

Milford Area

Working Group

Meeting No. 6

March 21, 2005



Working Group Members

Scott Adkisson

Milford Area Resident

Robert Burris

Burris Logistics

I.G. Burton, III

Businessman

Richard Carmean

City Manager, City of Milford

F. Brooke Clendaniel

Milford Historical Society

Mark Davis

Delaware Dept. of Agriculture

David Edgell

Office of State Planning Coordination

Terry Feinour

Bayhealth Medical Center

Scott Fitzgerald

Lincoln Area Businessman

Connie Fox

Farmer, Realtor

Dean Geyer

Geyer's Restaurant

Wyatt Hammond

*Chamber of Commerce for
Greater Milford*

E. Keith Hudson

Milford Police Chief

Carl King, Jr.

Lincoln Area Farmer

Lawrence Lank

*Sussex County Planning &
Zoning Commission*

Michael Levensgood

Purdue Farms

Mark Mallamo

Milford Resident

Randy Marvel

Milford Planning Commission

William Matthews, Jr.

*Sussex County Emergency
Medical Services*

Michael Petit de Mange

*Kent County Department of
Planning Services*

David Mick

Carlisle Fire Company

Skip "Michael" Pikus

Downtown Milford Incorporated

Trawana Porter

*First State Community Action
Agency*

Ronald Robbins

Farm Bureau

Mike Simmons

DelDOT, Project Development

Glen Stevenson

Milford School District

Elliot Workman

*Delaware Nature Society
Abbots Mill Nature Center*



Agenda

- **5:30 Call Meeting to Order** **Bob Kramer**
- **5:35 Opening Remarks** **Monroe Hite, III**
- **5:45 Status Reports**
 - * **Traffic Analysis** **Tom Hannan**
 - * **Cost Estimates** **Joe Wutka**
 - * **Economic Impact Analysis** **Jeff Riegner**
- **6:30 Briefing/ Group Discussion** **Working Group-**
(Comments / Plan Changes / Alternatives Retained Process) **Jeff Riegner / Joe Wutka**
 - * **Eastern Bypass Alternatives**
 - * **Western Bypass Alternatives**
 - * **On-Alignment Alternatives**
- **8:00 Third Lane Option** **Jeff Riegner**
- **8:15 Next Steps / Closing Remarks** **Monroe Hite, III**
- **8:30 Adjourn** **Bob Kramer**



Project Notebook

- **Tab 1: PowerPoint Slides**
- **Tab 2: Oct. 25, 2004 Working Group Meeting Summary**
- **Tab 3: Public Workshop Package**
- **Tab 4: Oct. 14, 2004 & Jan. 13, 2005 Agency Meeting Summaries**
- **Tab 5: Plan Changes / Third Lane Option**
- **Tab 6: Updated Matrix (Plan Changes)**
- **Tab 7: Project Calendar**



Project Meetings & Workshops

- **Sept. 13, 2004:** Ellendale Area Working Group Meeting No. 2
- **Sept. 20, 2004:** Milford Area Working Group Meeting No. 4
- **Sept. 29, 2004:** Millsboro-South Area Working Group Meeting No. 4
- **Sept. 30, 2004:** Georgetown Area Working Group Meeting No. 4
- **Oct. 14, 2004:** JPR Meeting (Environmental Resource Agencies Meeting)
- **Oct. 18, 2004:** Georgetown Area Working Group Meeting No. 5
- **Oct. 19, 2004:** Ellendale Area Working Group Meeting No. 3
- **Oct. 25, 2004:** Milford Area Working Group Meeting No. 5
- **Oct. 26, 2004:** Millsboro-South Area Working Meeting No. 5
- **Nov. 8, 2004:** Milford Area Public Workshop No. 3
- **Nov. 9, 2004:** Georgetown Area Public Workshop No. 3
- **Nov. 15, 2004:** Millsboro-South Area Public Workshop No. 3 (Millsboro)
- **Nov. 16, 2004:** Selbyville Area Public Workshop No. 1 (Selbyville)
- **Nov. 18, 2004:** Ellendale Area Public Workshop No. 1
- **Jan. 13, 2005:** JPR Meeting (Environmental Resource Agencies Meeting)
- **Feb. 22, 2005:** Ellendale Area Working Group Meeting No. 4
- **Mar. 2, 2005:** Millsboro-South Area Working Group Meeting No. 6



Recent Project Team Meetings

- **Dec. 6, 2004:** Mountaire Farms (Millsboro)
- **Dec. 6, 2004:** Ellendale Comprehensive Plan
- **Dec. 15, 2004:** First State Chevrolet (Georgetown)
- **Jan. 12, 2005:** Dagsboro Church of God
- **Feb. 18, 2005:** Seacoast Speedway (Sussex County / Georgetown)



Upcoming Meetings

- **Mar. 30, 2005:** **Millsboro-South Area Working Group Meeting No. 7**
 - 5:30 – 8:30 PM at Millsboro Fire Company, Dining Hall
109 E. State Street, Millsboro

- **Mar. 31, 2005:** **Georgetown Area Working Group Meeting No. 6**
 - 5:30 – 8:30 PM at CHEER Community Center
20520 Sand Hill Road, Georgetown

- **Apr. 21, 2005:** **Georgetown Area Working Group Meeting No. 7**
 - 5:30 – 8:30 PM at CHEER Community Center
20520 Sand Hill Road, Georgetown

- **Apr. 25, 2005:** **Milford Area Working Group Meeting No. 7**
 - 5:30 – 8:30 PM at Carlisle Fire Company, Banquet Hall
615 N.W. Front Street, Milford

- **Apr. 26, 2005:** **Ellendale Area Working Group Meeting No. 5**
 - 7:00 – 9:15 PM at Ellendale Volunteer Fire Company,
302 Main Street, Ellendale

- **Apr. 27, 2005:** **Millsboro-South Area Working Group Meeting No. 8**
 - 5:30 – 8:30 PM at Millsboro Fire Company, Dining Hall
109 E. State Street, Millsboro



Traffic Analysis

- **The Peninsula Travel Demand Model and how it is used**
- **Stages in the project planning process**
- **The process and general trends will be discussed tonight**
- **Preliminary model results for each alternative will be presented at the next working group meeting**

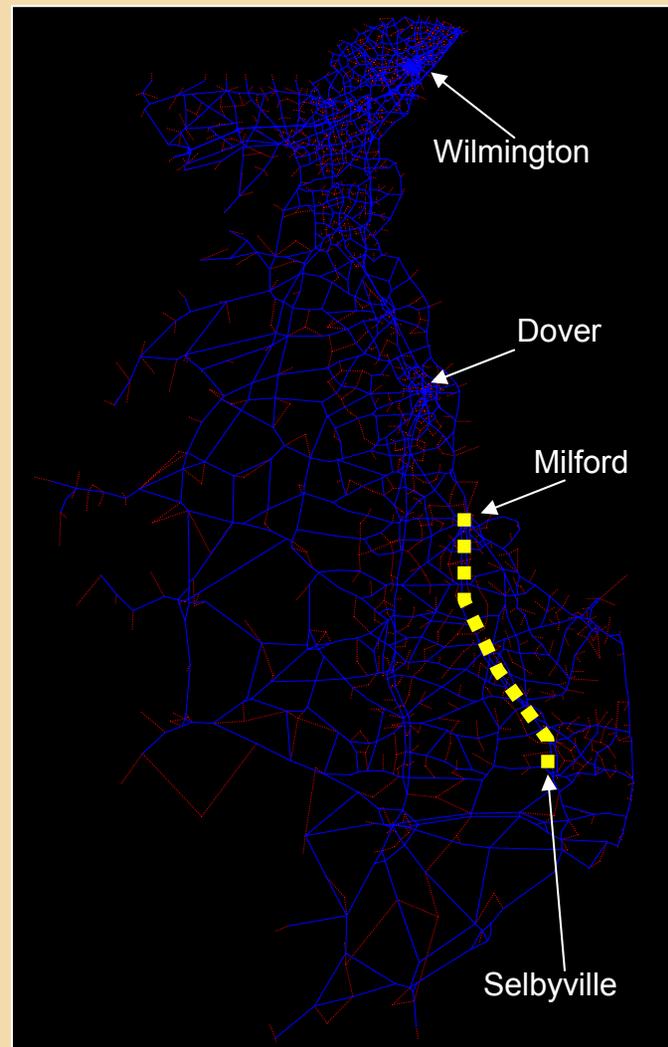


Traffic Analysis

Kent-Sussex
Model Network



Peninsula Model Network



Traffic Analysis

Project Planning Process

- **Stage 1: Establish Traffic Use [WE ARE HERE]**
 - Determine how much traffic will use the project.
- **Stage 2: Establish Facility Size**
 - Determine how many travel lanes needed for acceptable operation.
- **Stage 3: Establish Types of Access**
 - Determine intersection and interchange concepts.
- **Stage 4: Establish Concept Designs**
 - Develop preliminary designs based on physical and environmental constraints.



Traffic Analysis

Project Planning Process

- **Stage 1: Establish Traffic Use**
 - Determine existing daily traffic levels on the current road system.
 - Determine future daily traffic levels on the current road system.
 - Determine future daily traffic levels with the proposed project.

- **Stage 2: Establish Facility Size**
 - Determine the number of lanes needed to accommodate projected traffic levels.

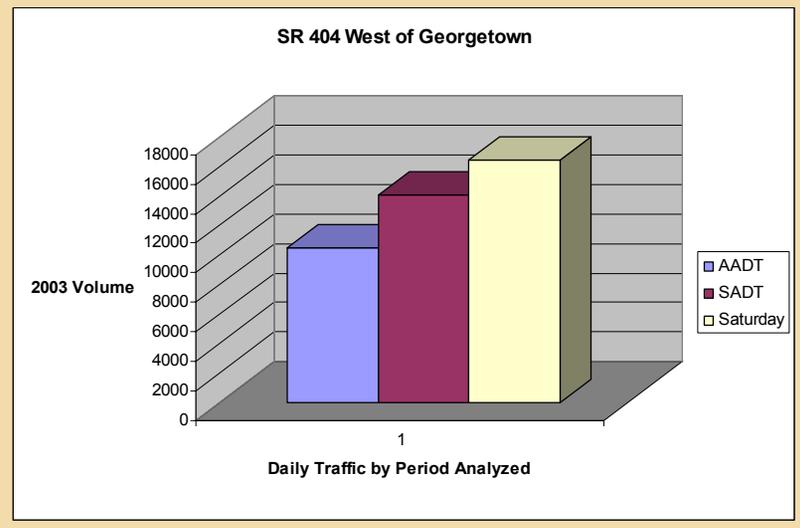
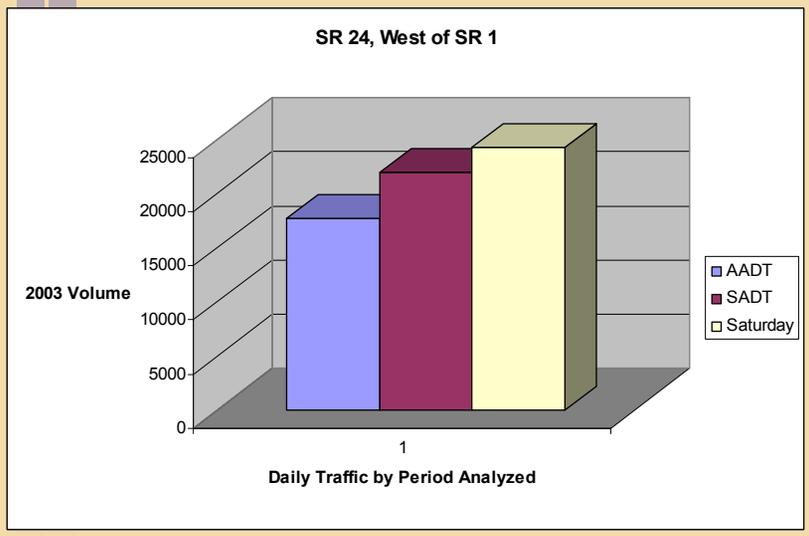
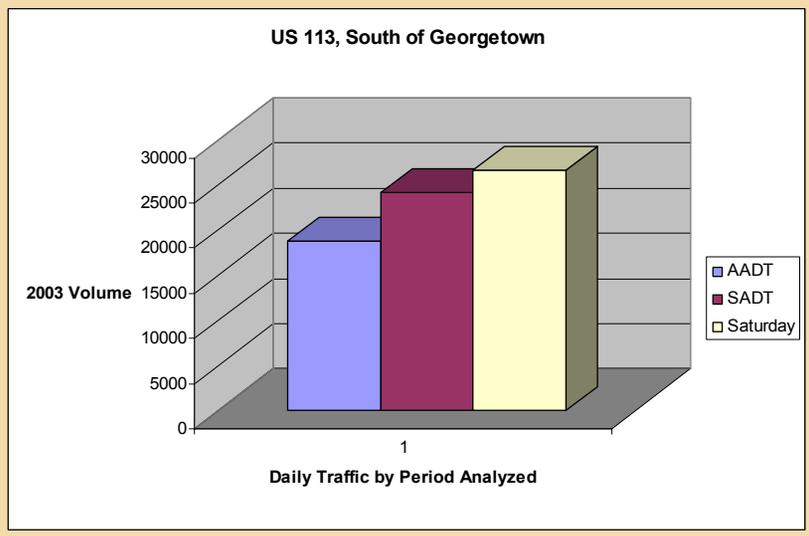


Traffic Analysis

Project Planning Process

- **Stage 3: Establish Types of Access**
 - **Convert daily volumes to Design Hour Volumes (DHVs).**
 - **DHV is most likely a summer weekend hour.**
 - **The current model provides Seasonal Average Daily Traffic volumes (SADTs).**
 - **The SADTs will be factored to represent a summer Saturday hour.**





Traffic Analysis

Project Planning Process

- **Stage 3: Establish Types of Access** (continued)
 - Determine where to provide access.
 - Determine how to provide access (signal, stop sign, interchange).
 - Determine configurations at access points (interchange type, turn bays, acceleration/deceleration lanes, etc.).
 - Note that minimum standards exist to ensure safety.



Traffic Analysis

Project Planning Process

- **Stage 4: Establish Concept Designs**
 - **Develop preliminary design and determine its impact (environmental, historical, community, cost).**
 - **Either retain design or go back to Stage 3 with alternatives that reflect the practical limitations of the project.**



Traffic Analysis

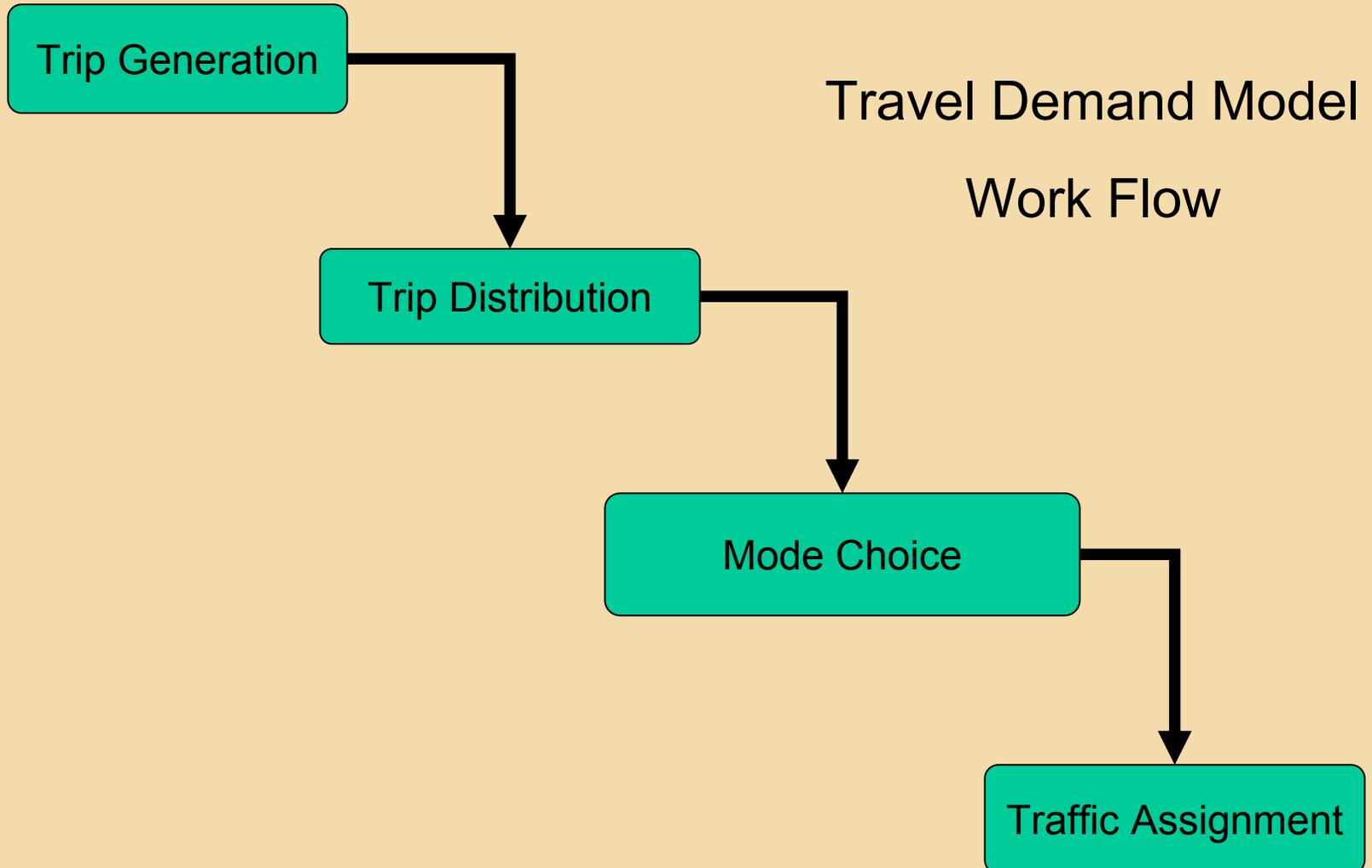
Stage 1: Establish Traffic Use (in detail)

- **Travel demand models are used to approximate current use and forecast future use of roadways in a study area.**



Traffic Analysis

Stage 1: Establish Traffic Use (in detail)



Traffic Analysis

Stage 1: Establish Traffic Use (in detail)

- **TRIP GENERATION** – Determines the number of trips produced and attracted to each zone.
 - Traffic Analysis Zones (TAZs) are geographic units similar to neighborhoods or subdivisions.
 - People (represented by households) generally produce trips.
 - Employers generally attract trips (whether a work trip or a consumer trip).
 - The number of trips generated per household is based on an ongoing Personal Transportation Survey conducted by the University of Delaware.



Traffic Analysis

Stage 1: Establish Traffic Use (in detail)

- **TRIP DISTRIBUTION – Determines the TAZs where trips start and end within the model area.**
 - Travel occurs between zones based on the number and type of households and employees and the distance separating them.
 - Travel from outside and through the study area is also included.



Traffic Analysis

Stage 1: Establish Traffic Use (in detail)

- **MODE SPLIT – Determines the means of travel between zones.**
 - **Car**
 - **Carpool**
 - **Public transportation**



Traffic Analysis

Stage 1: Establish Traffic Use (in detail)

- **TRIP ASSIGNMENT – Determines which roads travelers take between zones.**
 - **Travelers make decisions based on a combination of time, distance, and cost.**
 - **As traffic volumes increase on roadways, the model predicts relative reductions in speed due to congestion.**

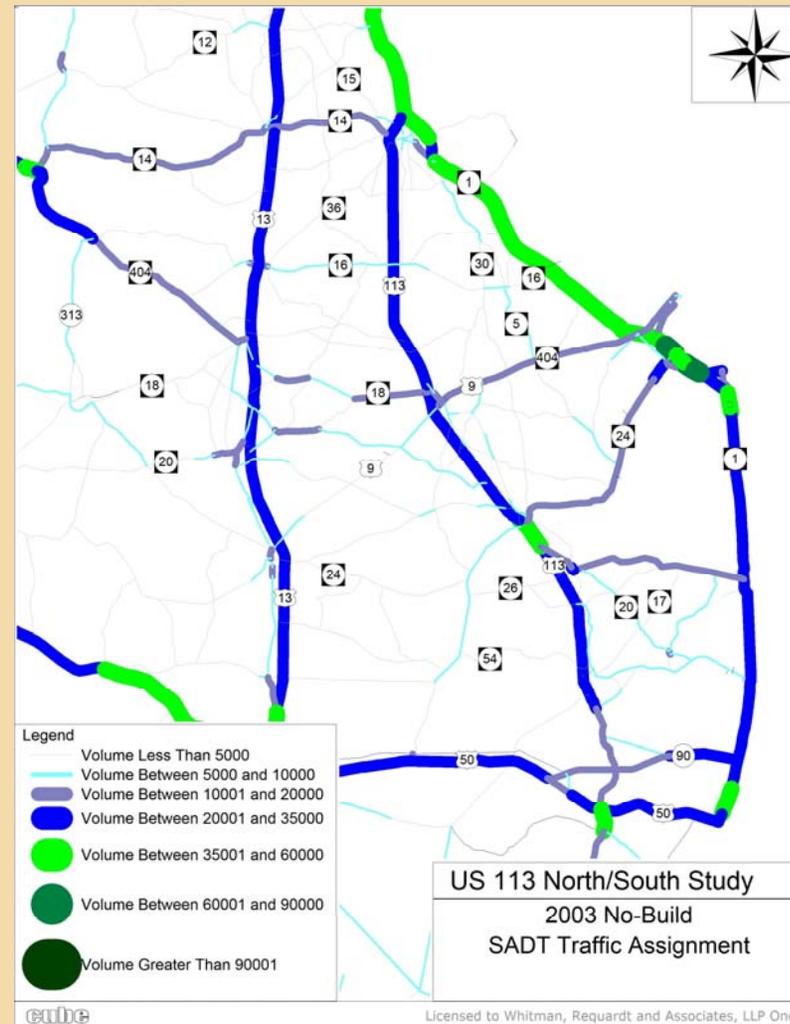
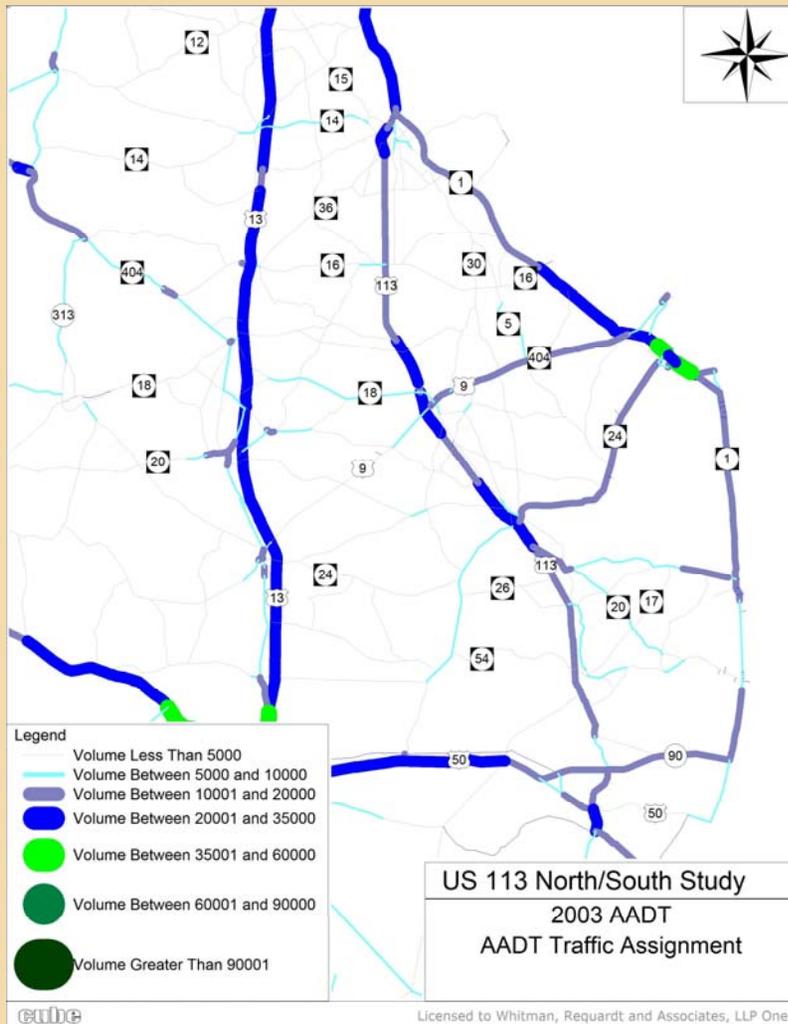


Traffic Analysis

Stage 1: Establish Traffic Use (in detail)

- The model is refined (“calibrated”) until it predicts traffic volumes that acceptably match existing traffic counts.
- This model is well calibrated within the project area.
- **PRELIMINARY STAGE 1 FINDINGS:**



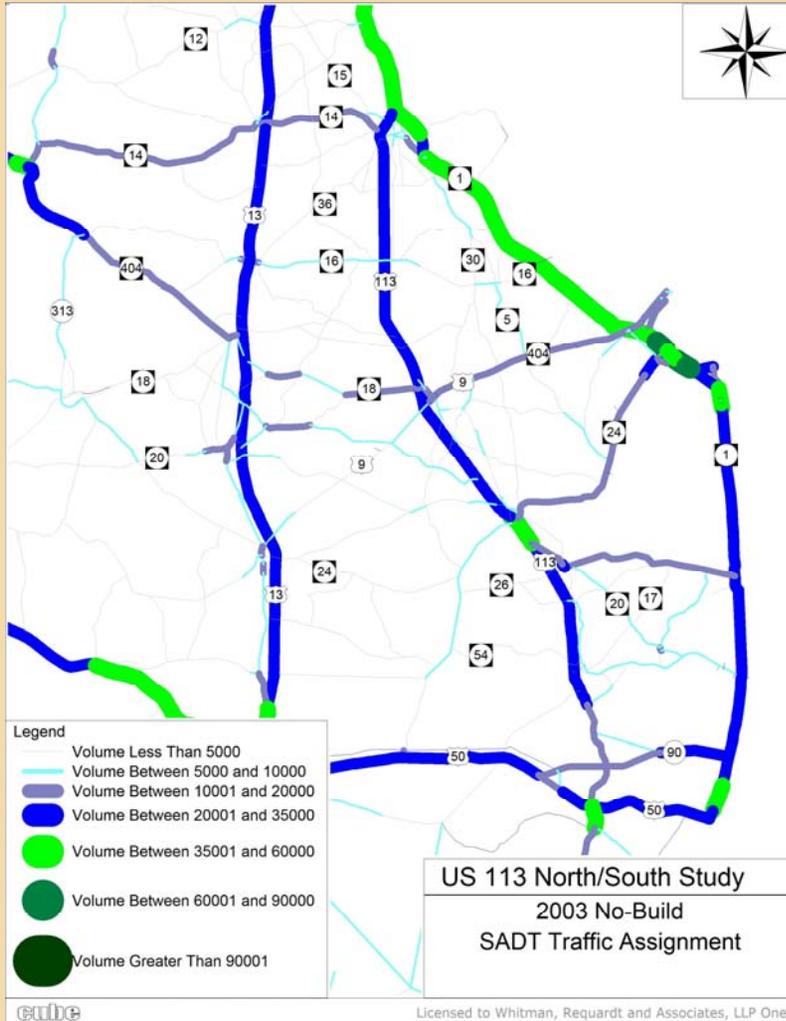


2003 average daily traffic
over the entire year (“AADT”)

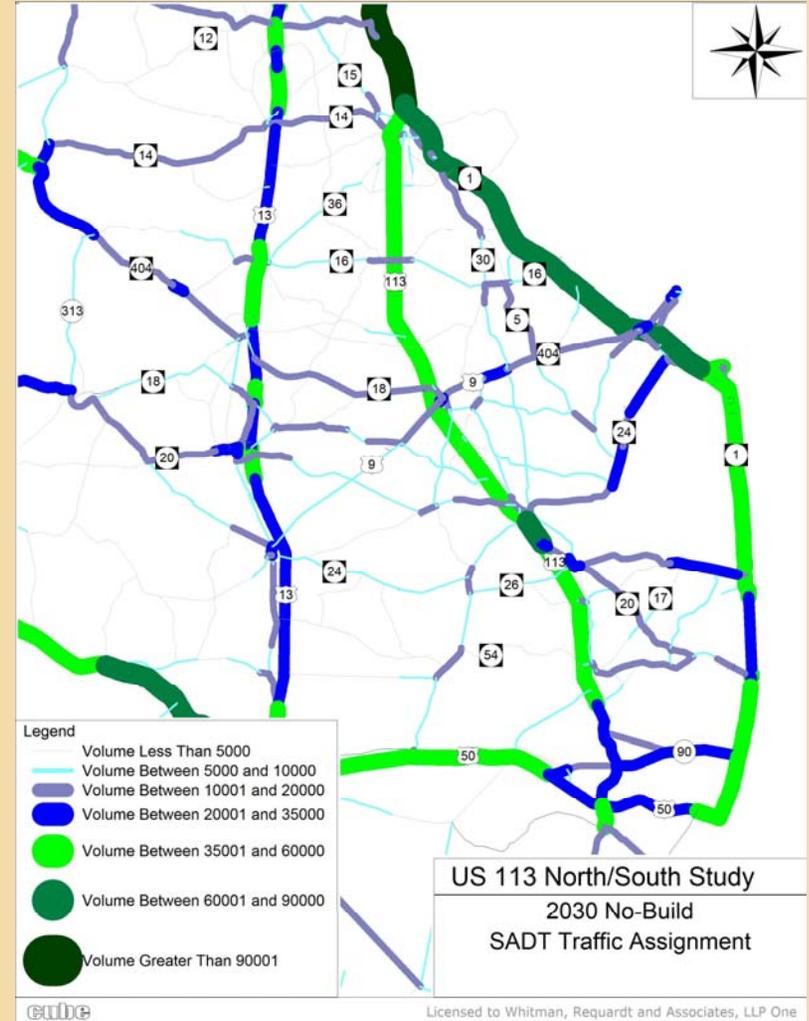
How does the peak
season affect traffic?

2003 average daily traffic
during the summer (“SADT”)





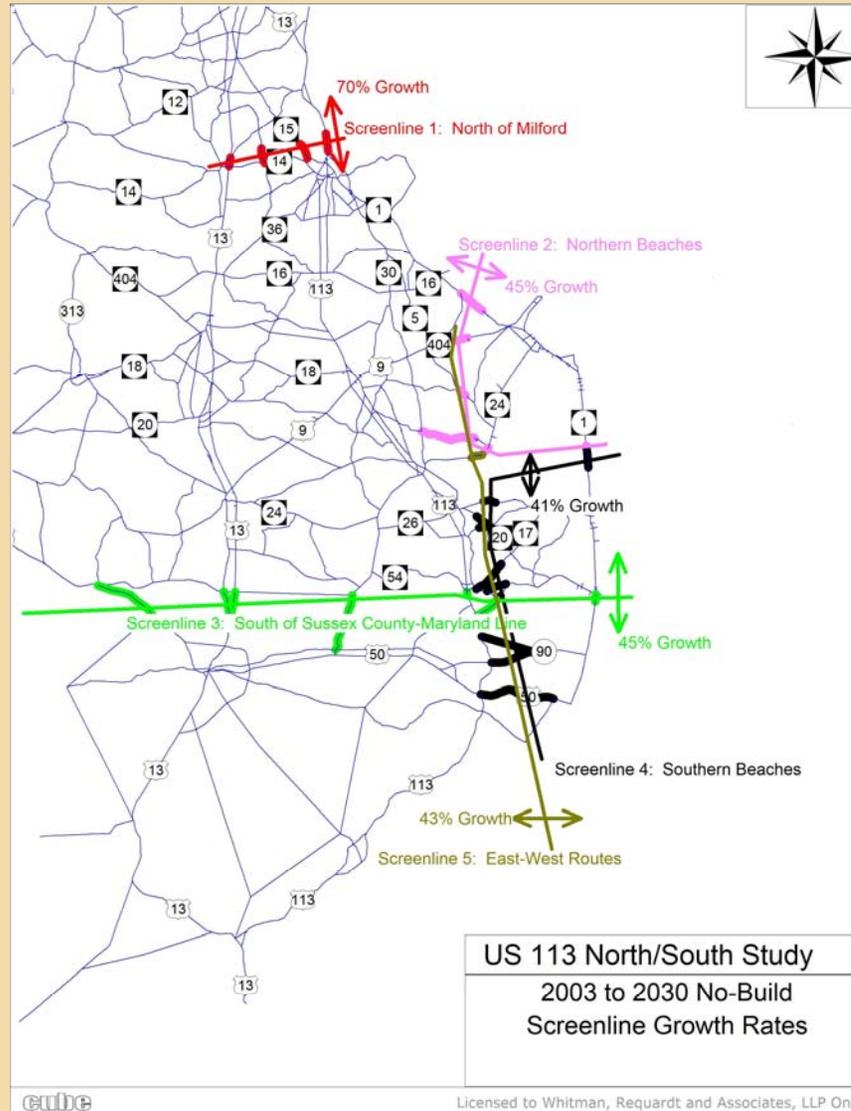
2003 average daily traffic during the summer



2030 average daily traffic during the summer

How will summer traffic grow over time?





How will summer traffic
grow over time?

Traffic Analysis: Key Points

- Traffic is only one of many elements that will be used to determine which alternatives will be retained for further study in the next stage of the project.
- Information on other factors such as safety, satisfaction of state/local mandates, resource impacts, and cost will be presented at future meetings for the working group's consideration.
- The decision on retaining alternatives will be based on which alternatives provide the best balance among these factors.



Cost Estimates

No alternative is being considered for elimination, at this point, based on cost.

Major Quantity Approach: Use items that generate significant quantities

- **Excavation and Embankment**
- **Borrow**
- **Base Course**
- **Pavement**

Apply multipliers for other items

- **Drainage / Stormwater Management (35%)**
- **Utilities (15%)**
- **Grading (25%)**
- **Traffic (25%)**
- **Contingency (20%)**



Cost Estimates

Structures – cost per square foot

Additional considerations

- **Planning / Design**
- **Construction Inspection / Management**
- **Environmental Mitigation**
- **Interchanges**
- **Right-of-Way/Relocation Assistance**

Compare with actual SR 1 cost per mile, escalated to 2005



Economic Impact Analysis

- Stakeholders (working groups, agencies, and the public) need an understanding of economic impacts to help make decisions
- Economic impacts can be analyzed in two ways:
 - On a regional basis (statewide/countywide)
 - On a local basis (impacts to individual businesses)
- The team will use these two parallel tracks to determine economic impacts



Economic Impact Analysis

- **Track 1: Analyze bypasses on a regional basis**
 - **Confirm that bypasses will have similar economic impacts to each other**
 - **Allow the stakeholders to recommend alternatives retained for detailed study without detailed economic analyses**
 - **Does NOT address on-alignment issues yet (see Track 2)**
 - **Complete for the next round of working group meetings**



Economic Impact Analysis

- **Track 2: Determine specific impacts on a local level**
 - 1. Obtain a list of businesses that will be affected**
 - Start from census of businesses
 - Allow self-identification of those not affected
 - 2. Estimate employment in affected businesses**
 - Year-round, full-time equivalent employees
 - State Labor Department and/or Chamber of Commerce
 - Direct surveys
 - 3. Estimate business continuation effects**
 - Survey of expectations and intentions
 - Remaining in present location
 - Moving to a new location
 - Going out of business



Economic Impact Analysis

- **Track 2 (continued):**
 4. Evaluate similar bypass routes in other locations
 5. Estimate jobs by industry lost along the old routes
 6. Estimate jobs by industry gained along by-pass routes
 7. Net job change yields economic impacts
 - Jobs
 - Incomes
 - Business sales
 - Tax effects
 8. Examine results for “reasonableness” and adjust
- **This track is starting now, and will be ready for analysis of alternatives retained for detailed study in summer/fall**



Traffic and Safety

- Existing Data & Supplement / Update
 - weekday commuters
 - weekend / seasonal
 - local / regional
- What & Where
 - local congestion
 - regional bottlenecks
- Safety Factors
 - statistics
 - reports
 - firsthand knowledge

Stakeholder Input

- Listening Tour / Interviews
- Working Groups
- Elected and Government Officials
- Public Workshops
- Groups with Special Interests
- Those Most Directly Affected
- Document Key Issues

Environmental Resources & Land Use

- Environmental Resources Inventory
- Land Use – Recent Trends & Projections
- Environmental Process (MATE)
- Permits

Resource Agencies
Working Groups
General Public

Products

- Purpose and Need
- Project Vision, Goals and Objectives
- Alternatives Development / Assessment
- Detailed Alternatives / Assessment
- Alternatives (Preferred) / Draft Environmental Documents
- Selected Alternative / Final Environmental Documents
- Implementation –
 - Protect Selected Alignments
 - Program / Prioritization of Improvements
 - Short-Term Operational Improvements
 - Mid-Term Improvements (CTP)
 - Longer-Term Improvements



Stakeholder Input:

Oct. 25, 2004 - Working Group Comments - Working Group Meeting #5

Nov. 8, 2004 - Public Comments - Public Workshop #3

Jan. 13, 2005 - Agency Comments

Nov. 8, 2004 Public Workshop

- 200 signed in at Carlisle Fire Company
- Copy of the comments from all five workshops provided in handouts (Tab #3)



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<p>Working Group Comments Oct. 25, 2004</p>	<p>Public Workshop Comments Nov. 8, 2004</p>	<p>Agency Comments Jan. 13, 2005</p>
<p>More information is needed regarding costs and economic impacts of all the options;</p> <p>Emergency services coordination is needed on any option.</p>	<p>It is strange, but people come here because of the quality of life, the beautiful natural environment that extends its peace and beauty to those who live here. But in overbuilding, they destroy the very thing they came to partake of;</p> <p>If you add another highway in that fragile area, it will destroy it;</p> <p>Why are we, the <u>communities</u>, paying for a road – whether by our tax money, our loss of income, or our loss of property, that will allow tourists to get to locations quicker;</p> <p>Limit Development – problem solved. Leave roads as they are;</p> <p>Comments reflected where one lived or owned a business;</p> <p>Positive comments for an alternative also reflected where one lived or owned a business, i.e. I own a business on 113 in Milford. The best place to solve this problem is an Eastern Bypass;</p> <p>Lack of compassion and understanding by Task Force, because it's not their property involved;</p> <p>“Improve Existing Roads.” Close DE to developers.</p>	<p>Extent and nature of impacts overriding concern;</p> <p>Avoid impacts where possible;</p> <p>Minimize impacts when unavoidable.</p>



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<p>Working Group Comments Oct. 25, 2004</p>	<p>Public Workshop Comments Nov. 8, 2004</p>	<p>Agency Comments Jan. 13, 2005</p>
<p>General themes:</p> <ul style="list-style-type: none"> ▪ Shorter bypass, less environmental impact and cost; ▪ Bypasses should be placed at the furthest edge of anticipated development; <p>Much of the land southeast of Milford is slated for development. A bypass there would be more compatible with the change that is already occurring;</p> <p>Comments generally reflected where one lived or owned a business;</p> <p>Positive comments for an alternative sometime reflected the desire to deflect comments away from another alternative;</p> <p>There is little support for an On-alignment Option, at least north of Johnson Road / Fitzgerald Road. An On-alignment Option appears fundamentally incompatible with the City of Milford;</p> <p>Eastern Bypass options appear to have the most support. This is supported by a summary of natural resource impacts.</p>		<p>Extent and nature of impacts extremely important;</p> <p>Eastern Bypass impacts acceptable;</p> <p>Preference for On-alignment</p> <p>Recommendation to drop Western Bypass Options may be reasonable.</p>



Alternatives to be Retained for Detailed Study:

No-Build – required by law

CEQ Regulation 40CFR 1502.14 (d)



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<p>Working Group Comments Oct. 25, 2004</p>	<p>Public Workshop Comments Nov. 8, 2004</p>	<p>Agency Comments Jan. 13, 2005</p>
<p>.To one degree or another, all options have development, environmental, historic, and agricultural land impacts;</p> <p>Growth is happening so fast in the East that it may make an East bypass unfeasible;</p> <p>There is more pending development than is shown on the map;</p> <p>Options B or C-1 are the least objectionable and will serve as a development boundary;</p> <p>Interchange alternatives at SR 1 / SR 30 still seem inconvenient for certain directions;</p> <p>How bypasses cut roads and change access to and from for emergency response is important in the development of an Eastern Bypass, particularly at SR1;</p> <p>Interferes with development plans, right-of-way costs will be high.</p>	<p>These proposals seem to be the shortest and most cost effective;</p> <p>Protect the historic Whitehead Farm!;</p> <p>If anything <u>has</u> to be done, I prefer Option E2 or E3 for the Eastern Bypass. Seems to pose less impact to wetlands and waterways. Probably less costly to construct;</p> <p>The bypass proposals do <u>not</u> make any sense. Current traffic patterns <u>do not</u> require any of these. However, should the public's opinions not be listened to my suggestion is to go with B;</p> <p>Less environmental impact! Route1 Is already there – so there is less building and restructuring to be done – the town will not be divided;</p> <p>It would create major noise and take valuable farmland. Please limit development.</p>	<p>Concern for impacts to Whitehead Farm (cultural resource) and properties in Agricultural Preservation Program.</p>



Eastern Bypass Options

- **Plan Changes:**
 - No substantial changes
 - Minor modifications to SR 1 interchanges to reflect higher volumes on SR 1 than US 113



Eastern Bypass Options

Alternatives to be Retained for Detailed Study:

- **Drop from further consideration?**
- **Retain one or more alternatives?**
- **If one, which alternative?**
- **If more, which alternatives?**

Options: B, C1, C2, C3, D1, D2, D3, E1, E2, E3, F1, F2, F3



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<p>Working Group Comments Oct. 25, 2004</p>	<p>Public Workshop Comments Nov. 8, 2004</p>	<p>Agency Comments Jan. 13, 2005</p>
<p>Right-of-way cost will be less than an East bypass on a per acre basis but more land will be required;</p> <p>Significant negative farm land consumption impacts;</p> <p>Require too much “new” road;</p> <p>Positive effect on truck traffic;</p> <p>Westernmost option will serve as an incentive for Milford to expand more, with negative agricultural land impacts;</p> <p>Growth is happening much more slowly on the west; thus, protection of right-of-way on the west may be more likely.</p>	<p>The environmental impact of the western bypass would be catastrophic. The wetlands and wildlife that encompass the area would be decimated;</p> <p>Seems much more feasible with less disruption to existing properties. Using vacant farmland vs. occupied housing-seems much cheaper and more feasible;</p> <p>Impacting wetlands, impacting farmlands, noise pollution, air quality, changes character of tow;.</p> <p>The further west you go the better. Fewer houses to buy. Lower cost farmland. More direct;</p> <p>It looks like very little is disturbed, however closer inspection reveals something totally different;</p> <p>The options of “Lesser evil” for the western bypass would be GH5.</p>	<p>If recommendation to drop Western Bypass Options was supportable based on the consideration of impacts (relative impact) of the alternatives, the agencies would consider the recommendation.</p> <p><u>Wetland impacts:</u></p> <p>On average-3 times greater than the Eastern Bypasses, 10 times greater than On-alignment.</p> <p><u>Cultural Resource Impacts:</u></p> <p>CRS Buildings, etc.</p> <p>On average – 12 times greater than the Eastern Bypasses, 24 times greater than On-alignment.</p> <p><u>Predictive Model, Prehistoric:</u></p> <p>On Average – 4 to 5 times greater than the Eastern Bypasses, 50 times greater than On-alignment</p>



Western Bypass Options

Plan Changes:

- None

Alternatives to be Retained for Detailed Study:

- Drop from further consideration?
- Retain one or more alternatives?
- If one, which alternative?
- If more, which alternatives?

Options: GM4, GN5, HLO4, HLP5, IKM4, IKN5, ILO4, ILP5, J, GN6, HLP6, IKN6, ILP6, HKM4, HKN6, HKN5



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<p>Working Group Comments Oct. 25, 2004</p>	<p>Public Workshop Comments Nov. 8, 2004</p>	<p>Agency Comments Jan. 13, 2005</p>
<p>Even with revisions, too many political, economic, quality of life, and traffic issues;</p> <p>Will destroy many businesses and divide the town into quadrants;</p> <p>Puts unfamiliar traffic on local streets;</p> <p>Seems like a short-term solution rather than a long-term solution;</p> <p>“Getting to and from,” a theme that doesn’t play well on-alignment;</p> <p>Appears to limit the movement of trucks;.</p> <p>Emergency service problems, particularly south of Haven Lake between SR 14 and SR 36;</p> <p>South-end options (south of Fitzgerald’s) are okay.</p>	<p>Seems to be too invasive to businesses along the route through Milford. We need to cause much less impact to businesses that contribute so much to the economy of Milford;</p> <p>It is predicated upon using existing right-of-way at the expense of Milford. It effectively cuts the city in half-if not, in fact, quarters-at the expense of the city residents, making it difficult to get from Point A to Point B;</p> <p>This makes the most sense. It does not destroy farmland. It helps businesses. It keeps traffic out of the country;</p> <p>The town would be divided! We would have to travel all over the place just to go north! Fire and police vehicles would also have to do the same to reach our house on Old Shawnee Road;</p> <p>There are insufficient service roads.</p>	<p>Preferential approach appears to minimize natural resource impacts;</p> <p>Nature of impacts less significant than impacts on Bypass Options.</p>



On-Alignment Options

Plan Changes:

- None

Resource Agencies strongly support On-alignment Option(s) for purposes of comparison with Off-alignment Options

Alternatives to be Retained for Detailed Study:

- Retain one or both options?
- If one, which option?

Options: A1 or A2



Third Lane Option

- Adds a third lane in each direction **AT GRADE** to increase traffic capacity; signals would remain
- At two intersections in the Milford area, this approach will result in an unacceptable level of service by 2030:
 - **US 113 at Airport Road/NW Tenth Street**
 - **US 113 at SR 14**
- At those locations, grade separations with ramps will be provided
- This option requires further study to determine if it meets long-term transportation needs



Next Steps

- **April: Resource Agencies provide input on Alternatives to be Retained for Detailed Study (April 14 and 20, 2005)**

- **April: Working Group Meeting #7 – Continue to develop recommendations regarding alternatives to be retained for detailed study (April 25, 2005)**

- **May: Public Workshop #4 – Present recommendations on Alternatives to be Retained for Detailed Study and those options recommended to be dropped**



Next Working Group Meeting

- **Agenda:** Continue to develop recommendations regarding alternatives to be retained for detailed study
- **Date:** April 25, 2005
- **Time:** 5:30 – 8:30 PM
- **Location:** Carlisle Fire Company, 615 N.W. Front Street, Milford

