

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0006335, Fulton-Forsyth Counties **OFFICE** Preconstruction
CSNHS-0006-00(335)
SR 400 ATMS **DATE** October 31, 2006

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

TO *for* SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

GRS/cj

Attachment

DISTRIBUTION:

Brian Summers
Harvey Keepler
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Joe Palladi (file copy)
Paul Liles
Babs Abubakari
Bryant Poole
Russell McMurry
BOARD MEMBER
FHWA

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: P. I. No. 0006335, Fulton-Forsyth Counties **OFFICE** Preconstruction
CSNHS-0006-00(335)
SR 400 ATMS **DATE** September 25, 2006

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

TO *David E. Studstill, Jr.*
David E. Studstill, Jr., P.E., Chief Engineer

SUBJECT PROJECT CONCEPT REPORT

This project is the expansion of Georgia DOT's Navigator system on SR 400 from 3600' south of SR 120, Fulton County to 4400' north of SR 20, Forsyth County. The Navigator system has nearly reached full integration inside the I-285 perimeter highway. It is currently being extended along SR 166 in Fulton County and SR 141 in DeKalb and Gwinnett Counties with further projects on I-20, I-75, I-85, I-285, I-675, I-985, SR 316, SR 400, and SR 410 planned as part of the Fast Forward Program. The expansion of the Navigator system in this region will help alleviate the congestion being experienced along this corridor during peak hours.

This project will extend the fiber optic trunk line along SR 400 from the existing Hub Q as well as two proposed mini hubs located at Windward Parkway and SR 20. The fiber optic trunk line will be located on the northbound and southbound sides as close to the back of the clear zone as possible. The trunk line may enter the paved shoulder to cross bridges and other locations where it is not feasible to locate outside the paved shoulder. The trunk line will be carried within continuous conduit duct banks, which will have four, 2" conduits.

Other devices included in this project will be two types of cameras: a closed circuit television (CCTV) camera for general traffic surveillance and a camera for vehicle detection (VDS). The traffic surveillance and vehicle detection cameras will be mounted on strain poles typically located off the shoulder of the freeway. However, where appropriate, some cameras may be mounted on existing sign structures or behind guardrail.

Five (5) CMS are proposed for this project. Each sign will be 3 x 21, mounted on full-span overhead structures. The locations of each of the 5 signs are as follows: (1) SR 400 northbound, prior to the Old Milton Parkway interchange just south of Kimball Bridge Road; (2) SR 400 northbound, prior to the McFarland Road interchange; (3) SR 400 northbound, prior to the SR 141/Peachtree Parkway interchange; (4) SR 400 southbound, prior to the SR 20/Buford Highway interchange just north of Buford Dam Road; and (5) SR 400 southbound prior to the McFarland Road interchange. Each sign will provide information on SR 400 and I-285 travel conditions as well as local construction and delay information.

David Studstill

Page 2

P. I. No. 0006335, Fulton-Forsyth
September 25, 2006

Ramp meters at these locations are being designed separately under the GRTA bus/shoulder lanes project, P.I. 200752-, and will be installed along SR 400 at all northbound and southbound entrance ramps, with the exception of northbound and southbound approach ramps at SR 120 (Old Milton Parkway). Fiber will be installed on the north and south sides of GA 400 to connect the GRTA ramp meters to the Navigator system and the TMC.

All network electronics required to operate and communicate with the devices in this project are included as well. This includes electronic equipment to be located in the hubs or in the equipment room at the TMC. Network electronics include devices for multiplexing video and data signals for converting analog signals to digital signals for transmission on fiber and video switches.

Environmental concerns include requiring a Categorical Exclusion be prepared; a public hearing open house is not required; time saving procedures are appropriate.

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>FUNDING</u>	<u>PROG DATE</u>
Construction (includes E&C and inflation)	\$9,887,000	\$9,887,000	GRVA	2007
Right-of-Way & Utilities	-0-	-0-		

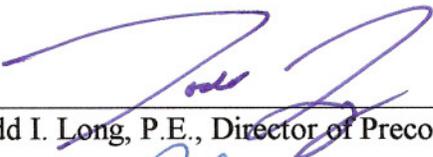
Expanding Navigator to this corridor will allow quicker detection and verification of incidents at the TMC, resulting in better information to travelers, quicker response by Highway Emergency Response Operators (HEROs), and improved highway safety. This project is in the STIP.

I recommend this project concept be approved.

GRS:JDQ/cj

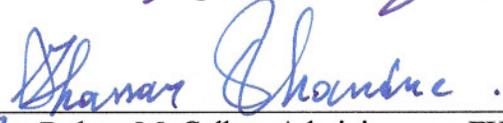
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CONCUR



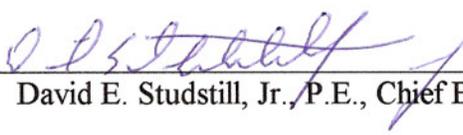
Todd I. Long, P.E., Director of Preconstruction

APPROVE



For: Robert M. Callan, Administrator, FHWA

APPROVE



David E. Studstill, Jr., P.E., Chief Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: CSSTP-0006-00(335) Fulton/Forsyth **OFFICE:** Engineering Services
P.I. No. 0006335
S.R. 400 ATMS

DATE: July 14, 2006

FROM: Brian K. Summers, Project Review Engineer *REW*
TO: Meg Pirkle, Assistant Director of Preconstruction

SUBJECT: CONCEPT REPORT



We have reviewed the Concept Report submitted June 22, 2006 by the letter from Keith Golden dated June 22, 2006, and have no comments:

The costs for this project are:

Construction	\$9,887,200
Inflation	\$0.00
E & C	\$0.00
Reimbursable Utilities	\$0.00
Right of Way	\$0.00

REW

c: Keith Golden, Attn.: Jim Tolson

SCORING RESULTS AS PER MOG 2440-2

Project Number: CSSTP-0006-00(335)		County: Fulton/Forsyth		PI No.: 0006335	
Report Date: June 22, 2006		Concept By: DOT Office: Traffic Safety and Design			
<input checked="" type="checkbox"/> Concept Stage		Consultant: Gresham Smith and Partners			
Project Type: Choose One From Each Column		<input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural	<input checked="" type="checkbox"/> ATMS <input type="checkbox"/> Bridge Replacement <input type="checkbox"/> Building <input type="checkbox"/> Interchange Reconstruction <input type="checkbox"/> Intersection Improvement <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous	
FOCUS AREAS	SCORE	RESULTS			
Presentation	100				
Judgement	100				
Environmental	100				
Right of Way	100				
Utility	100				
Constructability	100				
Schedule	100				



U.S. Department
of Transportation

**Federal Highway
Administration**

61 Forsyth Street, S.W.
Suite 17T100
Atlanta, Georgia 30303

In Reply Refer To:
HTM-GA

Georgia Division

August 16, 2006

Harold E. Linnenkohl, Commissioner
Georgia Department of Transportation
No. 2 Capitol Square, S.W.
Atlanta, Georgia 30334-1002

Attention: Mr. Keith Golden, P.E., State Traffic Safety and Design Engineer

Subject: Project Concept Reports for Ramp Metering Projects CSNHS-0006-00(335) Fulton-Forsyth Counties, CSNHS-0006-00(400) Cobb/Fulton Counties, and CSNHS-0006-00(401) Henry/Clayton/Fulton Counties

Dear Mr. Linnenkohl:

We have received your July 13, 2006 and July 17, 2006 Project Concept Reports for the subject projects. We have the following comments.

- All three project concept reports indicate potential design exceptions for sub-standard shoulder width. It is appropriate to identify this potential. In addition, please include information in the reports regarding which ramps would likely need more vehicle storage. With this information, we can then begin to evaluate alternatives to avoid or mitigate sub-standard features related to providing additional storage.
- The project reports for CSNHS-0006-00(335) and CSNHS-0006-00(401) indicate potential design exceptions for design speed. It is not clear why this would be the case based on the installation of ramp meters and associated ATMS. Please include in the reports explanations of the issues that may lead to potential design exceptions for design speed.
- Each project report includes a description and a figure showing the project area. The description texts should reference the figures, including page numbers.



- The coordination section of each report indicates the concept meeting date and brief summary are "To be Determined." This section of each report should be updated to indicate that these concept meetings were held on June 7, 2006 and include a summary of each meeting.
- The project report for CSNHS-0006-00(401) indicates seven ramp meters on page 5, and eight ramp meters on page 10. These numbers should be rectified.

Please address our comments and re-submit the Project Concept Reports for our action. With regards to the design exceptions, we think it is too early in the process for these projects to commit to sub-standard features and for GDOT to complete and submit design exception justifications. However, including in the project concept reports explanations of reasons and locations for the potential design exceptions, some explanation of the possible scope of alternatives to the potential design exceptions, and the scope of potential impacts that may occur if designed to meet full standards will aid our collaboration regarding these potential design exceptions. For any sub-standard features that would be considered necessary, GDOT would submit design exception justifications at a more appropriate time in the project development process. We recognize each of these projects is scheduled for fiscal year 2007 letting, and this means the schedules are compressed; however, there is adequate time available to evaluate and develop design solutions to avoid or mitigate potential sub-standard features.

If you have any questions, or you would like to discuss this further, please contact Mr. Wayne Fedora, P.E. at (404) 562-3651.

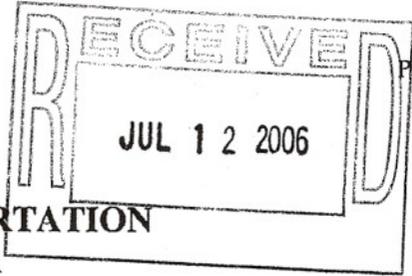
Sincerely,

/s/gs

Robert M. Callan, P.E.
Division Administrator

File: CSNHS-0006-00(335), CSNHS-0006-00(400), and CSNHS-0006-00(401)
Reader: lm/H2268608.rwf

Project Concept Report
Project Number: CSNHS-0006-00(335)
P.I. Number: 0006335
Counties: Fulton / Forsyth



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

**CSNHS-0006-00(335)
FULTON AND FORSYTH COUNTIES
P.I. NO. 0006335**

**FEDERAL ROUTE NUMBERS: 19
STATE ROUTE NUMBERS: 400**

*ATMS/GA 400 Communication/Surveillance from 3600 ft South of SR
120/Fulton to 4400 ft North of SR 20/Forsyth*

Recommendation for approval:

DATE 6-22-06 *Sheel Gold*
State Traffic Safety & Design Engineer

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

DATE _____
State Traffic Operations Engineer

DATE 7/11/06 *Joseph P. P. P.*
State Transportation Planning Administrator

DATE _____
State Transportation Financial Management Administrator

DATE _____
State Environmental / Location Engineer

DATE _____
District Engineer

DATE _____
Project Review Engineer

Project Concept Report
Project Number: CSNHS-0006-00(335)
P.I. Number: 0006335
Counties: Fulton / Forsyth

6/22/06

Page 1 of 14

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

**CSNHS-0006-00(335)
FULTON AND FORSYTH COUNTIES
P.I. NO. 0006335**

FEDERAL ROUTE NUMBERS: 19
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DATE _____

State Traffic Operations Engineer

DATE _____

State Transportation Planning Administrator

DATE 6/22/06

State Transportation Financial Management Administrator

DATE _____

State Environmental / Location Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

**CSNHS-0006-00(335)
FULTON AND FORSYTH COUNTIES
P.I. NO. 0006335**

FEDERAL ROUTE NUMBERS: 19
STATE ROUTE NUMBERS: 400

ATMS/GA 400 Communication/Surveillance from 3600 ft South of SR
120/Fulton to 4400 ft North of SR 20/Forsyth

Recommendation for approval:

DATE 6-22-06 *Heed Gold*
State Traffic Safety & Design Engineer

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DATE _____
State Traffic Operations Engineer

DATE _____
State Transportation Planning Administrator

DATE _____
State Transportation Financial Management Administrator

DATE _____
State Environmental / Location Engineer

DATE _____
District Engineer

DATE 7/14/06 *Brian K Summers*
Project Review Engineer

NOTICE OF LOCATION AND DESIGN APPROVAL

PROJECT: CSNHS-0006-00(335) FULTON AND FORSYTH COUNTIES P. I. NO. 0006335

Notice is hereby given in compliance with Georgia Code 22-2-109 that the Georgia Department of Transportation has approved the Location and Design of the above projects.

Date of Location and Design Approval: OCTOBER 31, 2006

Project CSNHS-0006-00(335) will expand the NaviGator system in Fulton and Forsyth Counties to provide coverage on SR 400 from 3600 ft South of SR 120/Old Milton Parkway to 4400 ft North of SR 20/Buford Highway. The project consists of complete CCTV and VDS coverage necessary to provide roadway condition information to the NaviGator system. CMS are to be installed to communicate roadway information to drivers. This project will extend the fiber optic trunk line along SR 400 from 3600 ft South of the SR 120/Old Milton Parkway interchange (southern project limit). This fiber network extension will reach 4400 ft North of the SR 20/Buford Highway interchange (northern project limit).

Drawings of the proposed project, as approved, are on file and are available for public inspection at the Georgia Department of Transportation:

Mr. Jim Tolson, Traffic Design Manager
935 E. Confederate Avenue
Wayne Shackelford Building
Atlanta, GA 30316
(404) 635-8139
email: jim.tolson@dot.state.ga.us

Any interested party may obtain a copy of the drawings or portions thereof by paying a nominal fee and requesting in writing to:

Keith Golden, P.E.
Office of Traffic Safety & Design
935 E. Confederate Avenue
Building 24
Atlanta, GA 30316
email: keith.golden@dot.state.ga.us

Any written request or communication in reference to this project or notice should include the Project and P.I. Number as noted at the top of this notice.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

PROJECT CONCEPT REPORT

**CSNHS-0006-00(335)
FULTON AND FORSYTH COUNTIES
P.I. NO. 0006335**

**FEDERAL ROUTE NUMBERS: 19
STATE ROUTE NUMBERS: 400**

*ATMS/GA 400 Communication/Surveillance from 3600 ft South of SR
120/Fulton to 4400 ft North of SR 20/Forsyth*

Recommendation for approval:

DATE 6-22-06 
State Traffic Safety & Design Engineer

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DATE _____
State Traffic Operations Engineer

DATE _____
State Transportation Planning Administrator

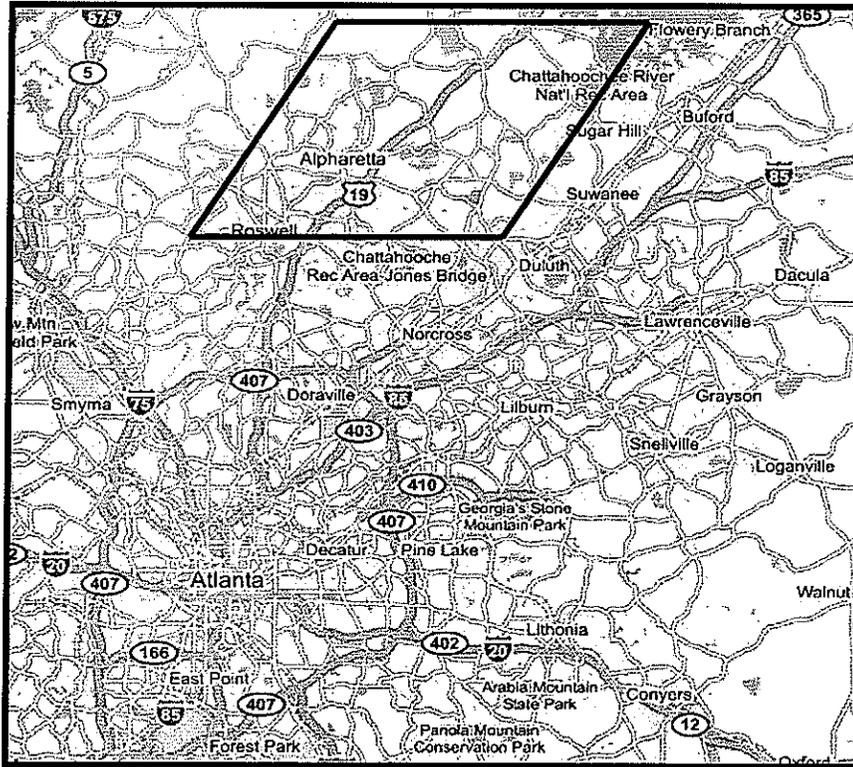
DATE _____
State Transportation Financial Management Administrator

DATE _____
State Environmental / Location Engineer

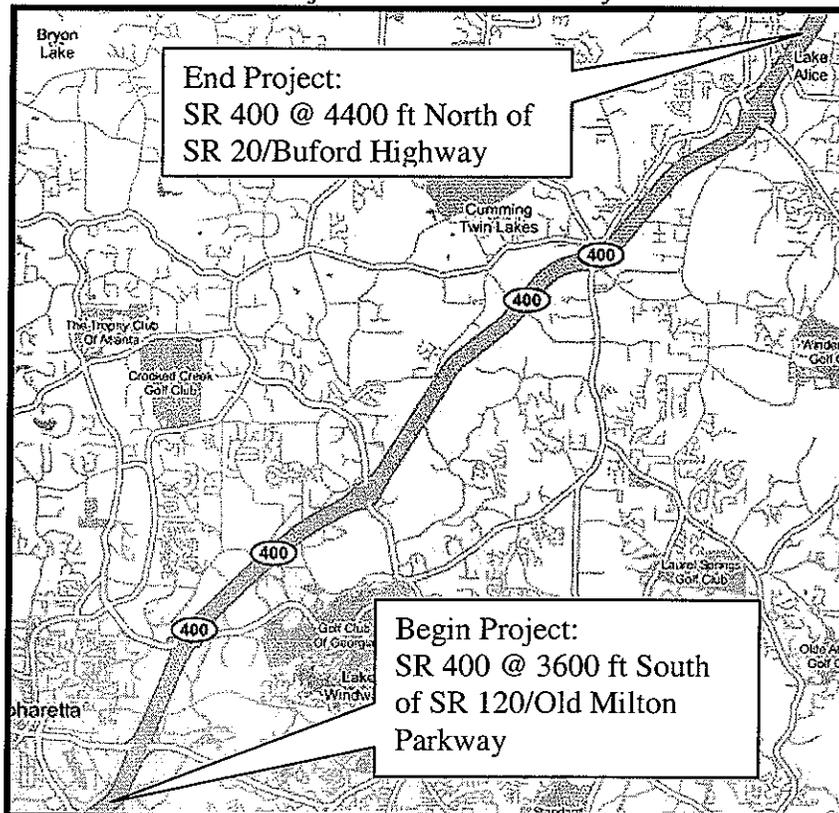
DATE _____
District Engineer

DATE _____
Project Review Engineer

PROJECT LOCATION MAPS



Location of Project in Fulton and Forsyth Counties



Detailed Map of Project Corridor

Need and Purpose:

The purpose of this project is to increase the efficiency and safety of the corridor by expanding the NaviGator system in Fulton and Forsyth Counties to provide coverage on SR 400 from 3600 ft South of the SR 120/Old Milton Parkway interchange to 4400 ft North of the SR 20/Buford Highway interchange. The expansion of the NaviGator system in this region will help mitigate the congestion currently experienced along this corridor during peak hours. Efficiency and safety will be improved by reducing incident response/clearance times, prevention of secondary accidents, and providing information to motorists of roadway/traffic conditions. Ramp meters will control the release of vehicles onto the corridor during peak hours, therefore reducing congestion and stabilizing the flow of traffic that typically occurs at heavy volume merge locations. The operation of the ramp meters will create a smoother flow of traffic and reduce the potential for traffic crashes during peak hours.

The Georgia DOT's NaviGator – Intelligent Transportation System has been in operation since April 1996. Initially providing coverage on Interstates 75 and 85, primarily within the I-285 Perimeter Highway, it is currently being extended along Langford Parkway (SR 166) in Fulton County and Peachtree Industrial Boulevard (SR 141/Peachtree Parkway) in DeKalb and Gwinnett counties, with additional projects on I-20, I-75, I-85, I-285, I-575, I-675, I-985, SR 316, SR 400, and US 78 planned as part of the Fast Forward Program. The system consists of closed-circuit television (CCTV) surveillance cameras, vehicle detection system cameras (VDS), Changeable Message Signs (CMS), and ramp meters. By use of a fiber optic communications backbone, all the devices are tied to the Transportation Management Center (TMC) and various Traffic Control Centers (TCCs) in the Metro Atlanta area. Operators located at the TMC are able to detect incidents and dispatch, with minimal delay, appropriate response teams. The NaviGator program benefits the trucking industry and motorists by reducing incident response/clearance times, and providing better information with consequential safety improvements.

On April 14, 2004 Governor Sonny Perdue introduced the Fast Forward Congestion Relief Program which includes accelerated growth of the NaviGator system throughout the Metro Atlanta region. The Fast Forward Program provides \$211 million to expand the Navigator and Highway Emergency Response Operator (HERO) coverage with a goal of reducing peak hour delays by 30%. This project covers SR 400 from 3600 ft South of the SR 120/Old Milton Parkway interchange to 4400 ft North of the SR 20/Buford Highway interchange. This work will assist in faster incident detection at the TMC, resulting in quicker response by emergency personnel, better information to travelers, and improved highway safety.

Description of the proposed project:

Coverage

This project will include complete CCTV and VDS coverage necessary to provide roadway condition information to the NaviGator system. CMS are to be installed to communicate roadway condition information to drivers. NaviGator equipment will be installed along SR 400 from 3600 ft South of State Route 120 to 4400 ft North of State Route 20. This project will extend the fiber trunk line along SR 400 from 3600 ft South of SR 120/Old Milton Parkway to the northern project limit at 4400 ft North of SR 20/Buford Highway utilizing existing Hub "Q" as well as two proposed mini hubs.

Communications Plan

This project will use the new digital communications architecture. The video data and control communications from the new devices will be sent via Gig Ethernet network, as opposed to the older analog method involving switches and multiplexers. All network electronics required to operate and communicate with the devices in this project are included as well, including field device connections to Hub "Q", as well as two proposed mini hubs located at Windward Pkwy and SR 20.

A 144-fiber optic trunk line will be located on both the northbound and southbound sides of GA 400, as close to

the back of the clear-zone as possible. The trunk line may enter the paved shoulder to cross bridges and at other locations where it is not feasible to locate outside the paved shoulder. The trunk will be carried within continuous conduit duct banks, which will have 4-2" conduits.

CCTV

CCTV Type B Dome cameras will be designed to provide continuous coverage of SR 400 within the project limits, as well as coverage of metered on-ramps. These cameras will be mounted on eighty-foot concrete poles located off the shoulder of the highway at the back of the clear zone. However, where appropriate, some cameras may be mounted on poles behind guardrail, on bridge overpasses, or on overhead sign structures. This project will include surveillance cameras with typical spacing every 2/3 mile to provide interchange coverage as well as at ramp meter locations. The poles or other mounting apparatus for the cameras are included in this project.

VDS

VDS camera locations have been chosen to provide an average spacing of 1/3 mile along the project limits, as well as at each ramp meter location. These cameras will be mounted on eighty-foot concrete poles located mainly off the shoulder of the highway at the back of the clear zone. However, where appropriate, some cameras may be mounted on existing sign structures or on poles behind guardrail. The poles or other mounting apparatus for the cameras are included in this project.

Changeable Message Signs (CMS)

Five (5) CMS are proposed for this project. Each sign will be 3' x 21', mounted on full-span overhead structures. The locations of each of the five signs are as follows: The first CMS will be located on SR 400 northbound, prior to the Old Milton Pkwy interchange, just south of Kimball Bridge Rd. The second CMS will be located on SR 400 northbound, prior to the McFarland Road interchange. The third CMS will be located on SR 400 northbound, prior to the SR 141/Peachtree Pkwy interchange. The fourth CMS will be located on SR 400 southbound prior to the SR 20/Buford Highway interchange, just north of Buford Dam Rd. The fifth CMS will be located on SR 400 southbound prior to the McFarland Road interchange. Each sign will provide information on SR 400 and I-285 travel conditions, as well as local construction and delay information.

Ramp Meters

Ramp Meters will be installed along SR 400 at all northbound and southbound entrance ramps, with the exception of northbound and southbound approach ramps at SR 120 (Old Milton Parkway). Ramp meters at these locations are being designed separately under the GRTA bus/shoulder lanes project, PI 100752. This project (PI 0006335) will install fiber on the north and south sides of GA 400 to connect the GRTA ramp meters to the NaviGator system and the TMC.

Each of the new ramp meters will require at least one IVDS (Intersection Video Detection System) camera to monitor mainline freeway operations, as well as a CCTV unit for visual coverage. All supporting hardware, devices, poles and/or mast arms, lane markings, traffic signal equipment, and signage for the installation of ramp meters are included in this project.

All ramp meters will be designed based upon the AASHTO recommended acceleration distance criteria established in its *Policy on Geometric Design of Highways and Streets, 5th Ed.*, Exhibit 10-70. All interchanges will be designed using criteria for 65 mph posted speeds, which specifies an acceleration distance of 1,410 feet.

Hubs

This project will tie into existing Hub Q as well as include installation of two new mini hubs along the SR 400 corridor. The new mini hubs will be located at Windward Pkwy and SR 20, and along with Hub Q, will serve as field connection points for the various devices installed on this project.

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

PDP Classification: Major Minor

Federal Oversight: Full Oversight Exempt State Funded or Other

Functional Classification: Urban Principal Arterial

U. S. Route Number(s): 19

State Route Number(s): 400

Traffic (2004 AADT)

source: http://www.dot.state.ga.us/dot/plan-prog/transportation_data/traffic_counts/index.shtml

SR 400 from SR 120/Old Milton Parkway to Windward Parkway	67,750
SR 400 from Windward Parkway to McFarland Road.....	76,070
SR 400 from McFarland Road to SR 141/Peachtree Parkway	54,730
SR 400 from SR 141/Peachtree Parkway to SR 20 Buford Highway	69,970

Existing design features:

- Typical Sections:
 - *SR 400 from 3600 ft South of SR 120/Old Milton Parkway to 4400 ft North of SR 20/Buford Highway : 4 lanes divided*
- Posted speeds:
 - *SR 400 from 3600 ft South of SR 120/Old Milton Parkway to 4400 ft North of SR 20/Buford Highway: 65 mph*
- Minimum Radius: *N/A*
- Maximum grade: *N/A*
- Major structures along SR 400:
 - *SR 400 under Kimball Bridge Road*
 - *SR 400 under SR 120/Old Milton Parkway*
 - *SR 400 under Webb Bridge Road*
 - *SR 400 over Windward Parkway*
 - *SR 400 under McGinnis Ferry Road*
 - *SR 400 under Union Hill Road*
 - *SR 400 under McFarland Road*
 - *SR 400 over Big Creek*
 - *SR 400 under Shiloh Road*
 - *SR 400 under Majors Road*
 - *SR 400 under SR 141/Peachtree Parkway*
 - *SR 400 under Pendley Road*
 - *SR 400 under Old Atlanta Road*
 - *SR 400 under SR 20/Buford Highway*
 - *SR 400 under Buford Dam Road*
- Major interchanges or intersections along SR 400:

- SR 400 @ SR 120/Old Milton Parkway
- SR 400 @ Windward Parkway
- SR 400 @ McFarland Road
- SR 400 @ SR 141/Peachtree Parkway
- SR 400 @ SR 20/Buford Highway

Existing lengths:

- SR 400 from 3600 ft South of SR 120/Old Milton Parkway to Windward Parkway : 2.2 miles
- SR 400 from Windward Parkway to McFarland Road: 2.9 miles
- SR 400 from McFarland Road to SR 141/Peachtree Parkway: 4.2 miles
- SR 400 from SR 141/Peachtree Parkway to 4400 ft North of SR 20/Buford Highway: 3.5 miles
- Total Project Length: 12.8 miles

Proposed Design Features:

- Typical Sections: *Existing section to remain. There will be no change to the lanes or typical sections.*
- Posted speeds: *Existing posted speeds to remain.*
- Minimum Radius: *N/A*
- Maximum grade: *N/A*
- Proposed Maximum grade Mainline: *N/A* Maximum grade allowable: *N/A*
- Proposed Maximum grade Side Street: *N/A* Maximum grade allowable: *N/A*
- Proposed Maximum grade driveway: *N/A*
- Proposed Minimum Radius Mainline: *N/A* Minimum Radius allowable: *N/A*
- Proposed Minimum Radius Side Street: *N/A* Minimum Radius allowable: *N/A*
- Type of Access: *Limited Access*
- Right of way: *Project will be constructed within the existing Limited Access Right of Way. No additional right of way and/or easements will be required.*
 - Number of parcels: *0* Number of displacements: *0*
 - Business: *0*
 - Residences: *0*
 - Mobile homes: *0*
 - Other: *0*
- Structures:
 - *Strain poles for CCTV and VDS, and strain poles with mast arms for Traffic Signals*
 - *Overhead Structures for CMS Signs*
- Major intersections and interchanges along SR 400:
 - *SR 400 @ SR 120/Old Milton Parkway*
 - *SR 400 @ Windward Parkway*
 - *SR 400 @ McFarland Road*
 - *SR 400 @ SR 141/Peachtree Parkway*
 - *SR 400 @ SR 20/Buford Highway*
- Traffic control during construction: *Shoulder closures and/ or lane closures will be necessary during installation of conduit, fiber optic cables and strain poles.*
- Design Exceptions to controlling criteria anticipated: *Design Exceptions for ramps with proposed outside shoulders less than 10 feet.*

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ROADWAY WIDTH:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SHOULDER WIDTH:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VERTICAL GRADES:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CROSS SLOPES:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
STOPPING SIGHT DISTANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SUPERELEVATION RATES:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HORIZONTAL CLEARANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SPEED DESIGN:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VERTICAL CLEARANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BRIDGE WIDTH:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BRIDGE STRUCTURAL CAPACITY:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- Design Variances: *None Known*
- Environmental Concerns: *None Known*
- Probable Locations of UST's: *N/A*
- Probable Locations of Hazardous Waste: *None*
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes No
 - Categorical Exclusion
 - Environmental Assessment/Finding of No Significant Impact (FONSI) , or
 - Environmental Impact Statement (EIS)
- Utility involvements: *Power service will be required for all CCTV cameras, IVDS and ramp meter equipment.*
- Meets Logical Termini Requirements: *Yes*
- Conforms to TIP/STIP: *Yes*

Project responsibilities:

- Design: *Gresham Smith and Partners on Behalf of the Georgia DOT.*
- Right of Way Acquisition: *N/A*
- Relocation of Utilities: *GDOT*
- Letting to contract: *GDOT*
- Supervision of construction: *GDOT*
- Providing material pits: *None Required*
- Providing detours: *None Anticipated*

Coordination

- Pre-Concept Meeting: *To be determined.*
- Initial Concept Meeting date and brief summary: *To be determined.*
- Concept meeting date and brief summary: *To be determined.*
- P. A. R. meetings, dates and results: *None Required*
- Public involvement: *No public meetings are anticipated.*
- Local government comments: *N/A*
- Other projects in the area: *See attached list*
- Other coordination to date: *None*

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: *N/A*
- Time to complete the Section 404 Permit: *N/A*

Project Concept Report
Project Number: CSNHS-0006-00(335)
P.I. Number: 0006335
Counties: Fulton / Forsyth

- Time to complete final construction plans: *3 Months*
- Time to complete to purchase right of way: *N/A*

Other alternates considered:

Alternative #1: No Build

Comments:

Attachments:

1. Cost Estimate including E & C
2. List of other projects in the area (Projects in Area summarized below)
3. Concept Report Rating Form

**ATMS / SR 400 from SR 120 / Old Milton Parkway to SR 20 / Buford Highway
 CSNHS-0006-00(335), PI 0006335
 Fulton and Forsyth Counties
 Quantities and Cost Summary
 Concept Cost Estimate**

Item Code	Description	Unit	Quantity	Engineer Estimate	
				Unit Price	Amount
150-1000	Traffic Control CSNHS-0006-00(335)	LS	LUMP	\$	\$200,000.00
153-1300	Field Engineer's Office, Type 3	EA	1	\$80,000.00	\$80,000.00
615-1075	Remove Guardrail Anchor, All Types	EA	15	\$200.00	\$3,000.00
615-1200	Directional Bore, 5 in	LF	5,000	\$15.00	\$75,000.00
631-2463	LED Pixel CMS, Walk in, 3 x 21, 18 in, Type B	EA	5	\$95,000.00	\$475,000.00
631-8000	Testing	LS	LUMP	\$	\$12,000.00
632-0003	Changeable Message Sign, Portable, Type 3	EA	4	\$18,000.00	\$72,000.00
638-1001	Structural Support for Overhead Sign, Tp 1, Sta XX+XX	LS	LUMP	\$	\$70,000.00
638-1001	Structural Support for Overhead Sign, Tp 1, Sta XX+XX	LS	LUMP	\$	\$70,000.00
638-1001	Structural Support for Overhead Sign, Tp 1, Sta XX+XX	LS	LUMP	\$	\$70,000.00
638-1001	Structural Support for Overhead Sign, Tp 1, Sta XX+XX	LS	LUMP	\$	\$70,000.00
638-1001	Structural Support for Overhead Sign, Tp 1, Sta XX+XX	LS	LUMP	\$	\$70,000.00
639-3004	Steel Strain Pole, Type IV, with 40 ft. Mast Arm	EA	8	\$7,000.00	\$56,000.00
639-4004	Strain Pole, Type IV	EA	40	\$8,000.00	\$320,000.00
647-1000	Traffic Signal Installation #1	LS	LUMP	\$	\$30,000.00
647-1000	Traffic Signal Installation #2	LS	LUMP	\$	\$30,000.00
647-1000	Traffic Signal Installation #3	LS	LUMP	\$	\$30,000.00
647-1000	Traffic Signal Installation #4	LS	LUMP	\$	\$30,000.00
647-1000	Traffic Signal Installation #5	LS	LUMP	\$	\$30,000.00
647-1000	Traffic Signal Installation #6	LS	LUMP	\$	\$30,000.00
647-1000	Traffic Signal Installation #7	LS	LUMP	\$	\$30,000.00
647-1000	Traffic Signal Installation #8	LS	LUMP	\$	\$30,000.00
641-1200	Guardrail, TP W	LF	1,000	\$13	\$13,000.00
641-5001	Guardrail, TP 1	EA	8	\$450.00	\$3,600.00
641-5012	Guardrail, TP 12	EA	8	\$1,400.00	\$11,200.00
647-2141	Pull Box, PB-4S	EA	50	\$1,500.00	\$75,000.00
647-2170	Pull Box, PB-7	EA	150	\$2,000.00	\$300,000.00
682-6222	Conduit, Nonmetl, Tp 2, 2 in	LF	2,000	\$8.00	\$16,000.00
682-6224	Conduit, Nonmetl, Tp 2, 4 in	LF	100	\$13.00	\$1,300.00
682-6233	Conduit, Nonmetl, Tp 3, 2 in	LF	55,000	\$4.00	\$220,000.00

682-6520	Conduit, Fiberglass, 2 in	LF	5,000	\$45.00	\$225,000.00
682-7062	Conduit Duct Bank, Type 3	LF	140,000	\$30.00	\$4,200,000.00
682-9028	Electrical Communications Box, Type 5	EA	15	\$6,000.00	\$90,000.00
682-9029	Electrical Communications Box Rehabilitation	EA	4	\$3,000.00	\$12,000.00
797-2200	Mini Hub	EA	2	\$75,000.00	\$150,000.00
935-1113	Outside Plant Fiber Optic Cable, Loose Tube, SM, 24 Fiber	LF	6,000	\$2.00	\$12,000.00
935-1118	Outside Plant Fiber Optic Cable, Loose Tube, SM, 144 Fiber	LF	126,720	\$5.00	\$633,600.00
935-1513	Outside Plant Fiber Optic Cable, Drop, SM, 24 Fiber	EA	6,000	\$3.00	\$18,000.00
935-3103	Fiber Optic Closure, Underground, 24 Fiber	EA	50	\$800.00	\$40,000.00
935-3108	Fiber Optic Closure, Underground, 144 Fiber	EA	10	\$1,600.00	\$16,000.00
935-3403	Fiber Optic Closure, FDC (Rack Mounted), 24 Fiber	EA	50	\$1,000.00	\$50,000.00
935-3601	Fiber Optic Closure, FDC pre-terminated, Type A, 4 Fiber	EA	10	\$900.00	\$9,000.00
935-4010	Fiber Optic Splice, Fusion	EA	2,500	\$40.00	\$100,000.00
935-8000	Testing	LS	LUMP	\$	\$20,000.00
936-1001	CCTV System, Type B	EA	17	\$7,000.00	\$119,000.00
936-8000	Testing	LS	LUMP	\$	\$5,000.00
937-1000	Video Camera Sensor Assembly	EA	50	\$2,500.00	\$125,000.00
937-3010	VDS System Processor, Type A	EA	40	\$10,000.00	\$400,000.00
937-8000	Testing	LS	LUMP	\$	\$7,500.00
938-1100	Intersection Video Detection System Assembly, Type A	EA	9	\$4,000.00	\$36,000.00
939-1190	Video Encoder, Type A	EA	17	\$6,000.00	\$102,000.00
939-1195	Video Decoder, Type A	EA	10	\$5,000.00	\$50,000.00
939-2211	Network Switch, Layer 3 GigE, Type A (4 SM 17DB GBICs)	EA	1	\$80,000.00	\$80,000.00
939-2221	GBIC Enterprise Routing Switch Module, 8 Port	EA	4	\$20,000.00	\$80,000.00
939-2232	GBIC, Type B	EA	25	\$3,000.00	\$75,000.00
939-2300	Field Switch, Type A	EA	40	\$4,500.00	\$180,000.00
939-2301	Field Switch, Type B	EA	10	\$6,000.00	\$60,000.00
939-2305	Field Switch, Type C	EA	12	\$3,500.00	\$42,000.00
939-3020	Equipment Frame	EA	12	\$2,500.00	\$30,000.00
939-4040	Type D Cabinet	EA	50	\$5,000.00	\$250,000.00
939-5020	Electrical Power Service Assembly, Underground Service	EA	50	\$2,500.00	\$125,000.00
939-6000	Hub Uninterruptible Power Supply	EA	2	\$3,500.00	\$7,000.00
939-8000	Testing	LS	LUMP	\$	\$7,500.00
939-8500	Training	LS	LUMP	\$	\$7,500.00

Total

\$9,887,200.00

Projects in Area:

- 1. SR 400 HOV Lanes from I-285 to McFarland Road**
GDOT PI 0001757
PE – 2009, ROW – 2009
- 2. Widening of SR 400 from SR 140 (Holcomb Bridge Road) to McFarland Road**
GDOT PI 722010
CST – 2006
- 3. Widening of SR 141 (Peachtree Parkway) from north of Fulton County Line to SR 9 (Atlanta Highway)**
GDOT PI 121980.
CST – 2006
- 4. Big Creek Greenway Extension to SR 9**
GDOT PI 0006920.
ROW – 2006, CST – 2008
- 5. Widening of McFarland Road from McGinnis Ferry Road to SR 400**
GDOT PI N/A.
ROW – 2006, CST – 2007
- 6. Widening of McFarland Road from SR 400 to SR 9**
GDOT PI N/A.
PE – LR, ROW – LR, CST – LR
- 7. Widening of Union Hill Road from McGinnis Ferry Road to McFarland Road**
GDOT PI 0007097.
CST – 2006
- 8. Windward Parkway Traffic Signal Interconnect from SR 9 (Alpharetta Highway) to McGinnis Ferry Road**
GDOT PI 0006818.
CST – 2006

See ARC attachments for detailed summary of each of these projects.

