

# **Public Workshop**

April 10 and 11, 2006 4:00 PM to 7:00 PM

Middletown
April 10 & 11
Middletown Fire Hall
W. Green St. and S. Scott St.
Middletown, DE

If you are unable to complete the comment form this evening, please return it to us by May 15, 2006.

# WELCOME

On behalf of the Delaware Department of Transportation (DelDOT), we welcome you to this fifth round of public workshops for the US 301 Project Development effort.

This may be your last opportunity to review and comment at a public workshop on the Alternatives Retained for Detailed Evaluation before DelDOT presents a recommendation on a preferred alternative late this year. Therefore, public input is vital as we seek a solution to address transportation problems in the US 301 area from the Delaware / Maryland state line to SR 1, south of the C&D Canal.

Tonight, we invite your comments and input on the Alternatives Retained for Detailed Evaluation, and if you wish, on a recommended preferred alternative, the next step in the project development process. We want to know what you think.

Thankyou for sharing your valuable time and insights.

Carolann Wicks, P.E.
Secretary
Delaware Department of Transportation

# **Workshop Purpose**

The purpose of this workshop is to continue the effort to evaluate alternatives and eventually select a Preferred Alternative for an improved US 301 from the Delaware / Maryland state line to SR 1, south of the C & D Canal.

You are invited to express your views, give reasons for support of, or opposition to, the refined Alternatives Retained for Detailed Evaluation including the options currently under consideration in the Armstrong Corner Road area, the Boyds Corner Road area and south of Summit Bridge. Also, if you wish, you are invited to provide your comments regarding your preferred options and on a preferred alternative, the next step in the project development process.

# **Next Steps**

DelDOT will consider the input from this fifth round of public workshops, the results of the continuing detailed evaluation and the results of continued consultation with the resource agencies, including the results of the Phase II and Phase III Bog Turtle Survey, in reaching a recommendation on a preferred alternative, the next step in the project development process. We currently anticipate that this will occur in late 2006.

# **Stay Involved - Provide your input**

We encourage you to provide us with your input and to stay involved in the project development process for this important project.

Please provide us with your comments by May 15, 2006 (See Page 8)

# **Workshop Information / Comment Form**

# POTENTIAL IMPACTS OF ALTERNATIVES RETAINED

The Yellow, Purple+Spur, Brown and Green+Spur Alternatives have been retained for detailed evaluation. This selection was based on an analysis of potential natural environmental and cultural resources 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 a summary of key potential natural environment, cultural, community and engineering impacts of each alternative, as well as the range of potential impacts for all four Retained Alternatives. The abbreviation N after the numbers is for the north option and the S is for the south option.

NATURAL ENVIRONMENT	YELLOW	PURPLE +SPUR	BROWN NORTH	BROWN SOUTH	GREEN + SPUR NORTH	GREEN + SPUR SOUTH	RANGE
Wetland (acres)	54.1 - 56.7	26.5 - 31.8	29	23.7	31.8 - 35.7	27.0 - 31.0	23.7 - 56.7
High quality wetlands (acres)	10.2 - 10.3	8.4 - 10.6	14.0	12.5	10.5 - 12.0	11.3 - 12.6	8.4 - 14.0
Number of wetlands	38 - 45	45 - 55	38	32	42 - 50	42 - 50	32 - 55
Number of wetland crossings	2 - 4	6 - 9	9	6	7 - 8	8 - 9	2 - 9
Waters of the US - linear feet (LF)	18,613 - 21,282	14,063 - 16,019	13,879	13,178	12,902 - 13,959	13,759 - 14,994	12,902 - 21,282
DNREC Tidal Wetlands (acres)	0.6	0.6	1.5	1.5	1.5	1.5	0.6 - 1.5
Hydric soils (acres)	156 - 178	125 - 146	117	112	132 - 145	125 - 138	112 - 178
Floodplain (acres)	1.7	1.7	2.5	2.5	2.5	2.5	1.7 - 2.5
Agricultural District (acres)	14.1	29.2 - 29.5	29.2	29.2	29.2 - 29.5	29.2 - 29.5	14.1 - 29.5
Agricultural Preservation Easements (acres)	0	6.1	9.4	11.7	6.1	6.1	0 - 11.7
Forestland (acres)	38.8 - 42.3	39.2 - 46.8	42.1	55.4	47.2 - 52.4	40.0 - 45.1	38.8 - 55.4
Potential Rare, Threatened and Endangered Species habitat areas (acres)	42.5 - 46.3	48.4 - 54.5	67.5	57.0	50.6 - 54.3	43.9 - 47.6	42.5 - 67.5
CULTURAL							
Historic Properties directly impacted	4	0	0	0	0	0	0 - 4
Historic Properties potentially affected	15	12 - 13	9	9	10 - 11	11 - 12	9 - 15
COMMUNITY							
Existing communities within 600 ft	7	6	5	5	5	5	5 - 7
ENGINEERING							
Total length of alternative (miles)	12.7 - 12.9	15.3 - 15.5	15.5	15.9	17.5	17.3	-
Properties directly impacted	354	140 -167	113	123	125 - 149	123 - 148	-
Preliminary cost (\$ millions)	694	618-674	581	541	531-582	567 - 611	

# **YELLOW ALTERNATIVE**

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# 4 LANES - LIMITED ACCESS -ALONG EXISTING US 301 & BOYDS CORNER ROAD

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 and parallel existing SR 896, Boyds Corner Road, and tie into SR 1 just north of the SR 1/Boyds Corner Road interchange. Existing Boyds Corner Road would provide local access while service roads would provide access for properties along existing US 301 and also allow for the circulation of local traffic.

# **Engineering / Traffic Comments:**

## **Advantage**

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

# **Disadvantages**

- Highest number of properties directly impacted businesses and homes along existing US 301 and SR 896
- Higher potential for traffic impacts during construction along existing US 301 and Boyds Corner Road/Route 896
- Proximity to Cedar Lane Elementary School and new Middle School (under construction)
- Circuitous property access-one way frontage roads between Armstrong Corner Road and Boyds Corner Road
- High impact on existing communities (within 600 feet)
- Not possible to lower roadway profile, due to overpass of Main Street, SR 71, Frogtown Crossing, Marl Pit Road, Boyds Corner Road (2), realigned Shallcross Lake Road, US 13 and SR 1; therefore, difficult to mitigate indirect impacts (noise, visual, etc.)
- Least improvement to traffic conditions on north/south roadways US 301, Choptank Road, Cedar Lane Road
- Moderate improvements on east/west roadways
- Lowest traffic volume using new US 301
- Requires acquisition of New Covenant Presbyterian Church under Boyds Corner Road Area Option 1
- Requires acquisition of the Odessa Fire Station at Boyd's Corner
- Highest overall cost
- Noise impacts to north side of Summit Bridge Farms, residents along Boyds Corner Road, just east of Mt. Pleasant, Grande View Farms and Asbury Chase I & II

# Cultural / Environmental Comments: Advantages

- Low DNREC Tidal Wetland impacts
- Lowest Agricultural District impacts
- Low forestland impacts
- Low floodplain impacts
- Mid-range impact to Species Habitat Areas (wildlife & plants)
- Mid-range residential noise impacts

### Disadvantages

- Highest Wetland impacts
- Highest Waters of the US impacts
- Highest direct impact on known historic properties / Section 4(f) - potential fatal flaw in use of federal funds
- Potential noise and visual effects on historic properties

### Note:

- Detailed evaluation process is on-going to identify cultural resources and assess potential effects
- Phase II & III Bog Turtle Survey currently underway

# **Public Comments from December and February Workshops:**

# **Positive**

- Uses existing roadway corridors
- The option is needed to serve local traffic
- Will improve traffic on US 301 through Middletown
- Uses right-of-way already owned by the State
- Noise and traffic stay on/near existing road

### Negative

- It will cut the Town of Middletown in half
- Comes too close to existing communities
- Will be very disruptive to local traffic patterns during construction
- Significant impacts on businesses and residences along existing US 301
- Don't want to see SR 896 widened
- Has negative environmental impacts
- Trucks will not use this alternative
- This alternative is too expensive, has many overpasses
- Don't want to see New Covenant Church forced to move

- 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
- Too many harmful impacts on existing roads

# INTERCHANGE OPTIONS - SOUTH OF SUMMIT BRIDGE

# **OPTION 1**

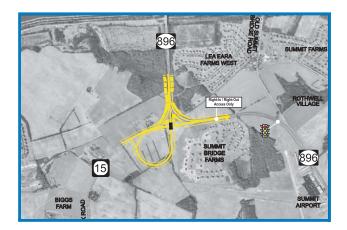
Provides Loop ramp for Southbound SR 896

# **Advantages**

- Eliminates existing SR 896 sharp curve and traffic signal
- Slows traffic down by using ramp movements
- Provides continuous traffic flow for major movements on SR 896

## Disadvantages

- Traffic volume near capacity on single-lane loop ramp (year 2030) likely requires two-lane loop
- Loop ramp constraints may not alleviate safety concerns speed of southbound vehicles coming off Summit Bridge onto loop ramp – driver expectation – ramp still below desired design speed



# **OPTION 2 (New)**

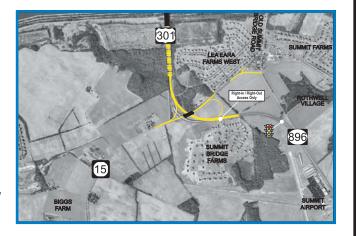
Bethel Church Road over SR 896 with loop ramp to SR 896 northbound

### Advantages

- Eliminates existing SR 896 traffic signal within curve
- Provides continuous traffic flow for major movements on SR 896
- Improves curve radius to desired design speed

### Disadvantages

 Access to SB 896 from SR 15 and NB 896 to SR 15 indirect. Provided by overpass to Bethel Church Road, to Old Summit Bridge Road, to SR 896 at existing signal



# ALIGNMENT OPTIONS IN BOYDS CORNER ROAD AREA



Provides new US 301 alignment just north of existing SR 896 (Boyds Corner Road – west of Jamison Corner Road)

### **Advantages**

- Leaves minimal "dead" space between Boyds Corner Road and new US 301
- Avoids impacts to Emerson Farm and residences, located along Jamison Corner Road
- Avoids impacts to southwest corner of Grande View Farms
- Avoids impacts to one of last three operating dairy farms (Emerson Farm) in New Castle County
- Minimizes impacts on proposed "Livable Delaware" community (Bayberry)

### Disadvantages

- Requires acquisition of New Covenant Presbyterian Church
- Results in difficult skew of new US 301 bridge over Boyds Corner Road
- Direct impact on proposed Bayberry South community (southside of existing Boyds Corner Road from east of Cedar Lane Road to Shallcross Lake Road)
- New US 301 is elevated and creates a barrier between proposed Bayberry South and Bayberry North / Bayberry Town Center

# **OPTION 2**

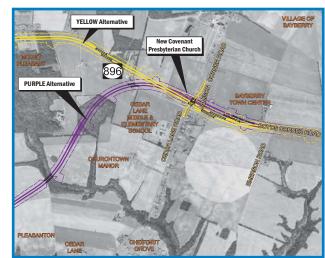
Shifts New US 301 alignment 1,800 feet north of New Covenant Presbyterian Church

# **Advantages**

- Avoids New Covenant Presbyterian Church
- Provides improved skew of new US 301 bridge over Boyds Corner Road
- Shifts new US 301 farther away from Cedar Lane Schools
- Minimizes impacts on proposed "Livable Delaware" Community (Bayberry)

### Disadvantages

- Impacts southwest corner of Grande View Farms community
- Results in greater wetland impacts than Option 1
- Isolates Church between Boyds Corner Road, new US 301 and realigned Jamison Corner Road
- New US 301 creates a barrier between proposed Bayberry South and Bayberry North / Bayberry Town Center
- Increases length of new US 301 (increased costs)
- Requires long bridge over the intersection of Boyds Corner Road, the entrance to Grande View Farms, and Shallcross Lake Road (increased costs and potential safety considerations)
- Decreases distance between new US 301 and historic resources
- Impacts one of last three operating dairy farms in New Castle County. Difficulty in implementing Nutrient Management Plan with reduced acreage



# OPTION 3 (New)

Shifts New US 301 alignment 1,500 feet north of New Covenant Presbyterian Church and adjacent to north boundary of proposed Town Center (Bayberry)

# **Advantages**

- Avoids New Covenant Presbyterian Church
- Provides improved skew of new US 301 bridge over Boyds Corner Road
- Shifts new US 301 farther away from Cedar Lane Schools
- Minimizes impacts to Emerson Farm and residences along Jamison Corner Road
- Avoids impacts to one of last three operating dairy farms (Emerson Farm) in New Castle County

# **Disadvantages**

- Impacts southwest corner of Grande View Farms community
- Results in greater wetland impacts than Option 1
- Isolates Church between Boyds Corner Road, new US 301 and realigned Jamison Corner Road
- New US 301 creates a barrier between proposed Bayberry South and Bayberry North / Bayberry Town Center
- Increases length of new US 301 (increased costs)
- Requires long bridge over the intersection of Boyds Corner Road, the entrance to Grande View Farms, and Shallcross Lake Road (increased cost and potential safety considerations)

# OPTION 4 (New)

Shifts New US 301 alignment 230 feet north of New Covenant Presbyterian Church

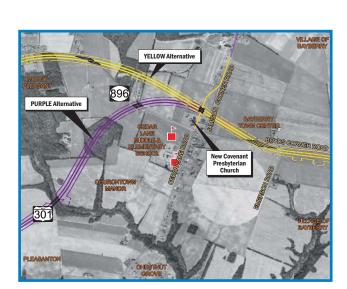
### **Advantages**

- Avoids New Covenant Presbyterian Church
- Provides improved skew of new US 301 bridge over Boyds Corner Road
- Shifts new US 301 farther away from Cedar Lane Schools
- Minimizes impacts to Emerson Farm and residences along Jamison Corner Road
- Avoids impacts to southwest corner of Grande View Farms
- Avoids impacts to one of last three operating dairy farms (Emerson Farm) in New Castle County

### Disadvantages

- Isolates Church between Boyds Corner Road, new US 301 and realigned Jamison Corner Road
- Impacts on proposed "Livable Delaware" community (Bayberry)
- New US 301 is elevated and creates a barrier between proposed Bayberry South and Bayberry North / Bayberry Town Center

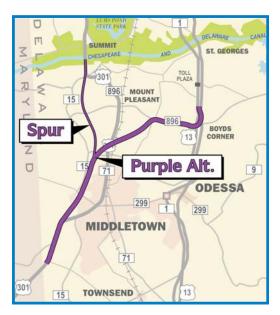




NOTE: Options 1,2,3 (New) & 4 (New) in Boyds Corner Road Area apply to both Yellow and Purple + Spur Alternatives

# PURPLE + SPUR ALTERNATIVE

# 4 LANES - LIMITED ACCESS - ALONG EXISTING BOYDS CORNER ROAD & ON NEW LOCATION



The Purple+Spur Alternative would be a four-lane, limited access tolled highway constructed on new location, generally north/south, from the Delaware/Maryland state line to south of Armstrong Corner Road, north of Middletown. The new alignment would continue northeast to SR 896 (Boyd Corner Road) west of Jamison Corner Road and Cedar Lane Road, where the alignment would parallel existing Boyds Corner Road (SR 896) and tie into SR 1 just north of the SR 1/Boyds Corner Road interchange and south of the existing Biddles Corner Toll Plaza. A two-lane, limited access spur roadway would extend from south of Armstrong Corner Road to just south of the Summit Bridge, with a diamond interchange at the Spur/SR 15/SR 896.

# **Engineering / Traffic Comments:**

# **Advantages**

- Mid-number of properties directly impacted
- Low impact on existing communities (within 600 feet)
- Improves safety by separating local from through traffic, including truck traffic
- Significant reduction in traffic on existing US 301, Boyds Corner Road, Cedar Lane Road, Choptank Road and SR 299
- Third highest volume using new US 301

### Disadvantages

- Noise impacts to north side of Summit Bridge Farms, Grande View Farms and Asbury Chase I & II
- Higher potential for traffic impacts during construction along existing Boyds Corner Road
- Proximity to new Approquinimink 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 Boyds Corner Road, due to overpasses of Boyds Corner Road (2), realigned Shallcross Lake Road, US 13 and SR 1; therefore, difficult to mitigate indirect impacts (noise, visual, etc.) on adjacent communities
- Overall width of SR 896 (Boyds Corner Road) and new US 301 creates significant barrier
- Requires acquisition of the New Covenant Presbyterian Church under Boyds Corner Road Area Option 1
- 2nd highest cost to construct

# **Cultural / Environmental Comments:**

# **Advantages**

- Low wetland impacts
- Lowest high quality wetlands impacts
- Mid-range Waters of the US impacts
- Low DNREC Tidal Wetland impacts
- Low floodplain impacts
- Mid-range forestland impacts
- Mid-range impact to Species Habitat Areas (wildlife & plants)

# Disadvantages

- High Agricultural District impacts
- Potential noise and visual effects on Vandergrift property (Historic)
- High number of residential noise impacts

### Note:

- Detailed evaluation process is on-going to identify cultural resources and assess potential effects
- Phase II & III Bog Turtle Survey currently underway

# **Public Comments from December and February Workshops:**

### **Positive**

- A direct route that fixes traffic problems, keeps traffic near Boyds Corner, provides better local access
- Separates local from through traffic, helps truck traffic
- Uses existing roadway corridor (Boyds 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

# Negative

- Extremely wide roadway corridor (new US 301 & Boyds 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 Presbyterian Church (Option 1)
- This alternative will cause negative impacts to an agricultural district
- Impact to four existing and four proposed communities

# Interchange options in armstrong corner road area

# **OPTION 1**

Provides diamond interchange between new US 301 and Armstrong Corner Road

### Advantages

- Lower wetland impacts than Options 2 and 3
- Utilizes existing Armstrong Corner Road alignment (reduces costs)
- Located farther away from Springmill community than Options 2 and 3
- Does not directly impact any historic properties farthest away from historic properties
- Uses proposed signal at Armstrong Corner Road for local access from existing US 301 to new US 301 (minimizes the number of traffic signals on existing US 301)
- Provides greatest spacing between signalized intersections on existing US 301
- Reduces total ROW impacts compared to Option 2
- Mainline goes under Armstrong Corner Road, so requires fewer bridges than Option 2

# Disadvantages

- Requires acquisition of Middletown Baptist Church impacts both church buildings and parking lot
- Provides ramp spacing between Spur and new US 301/Armstrong Corner Road that barely meets minimum design standards
- Does not provide direct tie between Armstrong Corner Road and Bohemia Mill Road
- Locates new US 301 Interchange on local road (Armstrong Corner Road) rather than arterial (existing US 301)

# OPTION 2

Provides diamond interchange between new US 301 and relocated existing US 301

### Advantages

- Less wetland impacts than Option 3
- Improves spacing between Spur interchange and new US 301/relocated existing US 301 interchange
- Avoids impacts to Middletown Baptist Church buildings, but impacts a portion of the church parking area
- Provides direct connection between Armstrong Corner Road and **Bohemia Mill Road**
- Locates new US 301 interchange on arterial (existing US 301) rather than local road (Armstrong Corner Road)
- Does not directly impact any historic properties

# **Disadvantages**

- Results in greater ROW and relocation impacts along existing US 301 than Option 1 (increased costs)
- Increased construction cost due to additional structures and relocation of existing US 301
- Two additional signals on existing US 301 (in addition to proposed signal at Armstrong Corner) affect traffic operations on US 301

NOTE: Options 1,2,2A & 3 in Armstrong Corner Road Area apply to

**Purple + Spur and Green + Spur Alternatives** 

- Leads to less than desirable spacing of signalized intersections on US 301
- Reduces distance between new US 301 and Springmill (from 1300 to 840 feet)
- Highest Waters of the US impacts
- Impacts on Midland Farms community

# **OPTION 2A (New)**

Provides a non-typical interchange with the movements split over several thousand feet on existing US 301. The northbound entrance and exit ramps are located just north of Armstrong Corner Road. The southbound exit ramp is a loop-type ramp.

# **Advantages**

- Avoids direct impacts to Middletown Baptist Church property
- Does not directly affect any historic properties
- Locates new US 301 interchange on an arterial (existing US 301) rather than a local road (Armstrong Corner Road)
- 2 additional signals to be placed on existing US 301, but at a greater spacing than Option 2
- Do not have to relocate existing US 301, so decreased construction and right-of-way cost as compared to Option 2
- Easier access to existing southbound US 301 from the north (right-hand turn) as compared to Option 2 (left-hand turn)

# **Disadvantages**

- Not a traditional type interchange
- Wider bridge needed over existing US 301 because of deceleration lane for loop
- May have to add turn lanes on existing US 301 for ramps and loops
- Slightly more difficult to access proposed northbound US 301 from south (left-hand turn) as compared to Option 2 (right-hand turn)
- Decreases distance between the interchange ramps and Post and Rail Farms community
- Impacts on Midland Farms community

# OPTION 3

Provides diamond interchange between the new US 301 and Armstrong Corner Road (similar to Option 1), but alignment shifted slightly to the southeast to avoid Middletown Baptist Church property

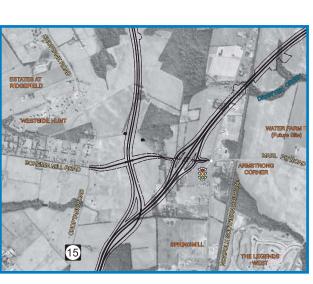
# Advantages

- Lower Waters of the US and Species Habitat impacts than Options 1&2
- Lower DNREC Sub-Aqueous Lands impacts than Option 2
- Lower Forest impacts than Options 1&2
- Increases distance from new US 301 to Post and Rail Farms community
- Avoids direct impacts to Middletown Baptist Church property
- Uses proposed signal at Armstrong Corner Road for local access from existing US 301 to new US 301 (minimizes number of signals on existing US 301)
- Does not require additional traffic signals on existing US 301
- Provides direct connection between Armstrong Corner Road and Bohemia
- Reduces acres of property required to 203 acres (214 and 281 acres for Options 1 and 2 respectively)
- Does not directly affect any historic properties

### **Disadvantages**

- Greater wetland impacts than Options 1&2 (9.6 acres verses 6.0 and 7.8 acres for Options 1&2, respectively)
- Impacts previously undisturbed, low quality wetland NW of Springmill
- Reduces distance between new US 301 and Springmill community to 600 feet (1300 and 840 feet for Options 1&2, respectively)
- Locates new US 301 interchange on local road (Armstrong Corner Road) rather than arterial (existing US 301)
- Reduces distance between new US 301 and the Armstrong Walker House historic site to 500 feet (1,400 and 1,000 feet for Options 1 and 2, respectively)
- Middletown Baptist Church buildings are located 300 feet from new ramp and 550 feet from new US 301 mainline
- Impacts on Midland Farms community
- Provides least flexibility for acceptable traffic operations if future traffic projections are higher, because of close spacing of interchange to existing US 301







# GREEN + SPUR ALTERNATIVE



# 4 LANES - LIMITED ACCESS - ON NEW LOCATION

The Green + Spur Alternative would be a four-lane, limited access tolled highway constructed on new location, extending north from the Delaware/Maryland state line to north of Armstrong Corner Road, north of Middletown, then continue generally northeast to tie into SR 1 north of the Biddles Corner Toll Plaza. The North Option extends north-northeast passing over Boyd's Corner Road, about 3700 feet west of Cedar Lane Road and continues north-northeast before curving east, south of the Airmont Community before tying into SR 1. The South Option extends in a northeast direction to the West of Cedar Lane Elementary School then passes over Boyds Corner Road and between the proposed Village of Bayberry and Scott Run Business Park at Whitehall before tying into SR 1. A diamond interchange with Jamison Corner Road is proposed for either option. A two-lane, limited access spur roadway would extend from south of Armstrong Corner Road to just south of the Summit Bridge, with a diamond interchange (Option 1) at the Spur/SR 15/SR 896.

# **Engineering / Traffic Comments:**

# **Advantages**

- Mid-range cost
- Lowest impact on existing communities (within 600 feet)
- 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
- Green South reduces indirect effects on the Airmont community (Scott Run Business Park would provide a buffer) and St. George's Vo-Tech High School
- Significant reduction in traffic on existing US 301, Boyds Corner Road, Cedar Lane Road, Choptank Road and SR 299
- Highest volume using new US 301

### Disadvantages

- Skewed (angled) crossing of Scott Run (environmental impacts) South Option
- Proximity to new Appoquinimink High School (under construction) west of Middletown, and Cedar Lane Elementary School and Middle School (under construction) South Option
- Potential indirect effect on the Airmont community and St. George's Vo-Tech High School North Option
- Noise impacts to north side of Summit Bridge Farms

# **Cultural / Environmental Comments:**

# **Advantages**

- Mid-range wetland impacts
- Mid-range high quality wetlands impacts
- Low Waters of the US impacts
- Mid-range forestland impacts
- Mid-range impact to Species Habitat Areas (wildlife & plants)
- Low residential noise impacts

### **Disadvantages**

- High DNREC Tidal Wetland impacts
- High floodplain impacts
- High Agricultural District impacts
- Impacts one of the last three operating dairy farms (Emerson Farm) in New Castle County. Difficulty in implementing Nutrient Management Plan with reduced acreage - South Option

# Note:

- Detailed evaluation process is on-going to identify cultural resources and assess potential effects
- Phase II & III Bog Turtle Survey currently underway

# **Public Comments from December and February Workshops:**

### **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 Appoquinimink High School
- Damages farmland
- Negative impacts on individuals' properties and specific communities
- Negative impact on open land

# Please visit Green+Spur Alternative Work Table to review detailed drawings and ask questions

# Interchange options - south of summit bridge



# **OPTION 1**

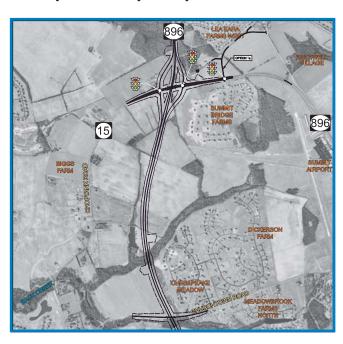
Provides a "full diamond" interchange with free traffic flow from Summit Bridge to the Spur

# **Advantages**

- Eliminates the existing SR 896 sharp curve and traffic signal
- Diamond interchange ramp would act as buffer between Spur Road and Summit Bridge Farms
- Provides full vehicular access in all directions for local communities

# Disadvantages

- Requires heaviest local traffic movements (SB & NB SR 896) to use signalized intersections
- Interchange is adjacent to Summit Bridge Farms community



# **OPTION 2 & 2A**

Provides a directional "Y" interchange between SR 896 and Spur. Grade separates SR 15 over the Spur Road and SR 896. Improves the sharp curve on SR 896 to current design standards and eliminates the traffic signal on the curve.

Option 2A would relocate the existing traffic signal at Old Summit Bridge Road to the entrance at Summit Bridge Farms and relocated Bethel Church Road.

# **Advantages**

- Improves the existing SR 896 sharp curve and removes the traffic signal on the curve
- Maintains free flow of heaviest local traffic movements (NB + SB SR 896) at the interchange
- Directional "Y" interchange is farther away from Summit Bridge Farms than Option 1
- Option 2A provides signalized access to / from Summit Bridge Farms
- Option 2A provides a less circuitous route for traffic using Choptank Road
- Option 2A provides less impacts to Lea Eara Farms

# Disadvantages

- Creates circuitous access for SR 15 traffic west of SR 896 seeking access to SR 896 (via Bethel Church Road (adjacent to Lea Eara Farms) and Old Summit Bridge Road)
- Results in 6,200 and 6,900 vehicles per day on Bethel Church Road and Old Summit Bridge Road (east of existing US 301/SR 896)
- Requires modification of existing SR 896 / Old Summit Bridge Road intersection
- Increased construction costs (number of structures)
- The northbound Spur Road is elevated, adjacent to Summit Bridge Farms and Lea Eara Farms communities
- Option 2A moves traffic signal closer to curve on SR 896
- Option 2A increases delay at signal by adding a 4th leg (Summit Bridge Farms)
- Option 2A creates two closely spaced intersections (not desirable) relocated Old Summit Bridge Road / SR 896 and Relocated Old Summit Bridge Road / Bethel Church Road, impacting Summit Bridge Farms and Lea Eara Farms communities

NOTE: Options 1, 2 & 2A, 3, 3B (New) & 4 south of Summit Bridge also apply to Purple + Spur Alternative



# INTERCHANGE OPTIONS - SOUTH OF SUMMIT BRIDGE



# **BROWN ALTERNATIVE**

Spur Road and Interchange Options apply to Green + Spur and Purple + Spur Alternatives

# **OPTION 3 & 3B (New)**

- Provide a directional "Y" interchange between Spur and SR 896
- Improve the sharp curve on SR 896 to current design standards and eliminate the signalized intersection on the curve
- Relocate access from SR 15 to SR 896 (on sharp curve) to an east-west extension of Bethel Church Road from Choptank Road to the Spur Road
- Option 3 provides a signalized intersection at the Spur / Bethel Church Road extended; Option 3B provides a grade separation at this location to improve traffic operations and safety; Option 3A would relocate the existing traffic signal at Old Summit Bridge Road to the entrance at Summit Bridge Farms and relocated Bethel Church Road

# **Advantages**

- Maintain free flow of heaviest local traffic movements (NB + SB SR 896) at the "Y" interchange
- Improve the existing sharp curve on SR 896 and eliminates the traffic signal on the curve
- Locate directional "Y" interchange farther away from Summit Bridge Farms than Option 1
- Option 3A provides signalized access to / from Summit Bridge Farms;
   less circuitous route for traffic using Choptank Road; has less impacts on Lea Eara Farms
- Option 3B Provides free flowing traffic on Spur; Removes only signal on Spur / proposed US 301 south of Canal; Reduces potential noise associated with signal (braking, stopping & starting); Can maintain a single through lane along entire Spur

# Disadvantages

- Northern Spur Road is elevated, adjacent to Summit Bridge Farms community
- Do not provide direct access (Summit Bridge Farms, Lea Eara Farms & Summit Farms) to and from the south, on the Spur
- Option 3B greater right-of-way impacts; more attractive route for potential diversions onto Choptank and Bethel Church Roads; Provides "unusual" 2-lane into 1-lane merge condition

# **OPTION 4**

- Same as Option 3, plus provides local access at Churchtown Road and Old Schoolhouse Road
- Requires traffic signals at the two additional intersections along the spur
   Advantages
- Same as Option 3, Plus provides local access at Churchtown Road and Old Schoolhouse Road
- Would keep speeds lower on Spur Road, closer to a true parkway concept
- Would reduce traffic on the section of Choptank Road north of Churchtown Road compared to spur options with no local access
- Option 4A provides signalized access to / from Summit Bridge Farms;
- less circuitous route for traffic using Choptank Road; less impacts to Lea Eara Farms

# Disadvantages

- Same as Option 3: DIUS
- May accelerate or encourage further development along roadways with access to the spur in both Delaware and Maryland (Old Schoolhouse Road, Churchtown Road and Bethel Church Road)
- Provides more toll free connectivity to the spur for Westown, Southridge, and other Middletown communities west of US 301, increasing volumes on southern Choptank Road. About 1,900 vpd are projected to use Old Schoolhouse Road to access spur, rather than Levels Road (toll)
- Potential safety issues intersection vs. free flowing traffic
- Potential noise issues braking, stopping and starting at intersections
- Option 4A moves traffic signal closer to curve on SR 896; increases delay at signal by adding a 4th leg (Summit Bridge Farms); creates two
  closely spaced intersections (not desirable) relocated Old Summit Bridge Road / SR 896 and relocated Old Summit Bridge Road / Bethel
  Church Road, impacting Summit Bridge Farms and Lea Eara Farms communities

SUMMIT BROOMSTOOK
PARMS

OPTION 3B

DICKERSON
PARM

ARPORT

CHIBRAFENGE
MEADOWSTOOK
PARMS
MATTE

# STOTE FOR THE CHARGE CHARLES - LINE



# 4 LANES - LIMITED ACCESS -ON NEW LOCATION

The Brown Alternative would be a four-lane, limited access tolled highway constructed on new location on a north/south alignment (Ridge Route) from the Delaware/Maryland state line to south of Summit Bridge. It would then continue on new location on an easterly alignment, south of the C&D Canal, to intersect with SR 1 between the Biddles Corner Toll Plaza and the SR 1 bridge over the C&D Canal. The North Option extends north to SR 15 / SR 896 and then curves east along existing SR 896 towards SR 1. The South Option extends just north of Churchtown Road and then curves northeast between Summit Bridge Farms and Dickerson Farm passing through the northern portion of Summit Airport, before curving east toward SR 1. An interchange with Jamison Corner Road is proposed with either option.

# **Engineering / Traffic Comments: Advantages**

- Lowest number of properties directly impacted
- Mid-range impacts on traffic during construction (SR 15 / SR 896)
- Improves safety by separating local from through traffic, including truck traffic
- Significant reduction in traffic on existing US 301, Boyds Corner Road, Cedar Lane Road, Choptank Road and SR 299
- Second highest traffic volume using new US 301
- Mid-range cost to construct

# **Disadvantages**

- Impacts on Summit Airport FAA designated reliever airport, 85 employees, 100 based aircraft, State Police helicopter operations
- Complex interchange at US 301 / SR 896 / SR 15, 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
- Proximity to new Appoquinimink High School (under construction) west of Middletown and St. George's Vo-Tech High School
- Noise impacts to Summit Bridge Farms ( Brown-South)

# **Cultural / Environmental Comments:**

### **Advantages**

- Mid-range wetland impacts
- Mid-range high quality wetlands impact
- Mid-range Waters of the US impacts
- Less potential impacts to cultural resources
- Mid-range forestland impacts

### **Disadvantages**

- High DNREC Tidal Wetland impacts
- High floodplain impacts
- High Agricultural District impacts
- Mid-range forestland impacts
- High impact to Species Habitat Areas (wildlife & plants)

### Note:

- Detailed evaluation process is on-going to identify cultural resources and assess potential effects
- Phase II & III Bog Turtle Survey currently underway

# **Public Comments from December and February Workshops:**

### **Positive**

- Will allow trucks to continue to use Summit Bridge
- Connects Summit Bridge area to SR 1
- Addresses the sharp curve at the south end of Summit Bridge

### Negative

- Goes through Summit Airport
- Too close to the schools
- Takes truck traffic through what is now a quiet community
- Traffic will be encouraged 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

# **Next Steps / Project Contact Information:**

# **NEXT STEPS**

**Fall / Late 2006** 

Public Workshops / Hearings No.6 Recommended Preferred Alternative

# Stay Informed & Up-To-Date

We encourage all residents, property owners, business owners and those who travel the US 301 Corridor to stay informed and make their views known on alternatives that will solve the problems on US 301. There are several ways to do this:

- Attend public workshops
- ▶ Fill out a Comment Form
- ▶ Log on to the project website for all the latest information: www.us301.org
- Visit the Project Office

Middletown Square Shopping Center 723 North Broad Street Middletown, DE 19709 **Hours of Operation** 

Mondays 10AM - 2PM (until May 15)

Thursdays 3PM - 7PM

Saturdays 9AM - 1PM (until May 20)

# \* Temporary Project Office Closing

Due to the Public Workshops and upcoming holiday season, the Project Office will be closed beginning on April 10th and will reopen on Thursday April 20th from 3-7 PM.

# **Revised Project Office Hours (after May 20th)**

Due to reduced attendance, the Project Office will no longer be open on Mondays and Saturdays after May 20th. The Project Office will continue to be open on Thursdays from 3pm to 7pm.

All materials presented at the public workshops will be available at the Project Office on April 20 and on the Project Website after April 17.

You may convey your comments via:

- DelDOT Public Relations, PO Box 778, Dover, DE 19903
- Phone 866-485-9988 (toll-free)

Please provide us with your comments by May 15, 2006.

- Fax 302-739-2217
- Email dot-public-relations@state.de.us

YOUR COMMENTS ON THE YELLOW ALTERNATIVE	YOUR COMMENTS ON THE BROWN NORTH ALTERNATIVE
What do you like about the Yellow Alternative?	What do you like about the Brown North Alternative?
What do you NOT like about the Yellow Alternative?	What do you NOT like about the Brown North Alternative?
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YOUR COMMENTS ON THE PURPLE + SPUR ALTERNATIVE	YOUR COMMENTS ON THE BROWN SOUTH ALTERNATIVE
YOUR COMMENTS ON THE PURPLE + SPUR ALTERNATIVE  What do you like about the Purple + Spur Alternative?	YOUR COMMENTS ON THE BROWN SOUTH ALTERNATIVE  What do you like about the Brown South Alternative?
What do you like about the Purple + Spur Alternative?	What do you like about the Brown South Alternative?
What do you like about the Purple + Spur Alternative?	What do you like about the Brown South Alternative?
What do you like about the Purple + Spur Alternative?	What do you like about the Brown South Alternative?

YOUR COMMENTS ON THE GREEN NORTH + SPUR ALTERNATIVE	Preferred Alternative / Additional Comments:
What do you like about the Green North + Spur Alternative?	If you wish to indicate your preference for a preferred alternative, please check one of the four alternatives and indicate your preference for the options under each alternative.  Alignment Options at Boyd's Corner Road  YELLOW Option 1 Option 2 Option 3 (New) Option 4 (New) (Select One Interchange Options South of Summit Bridge  Option 1 Option 2 (New) (Select One)
What do you NOT like about the Green North + Spur Alternative?	Interchange Options in Armstrong Corner Road Area  PURPLE + SPUR
	BROWN North Option South Option (Select One)
YOUR COMMENTS ON THE GREEN SOUTH + SPUR ALTERNATIVE  What do you like about the Green South + Spur Alternative?	GREEN + SPUR North Option South Option (Select One)  Interchange Options in Armstrong Corner Road Area  Option 1 Option 2 Option 2A (New) Option 3 (Select One)  Interchange Options south of Summit Bridge  Option 1 Option 2 Option 3 Option 3B (New) Option 4 (Select One)  Additional comments you wish to offer regarding the project:
	Additional commons you wish to only regarding the project.
What do you NOT like about the Green South + Spur Alternative?	Your comments and opinions are very important. All information provided on this form will be carefully considered by DelDOT. Under state law, this form is public domain, and if requested, a copy of it must be provided to the media or public. Thank you for your participation and contributions to this important transportation project.  Optional: Please provide your information:  Name:  Community/Organization:  Address:  Email Address:  DelDOT Public Relations, PO Box 778, Dover, DE 19903
10	Phone 866-485-9988 (toll-free) Fax 302-739-2217 Email dot-public-relations@state.de.us www.us301.org