ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-85-2(174) Franklin County
P. I. No. 110700

OFFICE Preconstruction

DATE February 8, 2002

FROM C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
Michael Henry
Phillip Allen
Marta Rosen
Paul Liles
Ben Buchan
Jim Kennerly
FHWA
Larry Dent
BOARD MEMBER

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-85-2(174) Franklin County
P.I. No. 110700

OFFICE Preconstruction

DATE October 18, 2001

FROM C. Wayne Hutto, P.E., Assistant Director of Preconstruction

TO Frank L. Danchetz, P.E., Chief Engineer

SUBJECT PROJECT CONCEPT REPORT

This project is the widening and reconstruction of I-85 beginning just north of SR320 and ending just north of SR 17 for a total of 9.1 miles. The existing roadway consists of two lanes in each direction separated by a 64' depressed grass median. The existing major structures are as follows:

LOCATION	DIMENSIONS	SUFFICIENCY RATING
Stagecoach Road/CR 187 Overpass	281' x 32'	71.3
Toccoa Carnesville Road/SR 106 Overpass	256' x 34'	81.0
I-85 over Unnamed Creek	Double 7' x 6' culvert	80.0
I-85 over Unnamed Creek	Double 8' x 7' culvert	-----
Brown Road/CR 97 Overpass	264' x 30'	64.1
I-85 over North Fork Broad River	NBL 232' x 45'	79.0
	SBL 232' x 45'	78.0
Fairview Road/CR 383 Overpass	290' x 32'	69.0
I-85 over Unnamed Creek	Double 7' x 7' culvert	-----
SR 17 Overpass	318' x 58'	76.7
Railroad Overpass	325' x 21'	-----

I-85/SR 403, a rural principal arterial, is a primary corridor in northeast Georgia. The Level of Service (LOS) for this section of I-85 is presently at LOS "C." With a projected 70% increase in traffic by the year 2005, the LOS will decrease to "F" if the additional lanes are not constructed. The base year traffic (2005) is 45,200 VPD and the design year traffic (2025) is 76,800 VPD. The posted speed and the design speed are 70 MPH.

The construction proposes to widen I-85 to a six lane facility for the entire project length. The typical section will consist of three, 12' lanes in each direction with a 28' median with barrier and 16' outside paved shoulders. All widening will be to the inside and no additional right-of-way is required. Traffic will be maintained on existing roadways during construction.

NH-IM-85-2(174) Franklin
October 18, 2001
What about culvert connection?
Bridge construction will be as follows:

1. North Fork Broad River -replace span four of southbound bridge and widen the existing bridges to the inside to form one bridge (232' x 138') that will span the inside median.

2. Stagecoach Road/CR 187 Overpass - jack bridge to provide minimum clearance of 17'.

3. Brown Road/CR 97 Overpass - jack bridge to provide minimum clearance of 17'.

4. Fairview Road/CR 383 Overpass - jack bridge to provide minimum clearance of 17'.

A design exception will be required for substandard stopping sight distance at MP 164.8 between Stephens Creek and CR 187; MP 165.1, 165.5, 167.0, 167.3, and 167.5 between CR 97 and Broad River; MP 169.3, 169.7, and 169.9 between Broad River and Fairview Road; and MP 170.7, 171.0, and 172.9 between Fairview Road and SR 17.

Environmental concerns include requiring a COE 404 Permit, a Categorical Exclusion will be prepared; a public hearing is not required; time saving procedures are appropriate.

The estimated costs for this project are:

	PROPOSED	APPROVED	PROG DATE	LET DATE
Construction (includes E&C and inflation)	$28,842,000	$28,490,000	LR	LR
Right-of-Way & Utilities	-0-	-0-		

This project will increase capacity, enhance safety and reduce congestion along this portion of I-85. I recommend this project concept be approved.

CWH:JDQ/cj

Attachment

CONCUR Thomas L Turner
Thomas L. Turner, P.E., Director of Preconstruct

See comments transmitted via email 1/30/02 to Jim Kennerly

APPROVE Thomas Shandue
FOR ~~Larry R. Dreihaup,~~ Division Administrator, FHW.

APPROVE F L Danchetz
Frank L. Danchetz, P.E., Chief Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

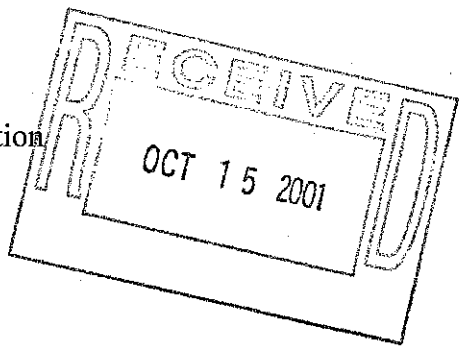
FILE: NH-IM-85-2(174) Franklin
P.I. Number 110700-

OFFICE: Engineering Services

DATE: October 10, 2001

FROM: David Mulling, Project Review Engineer

TO: Wayne Hutto, Assistant Director of Pre-construction



SUBJECT: **CONCEPT REPORT**

We have reviewed the concept report submitted September 27, 2001 by the letter from James A. Kennerly dated September 27, 2001, and have the following comment:

1. Estimated quantities and unit prices used to determine the cost of the bridge, pipe, signing & marking, traffic control and other items were not provided in the cost estimate. Costs for these items cannot be verified without this information.

The costs for the project are:

Construction	$22,879,000
Inflation	$ 3,432,000
E&C	$ 2,531,000
Reimbursable Utilities	$ 0
Right of Way	$ 0

DTM

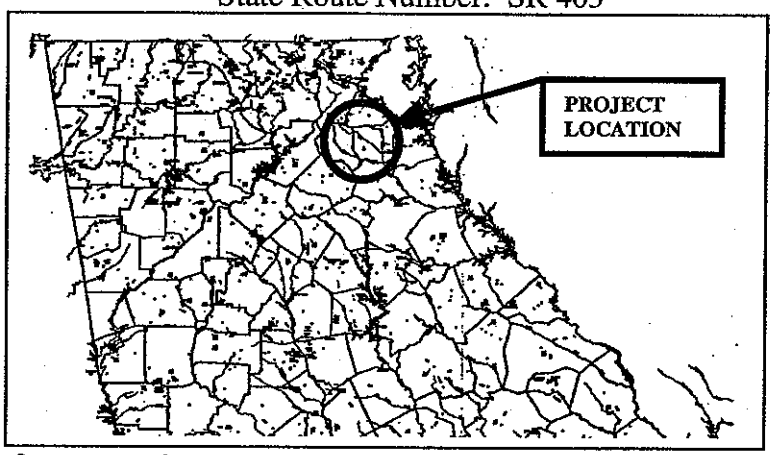
c: Jim Kennerly

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

I-85 Widening and Improvements from north of SR 320 to north of SR 17
Project Number: NH-IM-85-2(174)
County: Franklin
P. I. Number: 110700

Federal Route Number: I-85
State Route Number: SR 403



Recommendation for approval:

DATE 9-11-01 — Brent A. Story
Project Manager

DATE 9-25-01 — James Kennedy
Office Head/District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE _____ — State Transportation Planning Administrator

DATE _____ — State Transportation Programming Engineer

DATE _____ — State Environmental/Location Engineer

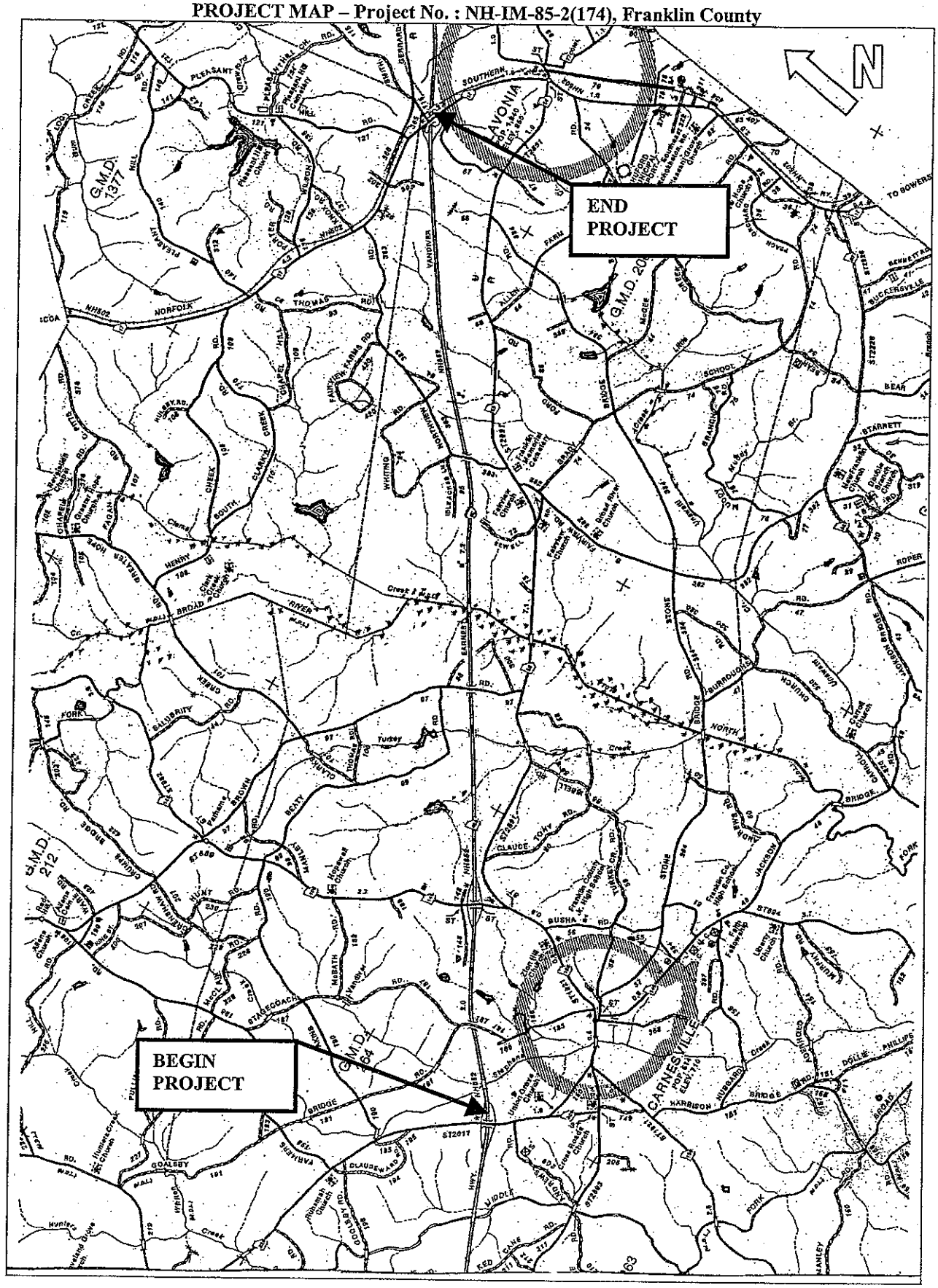
DATE _____ — State Traffic Safety and Design Engineer

DATE _____ — District Engineer

DATE _____ — Project Review Engineer

DATE _____ — Office of Bridge and Structural Design

PROJECT MAP – Project No. : NH-IM-85-2(174), Franklin County



SCORING RESULTS AS PER MOG 2440-2

Project Number:	**County:**	**PI No.:**
NH-IM-85-2(174)	FRANKLIN	100700-

Report Date: 9/27/01	**Concept By:**
	DOT Office: ROAD DESIGN
☒ CONCEPT	
	Consultant: Jordon, Jones & Goulding Inc.

Project Type: Choose One From Each Column			
	☒ Major	☐ Urban	☐ ATMS
	☐ Minor	☒ Rural	☐ Bridge
			☐ Building
			☐ Interchange
			☐ Intersection
			☒ Interstate
			☐ New Location
			☐ Widening & Reconstruction
			☐ Miscellaneous

FOCUS AREAS	**SCORE**	**RESULTS**
Presentation	90%	Estimated quantities & unit prices used to determine cost for bridge, traffic control, signing & marking, other items not provided in estimate.
Judgement	100%	
Environmental	100%	
Right of Way	100%	
Utility	100%	
Constructability	100%	
Schedule	100%	

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

Description of the proposed project:
This project is located in northern Franklin County, beginning just north of SR 320 and ending just north of SR 17. The project will consist of widening the existing four lane mainline of I-85 to six lanes.

Is the project located in a Non-attainment area? _____ **Yes** ___X___ **No**

PDP Classification: *Minor, Existing Location*

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):
Current Year (2005): *45,200* Design Year (2025): *76,800*

Existing design features:

- Typical Section:
  - *Four 12' lanes*
  - *64' depressed median*
  - *4' paved inside shoulder*
  - *10' paved outside shoulder*
- Posted speed: *70 mph* Maximum degree of curvature: *1°30'*
- Maximum grade: *3.46%*
- Width of right of way: *300'*
- Major structures:
  - *281'x32' Two-lane bridge on Stagecoach Road (CR 187) over I-85*
    Struct. ID 119-0023-0 Suff. Rating 71.3
  - *256'x34' Two-lane bridge on Toccoa Carnesville Road (SR 106) over I-85*
    Struct. ID 119-0020-0 Suff. Rating 81.0
  - *257'x21' Reinforced Concrete Bridge Culvert-Triple 7'x6'*
    Struct. ID 119-0046-0 Suff. Rating 80.0
  - *247'x16' Reinforced Concrete Box Culvert-Double 8'x7'*
    Struct. ID (not available) Suff. Rating (not available)

- *264'x30' Two-lane bridge on Brown Road (CR 97) over I-85*
  Struct. ID 119-0017-0 *Suff. Rating 64.1*
- *232'x45' and 232'x45' Two parallel two-lane bridges over North Fork Broad River*
  Struct. ID 119-0047-0 *Suff. Rating 79.0*
  119-0048-0 *78.0*
- *290'x32' Two-lane bridge on Fairview Road (CR 383) over I-85*
  Struct. ID 119-0034-0 *Suff. Rating 69.0*
- *214'x14' Reinforced Concrete Box Culvert-Double 7'x7'*
  Struct. ID (not available) *Suff. Rating (not available)*
- *318'x58' Two-lane bridge on SR 17 over I-85*
  Struct. ID 119-0002-0 *Suff. Rating 76.7*
- *325'x21' Single railroad bridge over I-85*
  Struct. ID 119-0050-0 *Suff. Rating (not available)*

- Major interchanges or intersections along the project: *Toccoa Carnesville Road (SR 106) and SR 17*
- Existing length of roadway segment and the beginning mile logs for each county segment: *9.1 miles; mile log 164.3-173.4*

Proposed Design Features:

- Proposed typical section(s):
  - *Six 12' lanes*
  - *Median barrier*
  - *12'-9" paved inside shoulder*
  - *16' paved outside shoulder*
- Proposed Design Speed Mainline: *70 mph*
- Proposed Maximum grade Mainline: *3.46%* Maximum grade allowable: *4.0%*
- Proposed Maximum grade Side Street: *N/A* Maximum grade allowable: *N/A*
- Proposed Maximum grade driveway: *N/A*
- Proposed Maximum degree of curve: *1° 30'* Maximum degree allowable: *3° 00'*
- Right of way
  - Width: 300' (Minimum)
  - Easements: Temporary ( ), Permanent ( ), Utility ( ), Other ( ).
  - Type of access control: Full (X), Partial ( ), By Permit ( ), Other ( ).
  - Number of parcels: *0* Number of displacements:
    - Business: *0*
    - Residences: *0*
    - Mobile homes: *0*
    - Other: *0*
- Structures:
  - *232'x138' Replace span four of southbound bridge and widen two parallel two-lane bridges over North Fork Broad River on I-85 to six lanes (includes a 28' median on structure).*
- Major intersections and interchanges: *No interchange improvements expected*
- Traffic control during construction:
  Traffic to be maintained on existing roadways during construction

- Design Exceptions to controlling criteria anticipated:

	UNDETERMINED	YES	NO
HORIZONTAL ALIGNMENT:	( )	( )	(X)
ROADWAY WIDTH:	( )	( )	(X)
SHOULDER WIDTH:	( )	( )	(X)
VERTICAL GRADES:	( )	( )	(X)
CROSS SLOPES:	( )	( )	(X)
STOPPING SIGHT DISTANCE:	( )	(X)	( )
SUPERELEVATION RATES:	( )	( )	(X)
HORIZONTAL CLEARANCE:	( )	( )	(X)
SPEED DESIGN:	( )	( )	(X)
VERTICAL CLEARANCE:	( )	(X)	( )
BRIDGE WIDTH:	( )	( )	(X)
BRIDGE STRUCTURAL CAPACITY:	( )	( )	(X)

  - *A Design Exception will be required for substandard vertical clearance at the existing railroad bridge over I-85 at milepost 173.2. The vertical clearance will be 15.64'.*
  - *A Design Exception will be required for substandard stopping sight distance at milepost 164.8 between Stephen's Creek and Stagecoach Road (CR 187), mileposts 165.1 and 165.5 between Stagecoach Road (CR 187) and Toccoa Carnesville Road (SR 106), mileposts 167.0, 167.3, and 167.5 between Brown Road (CR 97) and Broad River, milepost 167.9 between Brown Road (CR 97) and Broad River, mileposts 169.3, 169.7, and 169.9 between Broad River and Fairview Road (CR 383), and also at mileposts 170.7, 171.0 and 172.9 between Fairview Road (CR 383) and SR 17.*
- Design Variances: *Stopping Sight Distance*
- Environmental concerns: *None anticipated*
- Level of environmental analysis:
  - Are Time Savings Procedures appropriate? Yes (X), No ( ),
  - Categorical exclusion (X),
  - Environmental Assessment/Finding of No Significant Impact (FONSI) ( ), or
  - Environmental Impact Statement (EIS) ( ).
- Utility involvements: *None*

Project responsibilities:

- Design: *Georgia DOT*
- Right of Way Acquisition: *N/A*
- Relocation of Utilities: *N/A*
- Letting to contract: *Georgia DOT*
- Supervision of construction: *Georgia DOT*
- Providing material pits: *not determined*
- Providing detours: *N/A*

Coordination

- Concept meeting date: *June 13, 2001* *Meeting minutes attached.*
- P. A. R. meetings, dates and results: *None required*

- FEMA, USCG, and/or TVA: *None to date*
- Public involvement: *A public information meeting will not be required*
- Local government comments:
- Other projects in the area:
  - *NH-IM-85-2(173), Franklin County, I-85 Widening from just north of SR 51 to just north of SR 320*
  - *IM-00MS(325), I-85 Safety upgrades at SR 15, SR 63, SR 51, SR 320, SR 106, SR 17, and SR 177*
  - *IM-00MS(176), Upgrade I-85 Northbound and Southbound Weigh Stations including scale replacements*
  - *EDS-IM-545(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*
- Other coordination to date
  - Future Passenger Rail Corridor Yes ____ No _____

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: *6* Months
- Time to complete preliminary construction plans: *6* Months
- Time to complete right of way plans: *0* Months
- Time to complete the Section 404 Permit: *6* Months
- Time to complete final construction plans: *3* Months
- Time to complete to purchase right of way: *0* Months

Other alternates considered:

- ***No Build:*** *This alternative does not meet the capacity and operational needs of the project.*
- ***Widen I-85 to six lanes while maintaining the existing 64' depressed median:*** *This alternative would have met the required capacity, but would have required additional right-of-way acquisitions.*

Comments:

- *The section of I-85 between Church Road (SR 320) and Toccoa Carnesville Road (SR 106) will have a LOS D for the design year 2025. The section of I-85 between Toccoa Carnesville Road (SR 106) and SR 17 will have a LOS D for the design year 2025. It is the intent of the Department to program future projects to bring the level-of-service up to an acceptable level.*
- *The existing two-lane bridge on Stagecoach Road (CR 187) over I-85 will have a vertical clearance of 15.93' and should be jacked to provide a minimum clearance of 17.00'.*
- *The existing two-lane bridge on Brown Road (CR 97) over I-85 will have a vertical clearance of 15.76' and should be jacked to provide a minimum clearance of 17.00'.*
- *The existing two-lane bridge on Fairview Road (CR 383) over I-85 will have a vertical clearance of 15.76' and should be jacked to provide a minimum clearance of 17.00'.*

Attachments:

1. Need and Purpose Statement
2. Cost Estimates:
    a. Construction including E&C(10) and Inflation, $28,773,199
    b. Right of Way, $0
    c. Utilities, $0
3. Typical sections,
4. Accident summaries
5. Capacity analysis,
6. Minutes of Concept meeting,
7. LGPA

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.

Projects NH-IM-85-2	*Current Year (2005) AADT*	*Current Year (2005) (LOS)*	*Design Year (2025) Projected AADT*	*Design Year (2025) Projected (LOS) Build*	*Design Year (2025) Projected (LOS) No Build*
(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.

Projects NH-IM-85-2	*Accidents*	*Accident Rate*	*Statewide Accident Average*
(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:

Projects NH-IM-85-2	*Southern Terminus*	*Northern Terminus*	*Project Length (Miles)*
(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

P. I. NO.: 110700

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: NH-IM-85-2(174) COUNTY: Franklin

DATE: August 2001 ESTIMATED LETTING DATE: 2002

PREPARED BY: Jill Hodges PROJECT LENGTH: 9.1 Miles

( ) PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT ( ) DURING PROJECT DEV.

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (LAND & EASEMENT)	$ -
2. DISPLACEMENTS; RES: 0, BUS: 0, M.H.: 0	$ -
3. OTHER COST (ADM./COST, INFLATION)	$ -
SUBTOTAL: A	$ -
B. REIMBURSABLE UTILITIES:	
1. RAILROAD	$ -
2. TRANSMISSION LINES	$ -
3. SERVICES	$ -
SUBTOTAL: B	$ -
C. CONSTRUCTION:	
1. MAJOR STRUCTURES	
a. BRIDGES	
Grade Separations (3)	$ -
Stream Crossings (1)	$ 646,700
SUBTOTAL: C-1.a	$ 646,700
b. OTHER	
Walls	$ -
Box Culverts	$ -
Bridge Culverts (1) (3-7'x6')	$ -
SUBTOTAL: C-1.b	$ -
SUBTOTAL: C-1	$ 646,700
2. GRADING AND DRAINAGE:	
a. EARTHWORK	
In Place Embankment	$ -
b. DRAINAGE	
1) Cross Drain Pipe	$ 1,437,599
2) Curb and Gutter	$ -
3) Longitudinal System (incl. catch basins)	$ -
SUBTOTAL: C-2.b	$ 1,437,599
SUBTOTAL: C-2	$ 1,437,599

P. I. NO.: 110700

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: NH-IM-85-2(174) COUNTY: Franklin

DATE: August 2001 ESTIMATED LETTING DATE: 2002

PREPARED BY: Jill Hodges PROJECT LENGTH: 9.1 Miles

( ) PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT ( ) DURING PROJECT DEV.

PROJECT COST				
3. BASE AND PAVING:				
a. AGGREGATE BASE	179,102	Tons @ $17.03	$	3,050,102
b. ASPHALT PAVING (Mainline & Cross-Roads):				
Drainage - Type D	40,991	Tons @ $50.8	$	2,082,330
Surface - SMA	50,413	Tons @ $54.93	$	2,769,179
Surface - Superpave	12,061	Tons @ $42.56	$	513,305
Binder - SMA	-	Tons @ $56.9	$	-
Binder - Superpave	41,488	Tons @ $38.43	$	1,594,382
Base - Superpave	138,700	Tons @ $34.63	$	4,803,167
Pavement Reinf. Fabric Strips	95,840	Lane Ft @ $2.84	$	272,185
SUBTOTAL: C-3.b			$	12,034,549
c. CONCRETE PAVING (Ramps)	-	SY @ $33.57	$	-
d. OTHER (Leveling, Tack Coat, Milling)			$	1,839,133
SUBTOTAL: C-3			$	16,923,783
4. LUMP ITEMS				
a. GRASSING			$	(317,720)
b. CLEARING AND GRUBBING			$	-
c. LANDSCAPING			$	-
d. EROSION CONTROL			$	305,240
e. TRAFFIC CONTROL			$	383,360
SUBTOTAL: C-4			$	370,879
5. MISCELLANEOUS:				
a. LIGHTING			$	-
b. SIGNING - MARKING - SIGNALIZATION			$	239,600
c. GUARDRAIL				
Single-Faced			$	329,445
Double-Faced			$	-
Anchors			$	90,563
SUBTOTAL: C-5.c			$	420,007
d. SIDEWALK			$	-
e. MEDIAN / SIDE BARRIER	44,281	- LF @ $32.03	$	1,418,320
f. MOVABLE BARRIER SECTION			$	90,000
g. ACCESS FENCE			$	739,266
h. BRIDGE JACKING			$	385,022
i. APPROACH SLABS			$	16,140
j. REMOVAL				
Concrete Paving			$	-
Bridges			$	-
SUBTOTAL: C-5.j			$	-
k. ATMS Conduit	-	- LF @ $37.78	$	-
l. OTHER			$	191,680
SUBTOTAL: C-5			$	3,500,036

P. I. NO.: 110700

PRELIMINARY COST ESTIMATE

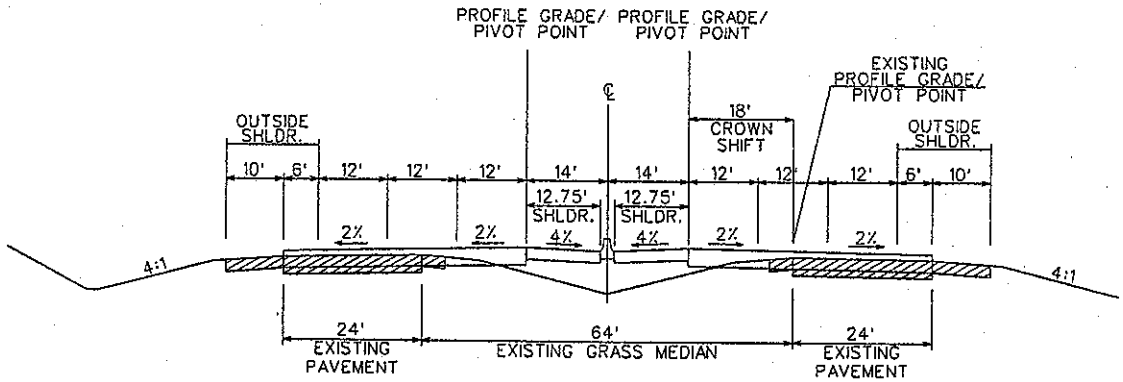
PROJECT NUMBER: NH-IM-85-2(174) COUNTY: Franklin

DATE: August 2001 ESTIMATED LETTING DATE: 2002

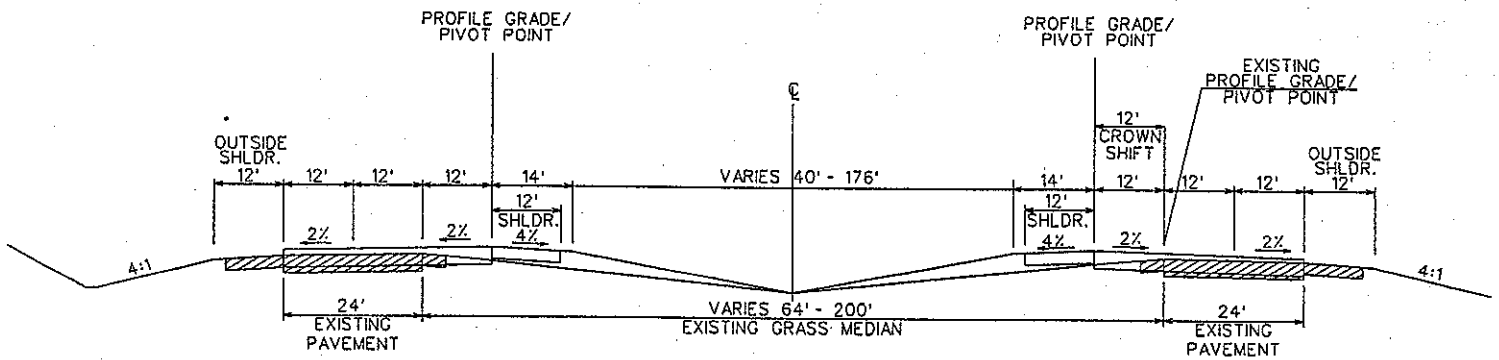
PREPARED BY: Jill Hodges PROJECT LENGTH: 9.1 Miles

( ) PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT ( ) DURING PROJECT DEV.

PROJECT COST	
6. SPECIAL FEATURES	
SUBTOTAL: C-6	$ -
SUMMARY	
A. RIGHT-OF-WAY	$ -
B. REIMBURSABLE UTILITIES	$ -
C. CONSTRUCTION	
1. MAJOR STRUCTURES	$ 646,700
2. GRADING AND DRAINAGE	$ 1,437,599
3. BASE AND PAVING	$ 16,923,783
4. LUMP ITEMS	$ 370,879
5. MISCELLANEOUS	$ 3,500,036
6. SPECIAL FEATURES	$ -
SUBTOTAL CONSTRUCTION COST	$ 22,878,998
E. & C. (10%)	$ 2,287,900
INFLATION (5% PER YEAR)	$ 3,606,302
NUMBER OF YEARS 3	
TOTAL CONSTRUCTION COST	$ 28,773,199
GRAND TOTAL PROJECT COST	$ 28,773,199



TANGENT SECTION
I-85
WIDEN TO INSIDE
6 LANES TOTAL



TANGENT SECTION
I-85
WIDEN TO INSIDE
6 LANES TOTAL

I-85 Widening and Improvements from north of SR 320 to north of SR 17
Project Number: NH-IM-85-2(174)
County: Franklin
P. I. Number: 110700

ACCIDENT HISTORY			
YEAR	**Accident Rate**	**Injury Rate**	**Fatality Rate**
1995	44 (47)	20 (28)	1.01 (0.73)
1996	38 (50)	22 (29)	0.00 (1.32)
1997	51 (49)	38 (28)	1.58 (1.03)

Note: All rates are per 100 million vehicle miles of travel. Numbers in parentheses are statewide average rates for rural interstates.

HCS2000: Basic Freeway Segments Release 4.1

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Design Analysis

Analyst:	VHR
Agency or Company:	GDOT
Date Performed:	6/11/01
Analysis Time Period:	AM Design Hour
Freeway/Direction:	I-85 SB
From/To:	SR 320 to SR 106 (wo #33)
Jurisdiction:	Banks / Franklin County
Analysis Year:	2025
Description:	NH-IM-85-2(174)

Flow Inputs and Adjustments

Volume, V	4740	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1248	v
Trucks and buses	25	%
Recreational vehicles	0	%
Terrain Type	Grade	
Grade	2.30	%
Segment length	0.27	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicles PCE, ER	1.2	
Heavy vehicles adjustment, fHV	0.889	
Driver population factor, vp	1.00	
Flow rate, vp	5614	pc/h
Desired level of service	D	

Speed Inputs and Adjustments

Lane width, LW	12.0	m
Right-shoulder lateral clearance, LC	6.0	m
Interchange density, ID	0.25	interchange/mi
Free-flow speed:	Ideal	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed	67.0	mi/h
	Urban Freeway	

LOS and Performance Measures

Desired level of service	D

Design flow rate, vp	5614	pc/h
Design free-flow speed, FFS	67.0	mi/h
Number of lanes required, N	3	
Average passenger-car speed, S	64.7	mi/h
Density, D	28.9	pc/mi/ln
Level of service	D	

Fewer number of lanes required will not produce the desired LOS.
Overall results are not computed when free-flow speed is less than 55 mph.

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Design Analysis

Analyst:	VHR
Agency or Company:	GDOT
Date Performed:	6/11/01
Analysis Time Period:	PM Design Hour
Freeway/Direction:	I-85 NB
From/To:	SR 320 to SR 106 (wo #33)
Jurisdiction:	Franklin County
Analysis Year:	2025
Description:	NH-IM-85-2(174)

Flow Inputs and Adjustments

Volume, V	4740	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1248	v
Trucks and buses	25	%
Recreational vehicles	0	%
Terrain Type	Grade	
Grade	3.00	%
Segment length	0.52	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicles PCE, ER	1.2	
Heavy vehicles adjustment, fHV	0.800	
Driver population factor, vp	1.00	
Flow rate, vp	6238	pc/h
Desired level of service	E	

Speed Inputs and Adjustments

Lane width, LW	12.0	m
Right-shoulder lateral clearance, LC	6.0	m
Interchange density, ID	0.25	interchange/mi
Free-flow speed:	Ideal	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed	67.0	mi/h
	Urban Freeway	

LOS and Performance Measures

Desired level of service	E

Design flow rate, vp	6238	pc/h
Design free-flow speed, FFS	67.0	mi/h
Number of lanes required, N	3	
Average passenger-car speed, S	61.3	mi/h
Density, D	33.9	pc/mi/ln
Level of service	D	

Fewer number of lanes required will not produce the desired LOS.
Overall results are not computed when free-flow speed is less than 55 mph.

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Diverge Analysis

Analyst: VHR
Agency/Co.: GA DOT
Date performed: 6/1/01
Analysis time period: P.M. Peak Hour
Freeway/dir or travel: NB I-85
Junction: State Rout 17
Jurisdiction: Franklin County
Analysis Year: 2025
Description: Parallel Ramp

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4600	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	780	vph
Length of first accel/decel lane	660	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4600	780		vph
Peak-hour factor, PHF	0.95	0.95		
Peak 15-min volume, v15	1211	205		v
Trucks and buses	25	25		%

Recreational vehicles	0	0	%
Terrain type:	Le	Level	Level
Grade	0.00 %	0.00 %	%
Length	0.00 mi	0.00 mi	mi
Trucks and buses PCE, ET	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	
Heavy vehicle adjustment, fHV	0.889	0.889	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5448	923	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 0.00 (Equation 25-8 or 25-9)

P_{FD} = 0.581 Using Equation 5

$v_{12} = v_R + (v - v_F) P_{FD}$ = 3554 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5448	7200	No
v_{12}	3554	4400	No
$v_{FO} = v - v_R$	4525	7200	No
v_R	923	2200	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 28.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.251

Space mean speed in ramp influence area, S_R = 63 mph

Space mean speed in outer lanes, S_0 = 73.3 mph

Space mean speed for all vehicles, S = 66.2 mph

HCS2000: Ramps & Ramp Junctions Release 4.1

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Diverge Analysis

Analyst: VHR
Agency/Co.: GA DOT
Date performed: 6/1/01
Analysis time period: P.M. Peak Hour
Freeway/dir or travel: NB I-85
Junction: State Route 106
Jurisdiction: Franklin County
Analysis Year: 2025
Description: Parallel Ramp

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4740	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	640	vph
Length of first accel/decel lane	660	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4740	640		vph
Peak-hour factor, PHF	0.95	0.95		
Peak 15-min volume, v15	1248	168		v
Trucks and buses	25	25		%

Recreational vehicles	0	0	%
Terrain type:	Le	Level	Level
Grade	0.00 %	0.00 %	%
Length	0.00 mi	0.00 mi	mi
Trucks and buses PCE, ET	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	
Heavy vehicle adjustment, fHV	0.889	0.889	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5614	758	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 0.00 (Equation 25-8 or 25-9)

P_{FD} = 0.585 Using Equation 5

$v_{12} = v_R + (v - v_F) P_{FD}$ = 3598 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5614	7200	No
v_{12}	3598	4400	No
$v_{FO} = v - v_R$	4856	7200	No
v_R	758	2200	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 29.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.236

Space mean speed in ramp influence area, S_R = 63 mph

Space mean speed in outer lanes, S_0 = 72.8 mph

Space mean speed for all vehicles, S = 66.5 mph

HCS2000: Ramps a Ramp Junctions Release 4.1

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Merge Analysis

Analyst: VHR
Agency/Co.: GDOT
Date performed: 6/5/01
Analysis time period: P.M. Peak Hour
Freeway/dir or travel: NB I-85
Junction: SR 106
Jurisdiction: Franklin County
Analysis Year: 2025
Description:

Freeway Data

Type of analysis	67.2	
Number of lanes in freeway	3	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4100	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	55.0	mph
Volume on ramp	500	vph
Length of first accel/decel lane	700	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4100	500		vph
Peak-hour factor, PHF	0.95	0.95		
Peak 15-min volume, v15	1079	132		v
Trucks and buses	25	25		%

Recreational vehicles	0	0		%
Terrain type:	Le\	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET		1.5	1.5	
Recreational vehicle PCE, ER		1.2	1.2	
Heavy vehicle adjustment, fHV		0.889	0.889	
Driver population factor, fP		1.00	1.00	
Flow rate, vp	4855	592		pcph

Estimation of V12 Merge Areas

L = 0.00 (Equation 25-2 or 25-3)
EQ

P = 0.597 Using Equation 1
FM

v = v (P) = 2899 pc/h
12 F FM

Capacity Checks

	Actual	Maximum	LOS F?
v FO	5447	7200	No
v R12	3491	4600	No

Level of Service Determination (if not F)

Density, D = 5.475 + 0.00734 v + 0.0078 v - 0.00627 L = 28.0+ pc/mi/ln
R R 12 A

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M = 0.372
S

Space mean speed in ramp influence area, S = 59.6 mph
R

Space mean speed in outer lanes, S = 64.8 mph
0

Space mean speed for all vehicles, S = 61.3 mph

HCS2000: Ramps and Ramp Junctions Release 4.1

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Diverge Analysis

Analyst: VHR
Agency/Co.: GA DOT
Date performed: 6/1/01
Analysis time period: A.M. Peak Hour
Freeway/dir or travel: SB I-85
Junction: State Rout 106
Jurisdiction: Franklin County
Analysis Year: 2025
Description: Parallel Ramp

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4600	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	500	vph
Length of first accel/decel lane	740	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4600	500		vph
Peak-hour factor, PHF	0.95	0.95		
Peak 15-min volume, v15	1211	132		v
Trucks and buses	25	25		%

Recreational vehicles	0	0	%
Terrain type:	Le	Level	Level
Grade	0.00 %	0.00 %	%
Length	0.00 mi	0.00 mi	mi
Trucks and buses PCE, ET	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	
Heavy vehicle adjustment, fHV	0.889	0.889	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5448	592	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 0.00 (Equation 25-8 or 25-9)

P_{FD} = 0.597 Using Equation 5

$v_{12} = v_R + (v - v_F) P_{FD}$ = 3489 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5448	7200	No
v_{12}	3489	4400	No
$v_{FO} = v - v_R$	4856	7200	No
v_R	592	2200	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 27.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.221

Space mean speed in ramp influence area, S_R = 64 mph

Space mean speed in outer lanes, S_0 = 73.0 mph

Space mean speed for all vehicles, S = 66.8 mph

HCS2000: Ramps & Ramp Junctions Release 4.1

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Merge Analysis

Analyst: VHR
Agency/Co.: GDOT
Date performed: 6/5/01
Analysis time period: A.M. Peak Hour
Freeway/dir or travel: SB I-85
Junction: SR 106
Jurisdiction: Franklin County
Analysis Year: 2025
Description:

Freeway Data

Type of analysis	67.0	
Number of lanes in freeway	3	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4100	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	55.0	mph
Volume on ramp	640	vph
Length of first accel/decel lane	700	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	520	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	5400	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4100	640	520	vph
Peak-hour factor, PHF	0.95	0.95	0.90	
Peak 15-min volume, v15	1079	168	144	v
Trucks and buses	25	25	0	%

Recreational vehicles	0	0	0	%
Terrain type:	Le	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.889	0.889	1.000	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4855	758	578	pcph

Estimation of V12 Merge Areas

L_{EQ} = 3132.79 (Equation 25-2 or 25-3)

P_{FM} = 0.597 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2899 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5613	7200	No
v_{R12}	3657	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 29.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M_S = 0.395

Space mean speed in ramp influence area, S_R = 58.9 mph

Space mean speed in outer lanes, S_0 = 64.8 mph

Space mean speed for all vehicles, S = 60.8 mph

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Design Analysis

Analyst:	VHR
Agency or Company:	GDOT
Date Performed:	6/11/01
Analysis Time Period:	AM Design Hour
Freeway/Direction:	I-85 SB
From/To:	SR 106 to SR 17 (wo #33)
Jurisdiction:	Franklin County
Analysis Year:	2025
Description:	NH-IM-85-2(174)

Flow Inputs and Adjustments

Volume, V	4600	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1211	v
Trucks and buses	25	%
Recreational vehicles	0	%
Terrain Type	Grade	
Grade	3.00	%
Segment length	0.51	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicles PCE, ER	1.2	
Heavy vehicles adjustment, fHV	0.800	
Driver population factor, vp	1.00	
Flow rate, vp	6055	pc/h
Desired level of service	D	

Speed Inputs and Adjustments

Lane width, LW	12.0	m
Right-shoulder lateral clearance, LC	6.0	m
Interchange density, ID	0.25	interchange/mi
Free-flow speed:	Ideal	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed	67.0	mi/h
	Urban Freeway	

LOS and Performance Measures

Desired level of service	D

Design flow rate, vp	6055	pc/h
Design free-flow spe FFS	67.0	mi/h
Number of lanes required, N	3	
Average passenger-car speed, S	62.5	mi/h
Density, D	32.3	pc/mi/ln
Level of service	D	

Fewer number of lanes required will not produce the desired LOS.
Overall results are not computed when free-flow speed is less than 55 mph.

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Design Analysis

Analyst:	VHR
Agency or Company:	GDOT
Date Performed:	8/25/99
Analysis Time Period:	PM Design Hour
Freeway/Direction:	I-85 NB
From/To:	SR 106 to SR 17 (wo #33)
Jurisdiction:	Franklin County
Analysis Year:	2025
Description:	NH-IM-85-2(174)

Flow Inputs and Adjustments

Volume, V	4600	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1211	v
Trucks and buses	25	%
Recreational vehicles	0	%
Terrain Type	Grade	
Grade	3.00	%
Segment length	0.56	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicles PCE, ER	1.2	
Heavy vehicles adjustment, fHV	0.800	
Driver population factor, vp	1.00	
Flow rate, vp	6055	pc/h
Desired level of service	D	

Speed Inputs and Adjustments

Lane width, LW	12.0	m
Right-shoulder lateral clearance, LC	6.0	m
Interchange density, ID	0.25	interchange/mi
Free-flow speed:	Ideal	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed	67.0	mi/h
	Urban Freeway	

LOS and Performance Measures

Desired level of service	D

Design flow rate, vp	6055	pc/h
Design free-flow speed, FFS	67.0	mi/h
Number of lanes required, N	3	
Average passenger-car speed, S	62.5	mi/h
Density, D	32.3	pc/mi/ln
Level of service	D	

Fewer number of lanes required will not produce the desired LOS.
Overall results are not computed when free-flow speed is less than 55 mph.

HCS2000: Ramps a)Ramp Junctions Release 4.1

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Diverge Analysis

Analyst: VHR
Agency/Co.: GA DOT
Date performed: 6/1/01
Analysis time period: P.M. Peak Hour
Freeway/dir or travel: NB I-85
Junction: State Route 17
Jurisdiction: Franklin County
Analysis Year: 2025
Description: Parallel Ramp

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4600	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	780	vph
Length of first accel/decel lane	740	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4600	780		vph
Peak-hour factor, PHF	0.95	0.95		
Peak 15-min volume, v15	1211	205		v
Trucks and buses	25	25		%

Recreational vehicles	0	0	%
Terrain type:	Le	Level	Level
Grade	0.00 %	0.00 %	%
Length	0.00 mi	0.00 mi	mi
Trucks and buses PCE, ET	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	
Heavy vehicle adjustment, fHV	0.889	0.889	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5448	923	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 0.00 (Equation 25-8 or 25-9)

P_{FD} = 0.581 Using Equation 5

$v_{12} = v_R + (v - v_F) P_{FD}$ = 3554 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5448	7200	No
v_{12}	3554	4400	No
$v_{FO} = v - v_R$	4525	7200	No
v_R	923	2200	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 28.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.251

Space mean speed in ramp influence area, S_R = 63 mph

Space mean speed in outer lanes, S_0 = 73.3 mph

Space mean speed for all vehicles, S = 66.2 mph

HCS2000: Ramps a Ramp Junctions Release 4.1

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Merge Analysis

Analyst: VHR
Agency/Co.: GDOT
Date performed: 6/5/01
Analysis time period: P.M. Peak Hour
Freeway/dir or travel: NB I-85
Junction: SR 17
Jurisdiction: Franklin County
Analysis Year: 2025
Description:

Freeway Data

Type of analysis	67.2	
Number of lanes in freeway	3	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3820	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	55.0	mph
Volume on ramp	610	vph
Length of first accel/decel lane	700	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3820	610		vph
Peak-hour factor, PHF	0.95	0.95		
Peak 15-min volume, v15	1005	161		v
Trucks and buses	25	25		%

Recreational vehicles	0	0	%
Terrain type:	Level	Level	Level
Grade	%	%	%
Length	mi	mi	mi
Trucks and buses PCE, ET	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	
Heavy vehicle adjustment, fHV	0.889	0.889	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	4524	722	pcph

Estimation of V12 Merge Areas

L_{EQ} = 0.00 (Equation 25-2 or 25-3)

P_{FM} = 0.597 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2701 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5246	7200	No
v_{R12}	3423	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 27.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, M_S = 0.364

Space mean speed in ramp influence area, S_R = 59.8 mph

Space mean speed in outer lanes, S_0 = 65.2 mph

Space mean speed for all vehicles, S = 61.6 mph

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Diverge Analysis

Analyst: VHR
Agency/Co.: GA DOT
Date performed: 6/1/01
Analysis time period: A.M. Peak Hour
Freeway/dir or travel: SB I-85
Junction: State Rout 17
Jurisdiction: Franklin County
Analysis Year: 2025
Description: Parallel Ramp

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4430	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	610	vph
Length of first accel/decel lane	740	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4430	610		vph
Peak-hour factor, PHF	0.95	0.95		
Peak 15-min volume, v15	1166	160		v
Trucks and buses	25	25		%

Recreational vehicles	0	0	%
Terrain type:	Level	Level	Level
Grade	0.00 %	0.00 %	%
Length	0.00 mi	0.00 mi	mi
Trucks and buses PCE, ET	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	
Heavy vehicle adjustment, fHV	0.889	0.889	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5247	722	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 0.00 (Equation 25-8 or 25-9)

P_{FD} = 0.596 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3417 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5247	7200	No
v_{12}	3417	4400	No
$v_{FO} = v_F - v_R$	4525	7200	No
v_R	722	2200	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 27.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.233

Space mean speed in ramp influence area, S_R = 63 mph

Space mean speed in outer lanes, S_0 = 73.6 mph

Space mean speed for all vehicles, S = 66.7 mph

HCS2000: Ramps a[illegible] Ramp Junctions Release 4.1

Harris Robinson
Jordan, Jones & Goulding
6801 Govenors Lake Parkway
Building 200
Norcross, GA 30071
Phone: 770-455-8555 Fax: 678-333-0324
E-mail: hrobinson@jjg.com

Merge Analysis

Analyst: VHR
Agency/Co.: GDOT
Date performed: 6/5/01
Analysis time period: A.M. Peak Hour
Freeway/dir or travel: SB I-85
Junction: SR 17
Jurisdiction: Franklin County
Analysis Year: 2025
Description:

Freeway Data

Type of analysis	66.9	
Number of lanes in freeway	3	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3820	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	55.0	mph
Volume on ramp	780	vph
Length of first accel/decel lane	700	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3820	780		vph
Peak-hour factor, PHF	0.95	0.95		
Peak 15-min volume, v15	1005	205		v
Trucks and buses	25	25		%

Recreational vehicles	0	0		%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		
Heavy vehicle adjustment, fHV	0.889	0.889		
Driver population factor, fP	1.00	1.00		
Flow rate, vp	4524	924		pcph

Estimation of V12 Merge Areas

L_{EQ} = 0.00 (Equation 25-2 or 25-3)

P_{FM} = 0.597 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2701 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5448	7200	No
v_{R12}	3625	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_{R12} + 0.0078\ v_A - 0.00627\ L$ = 28.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M_S = 0.390

Space mean speed in ramp influence area, S_R = 59.1 mph

Space mean speed in outer lanes, S_0 = 65.2 mph

Space mean speed for all vehicles, S = 61.0 mph

CONCEPT MEETING MINUTES
I-85 WIDENING AND IMPROVEMENTS FROM NORTH OF SR 211 (BARROW CO.) TO NORTH OF SR 17 (FRANKLIN CO.)

Project Number NH-85-2(166-174)
P.I. No. 110620, 110630, 110640, 110650, 110660, 110670, 110680, 110690, 110700
Barrow, Jackson, Banks and Franklin Counties
Wednesday, June 13, 2001 10:00 a.m.
Meeting at GDOT Office of Road Design

- Brent Story began the meeting by reviewing the concept report. The proposed typical section consists of widening the mainline to six travel lanes with a median barrier and grading for a future fourth lane in each direction. All interchange bridge replacement projects and the I-85 mainline will accommodate the future eight lane typical section for the mainline.
- Brent Story requested the Need and Purpose statement. Michelle Caldwell stated the main need for these project is to increase capacity on I-85 mainline.
- Parks Preston said that a CE would be required for this project. He suggested covering the entire corridor of I-85 under one document. A public information meeting would not be scheduled for this project.
- Brent Story expressed concern that some proposed bridges over I-85 would not meet the required 17 ft. vertical clearance. Dave Painter suggested coordination with the Office of Maintenance to verify the vertical clearance on all newly constructed and proposed bridges over I-85. Brent stated that some vertical clearance problems might be resolved by milling the I-85 mainline.
- Dave Painter suggested placing the resurfacing project, NHS-M001-00(027) Resurfacing of I-85 south of SR211 to south of US441/SR15 through Gwinnett, Barrow, Jackson, and Banks Counties, on hold pending the completion of the I-85 mainline widening projects. The existing I-85 mainline pavement is in immediate need of repair, and the resurfacing project should continue as scheduled.
- Jill Hodges stated that JJG studied the reconstruction of parallel exit and entrance ramps to taper type to meet the current GDOT standards. In most cases, the reconstruction would require additional right of way, and should be considered under a separate project.
- Dave Painter and Joe Garland requested the vertical alignment analysis calculations that locate the substandard vertical curves.
- Brent Story requested the Office of Utilities to provide cost estimates for any utility replacements on existing bridges if jacking is required.
- Katy Allen expressed concern with the Need and Purpose statement for these projects. The main need is to increase capacity on the I-85 mainline. She stated that LOS of D or E does not meet FHWA requirements. Harris Robinson commented the capacity analysis showed a need to widen I-85 mainline to 8 travel lanes for the design year. Jim Kennerly stated the additional lanes would require right-of-way. Future projects will be programmed to widen I-85 for the additional travel lanes.

- Due to the widening of I-85 mainline, Harris Robinson indicated the possible need to relocate some advance signs from ground to overhead.
- The Office of Maintenance has made recommendations for I-85 mainline bridge improvements.
- Jim Kennerly questioned the horizontal clearance for the future eight lane mainline section. Ms. Hodges stated that all the newly constructed interchanges would meet the required 18 ft. minimum clearance from the inside edge of shoulder to the bridge column face. The cross roads, however, will need to be replaced.
- The pavement design for I-85 mainline is based on the GDOT recommendation NH-IM-85-2(164-165) in Gwinnett Counties dated January 2, 2001. The pavement design was used for the entire I-85 corridor through Barrow, Jackson, Banks, and Franklin Counties. David Painter recommended that the proposed pavement design for I-85 mainline include PEM.
- David Millen suggested conducting a Value Engineering study for the whole corridor along I-85.
- Brook Martin requested conduit be added to any I-85 mainline bridge replacement.

Project Comments:

- NH-85-2(166)-At Exit 126 SR53/Green Street, Dave Painter suggested realigning the Mt. Zion Church Road away from the northbound entrance ramp. Jim Kennerly stated the need for additional right-of-way and suggested the relocation of Mt. Zion Church Road be considered under a different project.
  Joe Garland stated that new rest areas were being developed in this area.
- NH-85-2(167)-At Exit 137 US129/SR11/Lee Street, the parallel exit ramps need to be lengthened to meet the GDOT requirement of 740 ft. Harris Robinson recommends future projects be considered that will add an additional lane to the exist ramps to increased the LOS.
- NH-85-2(168)-No comments
- NH-85-2(169)-No comments
- NH-85-2(170)- Harris Robinson recommends future projects be considered that increased the exit ramp's LOS. Joe Garland and Dave Painter agreed on the need for additional lanes on the ramps.
- NH-85-2(171)-No comments
- NH-85-2(172)-No comments
- NH-85-2(173)-No comments
- NH-85-2(174)-Brent Story stated the need for a vertical clearance design exception for the railroad bridge just north of SR17. Milling and reconstruction of the I-85 mainline has been considered.

In Attendance:

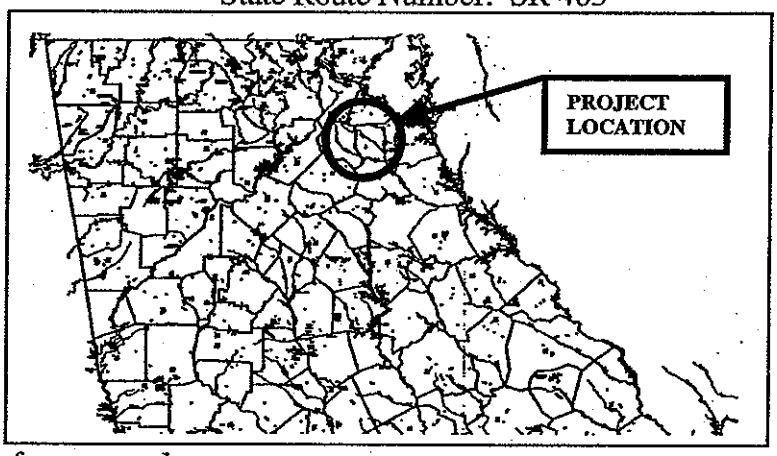
Name	Organization	Phone number
Brent Story	GDOT	404-656-5383
Brook Martin	GDOT-Traffic Operations	404-635-8127
Katie Mullins	GDOT-Office of Planning	404-651-7043
David Mulling	GDOT-Engineering Services	404-656-6846
Katy Allen	FHWA	404-569-3904
Parks Preston	GDOT-Envir/Loc	404-699-4411
Joe Leoni	GDOT-Road Design	404-656-5390
Michelle Caldwell	GDOT-Planning	404-651-5327
Keisha Nembhard	GDOT-Planning	404-657-6094
Cindy VanDyke	GDOT-Planning	404-657-6696
Dave Painter	FHWA	404-562-3658
Joe Garland	GDOT-District 1	770-532-5563
Reid Matthews	GDOT-Maintenance	404-657-6051
David Norwood	GDOT	404-656-5383
Harris Robinson	Jordan, Jones and Goulding Inc.	678-333-0431
Jill Hodges	Jordan, Jones and Goulding Inc.	678-333-0421
Cindy Lee	Jordan, Jones and Goulding Inc.	678-333-0424

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

I-85 Widening and Improvements from north of SR 320 to north of SR 17
Project Number: NH-IM-85-2(174)
County: Franklin
P. I. Number: 110700

Federal Route Number: I-85
State Route Number: SR 403



Recommendation for approval:

DATE 9-11-01 — Project Manager

DATE 9-25-01 — Office Head/District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE 10-2-01 — State Transportation Planning Administrator

DATE _____ — State Transportation Programming Engineer

DATE _____ — State Environmental/Location Engineer

DATE _____ — State Traffic Safety and Design Engineer

DATE _____ — District Engineer

DATE _____ — Project Review Engineer

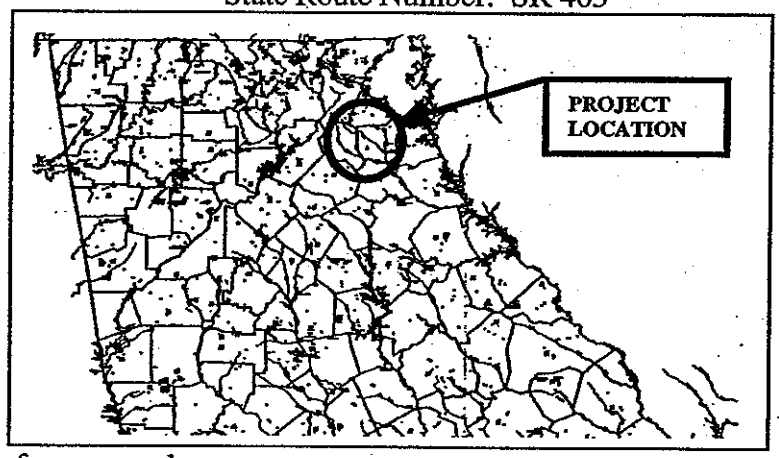
DATE _____ — Office of Bridge and Structural Design

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

I-85 Widening and Improvements from north of SR 320 to north of SR 17
Project Number: NH-IM-85-2(174)
County: Franklin
P. I. Number: 110700

Federal Route Number: I-85
State Route Number: SR 403



Recommendation for approval:

DATE 9-11-01 — Project Manager

DATE 9-25-01 — Office Head/District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE _____ — State Transportation Planning Administrator

DATE 9/27/01 — State Transportation Programming Engineer

DATE _____ — State Environmental/Location Engineer

DATE _____ — State Traffic Safety and Design Engineer

DATE _____ — District Engineer

DATE _____ — Project Review Engineer

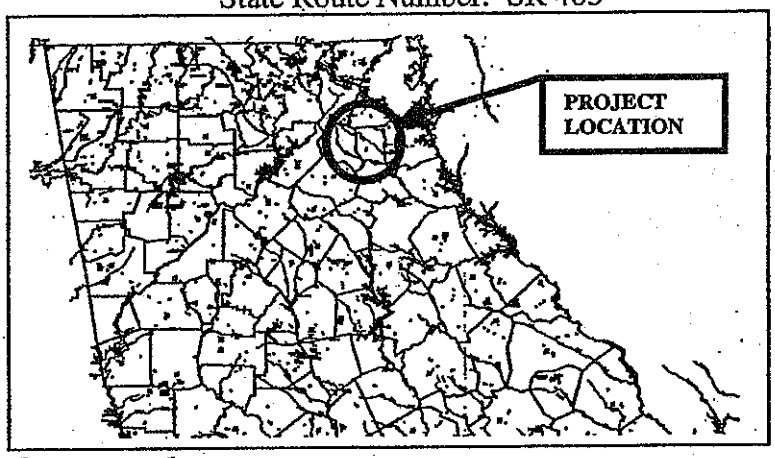
DATE _____ — Office of Bridge and Structural Design

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

I-85 Widening and Improvements from north of SR 320 to north of SR 17
Project Number: NH-IM-85-2(174)
County: Franklin
P. I. Number: 110700

Federal Route Number: I-85
State Route Number: SR 403



Recommendation for approval:

DATE 9-11-01 — Brent A. Story
Project Manager

DATE 9-25-01 — James Kennedy
Office Head/District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE _____ — State Transportation Planning Administrator

DATE _____ — State Transportation Programming Engineer

DATE _____ — State Environmental/Location Engineer

DATE _____ — State Traffic Safety and Design Engineer

DATE 10-7-01 — Larry E. Rubin
District Engineer

DATE _____ — Project Review Engineer

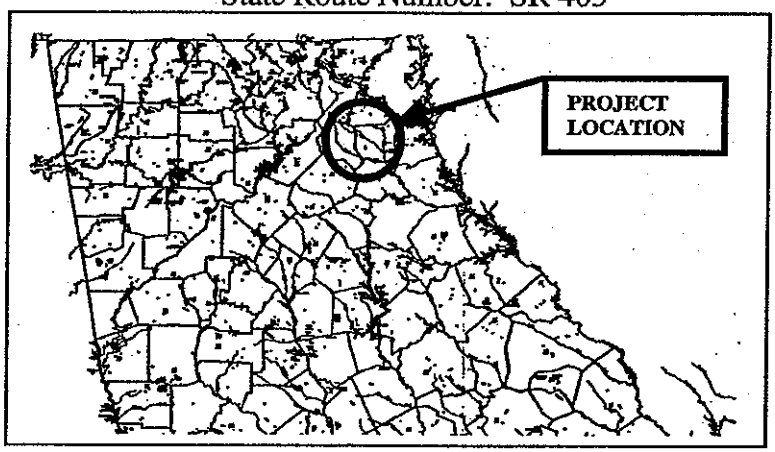
DATE _____ — Office of Bridge and Structural Design

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

I-85 Widening and Improvements from north of SR 320 to north of SR 17
Project Number: NH-IM-85-2(174)
County: Franklin
P. I. Number: 110700

Federal Route Number: I-85
State Route Number: SR 403



Recommendation for approval:

DATE 9-11-01 — Project Manager

DATE 9-25-01 — Office Head/District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE _____ — State Transportation Planning Administrator

DATE _____ — State Transportation Programming Engineer

DATE _____ — State Environmental/Location Engineer

DATE _____ — State Traffic Safety and Design Engineer

DATE _____ — District Engineer

DATE 10/10/01 — Project Review Engineer

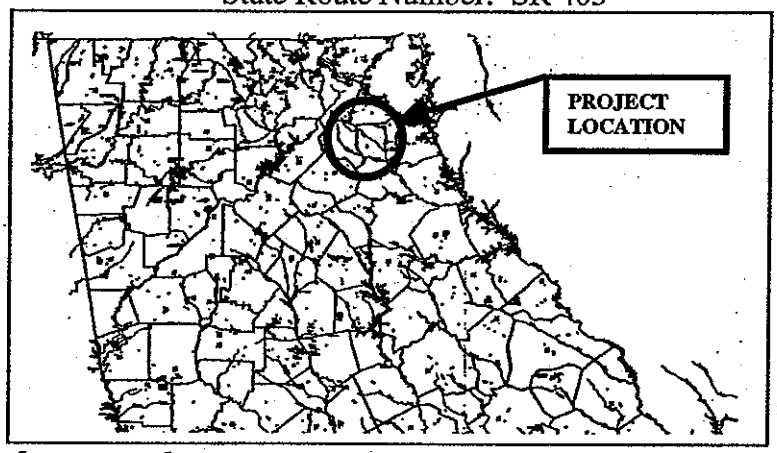
DATE _____ — Office of Bridge and Structural Design

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

I-85 Widening and Improvements from north of SR 320 to north of SR 17
Project Number: NH-IM-85-2(174)
County: Franklin
P. I. Number: 110700

Federal Route Number: I-85
State Route Number: SR 403



Recommendation for approval:

DATE 7-11-01 Bart A Story
Project Manager

DATE 9-25-01 James Kennedy
Office Head/District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE _____
State Transportation Planning Administrator

DATE _____
State Transportation Programming Engineer

DATE _____
State Environmental/Location Engineer

DATE _____
State Traffic Safety and Design Engineer

DATE _____
District Engineer

DATE _____
Project Review Engineer

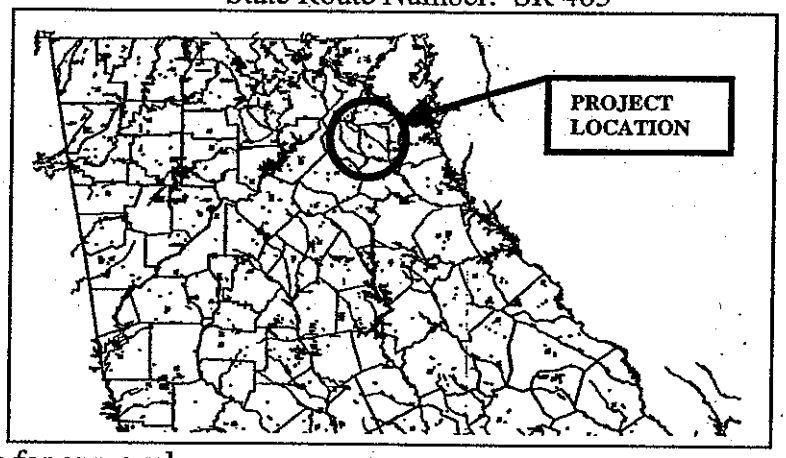
DATE 9/28/01 Paul V. Liles Jr.
Office of Bridge and Structural Design

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

I-85 Widening and Improvements from north of SR 320 to north of SR 17
Project Number: NH-IM-85-2(174)
County: Franklin
P. I. Number: 110700

Federal Route Number: I-85
State Route Number: SR 403



Recommendation for approval:

DATE 9-11-01 — Project Manager

DATE 9-25-01 — Office Head/District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE _____ — State Transportation Planning Administrator

DATE _____ — State Transportation Programming Engineer

DATE 10/16/01 — State Environmental/Location Engineer

DATE _____ — State Traffic Safety and Design Engineer

DATE _____ — District Engineer

DATE _____ — Project Review Engineer

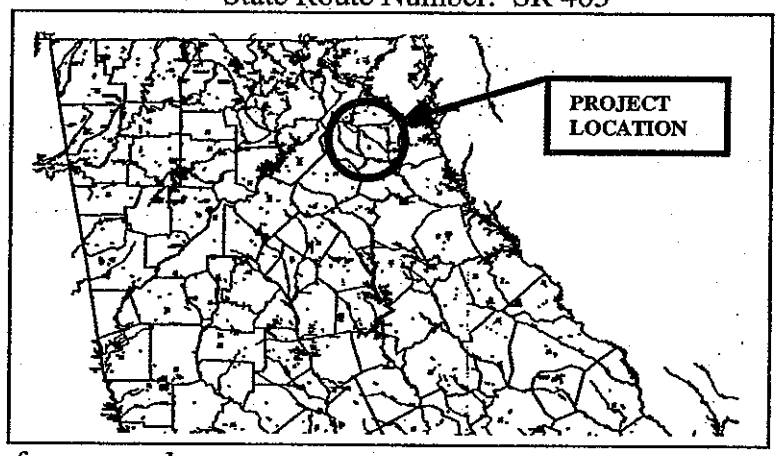
DATE _____ — Office of Bridge and Structural Design

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

I-85 Widening and Improvements from north of SR 320 to north of SR 17
Project Number: NH-IM-85-2(174)
County: Franklin
P. I. Number: 110700

Federal Route Number: I-85
State Route Number: SR 403



Recommendation for approval:

DATE 9-11-01 — Project Manager

DATE 9-25-01 — Office Head/District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE _____ — State Transportation Planning Administrator

DATE _____ — State Transportation Programming Engineer

DATE _____ — State Environmental/Location Engineer

DATE 10-15-01 — State Traffic Safety and Design Engineer

DATE _____ — District Engineer

DATE _____ — Project Review Engineer

DATE _____ — Office of Bridge and Structural Design

David Painter - RE: RE: I-85 Widening Concept

From: David Painter
To: "Todd.Long@dot.state.ga.us".gwhub.hubsmtp; Kennerly, Jim; McMurry, Russell; Story, Brent
Date: 1/30/02 2:15 PM
Subject: RE: RE: I-85 Widening Concept

I don't think that we got an opportunity to discuss these during GQI. Here is my understanding of our current agreement on these projects.
1. GDOT will create a separate project to move the two frontage roads away from the interstate. One of these roads is named Mt Zion Church Rd. I don't know the name of the other one.
2. GDOT will look at improving the substandard vertical curves on units (Units 168, 173 and 174) in Jackson and Frankin during preliminary engineering phase. These units had accident histories that were higher than the statewide averages. I don't think we can definitiively say that the vertical curvature is the problem given the quality of our accident data, but I think we should give strong consideration to fixing the curvature rather than granting a design exception.
In addition, per Walter Boyd's recommendation, I would like to see our design consultant evaluate the accel/decel distances of every ramp in this corridor and plan upgrades, if needed, as part of this project.

>>> Todd.Long@dot.state.ga.us 12/05/01 11:22AM >>>

Russell and I will see you at GQI to discuss.

Todd

-----Original Message-----
From: David Painter
To: brent.story@dot.state.ga.us ; Russell.McMurry@dot.state.ga.us ; Todd.Long@dot.state.ga.us ; Marvin Woodward
Sent: 12/4/01 11:36 AM
Subject: Fwd: RE: I-85 Widening Concept

See attached emails. 3-4 of the project segments had accident histories that approached or were higher than the statewide averages. That worries me since the interstates are almost always the safest component of the roads that go into the statewide average. If the vertical curvature is the problem (we may have problems determining the problem given the quality of our accident data) then I would hope we would give strong consideration to fixing the curvature rather than granting a design exception.
<<RE: I-85 Widening Concept>>