 CFR 93.109 requirements. These requirements are met for PM_{2.5} without a project-level hot-spot analysis, since the project was not found to be a Project of Air Quality Concern. Since the project meets the Clean Air Act and 40 CFR 93.109 requirements, it will not cause or contribute to a new violation of the PM_{2.5} NAAQS, nor increase the frequency or severity of violations.

Right of Way, Relocations, and Socio-economic Impacts

The project will be located entirely within right of way owned by the State of Delaware. No acquisitions or relocations will occur. No negative social or economic impacts are anticipated and the resultant reduction in traffic congestion at the Toll Plaza would benefit the traveling public. The project has been reviewed for environmental justice issues, and there are no issues concerning minority or low-income populations within the area. This action will not disproportionately affect any minority groups or low- to moderate-income neighborhoods either during or after construction.

Lane closures are expected throughout the duration of construction. A Transportation Management Plan will be in effect. Maintenance of Traffic and Public Notification will follow the Delaware Manual on Uniform Traffic Control Devices.

Cultural Resources

DelDOT conducted an evaluation of potential adverse effects in consultation with the State Historic Preservation Office (SHPO) and property owners, as detailed in the *Documentation in Support of a Finding of No Adverse Effect* (July 2005). In its September 29, 2005 letter, SHPO concurred with DelDOT's finding of no adverse effect on identified architectural resources as a result of construction of the selected alternative. There are no anticipated impacts to archaeological resources.

⁴ New Castle County Air Quality Conformity Determination for the FY 2009-2012 Transportation Improvement Program and 2030 Regional Transportation Plan, WILMAPCO, April 10, 2008

Section 4(f) Resources

No section 4(f) resources exist in the project area.

Hazardous Materials

There are no known hazardous materials sites in the vicinity of the project area.

Rare, Threatened and Endangered Species

Based on March 10, 2009 correspondence received from DNREC's Natural Heritage and Endangered Species Section, there are no records of state rare or federally-listed plants, animals, or natural communities in the study area.

PUBLIC PARTICIPATION

In December 2008, DeIDOT initiated a process to inform and educate the public about proposed American Recovery and Reinvestment Act (ARRA)-funded projects, including the I-95 Newark Toll Plaza Highway Speed EZ Pass Lanes project. DeIDOT's Office of Public Relations is tasked with ARRA public outreach. DeIDOT has communicated directly with the public through its website (www.deldot.gov), which contains the latest information received, statements made, and updates on progress, as well as a listing of Certifications and the Statewide Transportation Improvement Program. Details on all the proposed ARRA projects can be found on DeIDOT's website, under the "Recovery Project" tab.

The Department also developed a key stakeholder notification list that is utilized when there is a new development in an ARRA project or a general announcement. Outreach and presentations have also been conducted with the business community, including small businesses and minority-owned and women-owned business enterprises. Several significant milestones resulted in press/public events that have included Governor Jack Markell, federal legislators, and FHWA officials.

Governor Markell continues his commitment to keeping the public up to date regarding the progress of projects, how funds are being spent, the number of jobs generated, and the contractors who win the bids.

CONCLUSION

This reevaluation has been prepared in accordance with 23 CFR 771.129. Based on the information provided above, we have determined that the proposed current design when compared with the Build Alternatives evaluated in the 2005 I-95 Toll Plaza EA/FONSI, will result in a reduced project scope with elimination and/or reduction of project impacts. Therefore, we recommend a categorical exclusion classification: Class II, Level D, per 23 CFR 771.117 (d) (1) and (2).

Mr. Hassan Raza
August 21, 2009
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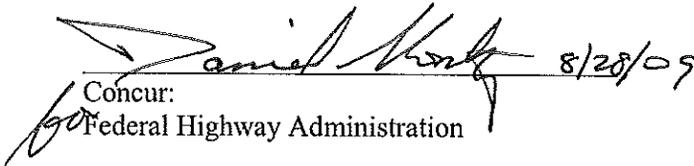
If you agree with this determination, please indicate your concurrence on the signature line provided. Should you have any questions or comments, please call me at 302-760-2280 or Mr. Darren O'Neill at 302-760-2274.

Sincerely,



Natalie M. Barnhart
Chief Engineer

NB:dow



Concur:
Federal Highway Administration

cc: Therese Fulmer, Environmental Manager
Darren O'Neill, I-95 Project Manager
Thomas Hannan, Project Manager, Whitman, Requardt and Associates
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