



PUBLIC INFORMATION

ITEM NO. 4.

DATE OF MEETING: November 18, 2013

REQUESTED BY: Marc Finlayson, Executive Director, Highway 17 Association

SHORT TITLE: US Highway 17 Economic Impact Study Results.

BACKGROUND: Mr. Finlayson has requested to come before the Board to provide an update on US Highway 17 Economic Impact Study results.

Status Report

For

US 17 Corridor

October 2013

US 17 Wilmington Bypass
TIP Project No. R-2633 A/B

US 17 Hampstead Bypass
TIP Project No. R-3300

US 17 Jacksonville Bypass to Drummer / Kellum Road
TIP Project No. U-4007

US 17 Belgrade to New Bern
TIP Project No. R-2514 B,C & D

US 17 New Bern Bypass
TIP Project No. R-2301 A

US 17 New Bern to Washington
TIP Project No. R-2513

US 17 Washington Bypass
TIP Project No. R-2510

US 17 Washington to Williamston
TIP Project No. R-2511

US 17 Mills Street in Bridgeton to NC 43
TIP Project No. R-3403

US 17-74-76 / NC 133 Widening in Wilmington
TIP Project No. R-3601

US 17 Status Report

October 2013

US 17 Wilmington Bypass (R-2633 A/B)

Total cost: \$532.1 million (National Highway System / NC Loop)

Unfunded: \$0

- Final Environmental Impact Statement – April 2007
- Record of Decision – October 2007
- Design Public Hearing – January 2008
- R/W Acquisition Segment A – complete
 Segment B – underway
- Construction Segment A – March 1, 2011.
 (estimated completion, December 2013)
 Segment BA – Letting scheduled January 2014
 Segment BB – Letting occurred September 2013

Action Items Recently Accomplished:

- Segment A – Mainline pavement completed.
- Segment A – 97% of original contract completed.
- Segment BB – Construction bids opened September 17, 2013

Action Items Planned:

- Segment A – Final lift of pavement.
- Segment A – Traffic signals to be installed on US 74/76.
- Segment BA – Right of Way acquisition process is on-going.
- Segment BA – Final design work continuing.
- Segment BB – Review of bids and awarding of contract.

Project Managers (Segment A): Wayne Currie, P.E. (910) 251-2691, wcurrie@ncdot.gov

Project Manager (Segment B): Brenda Moore, P.E. (919) 707-6285, blmoore@ncdot.gov

US 17 Jacksonville Bypass to Drummer Kellum Road (U-4007)

Total cost: \$201.9 million (National Highway System) Unfunded: \$104.4 million

- Environmental Assessment – October 2006
- Finding of No Significant Impact – February 2008
- R/W Acquisition Segments A, B – complete
 Segment C – Budgeted \$14.6 million in US FY 2020
 Segment C – partially unfunded (\$29.1 million)
 Segment D – unfunded (\$32.3 million)
- Construction Segment A – Began July 2011
 Segment B – Began October 2010
 Segment C – unfunded (\$26.3 million)
 Segment D – unfunded (\$16.6 million)

Action Items Recently Accomplished:

- Segment A – Road is open. Completing vegetation establishment at borrow pit. Construction approximately 96% complete (estimated completion December 2013).
- Segment B – Bridge work completed. Grade work being completed at Marine Boulevard. Construction is approximately 89% complete.

Action Items Planned:

- Segment A – Continue vegetation establishment.
- Segment B – Continue with paving work. Dependent on weather conditions, paving could extend into early 2014.

Project Manager (Segments C & D): Brenda Moore, P.E. (919) 707-6248, blmoore@ncdot.gov

Project Manager (Segments A & B): David A. Candela, P.E. (910) 347-5258, dacandela@ncdot.gov

US 17 Belgrade to New Bern Bypass (R-2514 B, C & D)

Total cost: \$233.4 million (NC Trust Fund)

Unfunded: \$0

- State draft Environmental Impact Statement – Approved August 31, 2004
- Corridor public hearing – August 16, 2005
- State Final Environmental Impact Statement (FEIS) – June 23, 2011
- Record of Decision – Approved June 25, 2012
- Design Public Hearing – September 2012
- R/W Acquisition
 - Segment B – December 2013
 - Segment C – June 2013 (underway)
 - Segment D – September 2013 (underway)
- Construction
 - Segment B – Budgeted \$93.3 million beginning NC FY 2015.
 - Segment C – Budgeted \$24 million beginning NC FY 2015.
 - Segment D – Budgeted \$101 million beginning NC FY 2015.

Action Items Recently Accomplished:

- Segments C and D – Right of Way acquisition initiated.
- Segment B – Right of Way project commitments update completed.

Action Items Planned:

- Continue preparation for Right of Way acquisition for Segment B.

Project Manager: Brian Yamamoto, P.E. (919) 707-6051 byamamoto@ncdot.gov

Roadway Design Project Manager: James Speer, P.E. (919) 707-6320 jspeer@ncdot.gov

US 17 New Bern Bypass (R-2301)

Total cost: Segment A – \$41.1 million (National Highway System) Unfunded: \$0
 Segment B – \$161.8 million (NC Trust Fund) Unfunded: \$156.5 million

- Record of Decision approved – June 2001
- R/W Acquisition Segment A – Complete
 Segment B – Budgeted \$5.3 million in NC FY 2020
 Segment B – Partially unfunded (\$10.5 million)
- Construction Segment A – Complete
 Segment B – Unfunded (\$146 million)

Action Items Recently Accomplished:

- No items underway.

Action Items Planned:

- Segment B – A reevaluation must be prepared due to the time elapsed since approval of the Record of Decision in June 2001. Project Development activities are scheduled to begin in late 2013, pending further information from the project prioritization process.

Project Manager (Segment B): Brian Yamamoto, P.E. (919) 707-6051 byamamoto@ncdot.gov

US 17 from SR 1438 to Washington Bypass (R-2513)

Total cost: \$72.8 million (NC Trust Fund) Unfunded: \$72.5 million

- Environmental Screening Report prepared by PDEA staff April 4, 2005.
- Project Costs updated by Feasibility Studies Unit – March 2010.
- R/W Acquisition – unfunded (\$15 million)
- Construction – unfunded (\$57.5 million)

Action Items Recently Accomplished:

- No items underway.

Action Items Planned:

- No items underway.

Feasibility Study Project Manager: Derrick Lewis, P.E. (919) 715-5572, dlewis@ncdot.gov
PDEA Project Manager: Charles Cox, P.E. (919) 707-6016, ccox@ncdot.gov

US 17 Washington Bypass (R-2510)

Total cost: \$326 million (National Highway System)

Unfunded: \$0

- Record of Decision approved – December 2004
- R/W Acquisition Segment A – Completed
 Segment B – Completed
 Segment C – Completed
- Construction Segment A – Opened to traffic September 2011
 Segment B – Opened to traffic February 26, 2010
 Segment C – Construction contract let March 2011
 (estimated completion late 2013)

Action Items Recently Accomplished:

- Segment C – Structure over Cherry Run is complete. Deck grooving to be performed late in October. Agreement reached with SHPO regarding construction revisions to J.C. Swanner House property (eligible for the National register of Historic Places). The project is now 84% complete and ahead of schedule.

Action Items Planned:

- Segment C – Pavement striping and guardrail erection to be initiated. The project is scheduled for mid-November completion.

Project Manager (Segment C): Shawn Mebane, P.E. (252) 792-0347 cmebane@ncdot.gov

US 17 from Washington Bypass to Williamston (R-2511)

Total cost: \$54.5 million (NC Trust Fund)

Unfunded: \$42.3 million

- State Environmental Assessment approved – May 2013
- Finding of No Significant Impact (FONSI) – August 2014
- R/W Acquisition – Budgeted \$8.5 million beginning NC FY 2019
- Utilities – Budgeted \$3.2 million in NC FYs 2019-20
- Construction in NC FY 2022 Unfunded (\$42.3 million)

Action Items Recently Accomplished:

- National Environmental Policy ACT (NEPA) / Section 404 merger permit application sent to the US Army Corps of Engineers in June 2013.
- Environmental Assessment approved by Federal Highway Administration (FHWA) on May 28, 2013.

Action Items Planned:

- Public Hearing map review planned for October 2013.
- Public Hearing planned for autumn 2013.

Project Manager: Joe Miller, P.E. (919) 707-6031 josephmiller@ncdot.gov

US 17-74-76 / NC 133 Widening (R-3601)

Total cost: \$18.9 million (National Highway System)

Unfunded: \$0

- Categorical Exclusion – September 2010
- Categorical Exclusion Addendum – August 2011
- R/W Acquisition – Began February 2013
- Construction – November 2013 (Design-Build Letting)

Action Items Recently Accomplished:

- Concurrence Point 4C meeting held in February 2013.
- All permits have been received.

Action Items Planned:

- Preparation for Design-Build Letting.
- Installation of closed circuit televisions.
- Coordination with National Marine Fisheries Service regarding Atlantic Sturgeon.

PDEA Project Manager: Michele L. James, P.E. (919) 707-6027 mjames@ncdot.gov

Roadway Design Project Manager: Susan Lancaster, P.E. (919) 707-6266

sclancaster@ncdot.gov

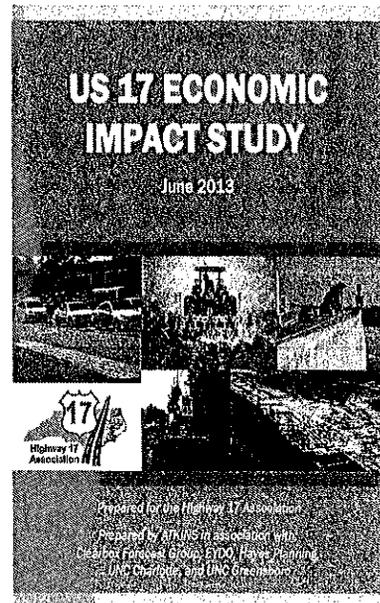
Economic Impact Analysis Complete **Investment in the Highway will benefit eastern North Carolina**

Advocates of US Highway 17 have long asserted that a fully improved facility from South Carolina to Virginia would enhance economic growth for eastern North Carolina. A new **Economic Impact Analysis** conducted in partnership with the **Highway 17 Association** and the NC Department of Transportation supports that assertion with reliable facts and data. Not only will further investment in facility improvements create jobs, both in the short and long term, they will also yield economic growth across almost all segments of the eastern North Carolina economy. Furthermore, improvements to US 17 will increase driver safety and reduce travel times, both of which have quantifiable economic value.

Study Shows Job Creation, Economic Growth from Continued US 17 Investment

US Highway 17 through eastern North Carolina has long been recognized by the region's business and government leaders as the transportation spine of the state's coastal plain. US 17 is critical to providing access to our beaches and other tourist destinations. It serves the logistics needs of the US Marine Corps. It speeds delivery of agricultural products to the state's ports and other markets, and it generally supports economic development efforts of the region.

Over the past few decades, the NC Department of Transportation has worked continuously with these regional leaders to improve the highway, adding lanes to handle increasing traffic, building bypasses around growing towns to increase travel speeds and making safety improvements. The benefits of these improvements have been tangible and substantial. Seven improved segments of US 17 have been opened to traffic in recent years and several other major improvements, such as the Washington Bypass in Beaufort County, are currently nearing completion.



But as has been documented in the US 17 Economic Impact Study, major improvements are still needed if the highway is to meet the mobility, safety and economic development expectations of the region. Only three of the US 17 improvement projects in NCDOT's latest State Transportation Improvement Program, or STIP, are fully funded. There are another 85 miles of US 17 that are identified as high-priority projects in the STIP but are only partially funded, that have no identified funding, or that would remain two lanes even after those STIP projects are completed. As shown below, over \$800 million in additional funding from state and federal pools is needed to complete those "Plan A" and "Plan B" projects. And if the entire 282-mile long corridor were to be upgraded to high-speed freeway standards, which are also the safest, an additional \$4.2 billion would be needed.

Improvement Scenarios

Improvement Plan	Length of Improvements	Cost	
		Year of Expenditure \$ ¹	Present Value \$
Plan A: Complete partially funded STIP projects	54 miles	\$453 million unfunded	\$387 million unfunded
Plan B: Complete unfunded STIP plus remaining two-lane and multilane undivided sections, and other traffic safety improvement needs (Plan B assumes Plan A is completed)	31 miles	\$ 360 million	\$281 million
Plan C: Complete entire corridor to freeway standard (Plan C assumes Plan A is completed)	207 miles	\$ 4.2 billion	\$544.2 million ²

1. Cost reflects estimate at time of anticipated construction (i.e., inflated cost). For Plan C, construction period would extend substantially beyond 2035, at historical spending rates.

2. Plan C present value cost represents only the 42 percent of total plan cost, reflecting anticipated funds and expenditures through the year 2035.

To evaluate the economic benefits that could be expected from further improvements to US 17, these three plans were combined into three improvement programs, called Build 1, Build 2 and Build 3. Build 1 is the stand-alone Plan A. Build 2 is the combination of Plans A and B. Build 3 is the combination of Plans A and C.

While the cost of completing any of these three sets of improvement programs would be high, the cost to the region of not completing the needed improvements would be even higher, in terms of reduced safety, increased delay and travel time, missed economic opportunity and clear financial benefit. As shown in the next two tables, completing any of the three improvement programs would have a significant positive impact on the region's economy and would yield a very healthy return on investment. Many construction jobs would be created. As travel conditions along the corridor are enhanced

due to the facility improvements, increased economic activity would result, creating more jobs due to increased retail and industrial expansion.

Most cost-effective would be simply completing the projects that are currently included in NCDOT's STIP but are only partially funded, the Build 1 improvement program. In committing the \$450 million needed in the year of the expenditure for these projects (\$387 million in today's dollars), the region would realize \$2 billion in benefits, a benefit-to-cost ratio of over 4.5 : 1! And some of these partially funded projects are well underway, so providing the balance of the funding to complete them seems almost a "no-brainer."

Slightly less efficient from a benefit-cost perspective but still providing a very strong return on the public investment would be completing the Build 2 improvement program. This program, which would complete all projects now in the STIP, widen all remaining two lane sections and improve the remaining undivided multilane sections, would cost \$668 million in today's dollars. Yet it would return benefits of more than \$2.2 billion, a benefit-to-cost ratio of over 3.3 : 1.

Cost-Benefit of Alternatives

Economic Benefit	Build 1 (= Plan A)		Build 2 (= Plan A + Plan B)		Build 3 (= Plan A + Plan C)	
	Output (Millions of Dollars) ¹	Employment (Jobs) ²	Output (Millions of Dollars) ¹	Employment (Jobs) ²	Output (Millions of Dollars) ¹	Employment (Jobs) ²
Construction Impacts	\$555.2	1,052	\$958.8	1,045	\$1,891.3	1,161
Increased Economic Activity – Traffic Diversion	\$56.0	112	\$111.2	278	\$377.2	1,437
Increased Economic Activity – Industrial Expansion	\$1,453.2	741	\$1,695.7	927	\$1,877.6	1,186
Improved Safety	\$85.9	119	\$105.3	159	\$108.5	183
Reduced Travel Times	\$0.1	0	\$4.9	10	\$22.9	65
Totals	\$2,150.4	2,024	\$2,875.9	2,419	\$4,277.5	4,032

¹ Dollar impacts are measured as the present value of added total economic output in the Study Region. This is the sum of the present value of the direct spending in benefit category, plus the present value of the spillovers from that benefit's activity. Total economic output represents gross sales, i.e. the accumulation of sales in each successive round of purchases. In almost all cases, the final consumers of tourism goods and services are households. Government spending is also considered as final demand.

² The employment impacts are measured as the total number of part-time and full-time jobs resulting from the direct spending or employment in that row. For construction, the impact is the average number of jobs per year during the period of that construction program. For other rows, the impact is the number of jobs in the final year of the study period, 2035.

Benefit Cost Ratios

Improvement Program	Construction Cost (Present Value, \$ millions) ¹	Total Benefits (Present Value, \$ millions) ¹	Benefit-Cost Ratio
Build 1 (Plan A)	\$ 386.8	\$ 1,763.5	4.56
Build 2 ² (Plan A + Plan B)	\$ 668.0	\$ 2,207.8	3.31
Build 3 ² (Plan A + Plan C)	\$ 931.0	\$ 2,959.7	2.25

1. Present value of costs and benefits through Year 2035.
2. The present value construction cost of Build 2 and Build 3 improvement programs includes the cost of Build 1.

It seems quite clear from the economic impact analysis summarized here that the value of continued public investment in making US 17 a safer, less congested, higher-speed facility that is in keeping with the region's economic development and economic opportunity goals is very real and quite large. The improvements to the highway would increase economic opportunities for agri-business and tourism, and enhance safety and logistics for the region's military, North Carolina's three largest economic sectors. Jobs would be created or preserved in each of those sectors, as well as in the construction industry. The investments would also continue to improve traveler safety, reduce travel time, increase retail activity, enhance industrial development activity and provide opportunities to divert traffic off of Interstate 95.

Next Steps for US 17 Economic Impact Study

The Highway 17 Association intends to make this study available to all US 17 stakeholders through an aggressive marketing program that will include digital and print dissemination as well as personal presentations to key groups within the US 17 corridor, in Raleigh and in Washington, DC.



A principal audience for the report will be the NC Department of Transportation, which will ultimately make decisions about which road projects receive funding on the STIP. Increasingly, NCDOT professionals use data to inform and influence their road-building decisions. The data in this report will show clearly that investing in US 17 projects will create jobs, enable economic growth, decrease

travel times and perhaps most importantly improve safety for residents and visitors in eastern North Carolina. In addition to the NCDOT, another key audience will be the

Highway 17 Association
 PO Box 1673 New Bern, NC 28563
 Phone (252) 514-2748 • Fax (252) 633-3565
 Email: fjnlaysn@highway17nc.org

North Carolina General Assembly that appropriates the funding to NCDOT to manage the state's transportation system. Legislators, especially those representing the US 17 corridor counties, should find the study enlightening.

The Association also expects this report to be beneficial to economic developers in the region and at the state level. Traditionally a key criterion in industrial site selection is access to a four lane, divided highway. This report will provide a blueprint for building that kind of facility on US 17. For example, the improvement of US 17 in Jones County will enable industrial and commercial growth in Jones, Onslow and Craven Counties. Economic professionals in all three counties should benefit from the results of the study.

The Highway 17 Association intends to present the results of the study to all of our funding partners in the corridor, including county and municipal governments, economic development partnerships, corporations and private citizens. Everyone who lives in eastern North Carolina will benefit from a fully improved US 17. This comprehensive economic impact study should galvanize support and create new advocates for the highway and the organization. The Association is excited to tell this important story.