

Milford Area

Working Group

Meeting No. 7

April 25, 2005





Working Group Members

Scott Adkisson
Milford Area Resident

Robert Burris
Burriss 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
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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**
- **5:40 Status Reports**
 - **Traffic Analysis** **Jeff Riegner**
 - **Cost Estimates** **Joe Wutka**
 - **Economic Impact Analysis** **Jeff Riegner**
- **6:20 Review of Alternatives and Impacts** **Project Team**
 - **On-alignment Alternatives**
 - **Eastern Bypass Alternatives**
 - **Western Bypass Alternatives**
- **7:30 Group Discussion** **Project Team**
- **8:15 Summary of Group Discussion** **Bob Kramer**
- **8:25 Next Steps / Closing Remarks** **Monroe Hite, III**
- **8:30 Adjourn** **Bob Kramer**



Project Notebook

- **Tab 1: PowerPoint Slides**
- **Tab 2: Updated Matrix**
- **Tab 3: Revised Public Workshop Schedule**



Recent Meetings

- **Jan. 12, 2005:** Dagsboro Church of God coordination meeting
- **Jan. 13, 2005:** Environmental resource agency “JPR” meeting
- **Feb. 18, 2005:** Seacoast Speedway coordination meeting
- **Feb. 22, 2005:** Ellendale area working group meeting no. 4
- **Mar. 2, 2005:** Millsboro-South area working group meeting no. 6
- **Mar. 21, 2005:** Milford area working group meeting no. 6
- **Mar. 29, 2005:** Plantation Lakes coordination meeting
- **Mar. 30, 2005:** Millsboro-South area working group meeting no. 7
- **Mar. 31, 2005:** Georgetown area working group meeting no. 6
- **Apr. 20, 2005:** Environmental resource agency meeting
- **Apr. 21, 2005:** Georgetown area working group meeting no. 7



Upcoming Meetings

- **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

- **May 16, 2005:** **Milford Area Working Group Meeting No. 8**
 - 5:30 – 8:30 PM at Carlisle Fire Company, Banquet Hall
615 N.W. Front Street, Milford

- **May 18, 2005:** **Georgetown Area Working Group Meeting No. 8**
 - 5:30 – 8:30 PM at CHEER Community Center
20520 Sand Hill Road, Georgetown

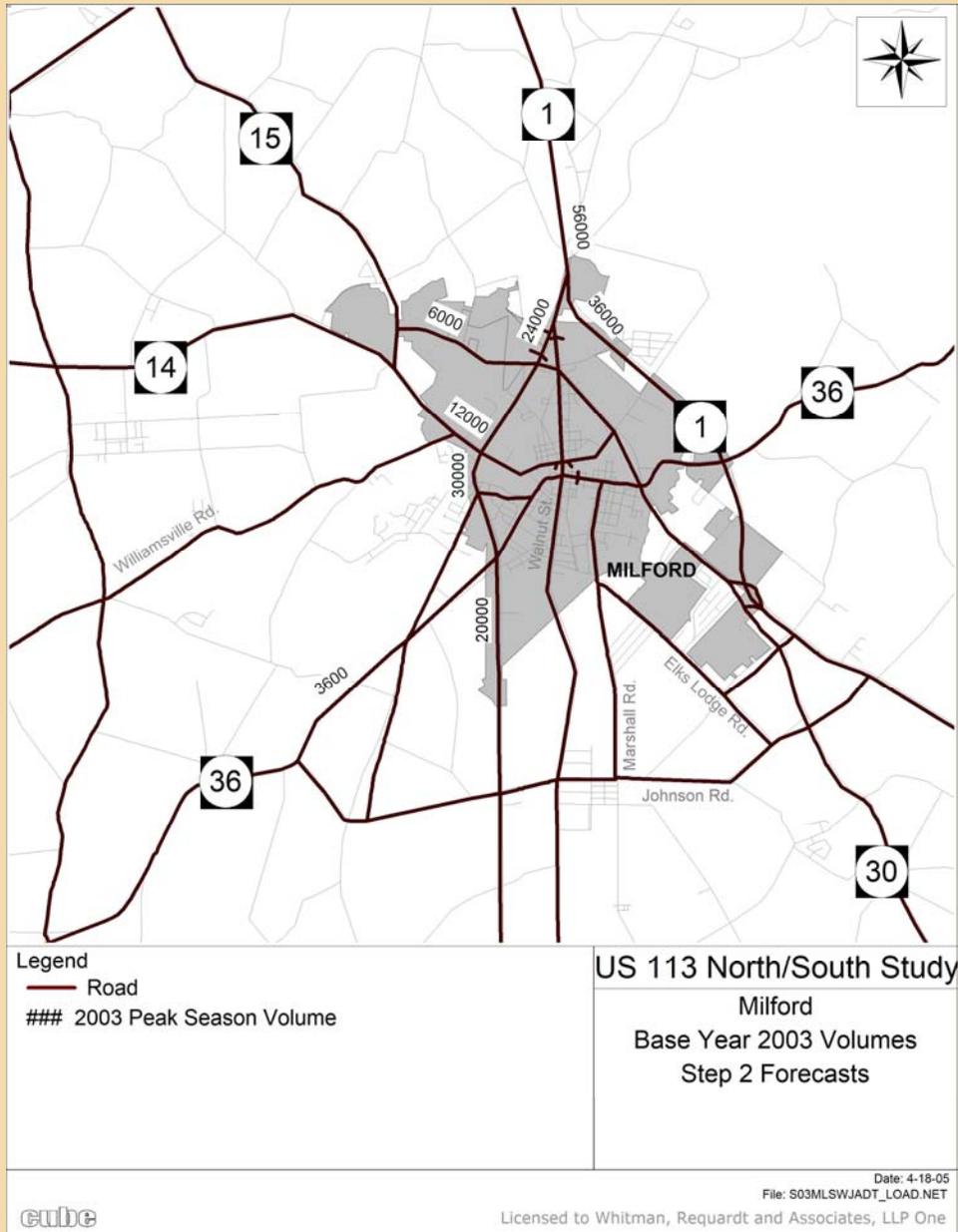
- **May and June:** **Public Workshops**
 - See attached schedule



Traffic Analysis

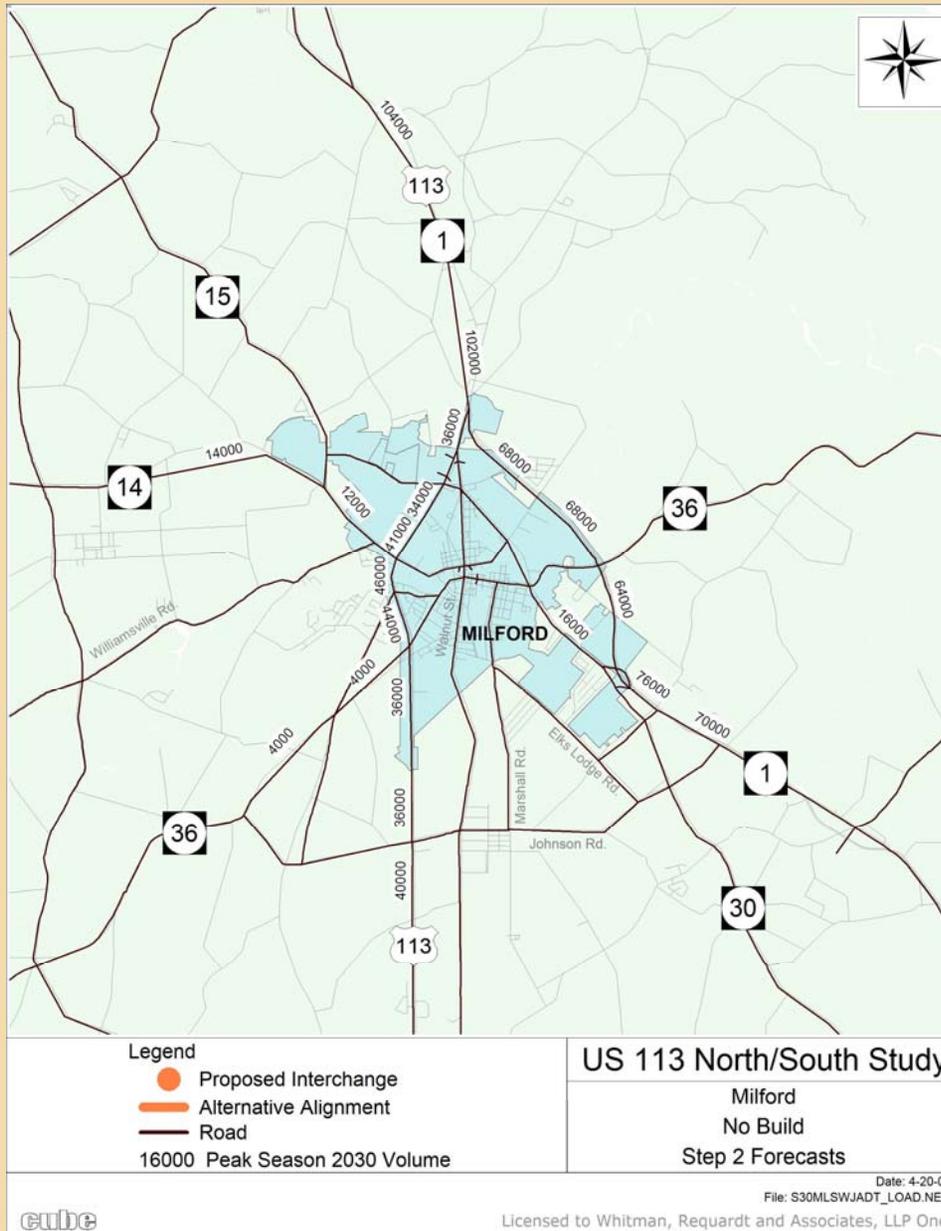
- **The traffic projections presented tonight are preliminary. This means that they can be used to:**
 - **Make comparisons among off-alignment alternatives, determining which best meet anticipated traffic needs**
 - **Determine approximate benefits along existing US 113**
- **They are NOT yet sufficient to:**
 - **Compare off-alignment to on-alignment alternatives**
 - **Determine specific interchange configurations**
 - **Determine specific intersection designs**
 - **Identify specific traffic composition (e.g. local/through, north/south, east/west, etc.)**
- **More detailed forecasts will be developed as the project progresses to allow us to perform more detailed analyses.**





Traffic Analysis: Base Year Conditions

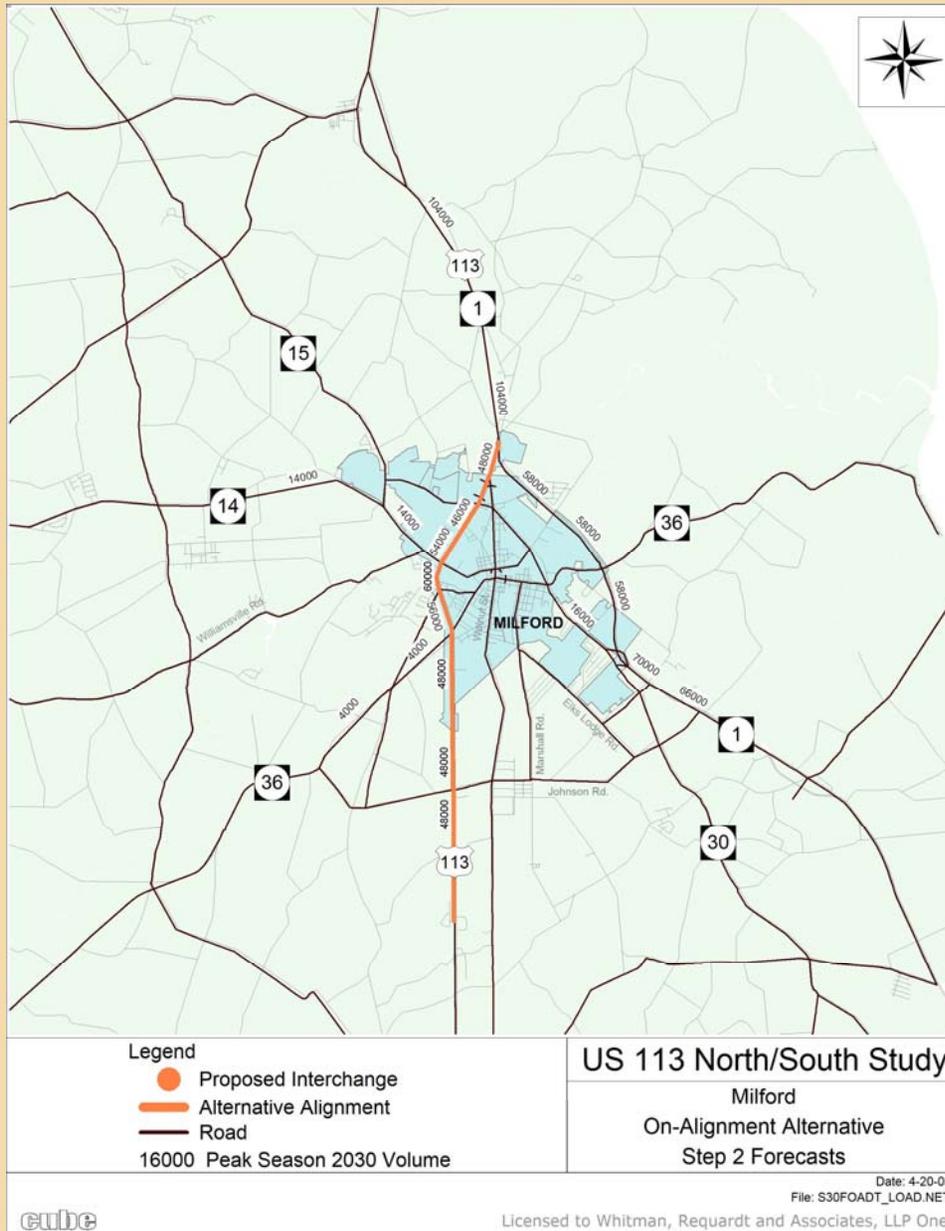




Traffic Analysis: No-Build Alternative

Step 2 forecasts are preliminary; further refinements are underway.

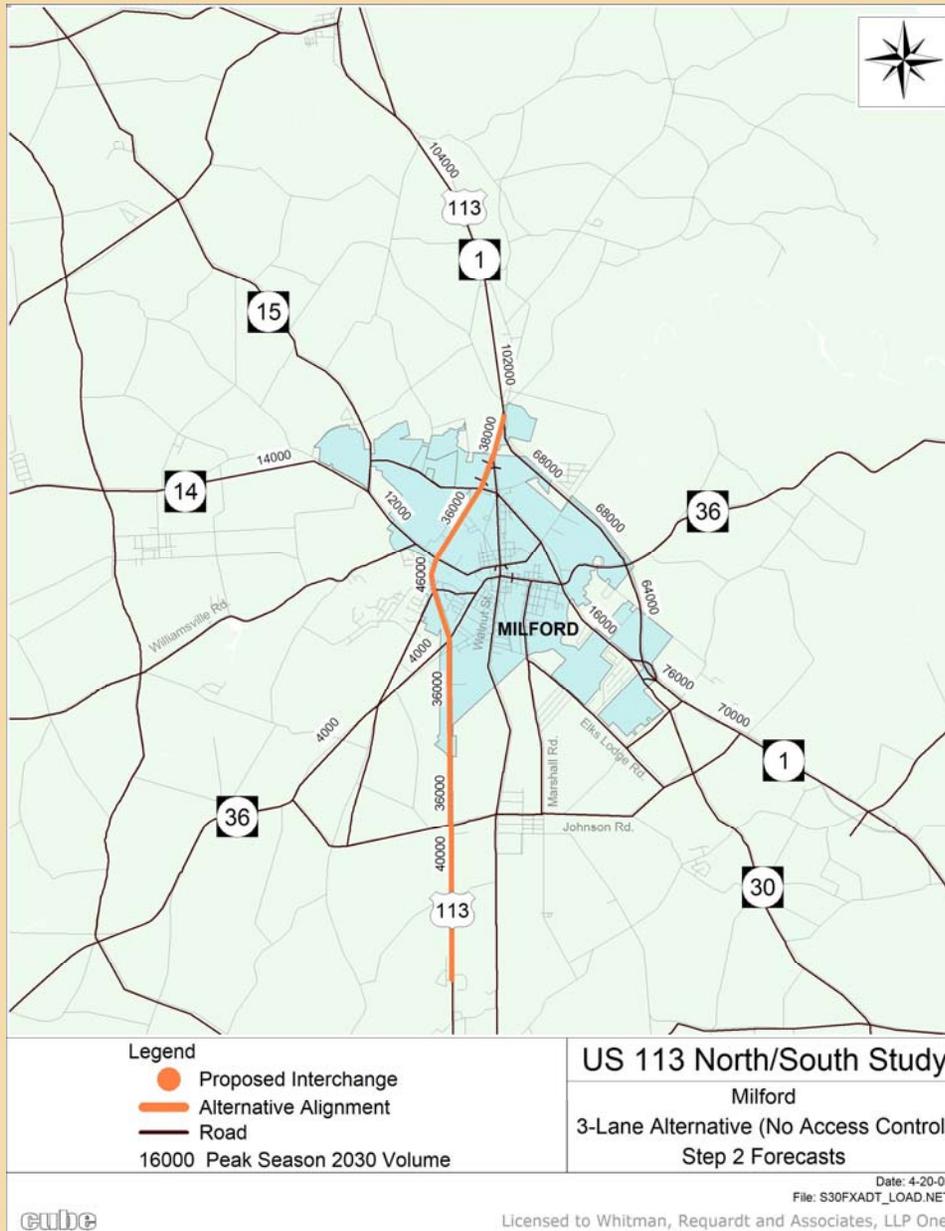




Traffic Analysis: Alternative A

Step 2 forecasts are preliminary; further refinements are underway.

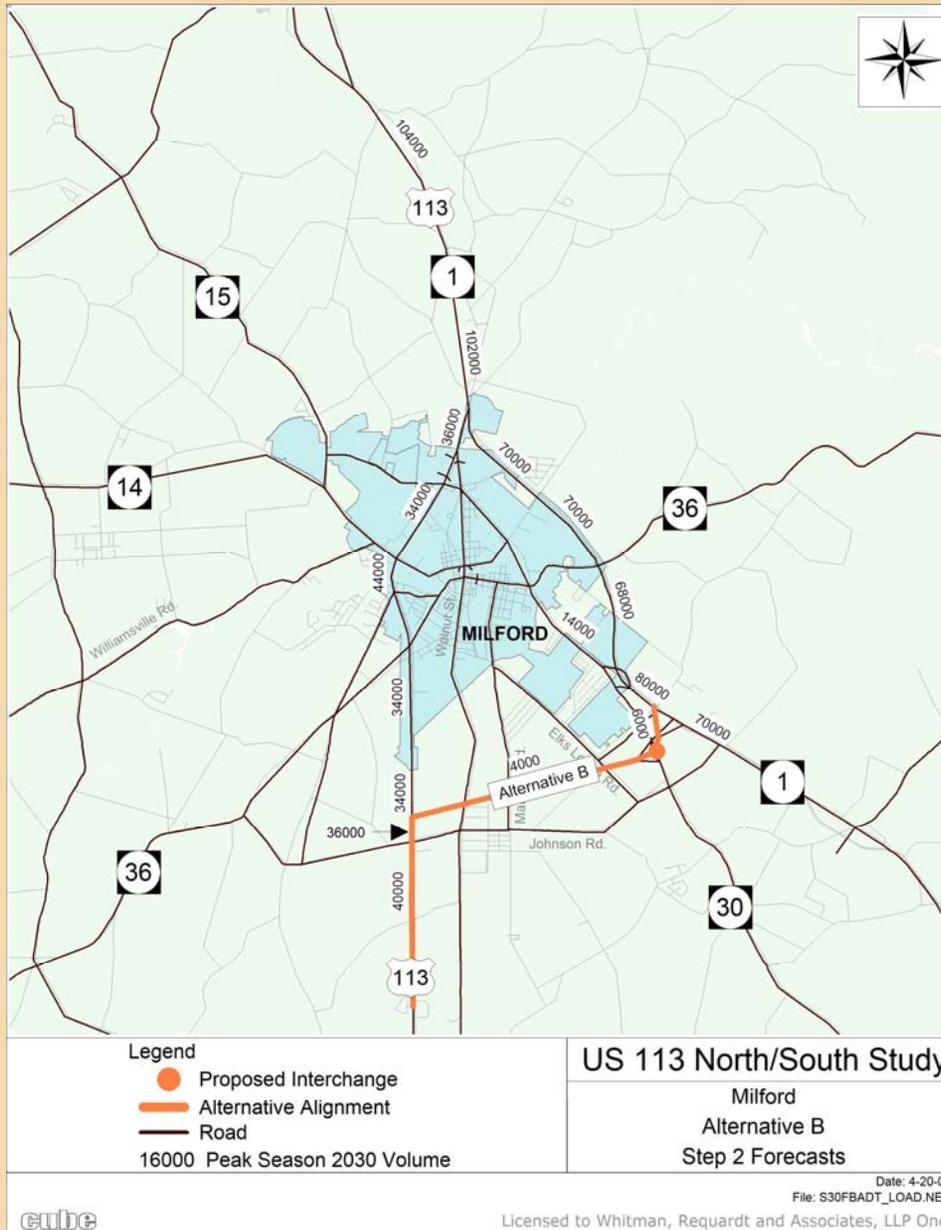




Traffic Analysis: Alternative A Option 3

Step 2 forecasts are preliminary; further refinements are underway.

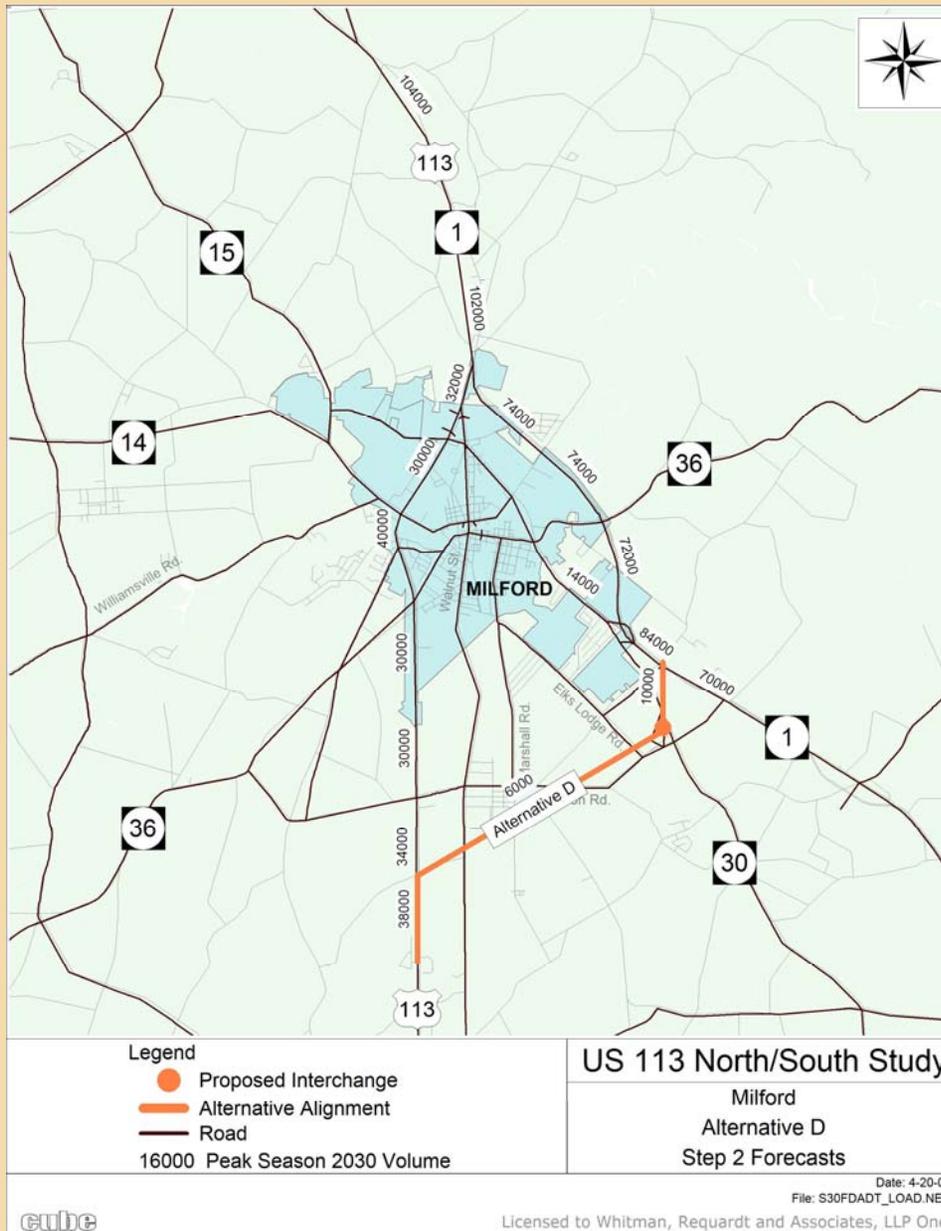




Traffic Analysis: Alternative B

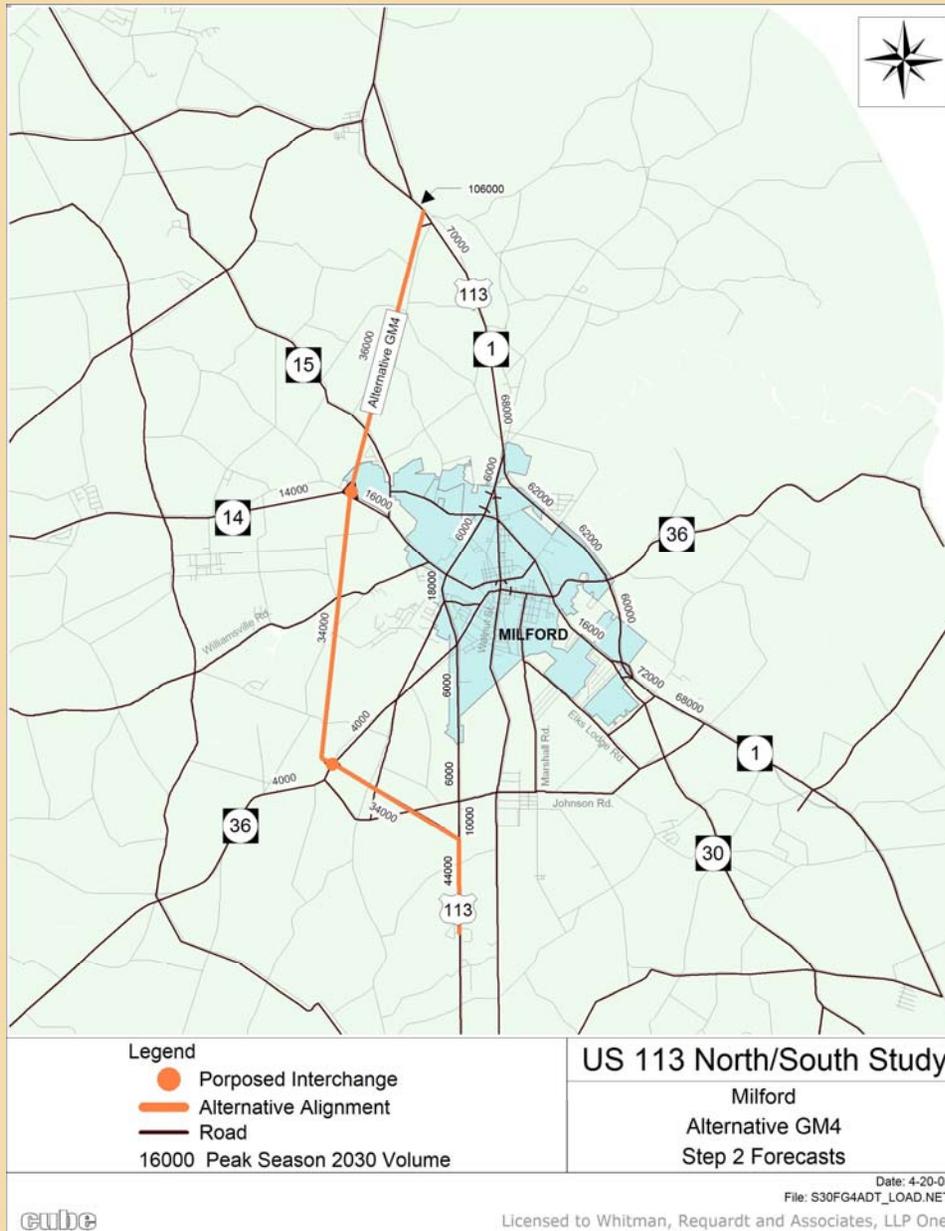
Step 2 forecasts are preliminary; further refinements are underway.





Traffic Analysis: Alternatives C, D, E, and F

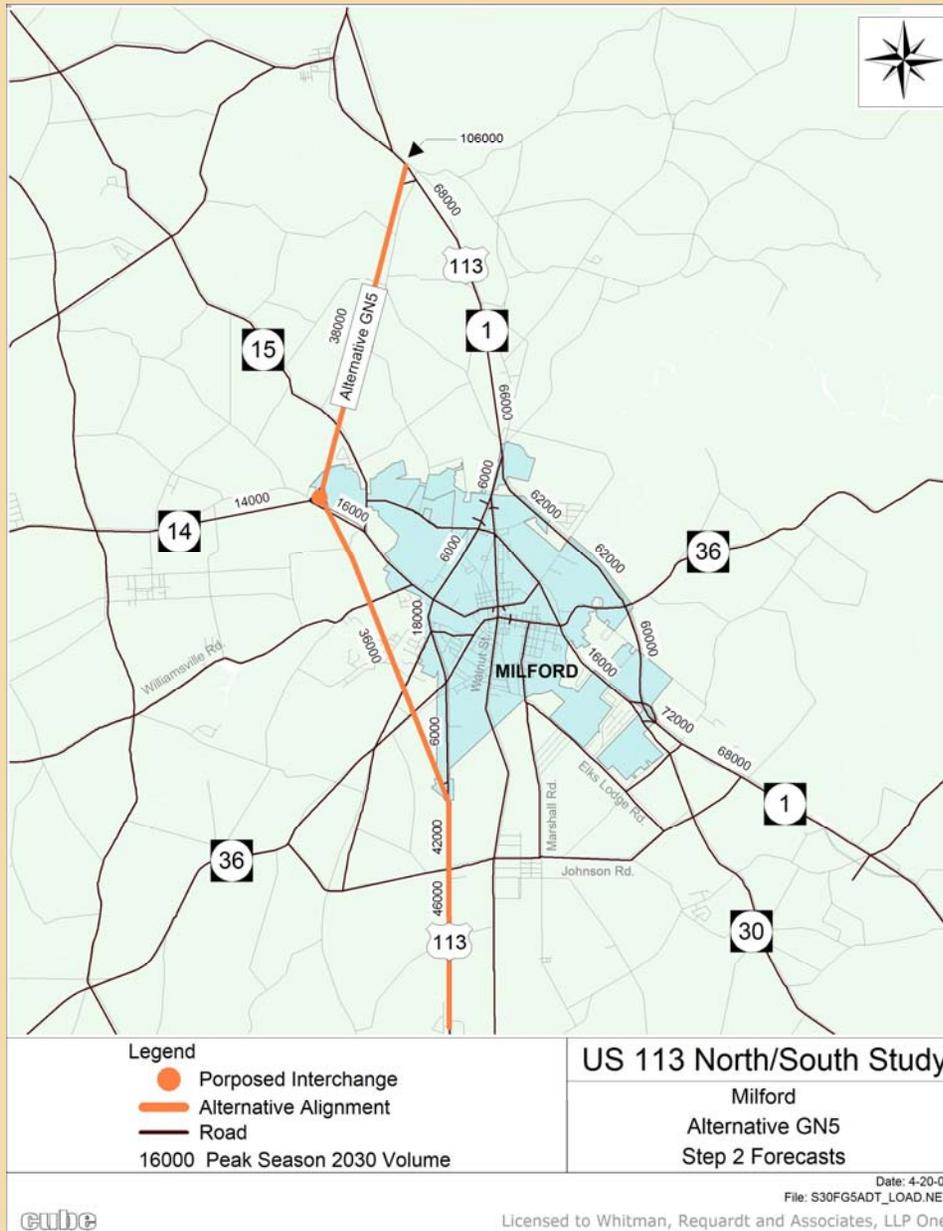
Step 2 forecasts are preliminary; further refinements are underway.



Traffic Analysis: Alternative GM4

Step 2 forecasts are preliminary; further refinements are underway.

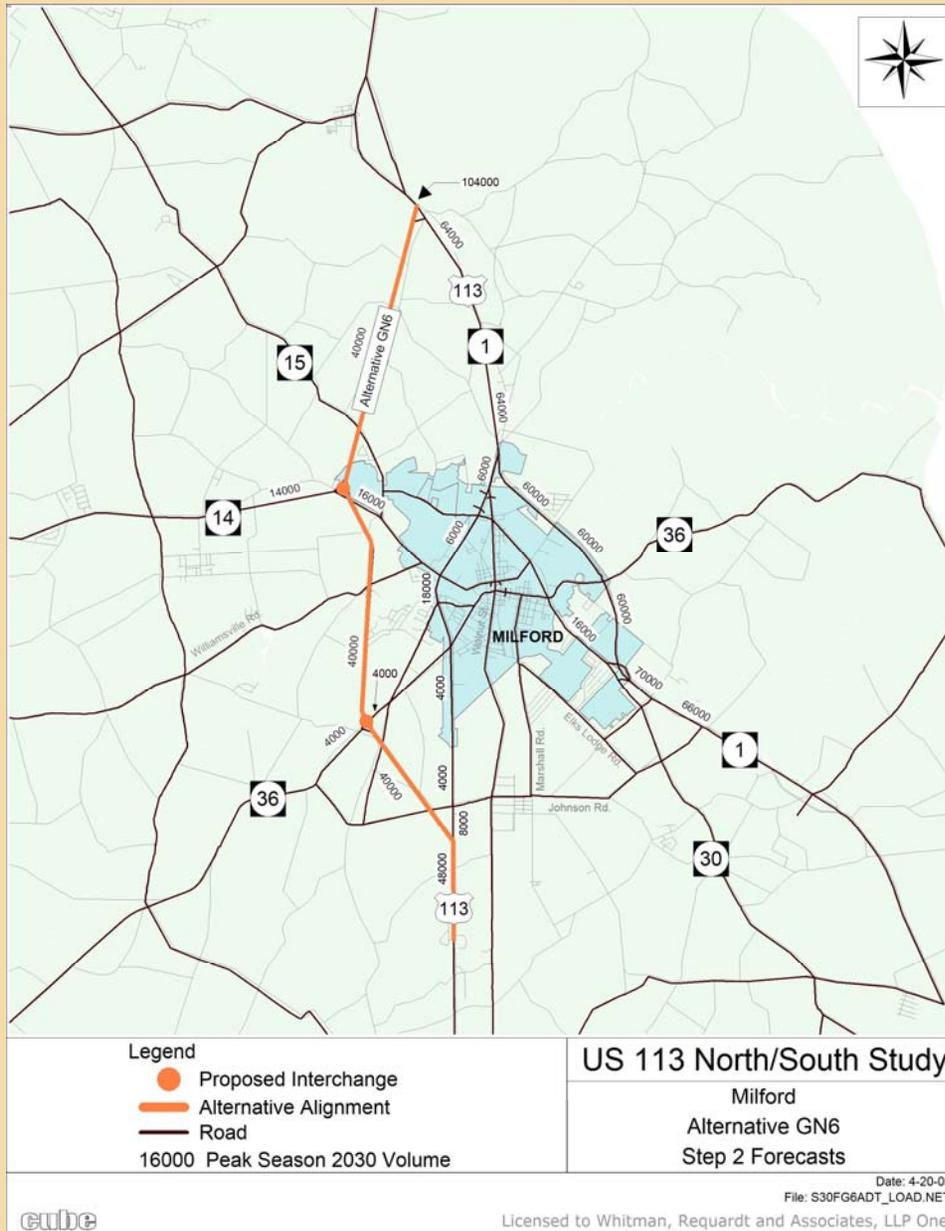




Traffic Analysis: Alternative GN5

Step 2 forecasts are preliminary; further refinements are underway.

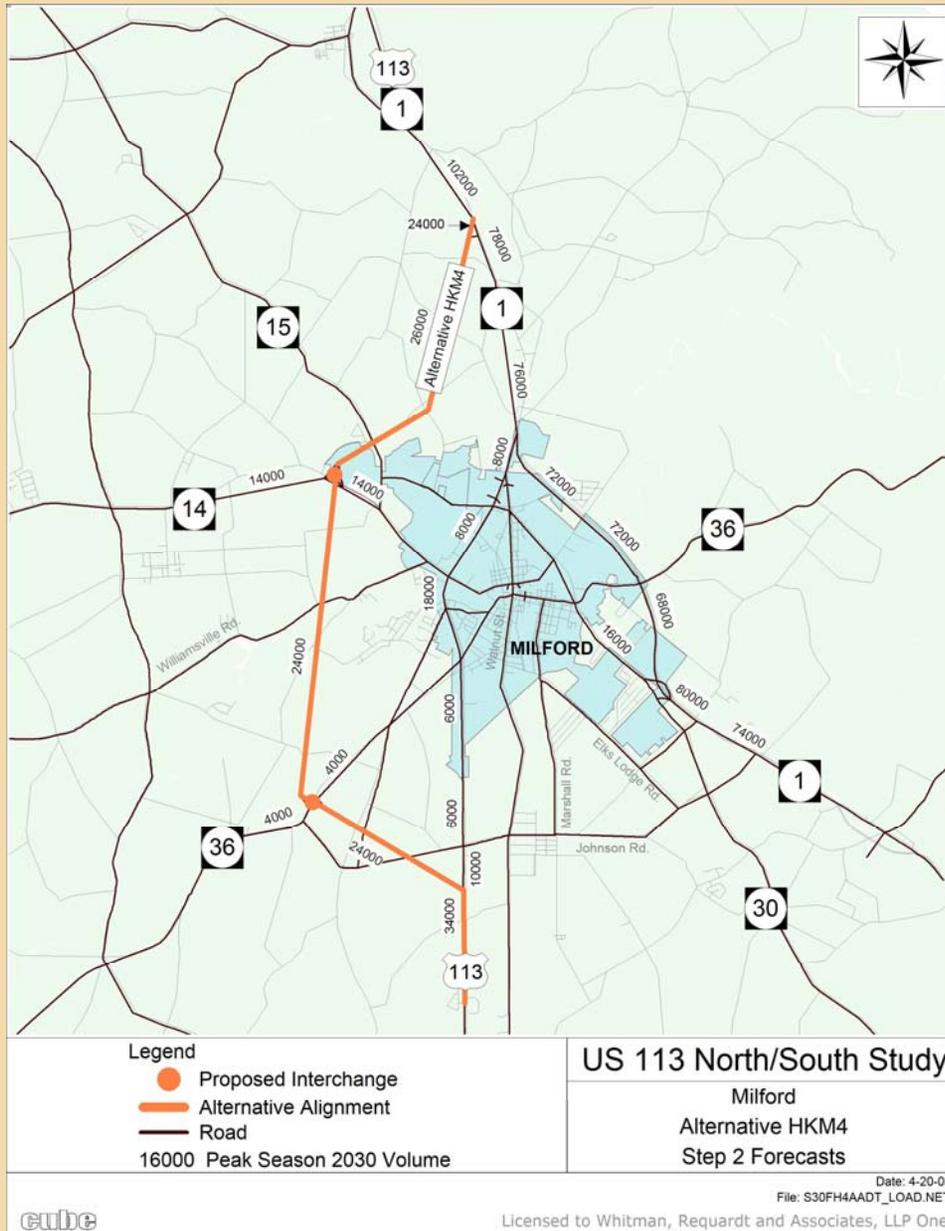




Traffic Analysis: Alternative GN6

Step 2 forecasts are preliminary; further refinements are underway.

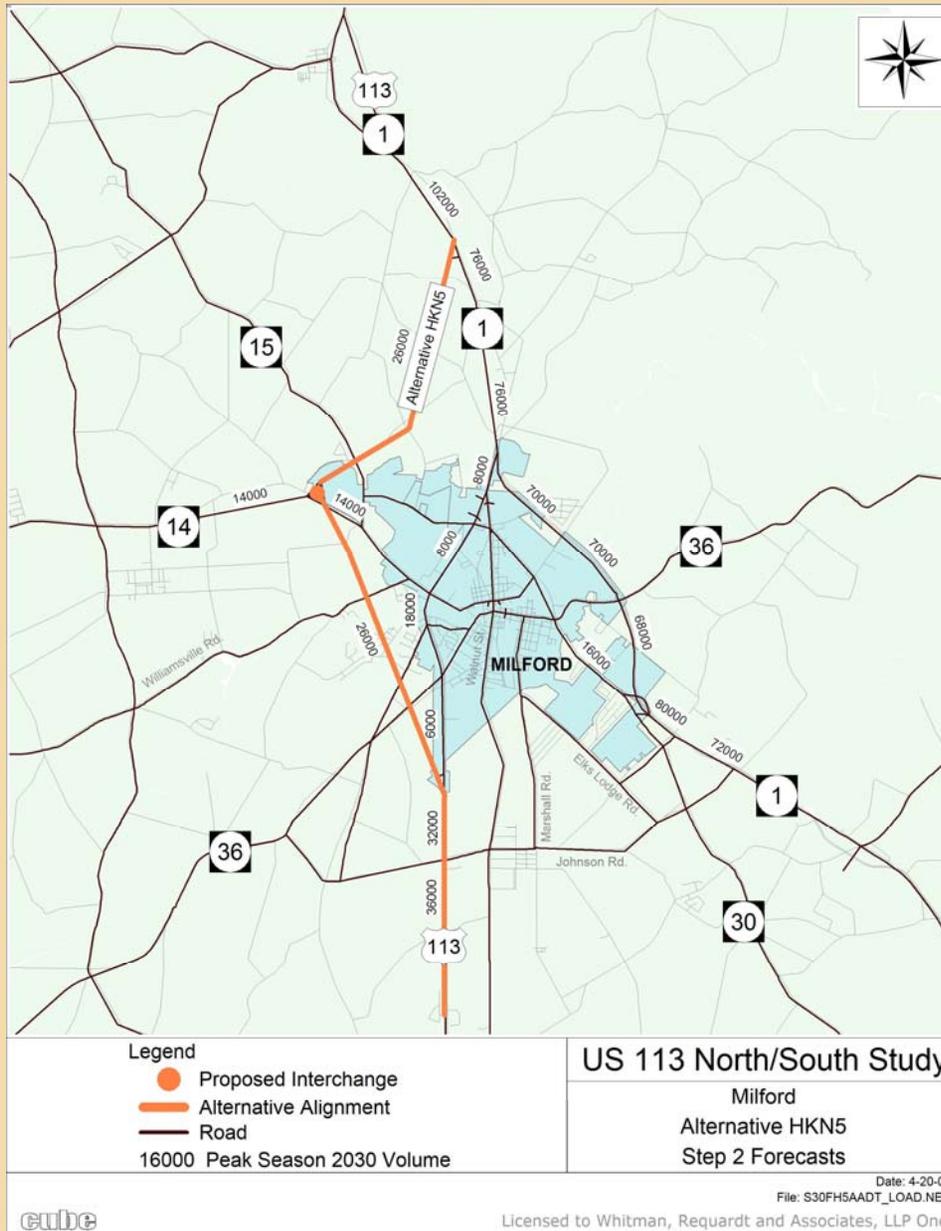




Traffic Analysis: Alternative HKM4

Step 2 forecasts are preliminary; further refinements are underway.

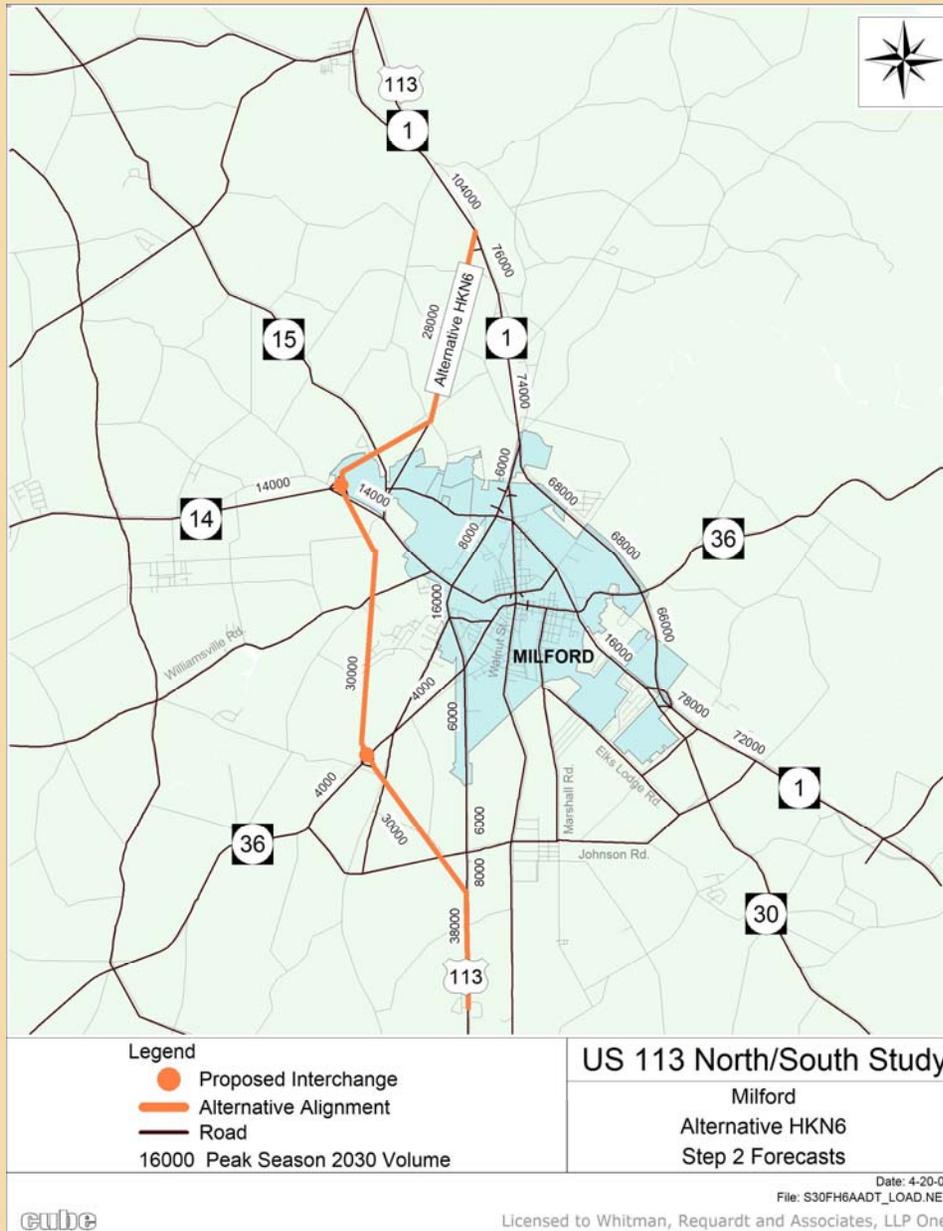




Traffic Analysis: Alternative HKN5

Step 2 forecasts are preliminary; further refinements are underway.

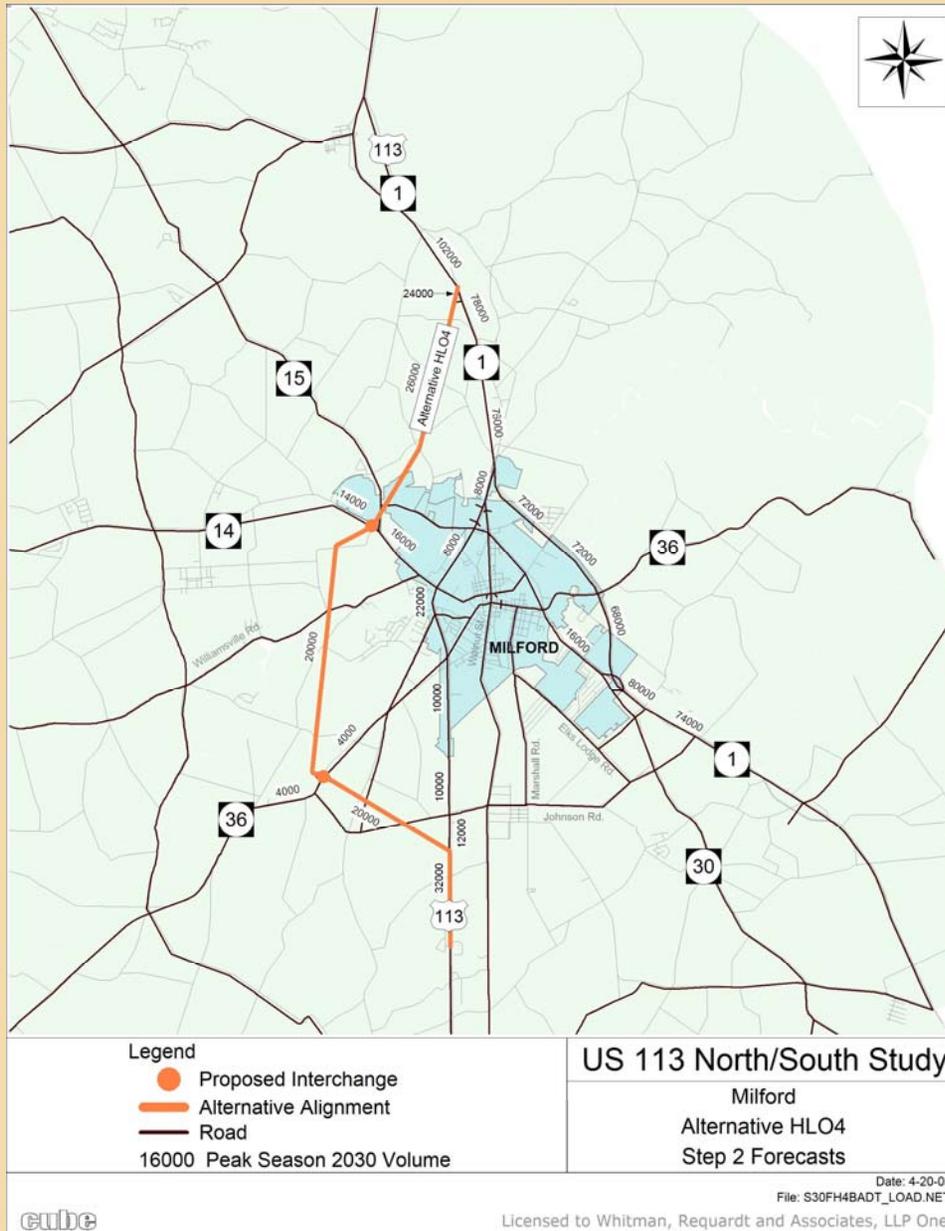




Traffic Analysis: Alternative HKN6

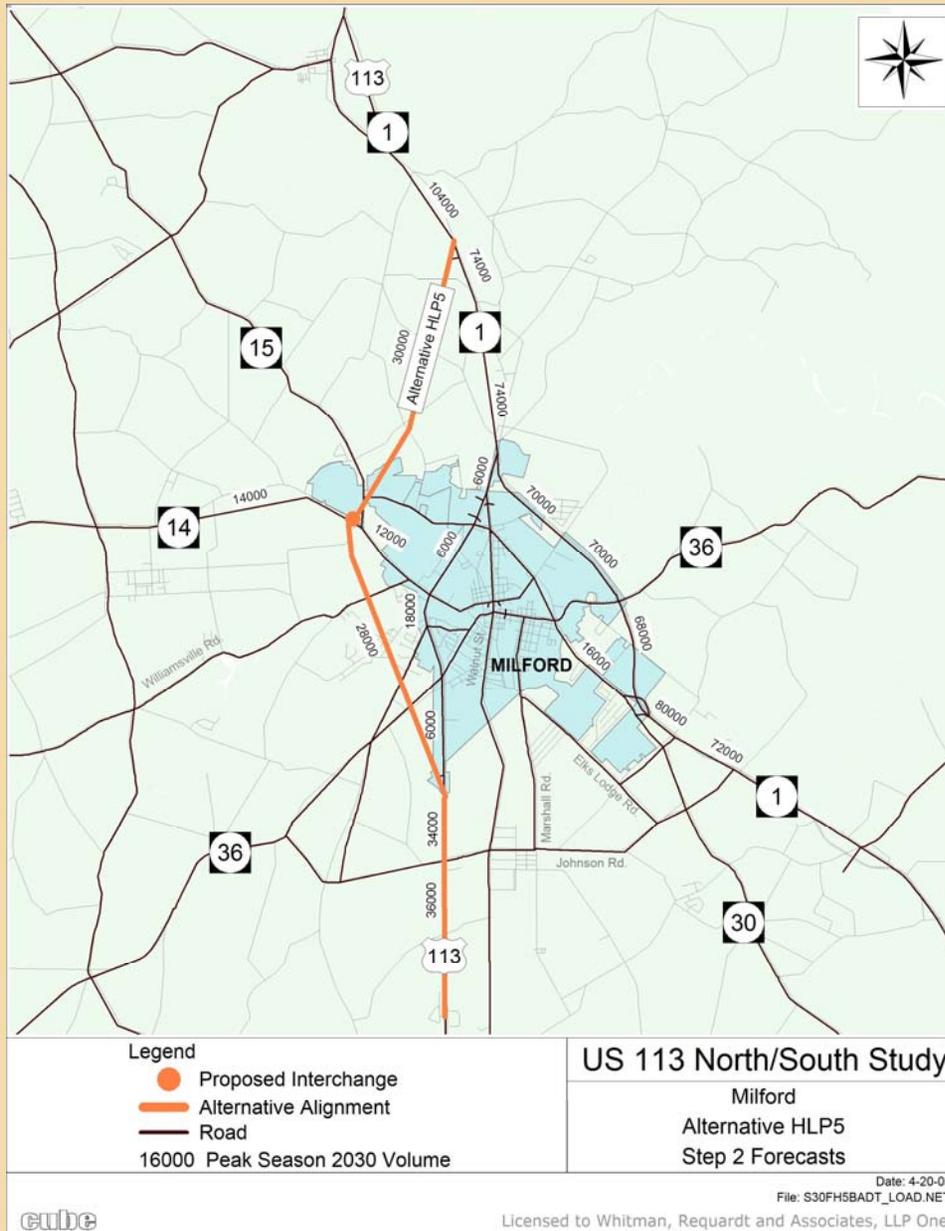
Step 2 forecasts are preliminary; further refinements are underway.





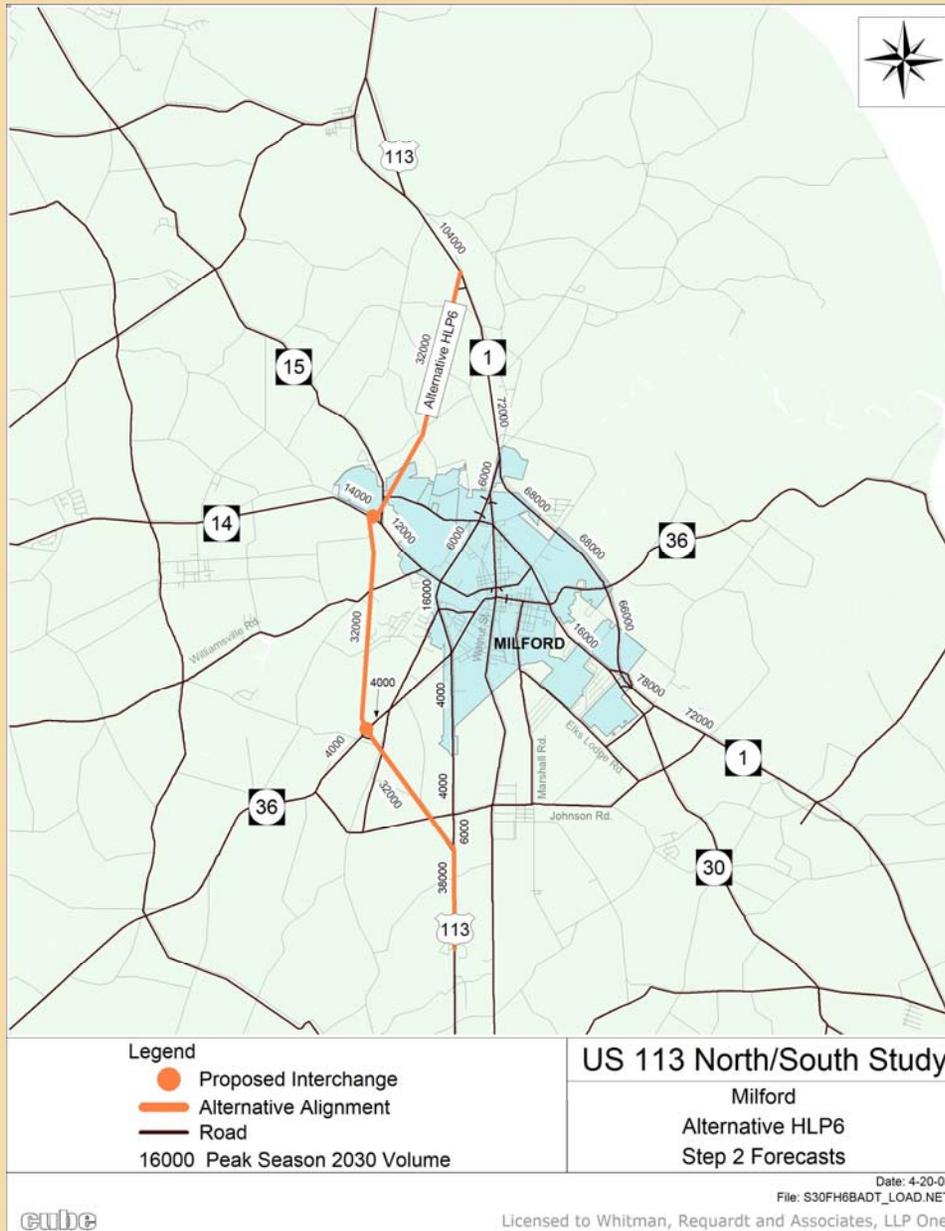
Traffic Analysis: Alternative HLO4

Step 2 forecasts are preliminary; further refinements are underway.



Traffic Analysis: Alternative HLP5

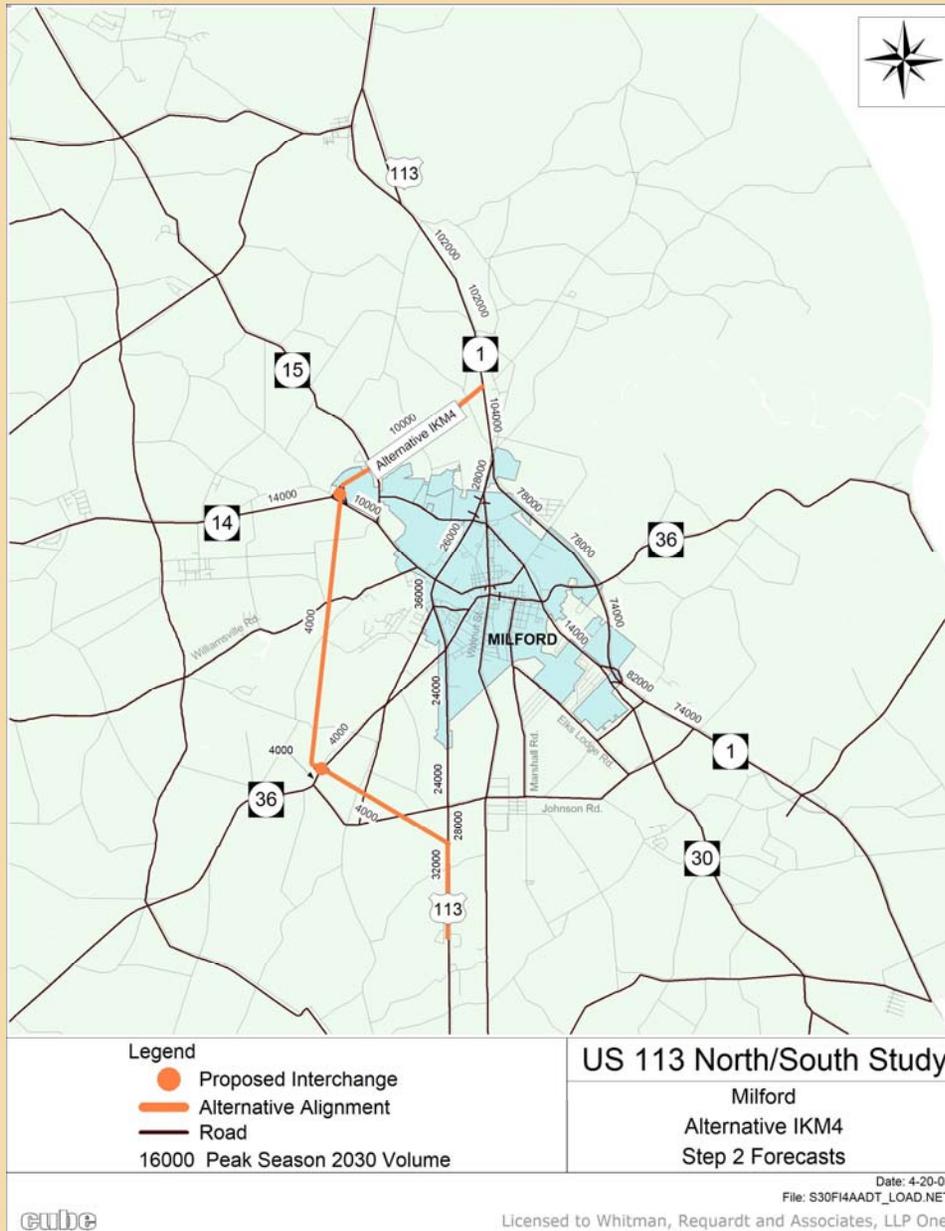
Step 2 forecasts are preliminary; further refinements are underway.



Traffic Analysis: Alternative HLP6

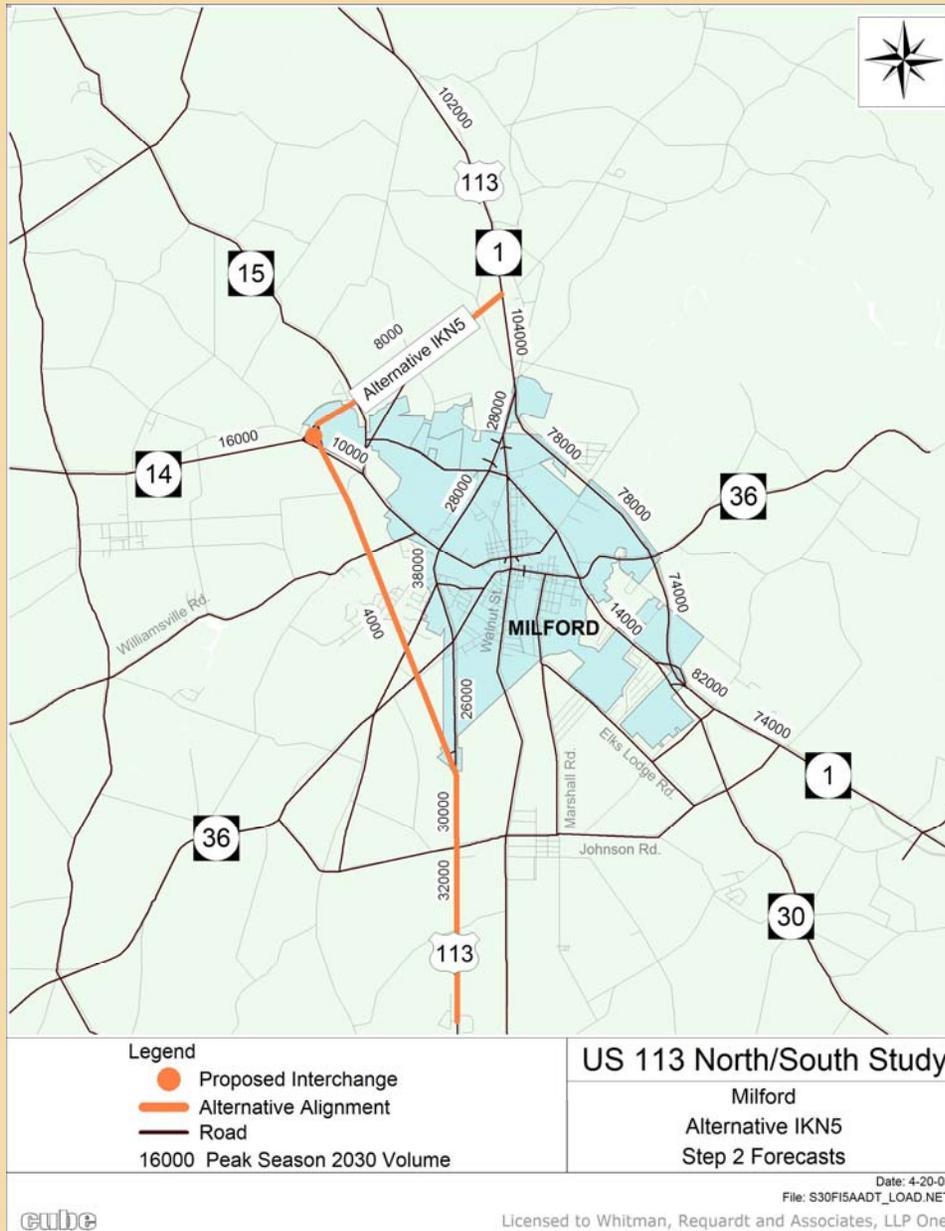
Step 2 forecasts are preliminary; further refinements are underway.





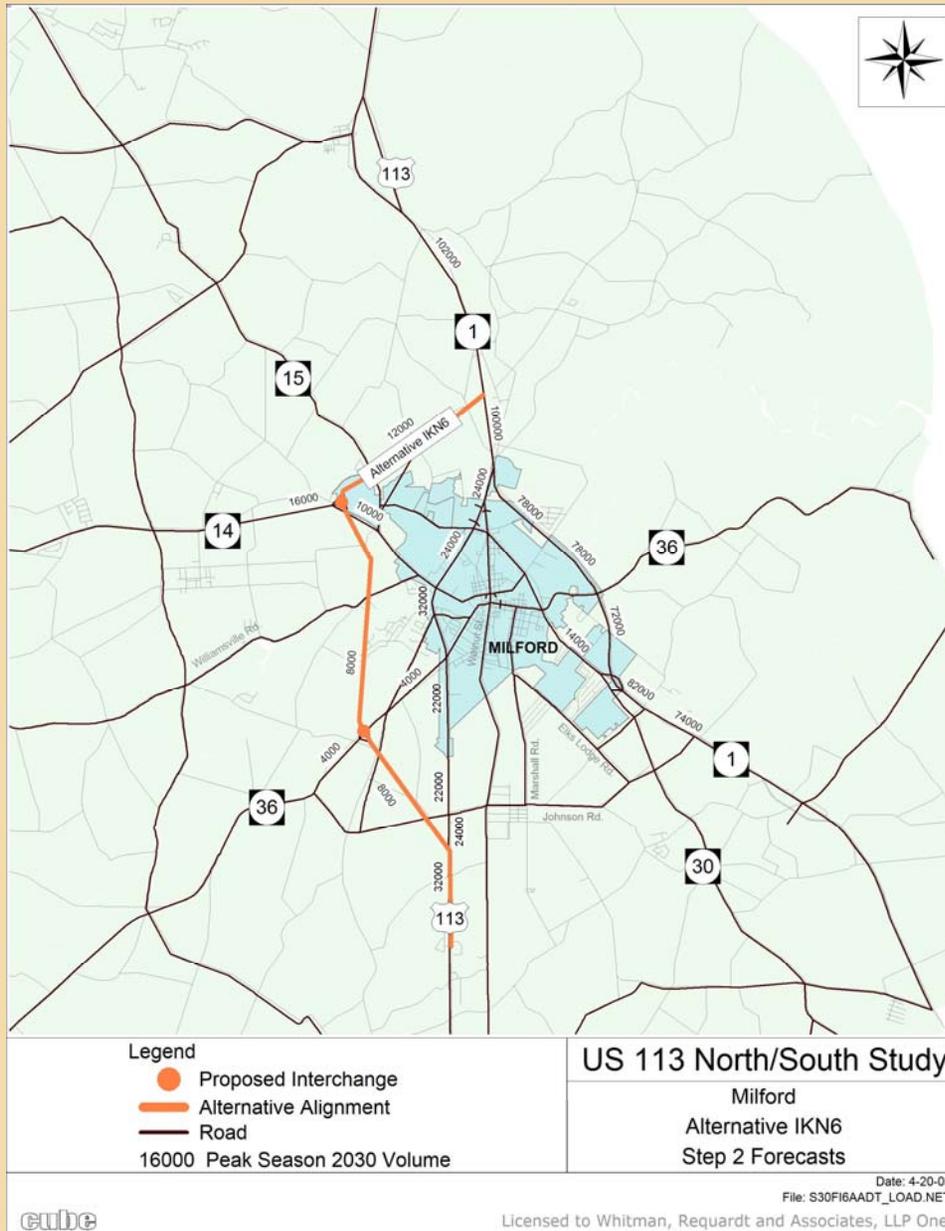
Traffic Analysis: Alternative IKM4

Step 2 forecasts are preliminary; further refinements are underway.



Traffic Analysis: Alternative IKN5

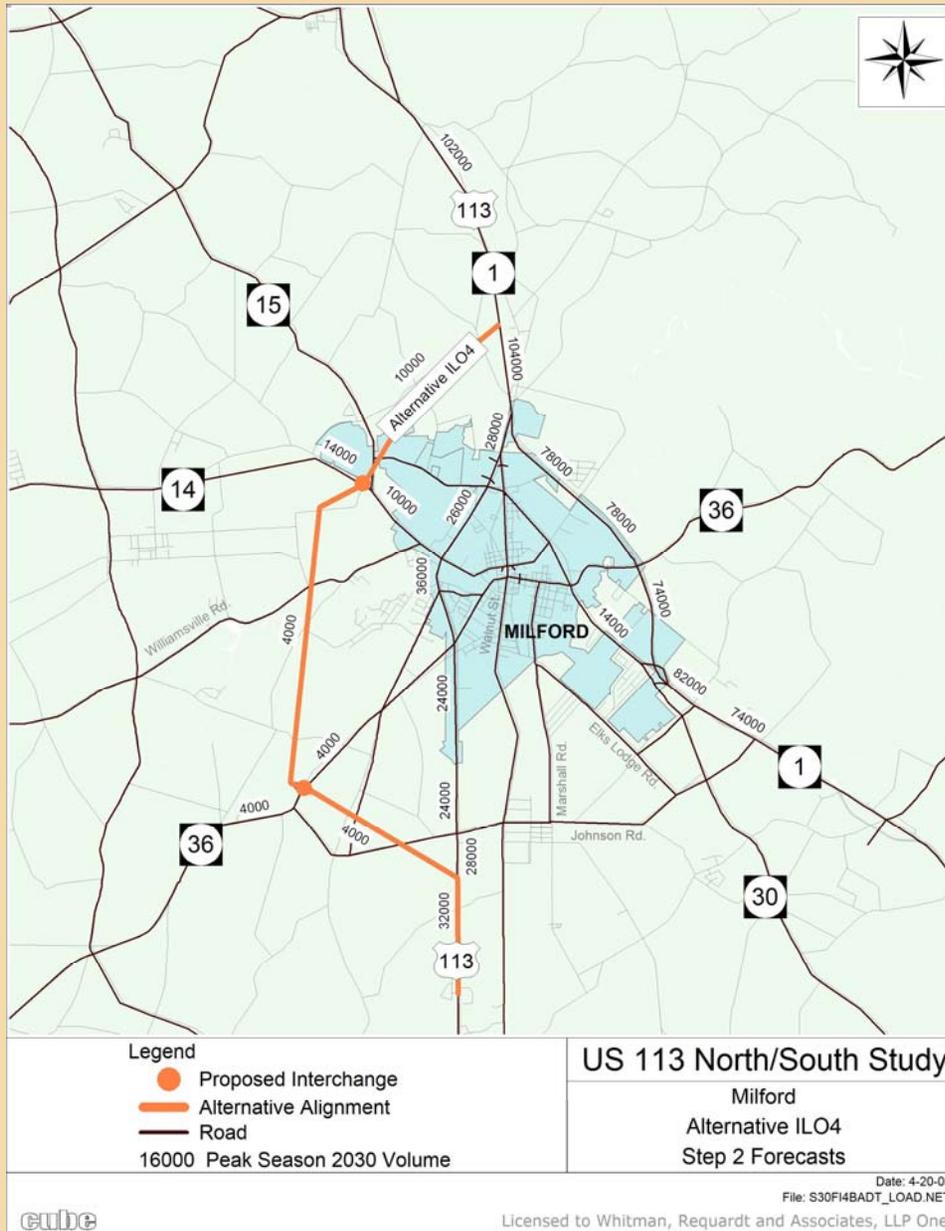
Step 2 forecasts are preliminary; further refinements are underway.



Traffic Analysis: Alternative IKN6

Step 2 forecasts are preliminary; further refinements are underway.

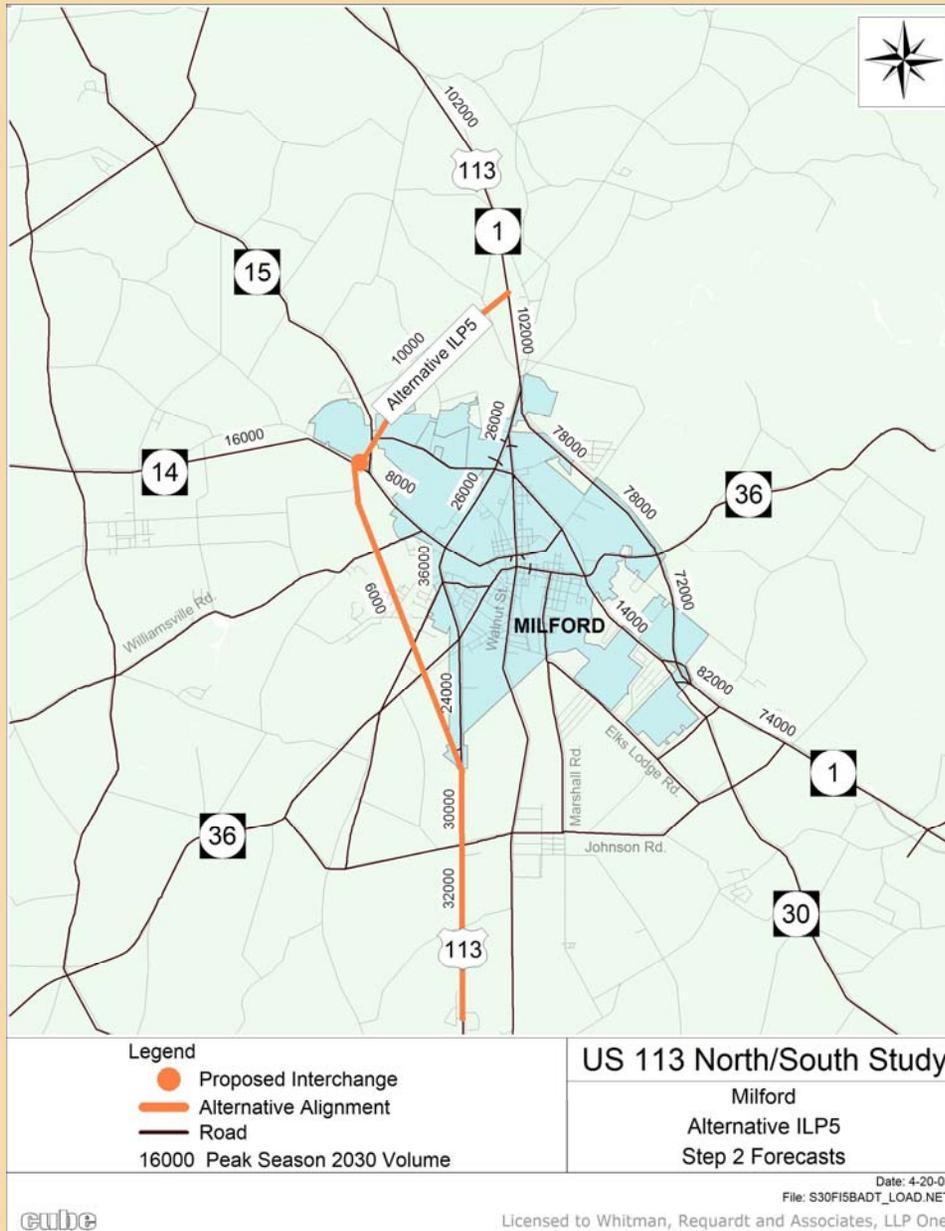




Traffic Analysis: Alternative ILO4

Step 2 forecasts are preliminary; further refinements are underway.

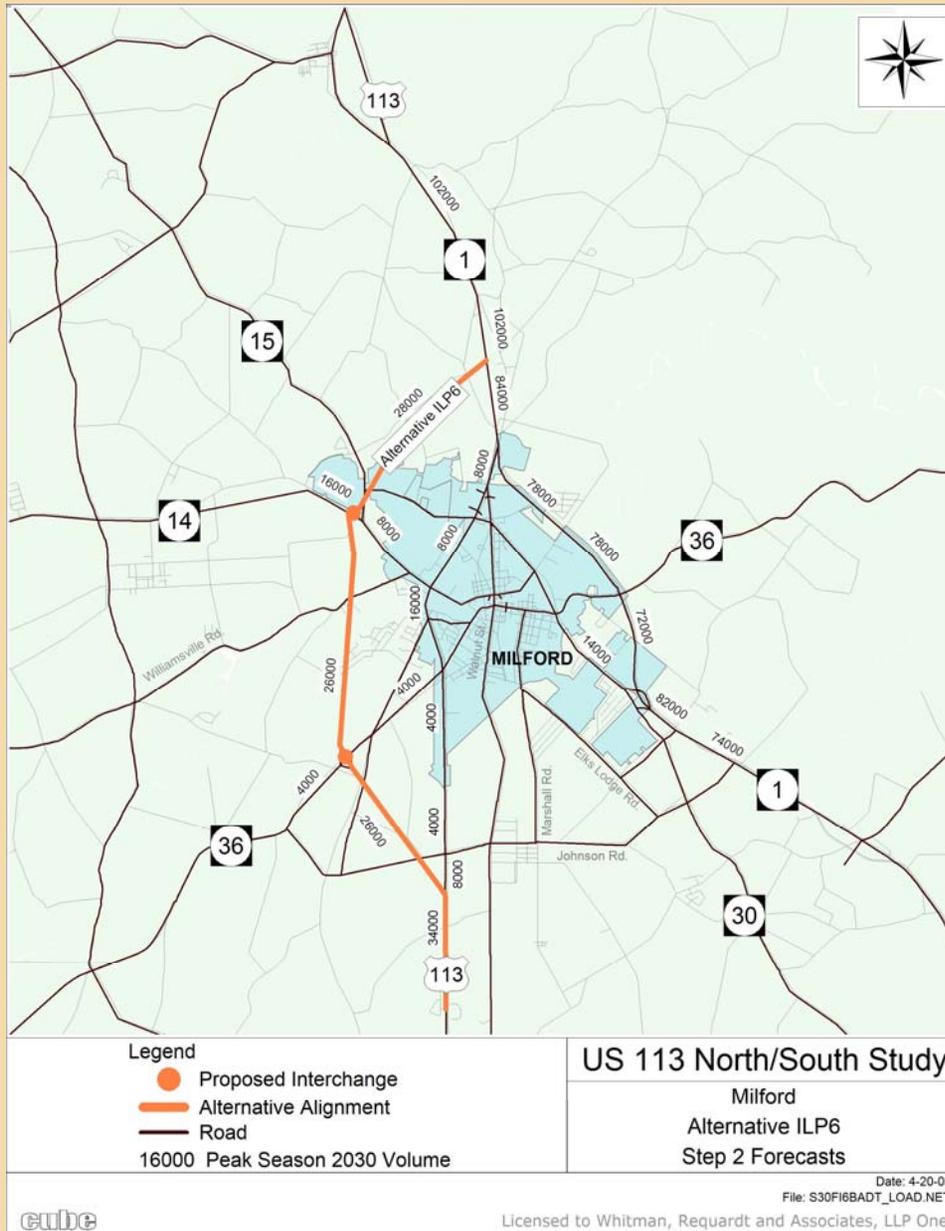




Traffic Analysis: Alternative ILP5

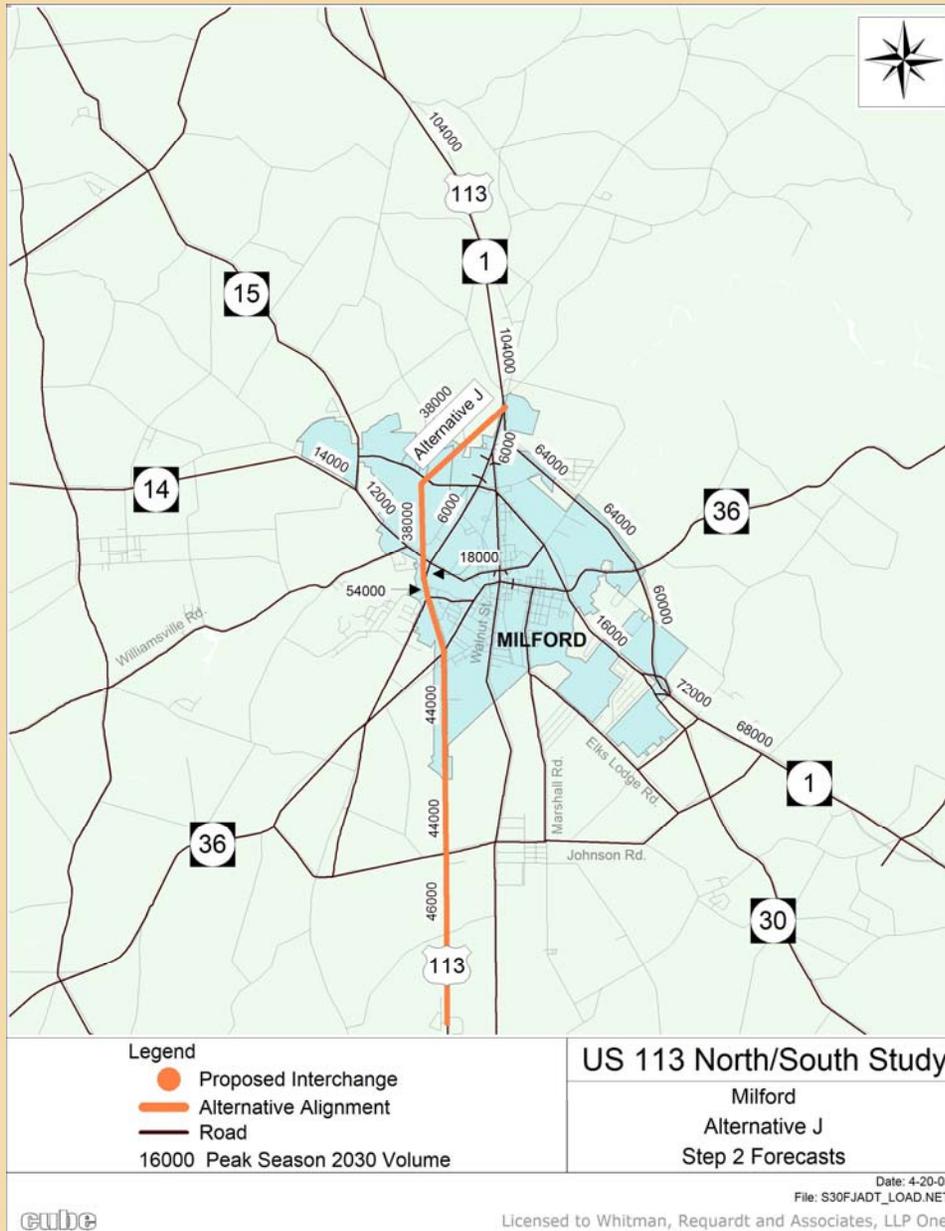
Step 2 forecasts are preliminary; further refinements are underway.





Traffic Analysis: Alternative ILP6

Step 2 forecasts are preliminary; further refinements are underway.



Traffic Analysis: Alternative J

Step 2 forecasts are preliminary; further refinements are underway.

Traffic Analysis Conclusions

- **The preliminary traffic analysis surprised us, because it showed that the eastern bypasses are generally less effective than the western bypasses.**
 - **Longer distance results in longer travel time than existing US 113, except during peak hours**
 - **The existing Milford bypass will be somewhat congested, even with the addition of a third lane in each direction**

- **As we evaluate the alternatives later in the meeting, we will provide initial conclusions regarding the relative traffic benefits of each alternative.**



Cost Estimates

- **At this point, no alternative is being considered for elimination based on cost.**
- **Cost estimates using the major quantity approach are still under development.**
- **At this preliminary stage, it is reasonable to use the length of each alternative and the number of interchanges as a means to compare relative cost.**



Economic Impact Analysis

- **Our economic impact consultant (Economic Development Research Group) has performed a cursory review of the off-alignment alternatives.**
- **Generally speaking, the further a bypass is from Milford, the greater the potential economic impact.**
- **However, most of the bypass alternatives in the Milford area are not so different from each other that economic impact should be used to retain one and drop another. An exception may be Alternative J, which is likely to have less impact than the other western bypass alternatives.**
- **More detailed analysis will begin with a business survey later this spring.**



Retaining Alternatives for Detailed Study

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

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



Retaining Alternatives for Detailed Study

- The no-build alternative and at least one on-alignment alternative will be retained for detailed study.
- The matrix, traffic information, and public opinion are the tools we have available to narrow down the list of alternatives.
- By the end of our next meeting, we would like the group to recommend:
 - which on-alignment alternative(s) be retained
 - which east bypass alternative(s) be retained, if any
 - which west bypass alternative(s) be retained, if any



On-Alignment Alternatives

- **Options 1 and 2 have been combined based on public input.**
 - **Full control of access along existing US 113**
 - **Grade separations and frontage roads used for access**
- **Option 3 adds one lane in each direction at grade.**
 - **Grade separations at Airport Road and SR 14**
 - **All other existing signals will remain**
 - **This option is being evaluated to determine whether it addresses purpose and need**
- **Public/working group opinions:**
 - **There is little support for an on-alignment alternative, at least north of Johnson Road / Fitzgerald Road.**
 - **An on-alignment alternative is perceived to have negative community and economic impacts to the City of Milford.**
- **Resource and property impacts:**
 - **See matrix for details.**



**On-Alignment
Alternatives:
Natural
Resource
Impacts**

	No Build Alternative	Alternative A, opt. 1/2	Alternative A, opt. 3
Area of Potential Floodplain Impacts - FEMA (acres)			
100-Year	0	16	8
Area of Potential Wetland/Waters of the US Impacts			
Total Wetlands (acres)	0	2	0
Hydric Soils (acres)	0	8	11
Waters of the US (linear feet)	0	1800	400
Potential Agricultural Impacts (acres)			
Agricultural Districts	0	0	0
Agricultural Preservation Easements	0	17	1
Prime Farmlands	0	227	118
Potential Hazardous Waste Impacts			
Number of EPA Sites	0	0	0
Number of NPDES Locations	0	0	0
Potential Natural Resource Impacts (acres)			
Natural Areas	0	0	0
State Resource Areas	0	3	6
Forestland: 2002 Land Use	0	14	1
State Forest	0	0	0
Rare, Threatened and Endangered Species	TBD	TBD	TBD
Parks and Recreation Areas	0	0	0



**On-Alignment
Alternatives:
Cultural
Resource
Impacts**

	No Build Alternative	Alternative A, opt. 1/2	Alternative A, opt. 3
Potential Cultural Resources Impacts			
Number of NRHP Buildings, Structures and Objects	0	1	1
Number of NRHP Archeological Sites	0	0	0
Number of NRHP Districts	0	1	1
Number of CRS Buildings, Structures and Objects	0	8	11
Number of CRS Archeological Sites	0	1	0
Number of CRS Areas/Districts	0	0	0
Number of Potential CRS Points	0	12	5
Number of Cemeteries	0	0	0
Predictive Model: Prehistoric Sensitivity - High & Moderate (acres)	0	41	23
Predictive Model: Prehistoric Sensitivity - Low (acres)	0	45	24
Predictive Model: Early Historic Sensitivity - High & Moderate (acres)	0	7	5
Predictive Model: Early Historic Sensitivity - Low (acres)	0	0	0
Predictive Model: Sites of Historic Sensitivity - High & Moderate	0	12	10
Predictive Model: Sites of Historic Sensitivity – Low	0	3	3



**On-Alignment
Alternatives:
Property
Impacts**

	No Build Alternative	Alternative A, opt. 1/2	Alternative A, opt. 3
Properties (numbers of, total acres)			
<i>Properties affected (numbers of)</i>	0	218	135
<i>Properties affected (total acres)</i>	0	97	30
Access Rights (numbers of affected properties)			
<i>Denial of Access (numbers of)</i>	0	35	7
Residential	0	23	3
Agricultural	0	3	0
Commercial	0	9	4
Industrial	0	0	0
<i>Modified Access (numbers of)</i>	0	331	30
Residential	0	231	6
Agricultural	0	13	0
Commercial	0	72	10
Industrial	0	15	14



On-Alignment Conclusions

- **Option 1/2 will be retained for further study.**
- **Option 3 must still be evaluated to determine whether it meets the purpose of and need for the project.**



Eastern Bypass Alternatives

- **Alternative B passes north of Lincoln.**
- **Alternatives C-F and 1-3 pass south of Lincoln.**
- **Each has an interchange (or interchanges) with SR 1 and SR 30 at the northeast end, and with US 113 at the southwest end.**
- **Each includes the addition of a third lane in each direction on the existing Milford bypass.**
- **Public/working group opinions:**
 - **Take advantage of existing Milford bypass.**
 - **Eastern bypasses have fewer resource impacts than western.**
 - **Needs to be coordinated with extensive development in progress.**



Eastern Bypass Alternatives

■ **Length:**

- The existing length of US 113 in the study area is 11.2 miles.
- Alternative B is 14.7 miles long.
- Alternatives C through F vary from 13.6 to 14.2 miles long.
- Each eastern bypass alternative includes between 4.0 and 4.7 miles of new highway.

■ **Resource and property impacts:**

- See matrix for details.



**Eastern
Bypass
Alternatives:
Natural
Resource
Impacts**

	B	C1	C2	C3	D1	D2	D3	E1	E2	E3	F1	F2	F3
Area of Potential Floodplain Impacts - FEMA (acres)													
100-Year	16	16	16	16	16	16	16	16	16	16	16	16	16
Area of Potential Wetland/Waters of the US Impacts													
Total Wetlands (acres)	8	4	4	5	3	3	3	5	5	5	4	4	4
Hydric Soils (acres)	36	16	16	20	21	21	24	23	23	27	13	13	17
Waters of the US (linear feet)	4300	2700	2700	3100	2500	2500	2900	1800	1800	2100	1500	1500	1800
Potential Agricultural Impacts (acres)													
Agricultural Districts	15	15	15	15	15	15	15	15	15	15	0	0	0
Agricultural Preservation Easements	13	7	15	41	7	15	41	7	15	28	7	15	28
Prime Farmlands	426	303	408	405	370	381	377	382	374	379	351	351	349
Potential Hazardous Waste Impacts													
Number of EPA Sites	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of NPDES Locations	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Natural Resource Impacts (acres)													
Natural Areas	0	0	0	0	0	0	0	0	0	0	0	0	0
State Resource Areas	13	13	13	13	17	17	15	22	22	22	23	23	23
Forestland: 2002 Land Use	38	34	30	22	38	33	25	22	20	19	17	15	14
State Forest	0	0	0	0	0	0	0	0	0	0	0	0	0
Rare, Threatened and Endangered Species	TBD												
Parks and Recreation Areas	0	0	0	0	0	0	0	0	0	0	0	0	0



Eastern Bypass Alternatives: Cultural Resource Impacts

	B	C1	C2	C3	D1	D2	D3	E1	E2	E3	F1	F2	F3
Potential Cultural Resources Impacts													
Number of NRHP Buildings, Structures and Objects	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of NRHP Archeological Sites	1	1	1	1	1	1	1	1	1	1	1	1	1
Number of NRHP Districts	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of CRS Buildings, Structures and Objects	6	4	5	0	3	4	2	5	9	5	5	5	5
Number of CRS Archeological Sites	1	0	0	0	0	0	0	0	0	0	0	0	0
Number of CRS Areas/Districts	1	0	0	0	0	0	0	0	0	0	0	0	0
Number of Potential CRS Points	7	4	5	8	3	4	7	3	5	7	3	5	7
Number of Cemeteries	0	1	0	0	1	0	0	0	0	0	0	0	0
Predictive Model: Prehistoric Sensitivity - High & Moderate (acres)	90	23	30	25	38	35	29	25	28	26	24	26	25
Predictive Model: Prehistoric Sensitivity - Low (acres)	79	49	45	43	45	41	40	38	39	38	38	39	39
Predictive Model: Early Historic Sensitivity - High & Moderate (acres)	20	18	18	18	17	17	18	13	13	15	15	15	17
Predictive Model: Early Historic Sensitivity - Low (acres)	0	0	0	0	0	0	0	0	0	0	0	0	0
Predictive Model: Sites of Historic Sensitivity - High & Moderate	6	6	4	6	6	4	6	7	7	8	5	5	6
Predictive Model: Sites of Historic Sensitivity - Low	2	1	1	1	1	1	0	1	1	1	1	1	1



**Eastern
Bypass
Alternatives:
Property
Impacts**

	B	C1	C2	C3	D1	D2	D3	E1	E2	E3	F1	F2	F3
Properties (numbers of, total acres)													
<i>Properties affected (numbers of)</i>	109	101	114	125	81	93	107	94	108	118	94	109	118
<i>Properties affected (total acres)</i>	265	270	272	276	259	260	264	246	248	252	255	257	262
Access Rights (numbers of affected properties)													
<i>Denial of Access (numbers of)</i>	6	2	2	2	2	2	2	2	2	2	2	2	2
Residential	1	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural	2	2	2	2	2	2	2	2	2	2	2	2	2
Commercial	3	0	0	0	0	0	0	0	0	0	0	0	0
Industrial	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Modified Access (numbers of)</i>	110	78	73	67	78	73	67	78	73	67	78	73	67
Residential	100	75	71	67	75	71	67	75	71	67	75	71	67
Agricultural	6	2	1	0	2	1	0	2	1	0	2	1	0
Commercial	4	1	1	0	1	1	0	1	1	0	1	1	0
Industrial	0	0	0	0	0	0	0	0	0	0	0	0	0



Eastern Bypass Alternatives

■ Traffic benefits:

- **All eastern bypasses will result in somewhat lower traffic on existing US 113 than the no-build condition.**
- **Alternative B is less effective than the others.**
- **Alternatives C through F are so similar that they were modeled as one alternative at this preliminary level.**



Eastern Bypass Alternatives

Traffic Comparison

Alternative	US 113 Volumes (at County Line)	Bypass Volumes	Volumes Beyond Limits of Alternatives (approx.)	
			North	South
Base Year	30,000	N/A	56,000	20,000
No-Build	46,000	N/A	104,000	40,000
B	44,000	4,000 – 6,000	104,000	40,000
C, D, E, F	40,000	6,000 – 10,000	104,000	38,000



Eastern Bypass Conclusions

- **All eastern bypasses will reduce traffic on US 113 in Milford.**
- **All have limited resource impacts compared to the western bypasses.**
- **Alternative B is longer and affects more aquatic resources than Alternatives C through F.**
- **Of the 84 public comments received on the eastern bypasses, 57 were positive. Sections F and 3 received the most public support, C and 1 the least.**



Western Bypass Alternatives

- Most western bypass alternatives pass well west of Milford.
- Alternative alignments chosen to minimize natural resource impacts associated with ponds west of Milford.
- All alternatives include an interchange with SR 14.
- Alternatives 4 and 6 also include an interchange with SR 36.
- Alternative J forms a very close-in bypass of the Kent County portion of Milford.
- Public/working group opinions:
 - “Requires too much new road.”
 - Greater resource impacts than eastern bypass alternatives.
 - May encourage more development west of Milford.



Western Bypass Alternatives

■ Length:

- The existing length of US 113 in the study area is 11.2 miles.
- Alternative J is 11.8 miles long, including 3.1 miles of new highway.
- The other western alternatives vary in length from 12.3 to 14.5 miles, including between 8.3 and 11.5 miles of new highway.

■ Resource and property impacts:

- See matrix for details.



113 US 113 NORTH/SOUTH STUDY

Milford Area

Western Bypass Alternatives: Natural Resource Impacts

	GM 4	GN 5	GN 6	HK M4	HK N5	HK N6	HL O4	HL P5	HL P6	IK M4	IKN 5	IKN 6	ILO 4	ILP 5	ILP 6	J
Area of Potential Floodplain Impacts - FEMA (acres)																
100-Year	269	273	270	269	273	270	269	273	270	269	273	270	269	273	270	274
Area of Potential Wetland/Waters of the US Impacts																
Total Wetlands (acres)	13	8	5	17	12	9	19	16	13	16	11	8	18	15	12	3
Hydric Soils (acres)	28	22	12	52	46	36	58	51	41	30	24	15	36	29	19	9
Waters of the US Impacts (linear feet)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Potential Agricultural Impacts (acres)																
Agricultural Districts	31	31	31	2	2	2	2	2	2	0	0	0	0	0	0	0
Agricultural Preservation Easements	16	13	16	15	15	15	15	15	15	13	13	13	13	13	13	13
Prime Farmlands	117	87	54	113	132	50	115	149	67	113	132	50	115	149	67	135
Potential Hazardous Waste Impacts																
Number of EPA Sites	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of NPDES Locations	0	4	4	0	4	4	4	0	0	0	4	4	4	0	0	0
Potential Natural Resource Impacts (acres)																
Natural Areas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
State Resource Areas	18	14	6	18	14	6	18	14	6	18	14	6	18	14	6	6
Forestland: 2002 Land Use	83	65	26	98	81	42	109	98	58	92	75	35	103	92	52	23
State Forest	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rare, Threatened and Endangered Species	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Parks and Recreation Areas	12	0	0	12	0	0	13	0	0	12	0	0	13	0	0	4



Western Bypass Alternatives: Cultural Resource Impacts

	G M4	GN 5	GN 6	HK M4	HK N5	HK N6	HL O4	HL P5	HL P6	IK M4	IK N5	IK N6	IL O4	ILP 5	ILP 6	J
Potential Cultural Resources Impacts																
Number of NRHP Buildings, Structures and Objects	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Number of NRHP Archeological Sites	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of NRHP Districts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of CRS Buildings, Structures and Objects	29	32	27	32	33	30	28	22	30	31	41	41	28	30	41	22
Number of CRS Archeological Sites	2	1	1	2	2	1	1	1	1	1	2	2	1	1	2	1
Number of CRS Areas/Districts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Potential CRS Points	14	25	11	14	59	11	7	68	12	26	61	17	7	70	18	80
Number of Cemeteries	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Predictive Model: Prehistoric Sensitivity - High & Moderate (acres)	59	56	40	65	83	46	63	94	71	67	83	46	63	94	71	45
Predictive Model: Prehistoric Sensitivity - Low (acres)	90	90	88	94	92	91	100	116	90	79	104	91	87	129	90	54
Predictive Model: Early Historic Sensitivity - High & Moderate (acres)	6	11	8	33	25	35	18	38	48	64	25	11	44	38	25	22
Predictive Model: Early Historic Sensitivity - Low (acres)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Predictive Model: Sites of Historic Sensitivity - High & Moderate	48	69	66	60	82	78	67	88	71	70	100	81	67	106	74	47
Predictive Model: Sites of Historic Sensitivity - Low	5	5	5	5	4	5	6	8	2	2	5	5	5	9	2	5



**Western
Bypass
Alternatives:
Property
Impacts**

	G M4	G N5	G N6	HK M4	HK N5	HK N6	HL O4	HL P5	HL P6	IK M4	IK N5	IK N6	IL O4	IL P5	IL P6	J
Properties (numbers of, total acres)																
<i>Properties affected (numbers of)</i>	88	82	75	91	80	73	97	96	91	78	72	66	88	89	83	52
<i>Properties affected (total acres)</i>	480	398	441	485	404	447	483	388	431	413	333	375	409	333	357	140
Access Rights (numbers of affected properties)																
<i>Denial of Access (numbers of)</i>	27	39	26	32	44	31	42	55	42	23	35	22	33	46	33	27
Residential	17	31	19	16	30	18	22	37	25	16	30	18	22	37	25	20
Agricultural	5	3	2	8	6	5	9	7	6	3	1	0	4	2	1	0
Commercial	5	5	5	3	3	3	6	6	6	4	4	4	7	7	7	5
Industrial	0	0	0	5	5	5	5	5	5	0	0	0	0	0	0	2
<i>Modified Access (numbers of)</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Industrial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Western Bypass Alternatives

■ Traffic benefits:

- Preliminary results indicate that all western bypass alternatives are very effective at diverting traffic from US 113.
- In general, the western bypass alternatives starting with section I are less effective than the others.
- Alternative J is particularly effective, but only bypasses the Kent County portion of Milford.



Western Bypass Alternatives

Traffic Comparison

Alternative	US 113 Volumes (at County Line)	Bypass Volumes	Volumes Beyond Limits of Alternatives (approx.)	
			North	South
Base Year	30,000	N/A	56,000	20,000
No-Build	46,000	N/A	104,000	40,000
GM4, GN5, GN6	18,000	34,000 – 40,000	105,000	46,000
HKM4, HKM5, HKM6	16,000 – 18,000	24,000 – 30,000	103,000	36,000
HLO4	22,000	20,000 – 26,000	102,000	32,000
HLP5, HLP6	16,000 – 18,000	28,000 – 32,000	104,000	37,000
IKM4, IKN5	36,000 – 38,000	4,000 – 10,000	102,000	32,000
IKN6	32,000	8,000 – 12,000	102,000	32,000
ILO4, ILP5	36,000	4,000 – 10,000	102,000	32,000
ILP6	16,000	26,000 – 28,000	102,000	34,000
J	N/A	38,000	104,000	46,000



Western Bypass Conclusions

- **All western bypasses appear to be effective in reducing traffic on US 113 in Milford.**
- **All except J have substantial resource impacts compared to the eastern bypasses.**
- **Of the 51 public comments received on the western bypasses, 38 were negative. Few were directed toward specific alternatives.**





DISCUSSION



Next Steps

- **May:** Working Group Meeting #8 – Continue to develop recommendations regarding Alternatives to be Retained for Detailed Study (May 16, 2005)
- **June:** Public Workshop #4 – Present recommendations on Alternatives to be Retained for Detailed Study and those alternatives recommended to be dropped (June 6, 2005)



Next Working Group Meeting

- **Agenda:** Continue to develop recommendations regarding Alternatives Retained for Detailed Study
- **Date:** May 16, 2005
- **Time:** 5:30 – 8:30 PM
- **Location:** Carlisle Fire Company, 615 N.W. Front Street, Milford

