

Yellow, Purple, Brown and Green Alternatives to be Retained for Detailed Evaluation



Thanks to input from the public and the State and Federal Environmental Resource and Regulatory Agencies, as well as analysis and refinements by the Project Team, DelDOT has selected the US 301 alternatives to be retained for detailed evaluation.

Inside, you will find information and maps showing the alternatives that have been retained: Yellow, Purple, Brown, and Green. The Purple and Green Alternatives have been refined to include a 2-lane spur road (one lane in each direction) to Summit Bridge, generally along the Brown alignment. The purpose of the spur is to address the existing hazardous curve at the south end of Summit Bridge and to optimize the capacity of the existing bridges across the C&D Canal, i.e. Summit Bridge, the Route 1 Bridge and St. Georges Bridge.

The Red, Orange and Blue Alternatives have been dropped from further consideration.

Workshops on Dec. 5, 6 & 7 will highlight retained alternatives

The Project Team continues to refine and evaluate the retained alternatives and will present the results at three workshops on December 5, 6 & 7. Workshop attendees will be able to review maps, ask questions and express their views regarding the retained alternatives and offer suggestions for a preferred alternative, which will be the next step in the project development process.

Your comments, along with those of the Federal and State Environmental Resource and Regulatory Agencies, will be considered in reaching an informed decision on a preferred alternative. After the December workshops, **written comments should be submitted to DelDOT prior to January 9, 2006.**

Inside...

- Potential Impacts of Alternatives Retained
- Yellow Alternative
- Purple Alternative with Spur
- Brown Alternative
- Green Alternative with Spur
- Retained Alternatives Traffic Impacts
- Why has the Red Alternative been Dropped?
- Why has the Blue Alternative been Dropped?
- Next Steps



Public Workshops

Monday & Tuesday, December 5 & 6
 4:00 p.m. – 7:00 p.m.
Middletown Fire Hall
 W. Green Street and S. Scott Street
 Middletown

Wednesday, December 7
 4:00 p.m. – 7:00 p.m.
Townsend Fire Hall
 107 Main Street
 Townsend

Each workshop will offer the same material. A brief presentation will be given at each workshop at 4:15 and repeated at 5:15 and 6:15.



Delaware Department of Transportation



A Cooperative Effort of the Delaware Department of Transportation and the Federal Highway Administration

POTENTIAL IMPACTS OF ALTERNATIVES RETAINED

The Yellow, Purple, Brown and Green Alternatives have been retained for detailed evaluation. This selection was based on an analysis of potential natural environmental and cultural impacts, community impacts, engineering considerations, and comments received from the general public, community and business representatives and leaders, the environmental resource and regulatory agencies and state and

local elected officials. The chart below provides details on the potential impacts of each alternative, as well as the range of potential impacts for all alternatives. **For the Brown and Green alternatives, the N after the numbers is for the north option and the S is for the south option.**

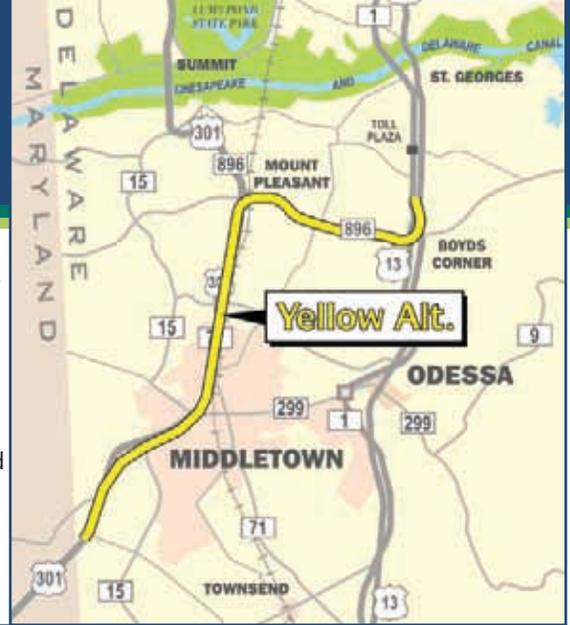
NATURAL ENVIRONMENT	YELLOW	PURPLE + Spur	BROWN	GREEN + Spur	RANGE
Wetland Impacts (acres)	44.4	16	20.3 N / 26.9 S	20.6 N / 21.4 S	16-44.4
High quality wetlands (acres)	25.3	6	10.4 N / 8.5 S	8 N / 8.9 S	6-25.3
Number of wetlands impacted	35	35	36 N / 30 S	39 N & S	30-39
Number of wetland crossings	3	9	9 N / 6 S	8 N / 9 S	3-9
Waters of the US impacts – linear feet (LF)	18,438	12,334	12,829 N / 12,088 S	10,612 N / 10,959 S	10,612-18,438
DNREC Tidal Wetlands impacts (acres)	0	0	1.5 N & S	1.5 N & S	0-1.5
Hydric soils impact (acres)	59	26	46 N / 58 S	33 N & S	26-59
Floodplain impacts (acres)	0.3	0.3	2.5 N & S	2.5 N & S	0.3-2.5
Agricultural District impacts (acres)	14	28	28 N & S	28 N & S	14-28
Agricultural Preservation Easements (acres)	0	2	7 N / 12 S	2 N / 2 S	0-12
Forestland impacts (acres)	33.7	38.7	38.7 N / 50.8 S	42.7 N / 36.1 S	33.7-50.8
Potential Rare, Threatened and Endangered Species (RTE) areas	Low	Mid	High	Mid	Low-High
CULTURAL					
Known Historic Properties directly impacted	4	0	0	0	0-4
Known Historic Properties potentially affected	73	48	28 N & S	38 N & S	28-73
COMMUNITY					
Existing communities within 600 ft	5	3	5 N / 6 S	3 N / 2 S	2-6
ENGINEERING					
Total length of alternative (miles)	12.7	15.3	15.5 N / 15.9 S	17.5 N / 17.3 S	12.7-17.5
Properties directly impacted	323	127	110 N / 111 S	126 N / 124 S	110-323
Preliminary cost (\$ millions)/Includes right-of-way	\$603	\$500	\$543 N / \$579 S	\$552 N / \$567 S	\$500-\$603

Summary of Comments Received from the Public as of October 17, 2005

A total of 1,056 public comments were received from the September workshops, the project office, e-mail, mail and phone.

	YELLOW	PURPLE	BROWN	GREEN
Support/Retain	123	331	120	594
Oppose/Drop	259	99	259	139

YELLOW ALTERNATIVE



REVISIONS SINCE SEPTEMBER 2005 PUBLIC WORKSHOPS

- Developed Strawberry Lane Overpass
- Retaining Walls were added to avoid impacts to historic properties (Cochran Grange and Hedgelawn) and parklands (Middletown Commons)
- Refining environmental and cultural information

The Yellow Alternative would be a four-lane, limited access tolled highway constructed along existing US 301 from the Delaware/Maryland state line to the Mt. Pleasant area, where the roadway would turn east/west and parallel existing Route 896, Boyds Corner Road, and tie into Route 1 just north of the Route 1/Boys Corner Road interchange. Existing Boyds Corner Road would provide local access while service roads would provide access for properties on existing US 301 and also allow for the circulation of local traffic.

ENGINEERING/TRAFFIC

Advantages

- Retains the new roadways in existing roadway corridors (US 301 / Boyds Corner Road, Route 896)
- Improves safety by separating local from through traffic, including truck traffic

Disadvantages

- Highest number of properties directly impacted – 323 businesses and homes along existing US 301 and Route 896
- Higher potential for traffic impacts along existing US 301, Boyds Corner Road, and Route 896 during construction
- Proximity to Cedar Lane Elementary School and new Middle School (under construction)
- Circuitous property access – one-way frontage roads between Armstrong Corner and Boyds Corner Road
- High impact on existing communities (within 600 feet) – 5 communities
- Not possible to lower roadway profile, due to overpasses of Main Street, Route 71, Frogtown Crossing, Marl Pit Road, Boyds Corner Road (2), realigned Shallcross Lake Road, US 13 and Route 1; therefore, difficult to mitigate indirect impacts (noise, visual, etc.)
- Highest cost –\$603M

CULTURAL/ENVIRONMENTAL

Advantages

- No DNREC Tidal Wetland impacts
- Lowest Agricultural District impacts – 14 acres
- Lowest forestland impacts – 33.7 acres
- Low floodplain impacts – 0.3 acres
- Low potential Rare, Threatened and Endangered Species (RTE) area

Disadvantages

- Highest wetland impacts – 44.4 acres
- Highest impact to high quality wetlands – 25.3 acres

- Highest Waters of the US impacts – 18,438 LF
- Highest direct impact on known historic properties / Section 4(f) – 4 properties

Note: Detailed evaluation is continuing to identify cultural resources and assess potential effects

PUBLIC COMMENTS 123 RETAIN / 259 DROP

Brief summary of comments received from the September workshops, e-mail, website, project office and project phone as of the end of the comment period on October 17, 2005.

Advantages

- Like the Yellow Alternative as it uses existing roadway corridors
- The option is needed to serve local traffic
- Will have less impact on property values
- Will improve traffic on US 301 through Middletown
- Uses right-of-way already owned by the State

Disadvantages

- It will cut the Town of Middletown in half
- Comes too close to existing communities
- Will be very disruptive during construction and to local traffic patterns.
- Negative impacts on businesses along US 301
- Don't want to see Route 896 widened
- Has negative environmental impacts
- Trucks will not use this alternative
- This alternative is too expensive, has many overpasses
- Don't like the service roads
- Alternative is not direct, will have negative traffic impacts, congestion will remain
- Do not want major highway construction/improvements near their communities or homes or near those of friends and family members
- Too many harmful impacts on current roads

PURPLE ALTERNATIVE with Spur



REVISIONS SINCE SEPTEMBER 2005 PUBLIC WORKSHOPS

- Developed Strawberry Lane Overpass
- Added a 2-lane spur road from Armstrong Corner Road north to Summit Bridge, with a diamond interchange at Summit Bridge Road/Route 896 to:
 - provide a balanced traffic solution by optimizing the existing capacity of C & D Canal bridges (Summit, Route 1 and St. George's)
 - address the sharp curve at south end of Summit Bridge, where numerous accidents and fatalities have occurred
 - minimize improvement costs required in the Route 896 and Route 1 corridors north of the Canal
- Shifted alignment to the south as it crosses existing US 301 to avoid segmenting forested wetland
- Provided a diamond interchange to access US 301 – This option will have additional property impacts
- Refining environmental and cultural information
- Revised to avoid historic Lovett property on Cedar Lane Road

The Purple Alternative would be a four-lane, limited access tolled highway constructed on a new location, generally north/south, from the Delaware/Maryland state line to north of Armstrong Corner Road, north of Middletown. The new alignment would continue northeast to Route 896 west of Jamison Corner Road and Cedar Lane, where the alignment would parallel existing Boyd's Corner Road (Route 896) and tie into Route 1 just north of the Route 1/Boyd's Corner Road interchange and south of the existing Biddles Corner Toll Plaza. A two-lane, limited access spur roadway would extend from north of Armstrong Corner Road to just south of the Summit Bridge.

ENGINEERING/TRAFFIC

Advantages

- Lowest cost to construct – \$500M
- High number of properties impacted – 127 properties
- Low impact on existing communities (within 600 feet) – 3 communities
- Improves safety by separating local from through traffic, including truck traffic

Disadvantages

- Higher potential for traffic impacts along existing Boyd's Corner Road and Route 896 during construction
- Proximity to new high school (under construction) west of Middletown, Cedar Lane Elementary School and Middle School (under construction)
- Not possible to lower new US 301 roadway profile along Boyd's Corner Road, due to overpasses of Boyd's Corner Road (2), realigned Shallcross Lake Road, US 113 and Route 1; therefore, difficult to mitigate indirect impacts (noise, visual, etc.) on adjacent communities

CULTURAL / ENVIRONMENTAL

Advantages

- Lowest wetland impacts – 16.0 acres
- Lowest high quality wetlands impacts – 6 acres
- Mid-range Waters of the US impacts – 12,334 LF
- No DNREC Tidal Wetland impacts
- Low floodplain impacts – 0.3 acres
- Mid-range forestland impacts – 38.7 acres

Disadvantages

- High Agricultural District impacts – 28 acres
- High number of historic properties potentially affected – 48 properties

Note: Detailed evaluation is continuing to identify cultural resources and assess potential effects

PUBLIC COMMENTS

331 RETAIN / 99 DROP

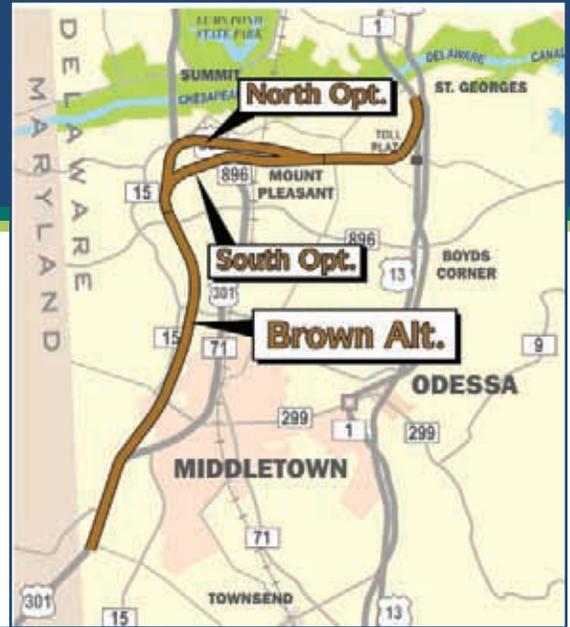
Brief summary of comments received from the September workshops, e-mail, website, project office and project phone as of the end of the comment period on October 17, 2005.

Advantages

- A direct route that fixes traffic problems, keeps traffic near Boyd's Corner, provides better local access
- Separates local from through traffic, helps truck traffic
- Uses existing roads (Boyd's Corner Road)
- Strikes a good balance among the issues
- Less property and environmental impacts
- A lower cost approach
- Doesn't divide Middletown; keeps the town whole
- Will do a good job of keeping traffic moving

Disadvantages

- Extremely wide roadway corridor (new US 301 & Boyd's Corner Road)
- Impacts existing and new schools
- Will destroy Choptank Road open space
- Too close to several existing developments
- Will require acquisition of the New Covenant Church
- This alternative will cause negative impacts to an agricultural district
- Impact to four existing and four proposed communities



REVISIONS SINCE SEPTEMBER 2005 PUBLIC WORKSHOPS

- Developed Strawberry Lane Overpass
- Made modifications to avoid impacts to C&D Canal Wildlife Area, Section 4(f) property
- Refining environmental and cultural information

The Brown Alternative would be a four-lane, limited access tolled highway constructed on a new location in a north/south alignment (Ridge Route) from the Delaware/Maryland state line to south of Summit Bridge. It would then continue on a new location in an east/west alignment south of the C&D Canal to intersect with Route 1 between the Biddles Corner Toll Plaza and the Route 1 bridge over the C&D Canal.

In the following information, the N after the numbers is for the north option and S is for the south option.

ENGINEERING/TRAFFIC

Advantages

- Lowest number of properties impacted – 110 N / 111 S properties
- Mid-range impacts on traffic during construction (Route 13 / Route 896)
- Improves safety by separating local from through traffic, including truck traffic
- Mid-range cost to construct – \$543M N / \$579M S

Disadvantages

- Impacts on Summit Airport – FAA designated reliever airport, 85 employees, 100 based aircraft, State Police helicopter operations
- Complex interchange at US 301 / Route 896, south of Summit Bridge – difficult to mitigate indirect effects (noise, visual, etc.) on Lea Eara Farms and Summit Bridge Farms communities
- Highest number of existing communities within 600 ft – 6 S
- Proximity to new high school (under construction) west of Middletown and St. George's Vo-Tech High School

CULTURAL/ENVIRONMENTAL

Advantages

- Mid-range wetland impacts – 20.3 N / 26.9 S acres
- Mid-range high quality wetlands impact – 10.4 N / 8.5 S acres
- Mid-range Waters of the US impacts – 12,829 N / 12,088 S LF
- Less potential impacts to cultural resources

Disadvantages

- High DNREC Tidal Wetland impacts – 1.5 N & S acres
- High floodplain impacts – 2.5 N & S acres
- High Rare, Threatened and Endangered Species (RTE) impact

- High Agricultural District impacts – 28 N & S acres
- Mid-range forestland impacts – 38.7 N / 50.8 S acres

PUBLIC COMMENTS 120 RETAIN / 259 DROP

Brief summary of comments received from the September workshops, e-mail, website, project office and project phone as of the end of the comment period on October 17, 2005.

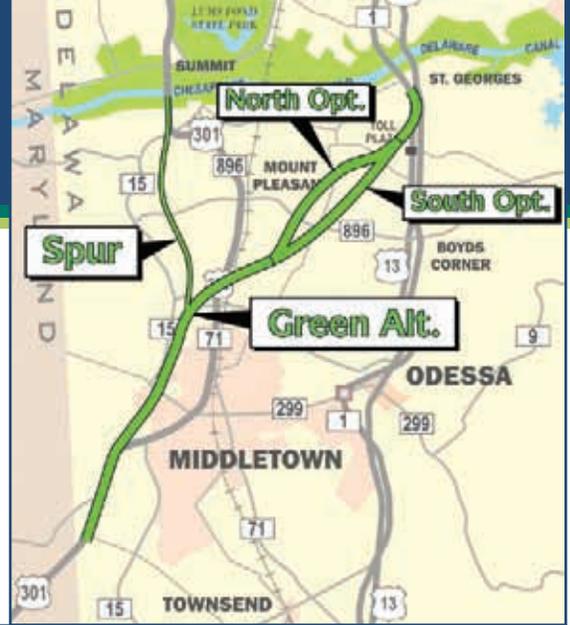
Advantages

- Will allow trucks to continue to use Summit Bridge
- Connects Summit Bridge area to Route 1
- Solves problem of the dangerous Summit Bridge curve
- Will be effective with tolls
- Only alternative that will solve the problem

Disadvantages

- Goes through Summit Airport
- Too close to the schools
- Takes truck traffic through what is now a quiet community
- Traffic will be pushed north to use Summit Bridge
- Negative impacts for several existing communities
- A long, costly route with construction issues, several overpasses
- Concern regarding direct impacts on several individual property owners
- Concerned about detrimental impact to farmland
- Will reduce property values

GREEN ALTERNATIVE with Spur



REVISIONS SINCE SEPTEMBER 2005 PUBLIC WORKSHOPS

Green North Option

- Revised crossing of Boyd's Corner Road, Route 896 to provide a better alignment in order to further reduce wetland impacts

Green South Option

- Revised alternative to provide a straighter crossing of Scott Run

Green North & South

- Developed Strawberry Lane Overpass
- Added a 2-lane spur road from Armstrong Corner Road north to Summit Bridge, with a diamond interchange at Summit Bridge Road/Route 896 to:
 - provide a balanced traffic solution by optimizing the existing capacity of C & D Canal bridges (Summit, Route 1 and St. George's)
 - address the sharp curve at south end of Summit Bridge, where numerous accidents and fatalities have occurred
 - minimize improvement costs required in the Route 896 and Route 1 corridors north of the Canal
- Shifted alignment to the south as it crosses existing US 301 to avoid segmenting forested wetland
- Provided a diamond interchange to access US 301
 - This option will have additional property impacts
 - Revised to avoid historic Lovett property on Cedar Lane Road

The Green Alternative would be a four-lane, limited access tolled highway constructed on a new location, north/south from the Delaware/Maryland state line to north of Armstrong Corner Road, north of Middletown, then continue generally northeast to tie into Route 1 north of the Biddles Corner Toll Plaza. A two-lane, limited access spur roadway would extend from north of Middletown to just south of the Summit Bridge.

In the following information, the N after the numbers is for the north option and S is for the south option.

ENGINEERING/TRAFFIC

Advantages

- Mid-range cost – \$552M N / \$567M S
- Lowest impact on existing communities (within 600 feet) – 3 N / 2 S
- Higher potential to minimize effects on adjacent communities since alternative passes under most local roads
- Lowest impacts on traffic during construction
- Improves safety by separating local from through traffic, including truck traffic
- Mid-range number of properties impacted – 126 N / 124 S
- Green South reduces indirect impacts on the Airmont community (Scott Run Business Park provides a buffer) and St. George's Vo-Tech High School

Disadvantages

- Skewed (angled) crossing of Scott Run (environmental impacts) – S
- Proximity to new high school (under construction) west of Middletown, and Cedar Lane Elementary School and Middle School (under construction) – S
- Potential indirect impact on the Airmont Community and St. George's Vo-Tech High School – N

CULTURAL/ENVIRONMENTAL

Advantages

- Mid-range wetland impacts – 20.6 N / 21.4 S acres
- Mid-range high quality wetlands impacts – 8.0 N / 8.9 S acres
- Lowest Waters of the US impacts – 10,612 N / 10,959 S LF
- Mid-range to lower forestland impacts – 42.7 N / 36.1 S acres
- Mid-range Rare Threatened and Endangered Species (RTE)

Disadvantages

- High DNREC Tidal Wetland impacts – 1.5 N & S acres
- High floodplain impacts – 2.5 N & S acres
- High Agricultural District impacts – 28 N & S acres

Note: Detailed evaluation is continuing to identify cultural resources and assess potential effects

PUBLIC COMMENTS

594 RETAIN / 139 DROP

Brief summary of comments received from the September workshops, e-mail, website, project office and project phone as of the end of the comment period on October 17, 2005.

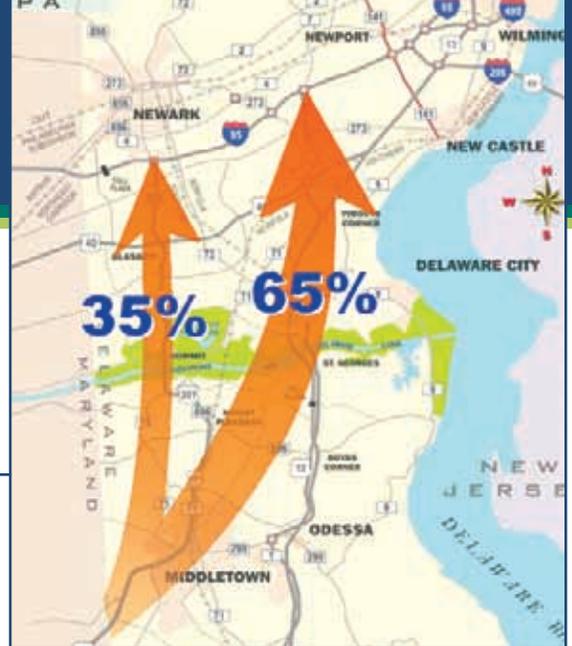
Advantages

- More direct route, keeps traffic out of Middletown, doesn't cut the town in half, lessens congestion
- Will save fuel and time
- Gets traffic out of business district
- This alternative has a lot of public support
- Moderate construction cost
- Less impact on existing residences and businesses and on the environment
- Good solution to traffic problems, less disruption during construction, handles trucks better
- Fewer overall negative impacts
- Changes can be made to proposed developments to accommodate the new road
- Meets goals and objectives of the project

Disadvantages

- Harmful impacts on Vo-Tech and new high schools
- Damages farmland
- Negative impacts on individuals' properties and specific communities
- Negative impact on open land
- Will be too expensive

RETAINED ALTERNATIVES Traffic Impacts



US 301 PROJECT AREA
WHERE PEOPLE WANT TO GO

Where are people going?

Data from an origin and destination study conducted by the project team shows that 65% of motorists traveling north on US 301 are headed northeast (Churchmans Crossing, Wilmington, Philadelphia, New Jersey) and 35% are going north (Glasgow, Newark, Elkton). Interstate truck data shows 95% of the truck traffic heading northeast, while 5% is going north.

ALL OF THE RETAINED ALTERNATIVES ACCOMPLISH THE FOLLOWING:

- Optimize the traffic capacity of the existing bridges crossing the C&D Canal
- Do not require a new bridge across the C&D Canal
- Do not require reconstruction of I-95 and Route 896 interchange (mainly due to future construction of Newtown Road between Route 896 and Route 72, and north serving ramps at I-95 and Route 72)
- Do not require improvements to Route 1, south of Tybouts Corner
- Do require a third lane on Route 1, north of Tybouts Corner. However, this third lane is already planned.
- Take advantage of programmed improvements at I-95/Route 1 interchange and I-95, from Route 1 to Route 141

- Do not preclude future improvements in the Route 896 corridor

HOW THE ALTERNATIVES COMPARE IN SOLVING TRAFFIC ISSUES

Yellow

- Least improvements to traffic conditions on north/south roadways (US 301, Choptank Road, Cedar Lane)
- Moderate improvements on east/west roadways
- Attracts the lowest volume of traffic to the new US 301

Purple

- Significant reduction in traffic on US 301, Boyds Corner Road, Cedar Lane, Choptank Road and Route 299
- Attracts the third highest volume of traffic to the new US 301

Brown

- Significant reduction in traffic on US 301, Boyds Corner Road, Cedar Lane, Choptank Road and Route 299
- Attracts the second highest volume of traffic to the new US 301

Green

- Significant reduction in traffic on US 301, Boyds Corner Road, Cedar Lane, Choptank Road and Route 299
- Attracts the highest volume to the new US 301

Why has the Red Alternative been dropped?

AFTER ADDITIONAL DETAILED EVALUATION, DELDOT'S DECISION TO DROP THE RED ALTERNATIVE IS BASED ON THE FOLLOWING:

- Does not optimize traffic capacity of the existing Route 1 bridge crossing at the C&D Canal
- Does not match roadway improvements with the desired destinations of motorists (65% want to go northeast, not north)
- Requires a new Summit Bridge across the C&D Canal.
- Is the most costly alternative at \$789 M (other alternatives range from \$500M to \$603M)
- Impacts Recreational Property [Section 4(f)], a potential fatal flaw in utilizing federal funds
- Will result in significant construction impacts: Route 896 north of C&D Canal and I-95/Route 896 interchange reconstruction

Why has the Blue Alternative been dropped?

AFTER ADDITIONAL EVALUATION AND COMMENTS FROM THE PUBLIC AND RESOURCE AGENCIES, DELDOT DECIDED TO DROP THE BLUE ALTERNATIVE BASED ON THE FOLLOWING:

- Strong opposition from both the public (over 2300 opposed) and resource agencies
- Poor traffic performance and congestion relief compared to the retained alternatives (20,000-26,000 vehicles per day versus 38,000-57,000)
- Significant environmental impacts, including two high quality wetlands, forested lands, natural areas and wildlife habitat
- Based on the Department of Agricultural analysis, areas of agricultural suitability would be the most severely impacted by this alternative
- Could encourage development where state policies are designed to preserve agricultural and natural resources

Thanks for all of your comments, ideas and suggestions!

Since the project began early this year, we have had overwhelming participation from local citizens:

- Over 800 people attended the June 20 and 21 workshops in Middletown.
- About 1,100 attended workshops on September 12 and 13 in Middletown and September 19 in Townsend.
- A total of over 1000 comments and four petitions with nearly 1900 signatures expressing opinions on

the various alternatives were received at the workshops and during the comment period via mail, at the Project Office in Middletown, at DeIDOT's headquarters or through the project website.

Public input is welcomed and encouraged throughout the project development process. Information about the project can be obtained from the project's web site at www.us301.org.

Next Steps

December 5, 6 & 7

- Public Workshops
- Alternatives Retained for Detailed Evaluation

December/January

- Review public comments, analyze alternatives, develop recommended Preferred Alternative

Early 2006

- Public Workshops
- Preferred Alternative
- Draft Environmental Impact Statement

Contact Information

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Middletown, DE 19709

Hours:

Monday 10 a.m.-2 p.m.

Thursday 3-7 p.m.

Saturday 9 a.m.-1 p.m.

Project Office Holiday Closings

Nov. 24, 26 and Dec. 22-Jan. 4

Reserve the Dates...
Next US 301 Project
Development
Workshops
December 5, 6 & 7



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