HIGHWAY STATISTICS

Delaware's Current Major Transportation Projects

At present, DelDOT is working on three major projects which would cost $1,528,044,000 upon completion. The table below shows the existing expenditure status. The 20% state match includes non-cash payments such as land acquisition, toll credits and long term bonds as well as federal stimulus funds. The state share at the conventional 80/20 split would be $305,609,000. While these projects serve national travel needs, it represents an enormous capital burden for a small state.

Delaware's Current Major Transportation Projects				
Dollars in thousands				
Project Title	Est. Total Funds	Funds Spent FY2010	Funds Spent to Date	Percent Funds Expended
I-95 MD State Line to I-295	$319,879	$26,381	$112,276	35.10%
Indian River Inlet Bridge	$291,867	$21,260	$191,706	65.68%
US 301 and Spur Road	$916,298	$26,246	$81,724	8.92%
Total	$1,528,044	$73,887	$385,706	25.24%

Source: Delaware Department of Transportation, Division of Finance, April 30, 2011.

Delaware has 6,337 total certified miles of roadway, out of which 4,801.43 miles of roads are not eligible for Federal-aid. Thus, a huge disproportionate length covering 75.76% of the state mileage is ineligible for any Federal-aid participation. In view of this, it seems a review is necessary to increase Federal-aid for highway improvements in a small state like Delaware.

2010 Delaware Interstate Status

Indian River Inlet Bridge

Construction of the new Indian River Inlet Bridge has progressed considerably to meet the anticipated opening to traffic scheduled for late 2011. The Approach structures are nearly complete, with one remaining span still lacking the roadway deck on each side of the Inlet. The signature Cable Stayed Main Span is now beginning to cross over the navigation channel of the Inlet, and in the back span region known as the Ballast Span, complex operations continue as the constructor, Skanska USA Civil Southeast, Inc., works seven days a week to meet schedule deadlines.

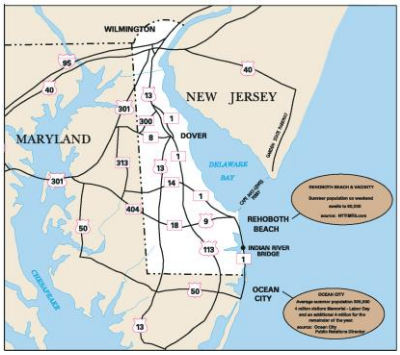
Building of the Main Span saw operations on the falsework supported cast-in-place superstructure finishing with the stressing of 14 pairs of cable stays at the end of 2010. The steel cables are encased in blue plastic duct pipes that are dramatically set off against the Atlantic Coast skyline. Early the following January, a pair of form travelers – one on each side of the Inlet – were lifted up and launched to the end of the cast-in-place portion of the Main Span. Each form traveler supports 24-foot long segments of concrete edge girder and roadway deck that are cast in cycles of 16-day duration. Skanska follows a complex set of operations and procedures provided by the Erection Engineer that include casting concrete elements and then stressing pairs of cable stays to support the segment. The cycle continues with the forward launching of the form traveler, including the advancing and stressing of a temporary steel cable that is required to help support the traveler as well as the fresh concrete that is subsequently placed with each segment. As of the end of May, 2011, seven of 12 segments have been built from the North side, and the sixth of 12 segments is being started on the South side. The two cantilevers should meet at the exact middle of the Inlet in about October; one of the form travelers will then be used to cast the 10-ft long closure segment. Steel cables embedded inside of the concrete will then be pulled and stressed to complete the structure.

The University of Delaware, together with DelDOT, has installed many types of sensors into the segments to allow engineers to monitor the "health" of the bridge during its 100-year design life. The State will be able to track the formation of possible corrosive agents within the concrete, and will then have the ability for earlier intervention, if necessary. The monitoring plan also includes instruments to measure wind speed and resulting behavior of the cables, which is important in this region subjected to strong Nor'easters and hurricanes. Other features of the bridge, including a sand pipe that allows for transportation of sand from the South side to the North side of the Inlet for beach refurbishment and a roadway overlay as a protection barrier from corrosive road salts, will be added to the bridge when it is complete.

Visitors and residents of Delaware and the surrounding region were invited to an Open House at the end of April, 2011; over 900 people participated in bridge tours that showcased the construction operations with DelDOT and Skanska engineers available to present information and answer any questions. Needless to say, the public was delighted to tour the bridge and see firsthand the progress that has been made.

Douglass A. Robb, P.E.
IRIB Project Manager
Delaware Department of Transportation
36368 Inlet Road, Rehoboth, DE 19971
Phone (302) 226-1251, FAX (302) 226-2191
douglass.robb@state.de.us

The Indian River Inlet Bridge, now on NHS, will serve the summer traffic between Rehoboth Beach and Ocean City, Maryland. The traffic demand is extremely high as the accompanying figures indicate.



REHOBOTH BEACH & VICINITY
Summer Population on Weekend Swells to 90,000
Source nytimes.com

OCEAN CITY Average Summer Population 305,000 4 million visitors Memorial-Labor Day and additional 4 million for the remainder of the year Source: Ocean City Public Relations Director.

Distance: 27.2 miles Approximate Travel Time: 50 minutes

U.S. 301, DE/MD State Line to SR1, South of the Chesapeake & Delaware Canal

DelDOT is working on improvements to the U.S. 301 Corridor in Delaware, from the MD State Line to SR1, South of the Chesapeake and Delaware Canal. The existing U.S. 301 in Delaware is a two-lane highway with signalized and unsignalized access points. The corridor is experiencing congestion and increases in accidents caused by a growth in population in this area of New Castle County and the use of the roadway for regional traffic, including large percentages of trucks.

To address these short and long-term transportation needs, DelDOT, on behalf of FHWA, initiated an Environmental Impact Statement (EIS) in 2005, and evaluated alternatives consistent with the National Environmental Policy Act (NEPA). A Draft EIS was published in November 2006, with a Final EIS published in November 2007. A Record of Decision (ROD) was issued by FHWA on April 30, 2008. The ROD selected a four lane limited access highway, from the MD State Line to SR1, and a two lane "spur" from the Armstrong Corner Road area to connect to the Summit Bridge over the Canal. The Selected Alternative, Green North + Spur, is shown below:

Design of the project was started in the fall of 2008. The design process is expected to be complete by 2011. Acquisitions of right-of-way are expected to be complete in 2012. Construction of the project could potentially begin in 2012.

The Selected Alternative will reduce traffic congestion and improve highway safety by removing through traffic, especially heavy truck traffic, from local roads in the rapidly developing area. The project will improve the current road conditions and will also promote the safety, health and general welfare of the citizens in this area and those that are traveling through the region.

Diane Gunn,
U.S. 301 Project Engineer, DelDOT
Phone: (302) 760-2323
Diane.Gunn@state.de.us