



In 2006, the Pennsylvania Department of Transportation (PennDOT) initiated the I-95/US 322 Interchange Improvement Project that will reconstruct the interchange to improve congestion and enhance safety for the traveling public. As part of this project, portions of I-95 and the US 322/ Bethel Road interchange will be upgraded.

The project will reconstruct the interchange connecting two heavily traveled highways, I-95 and US 322, and improve this part of the region's major north-south corridor. In addition, it will improve US 322, which carries traffic from Chester and Delaware counties eastward to I-95 and New Jersey via the Commodore Barry Bridge. PennDOT expects to complete the preliminary engineering phase of the project in late 2010.

## Purpose and Need

The purpose of the project is to improve safety and traffic operations, enhance access to the region, and reduce traffic congestion. Currently, motorists on I-95 face extreme congestion during peak hours at the I-95/US 322 Interchange. A major problem in the area is that US 322 eastbound traffic destined for I-95 North merges into the left lane of I-95, and then drivers must cross four lanes of traffic to reach the Commodore Barry Bridge. Average daily traffic along I-95 in this area is 146,000 vehicles a day. Traffic is projected to grow at ½ percent annually and reach 173,000 vehicles per day in 2034. The Federal Highway Authority (FHWA) has identified this project as a priority and has included it as part of its Bottleneck Initiative to relieve congestion on interstate highways.



## Development of Alternatives

Every transportation improvement project involves the development of alternative plans. The alternatives must be examined to determine the one that best meets the Purpose and Need of the project while having the least possible impact on the economic, cultural and environmental resources in the project area. Over the past two years, PennDOT defined and analyzed a number of alternatives to improve the interchange and associated roadways. The best options were blended together to create alternative combinations.

**I-95/US 322 Interchange Options.** PennDOT identified three different interchange options to improve traffic from US 322 West to the right side of I-95 North. The options include shifting I-95 North bringing US 322 under I-95 on the right side, bringing US 322 over I-95 utilizing a flyover, and shifting I-95 North and bringing US 322 East to I-95 with a loop ramp. The loop ramp option is deemed the best because it solves traffic operations problems at the interchange.



*Shift I-95 Northbound with Loop Ramp*

**I-95 Alignment Options.** In conjunction with analyzing interchange options, PennDOT considered alignment options for I-95. The Highland Gardens Historic District is located along both sides of I-95 in the City of Chester. Because it is recognized as an historic district, PennDOT is required to avoid or minimize impacts to Highland Gardens. By shifting the alignment of I-95 east of its current location PennDOT can limit the impacts on the western side, thus reducing the number of affected properties. Shifting I-95 to the east is the optimal option because it results in the least number of property impacts.



Shift I-95 to the South

**Access to Highland Avenue Options.** During the early stage of preliminary engineering, PennDOT met with officials from the City of Chester and officials from Aston Township, Chester Township, and Upper Chichester Township to discuss traffic issues. PennDOT learned the importance local officials placed on providing direct access from I-95 to Highland Avenue. The most desirable options are those that provide direct access between I-95 and Highland Avenue.



**US 322/Bethel Road Interchange Options.** Four improvement options were developed specifically for the US 322/Bethel Road Interchange. CSX is the major property owner in the area and it is important that its entryway and facility are not negatively affected by the project. Bethel Road Option 3 brings the interchange up to current engineering standards and avoids CSX property. However, it also eliminates current access from US 322 East to Bethel Road. For this reason, further coordination is needed with nearby affected communities to determine the feasibility of this option.



Bethel Road Option 3

## Preferred Combinations

PennDOT used the I-95/US 322 Interchange loop option and the option that would shift I-95 to the east to develop three alternative combinations designated as 3A, 3E-1 and 3E-2. Of the three alternative combinations, only 3E-1 and 3E-2 meet project Purpose and Need and provide direct access to Highland Avenue from I-95. Combinations 3E-1 and 3E-2 each accommodate Option 3 of the proposed improvement to the US 322/Bethel Road Interchange.

The difference between the two options is that 3E-2 proposes a new ramp connecting I-95 North to US 322 West and 3E-1 does not. The inclusion of this ramp means that traffic could travel in all four directions between I-95 and US 322. **PennDOT recommends carrying forward combinations 3E-1 and 3E-2 for further engineering and welcomes public comment on all the design options.**



**Combination 3E-1**



**Combination 3E-2: Includes New Ramp from I-95 North to US 322 West**





## Bridges in the Project Area

Several existing bridges will be reconstructed as part of the I-95/US 322 Interchange Improvement Project. The Highland Avenue and Engle Street bridges over I-95 will both be rebuilt. During construction the Highland Avenue bridge will remain open to traffic, but the Engle Street bridge will be closed and traffic will be detoured to Highland Avenue.



## Project Schedule

Preliminary Design will be completed in fall 2010. Final Design will then begin and take approximately three years. Construction is expected to begin in 2016.

## Project Information

**Visit the I-95/US 322 Improvement Project website at:**  
[www.i95-us322.com](http://www.i95-us322.com)

Send us an e-mail through the website to sign up for e-mail announcements about the I-95/US 322 Interchange Improvement Project.

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Tasks	Year											
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Preliminary Engineering												
Final Design												
Right of Way												
Start of Construction												