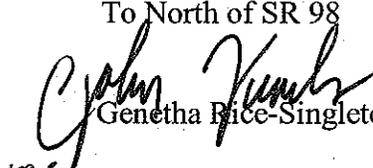


DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

**FILE** P. I. No. 110650-, Jackson County **OFFICE** Preconstruction  
NH-IM-85-2(169)  
I-85 Widening from North of SR 82 **DATE** April 9, 2008  
To North of SR 98

**FROM**  Genetha Rice-Singleton, Assistant Director of Preconstruction

**TO**  SEE DISTRIBUTION

**SUBJECT** APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

Brian Summers  
Glenn Bowman  
Ken Thompson  
Michael Henry  
Keith Golden  
Joe Sheffield  
Paul Liles  
Russell McMurry  
Robert Mahoney  
BOARD MEMBER



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Georgia Division**

61 Forsyth St. SW 17T100  
Atlanta, GA 30303

February 19, 2008

In Reply Refer To:  
HTM-GA

Ms. Gena L. Abraham, Commissioner  
Department of Transportation  
No. 2 Capitol Square  
Atlanta, Georgia 30334

*TOPP LONG - DIRECTOR OF PRECONSTRUCTION*  
Attention: ~~Mike Thomas, Director, Division of Transportation Planning, Data and Intermodal  
Development~~

Dear Ms. Abraham:

Our office has reviewed and approved the revised Concept Reports NH-IM-85-2 (165, 166, 167, 168, 169, 170, 171, 172, 173, 174) conditioned upon the following comments being satisfied:

- For project NH-IM-85-2(167), please evaluate the option of raising SR 332 in the design phase (as opposed to lowering the Interstate profile).
- Several of the reports indicate the reconstruction of Interstate bridges to accommodate 8 lanes total width. After discussion with your staff, we have agreed that all bridges will only be widened to accommodate six lanes.
- Approval of these Concept Reports does not constitute approval of design decisions (sequence of construction/staging etc.).

Please contact George Merritt if you have any questions at 404-562-3655 or [george.merritt@fhwa.dot.gov](mailto:george.merritt@fhwa.dot.gov).

Sincerely,

For: Rodney Barry, P.E.  
Division Administrator

**MOVING THE  
AMERICAN  
ECONOMY**



# REVISED PROJECT CONCEPT REPORT

**Need and Purpose:** See attached Need & Purpose

**Project location:** The project is located in northern Jackson County, beginning just north of SR 82 (mile log 140.5) and ending just north of SR 98 (mile log 146.5). The total project length is 6.0 miles.

**Description of the approved concept:** The approved concept for this project is the widening of I-85 from the existing four-lane divided section with a depressed median to a six-lane section with a median barrier.

**PDP Classification:** Major \_\_\_\_\_ Minor X

**Federal Oversight:** Full Oversight ( X ), Exempt( ), State Funded( ), or Other ( )

**Functional Classification:** Rural Interstate Principal Arterial

**U. S. Route Number(s):** I-85 **State Route Number(s):** SR 403

**Traffic (AADT) as shown in the approved concept:**

Current Year: 53,200 (2005)

Design Year: 90,500 (2025)

**Proposed features to be revised:**

- The proposed typical section:
  - Six 12' lanes
  - Median barrier
  - 12'-9" paved inside shoulder
  - 16' paved outside shoulder

The typical section will be revised to decrease the inside and outside paved shoulder widths per agreement with FHWA. The revised typical section will begin on I-85 just north of SR 82 and extend throughout the project corridor, ending just south of SR 98.

- Design Exceptions to controlling criteria anticipated:  
Design exceptions for inside shoulder width will be required for I-85 at Plainview Road (CR 250) over I-85 and at Lee Road (SR 82 Spur) over I-85.

This design exception was not noted in the approved concept report. The concrete median barrier on I-85 will be transitioned around bridge columns at all overpasses. Design exceptions for inside shoulder width are required at these locations due to the transition of the concrete barrier encroaching on the 12'-0" paved inside shoulder. As a result, the remaining inside shoulder width at the bridge columns will be 9'-10" measured from the inside edge of travel to the face of barrier. A Policy on Geometric Design of Highways and Streets 2004 states that the minimum useable shoulder width should be 10'-0" for a paved median shoulder. The paved shoulder will not meet this minimum width at the locations listed above.

- Design Exceptions to controlling criteria anticipated:  
Design exceptions for substandard stopping sight distance will be required at milepost 142.5 between Plainview Road (CR 250) and Lee Road (SR 82 Spur) and also at mileposts 144.8, and 145.2 between North Oconee River and North Elm Street (SR 98).

ok  
Design Exceptions for substandard stopping sight distance are no longer required due to the change in design controls for crest vertical curves in A Policy on Geometric Design of Highways and Streets 2004. Additionally, any vertical curves that do not meet the required sight distance will be reconstructed to meet required values.

**Describe the revised feature(s) to be approved:**

- The revised typical section:
  - Six 12'-0" lanes, outside lane paving will extend 1'-0" into the paved outside shoulder but will be striped at 12'-0"
  - Median barrier
  - 12'-0" paved inside shoulder
  - 12'-0" paved outside shoulder, includes 1'-0" extension of outside lane paving

The revised typical section will begin on I-85 just north of SR 82 and extend throughout the project corridor, ending just south of SR 98.

- Design Exceptions to controlling criteria anticipated:  
Design exceptions for inside shoulder width will be required for I-85 at Plainview Road (CR 250) over I-85 and Lee Road (SR 82 Spur) over I-85. The minimum inside shoulder width required is 10'-0". The inside shoulder width will be 9'-10" from inside edge of travel to face of barrier at the bridge columns.
- Design Exceptions for substandard stopping sight distance are no longer required at milepost 142.5 between Plainview Road (CR 250) and Lee Road (SR 82 Spur) and also at mileposts 144.8, and 145.2 between North Oconee River and North Elm Street (SR 98).

**Updated traffic data (AADT):**

Current Year: 54,700 (2010)      Design Year: 90,600 (2030)

**Programmed/Schedule:**

P.E. 2005      R/W: NA      Construction: 2013

**Revised cost estimates:**

1. Construction cost including E&C, \$50,365,608.98
2. Right-of-way, \$0
3. Utilities, \$0

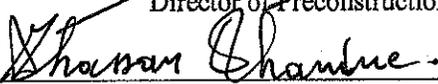
Is the project located in a Non-attainment area?      Yes      X      No.

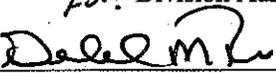
**Recommendation:** It is recommended that the proposed revision to the concept be approved for implementation.

Attachments:

1. Sketch Map,
2. Cost Estimate,
3. Typical Sections,
4. Need and Purpose.

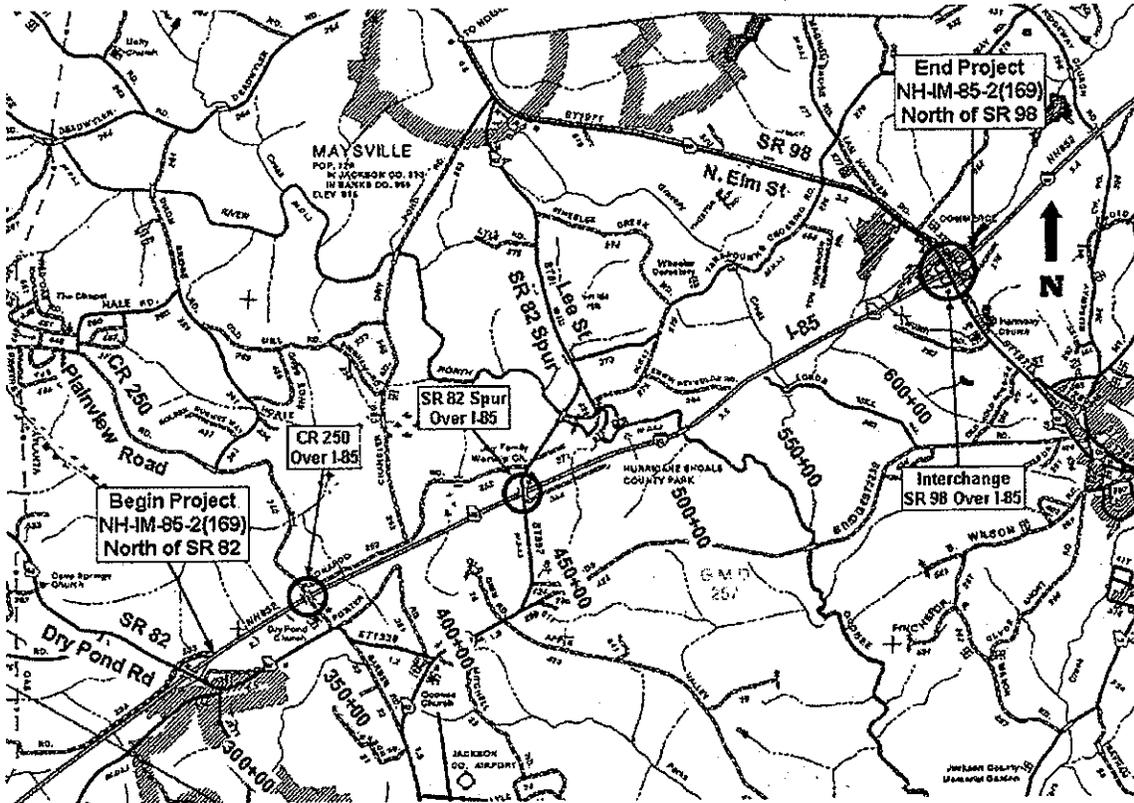
Concur:   
\_\_\_\_\_  
Director of Preconstruction

Approve:   
\_\_\_\_\_  
As: Division Administrator, FHWA

Approve:   
\_\_\_\_\_  
Chief Engineer

# PROJECT LOCATION

## NH-IM-85-2(169)



## Estimate Report for file "110650"

Section ROADWAY					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	3000000.00	TRAFFIC CONTROL -	3000000.00
150-9011	3800	HR	52.67	TRAFFIC CONTROL - WORKZONE LAW ENFORCEMENT (CONTRACTOR BIDS)	200146.00
152-1000	1	EA	30000.00	FIELD LABORATORY	30000.00
153-1300	1	EA	63196.25	FIELD ENGINEERS OFFICE TP 3	63196.25
158-1000	12500	HR	0.80	TRAINING HOURS	10000.00
201-1500	1	LS	720000.00	CLEARING & GRUBBING -	720000.00
205-0001	158901	CY	4.34	UNCLASS EXCAV	689634.33
206-0002	195300	CY	4.99	BORROW EXCAV, INCL MATL	974547.00
310-1101	275700	TN	16.01	GR AGGR BASE CRS, INCL MATL	4413957.00
402-3121	25900	TN	48.57	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM	1257963.00
402-3130	4600	TN	46.98	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM	216108.00
402-3190	65900	TN	53.81	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM	3546079.00
413-1000	5300	GL	1.32	BITUM TACK COAT	6996.00
430-0220	336000	SY	44.58	PLAIN PC CONC PVMT, CL 1 CONC, 12 INCH THK	14978880.00
433-1300	830	SY	142.13	REINF CONC APPROACH SLAB, INCL BARRIER	117967.90
436-1000	17500	LF	9.04	ASPHALTIC CONCRETE CURB -	158200.00
441-0204	6800	SY	30.89	PLAIN CONC DITCH PAVING, 4 IN	210052.00
444-1000	80	LF	2.49	SAWED JOINTS IN EXIST PAVEMENTS - PCC	199.20
456-2012	12	GLM	949.78	INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (CONTINUOUS)	11872.25
500-3200	13	CY	436.65	CLASS B CONCRETE	5676.45
550-1180	22000	LF	36.45	STORM DRAIN PIPE, 18 IN, H 1-10	801900.00
550-1240	8250	LF	44.89	STORM DRAIN PIPE, 24 IN, H 1-10	370342.50
550-1300	3750	LF	54.36	STORM DRAIN PIPE, 30 IN, H 1-10	203850.00
550-1360	500	LF	66.73	STORM DRAIN PIPE, 36 IN, H 1-10	33365.00
550-4218	11	EA	558.86	FLARED END SECTION 18 IN, STORM DRAIN	6147.46
550-4224	7	EA	639.96	FLARED END SECTION 24 IN, STORM DRAIN	4479.72
550-4230	2	EA	732.96	FLARED END SECTION 30 IN, STORM DRAIN	1465.92
550-4236	1	EA	1036.11	FLARED END SECTION 36 IN, STORM DRAIN	1036.11
573-2006	1500	LF	15.07	UNDDR PIPE INCL DRAINAGE AGGR, 6 IN	22605.00
576-1010	1460	LF	6.51	SLOPE DRAIN PIPE, 10 IN	9504.60
577-1100	73	EA	1015.93	METAL DRAIN INLET - COMPLETE ASSEMBLY	74162.89
610-1055	15000	LF	1.55	REM GUARDRAIL	23250.00
610-1075	58	EA	245.63	REM GUARDRAIL ANCH, ALL TYPES	14246.54
615-1000	560	LF	291.69	JACK OR BORE PIPE -	163346.40
621-3125	380	LF	270.07	CONCRETE BARRIER, TP 25S, MODIFIED	102626.60
621-6001	26000	LF	55.59	CONCRETE BARRIER, TP S-1	1445340.00
621-6002	1700	LF	70.48	CONCRETE BARRIER, TP S-2	119816.00
621-6003	3900	LF	177.53	CONCRETE BARRIER, TP S-3	692367.00
621-6008	320	LF	207.64	CONCRETE SIDE BARRIER, TP 7-CS	66444.80
621-6013	84	LF	115.16	CONCRETE SIDE BARRIER, TP 7-TS	9673.44
622-1033	126000	LF	28.52	PRECAST CONCRETE MEDIAN BARRIER, METHOD 3	3593520.00
641-1100	260	LF	36.09	GUARDRAIL, TP T	9383.40
641-1200	17300	LF	15.99	GUARDRAIL, TP W	276627.00
641-5001	32	EA	549.47	GUARDRAIL ANCHORAGE, TP 1	17583.04
641-5012	26	EA	1713.38	GUARDRAIL ANCHORAGE, TP 12	44547.88
649-0018	31500	LF	12.63	CONCRETE GLARE SCREEN, 18 INCH	397845.00
650-1200	4	EA	12714.99	IMPACT ATTENUATOR UNIT, (COMPRESSION CRASH CUSHION) TYPE T -	50859.96
668-2105	128	EA	3595.64	DROP INLET, GP 1, SPCL DES	460241.92
668-2110	30	LF	257.21	DROP INLET, GP 1, ADDL DEPTH	7716.30
668-5000	2	EA	1793.31	JUNCTION BOX	3586.62
<b>Section Sub Total:</b>					<b>\$39,639,355.48</b>

Section PERMANENT EROSION CONTROL					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
603-2182	250	SY	47.10	STN DUMPED RIP RAP, TP 3, 24 IN	11775.00

603-7000	250	SY	4.31	PLASTIC FILTER FABRIC	1077.50
700-6910	65	AC	837.76	PERMANENT GRASSING	54454.40
700-7000	300	TN	59.69	AGRICULTURAL LIME	17907.00
700-7010	250	GL	19.04	LIQUID LIME	4760.00
700-8000	46	TN	294.10	FERTILIZER MIXED GRADE	13528.60
700-8100	3300	LB	1.71	FERTILIZER NITROGEN CONTENT	5643.00
715-2200	10000	SY	1.97	BITUMINOUS TREATED ROVING, WATERWAYS	19700.00
716-2000	8800	SY	1.12	EROSION CONTROL MATS, SLOPES	9856.00
<b>Section Sub Total:</b>					<b>\$138,701.50</b>

<b>Section TEMPORARY EROSION CONTROL</b>					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	33	AC	523.03	TEMPORARY GRASSING	17259.99
163-0240	1800	TN	191.61	MULCH	344898.00
163-0300	10	EA	1826.91	CONSTRUCTION EXIT	18269.10
163-0520	3000	LF	14.30	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	42900.00
163-0530	15000	LF	3.05	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	45750.00
163-0550	140	EA	272.79	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	38190.60
165-0010	12500	LF	1.00	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	12500.00
165-0030	3300	LF	1.32	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	4356.00
165-0070	7500	LF	1.76	MAINTENANCE OF BALED STRAW EROSION CHECK	13200.00
165-0101	10	EA	486.99	MAINTENANCE OF CONSTRUCTION EXIT	4869.90
165-0105	140	EA	98.01	MAINTENANCE OF INLET SEDIMENT TRAP	13721.40
167-1000	2	EA	1477.12	WATER QUALITY MONITORING AND SAMPLING	2954.24
167-1500	30	MO	903.71	WATER QUALITY INSPECTIONS	27111.30
171-0010	25000	LF	1.83	TEMPORARY SILT FENCE, TYPE A	45750.00
171-0030	6500	LF	3.32	TEMPORARY SILT FENCE, TYPE C	21580.00
<b>Section Sub Total:</b>					<b>\$653,310.53</b>

<b>Section SIGNING AND MARKING</b>					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
632-0003	8	EA	13092.88	CHANGEABLE MESSAGE SIGN, PORTABLE, TYPE 3	104743.04
636-1020	30	SF	14.49	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	434.70
636-1029	255	SF	17.89	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 3	4561.95
636-1032	350	SF	27.99	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING TP 6	9796.50
636-3010	2	EA	372.41	GROUND-MOUNTED BREAKAWAY SIGN SUPPORT	744.82
636-5010	25	EA	40.57	DELINEATOR, TP 1	1014.25
638-1001	1	LS	77889.04	STR SUPPORT FOR OVERHEAD SIGN, TP I, STA -	77889.04
638-1001	1	LS	77889.04	STR SUPPORT FOR OVERHEAD SIGN, TP I, STA -	77889.04
654-1001	13080	EA	3.59	RAISED PVMT MARKERS TP 1	46957.20
654-1003	1640	EA	3.78	RAISED PVMT MARKERS TP 3	6199.20
657-1054	67000	LF	3.56	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, WHITE, TP PB	238520.00
657-1104	4000	LF	6.66	PREFORMED PLASTIC SOLID PVMT MKG, 10 IN, WHITE, TP PB	26640.00
657-3085	130800	GLF	3.34	PREFORMED PLASTIC SKIP PVMT MKG, 8 IN, CONTRAST	436872.00
657-6054	65400	LF	3.77	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, YELLOW, TP PB	246558.00
<b>Section Sub Total:</b>					<b>\$1,278,819.74</b>

<b>Section BRIDGE</b>					
Item Number	Quantity	Units	Unit Price	Item Description	Cost

500-9000	20383	SF	100.00	Bridge No.1	2038365.00
500-9000	20383	SF	100.00	Bridge No.2	2038365.00
<b>Section Sub Total:</b>					<b>\$4,076,730.00</b>

**Total Estimated Cost: \$45,786,917.25**

<b>Subtotal Construction Cost</b>	<b>\$45,786,917.25</b>
E&C Rate 10.0 %	\$4,578,691.73
Inflation Rate 0.0 % @ 0.0 Years	\$0.00
<hr/>	
<b>Total Construction Cost</b>	<b>\$50,365,608.98</b>
Right Of Way	\$0.00
ReImb. Utilities	\$0.00
<hr/>	
<b>Grand Total Project Cost</b>	<b>\$50,365,608.98</b>



**NEED AND PURPOSE**  
**PROJECTS NH-IM-85-2 (166-174)**  
**BARROW, JACKSON, BANKS, FRANKLIN**  
**P.I. NO. 110620, 110630, 110640, 110650, 110660, 110670, 110680, 110690, 110700**  
**I-85/SR 403 IMPROVEMENTS**

I-85/SR 403, a rural principal arterial, is a primary corridor in northeastern Georgia. The proposed project NH-IM-85-2 (166-174) would consist of adding one lane to I-85/SR 403 inside the median in each direction from SR 211 in Barrow County to north of SR 17 in Franklin County for a total of 47.2 miles.

**Level of Service**

The current Average Annual Daily Traffic (AADT) on I-85/SR 403 for projects NH-IM-85-2 (166-174) ranges from 35,800 to 42,800 providing a Level of Service in the "C" to "D" range. The projected (2025) traffic volumes for NH-IM-85-2 (166-174) range from 76,800 AADT to 95,300 AADT, providing for a LOS "F". The increasing traffic volumes, with 24% trucks, are projected to cause the roadway to reach unacceptable Levels of Service.

<i>Projects NH-IM-85-2</i>	<i>Current Year (2005) AADT</i>	<i>Current Year (2005) (LOS)</i>	<i>Design Year (2025) Projected AADT</i>	<i>Design Year (2025) Projected (LOS) Build</i>	<i>Design Year (2025) Projected (LOS) No Build</i>
(166)	51,600	D	95,300	E	F
(167)	51,600	D	87,700	D	F
(168)	53,800	D	91,500	E	F
(169)	53,200	D	90,500	E	F
(170)	51,200	D	87,100	E	F
(171)	51,200	D	87,100	E	F
(172)	49,500	D	84,200	E	F
(173)	47,000	C	79,900	D	F
(174)	45,200	C	76,800	D	F

**Accidents**

The latest year that complete accident data is available is 1997. The statewide average accident rate in 1997 for a rural interstate was 49 accidents per 100,000,000 vehicle miles traveled. Proposed projects NH-IM-85-2 (166-173) are below the statewide average. Proposed project NH-IM-85-2 (174) was above the statewide average.

<i>Projects NH-IM-85-2</i>	<i>Accidents</i>	<i>Accident Rate</i>	<i>Statewide Accident Average</i>
(166)	25	31	49
(167)	12	15	49
(168)	26	46	49
(169)	17	17	49
(170)	12	26	49
(171)	9	16	49
(172)	17	21	49
(173)	18	36	49
(174)	65	51	49

**Project Termini**

The termini for the proposed projects are as follow:

<i>Projects NH-IM-85-2</i>	<i>Southern Terminus</i>	<i>Northern Terminus</i>	<i>Project Length (Miles)</i>
(166)	North of SR 211	Ties into proposed project NH-IM-85-2 (167) Location: North of SR 60	5.8 mi.
(167)	Ties into proposed project NH-IM-85-2 (166) Location: North of SR 60	Ties into proposed project NH-IM-85-2 (168) Location: North of US 129/SR 11	5.0 mi.
(168)	Ties into proposed project NH-IM-85-2 (167) Location: North of US 129/SR 11	Ties into proposed project NH-IM-85-2 (169) Location: North of SR 82	3.6 mi.
(169)	Ties into proposed project NH-IM-85-2 (168) Location: North of SR 82	Ties into proposed project NH-IM-85-2 (170) Location: North of SR 98	6.2 mi.
(170)	Ties into proposed project NH-IM-85-2 (169) Location: North of SR 98	Ties into proposed project NH-IM-85-2 (171) Location: North of US 441/SR 15	2.8 mi.
(171)	Ties into proposed project NH-IM-85-2 (170) Location: North of US 441/SR 15	Ties into proposed project NH-IM-85-2 (172) Location: North of SR 63	4.4 mi.
(172)	Ties into proposed project NH-IM-85-2 (171) Location: North of SR 63	Ties into proposed project NH-IM-85-2 (173) Location: North of SR 51	6.0 mi.
(173)	Ties into proposed project NH-IM-85-29(172) Location: North of SR 51	Ties into proposed project NH-IM-85-2 (174) Location: North of SR 320	4.1 mi.
(174)	Ties into proposed project NH-IM-85-2 (173) Location: North of SR 320	North of SR 17	9.3 mi.

**Other Projects in the Area**

Although the proposed improvements demonstrate independent utility, it is also consistent with the goals of other projects in the area in order to improve the entire transportation network.

- NHS-M001-00 (027), Gwinnett, Barrow, Jackson, and Banks Counties: resurfacing of I-85 south of SR 211 in Gwinnett County to South of US 441/SR 15 in Banks County
- IM-00MS (266), I-85 Safety Upgrades at SR 211 in Barrow County and SR 53, SR 82, and SR 98 in Jackson County
- IM-85-2 (177), Jackson County Rest Areas
- STP-065-3 (55), SR 53 from I-85 to Lanier Raceway/Road Atlanta
- IM-00MS (325), I-85 Safety Upgrades at SR 15 and SR 63 in Banks County and SR 51, SR 320, SR 106, and SR 17 in Franklin County and SR 77 in Hart County
- EDS-IM0545 (19), Widen and Reconstruct SR 17 from CR 67 in Lavonia to Stephens County line including replacement bridge over I-85 and realigning ramp terminals on SR 17