

**DESIGN EXCEPTION IN-SERVICE MONITORING PROGRAM
DEVELOPMENT**

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Presented to
The Academic Faculty

by

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LIST OF SYMBOLS AND ABBREVIATIONS

@	At
AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ALT	Alternate
ATMS	Advanced Traffic Management System
BLVD	Boulevard
BR	Bridge
BTWN	Between
BYP	Bypass
CAPS	Center for Advanced Public Safety
CARE	Critical Analysis Reporting Environment
CD	Collector/Distributor
CFR	Code of Federal Regulations
CL	County Line
CMF	Crash Modification Factor
CO	County
COMM	Communication
CONN	Connection
CORR	Corridor
CR	County Road
DE	Design Exception
DOT	Department of Transportation
DPM	Design Policy Manual

DR	Drive
E.	East
EB	Eastbound
EB	Empirical Bayes
FHWA	Federal Highway Administration
GDOT	Georgia Department of Transportation
GRTA	Georgia Regional Transportation Authority
HOV	High Occupancy Vehicle
HSM	Highway Safety Manual
HWY	Highway
I	Interstate
INDOT	Indiana Department of Transportation
INT	Interstate
JCT	Junction
LN	Lane
LNS	Lanes
LOC	Location
LS	LOCAL ST
MI	Mile
MP	Milepost
N&S	North and South
NE	Northeast
NCHRP	National Cooperative Highway Research Program
NHS	National Highway System
NW	Northwest

PED	Pedestrian
PDO	Property Damage Only
PDP	Plan Development Process
PH	Phase
PI	Project ID
PKWY	Parkway
QA/QC	Quality Assurance and Quality Control
RELOC	Relocation
RI	River
RR	Railroad
SCH	School
SE	Southeast
STARS	State Traffic and Report Statistics
SPF	Safety Performance Function
SQ	Square
SR	State Route
ST	Street
TransPi	Transportation Project Information
TR	Trail
W.	West
WB	Westbound
WSDOT	Washington Department of Transportation
UDOT	Utah Department of Transportation
US	United States

SUMMARY

When project sites consist of substandard design elements according to standards set by the Federal Highway Administration (FHWA), design exceptions are implemented. The goal of this thesis is to analyze a sample set of 18 design exceptions taken from a total of 467 design exceptions approved in Georgia from 1995 – 2012. Crash data were obtained at the locations of each of these design exceptions three years before the let date and three years after the construction end date.

To compensate for causal factors other than the design exception on the roadway, similar information from a range of control sites were also obtained. These control sites consisted of projects without design exceptions that occurred within the same time constraints as the design exception projects, were of the same work type, and were either located on the same route or within the same district. The potential safety impacts of the design exceptions were evaluated by comparing the before and after crash rates of projects before and after crash rates at these control sites

Based on these data, no statistically significant relationship between the existence of a design exception and crash rates was identified. Despite this finding, a future Empirical Bayesian (EB) before and after analysis is recommended to compensate for any potential regression to the mean bias. This study also describes a method to incorporate this analysis along with predictive methods provided by the Highway Safety Manual (HSM) towards developing a functional design exception in-service monitoring program.

CHAPTER 1

INTRODUCTION

In the design of roadways and related infrastructure, it is important to consider the relationship between design vehicles, users of the system, and the surrounding environment when making engineering decisions. An important part of maintaining this balance is considering the safety effects that different features of the system will have on its users. There are various organizations that help to provide guidance to engineers and designers in this design process including, but not limited to, the Federal Highway Administration (FHWA), the American Association of State Highway and Transportation Officials (AASHTO), and the Department of Transportation (DOT) of each state.

A Policy on Geometric Design of Highways and Streets published by AASHTO, also known as the *AASHTO Green Book*, is the primary and most frequently used reference by highway designers and engineers for guidance on critical highway dimensions [1]. The Code of Federal Regulations (23 CFR 625) adopts this document as the design standard for roadways within the National Highway System (NHS) under the authority of the Federal Highway Administration (FHWA) [2]. When a roadway is not on the NHS, the of the *AASHTO Green Book* is left up to the discretion of the Department of Transportation (DOT) in each state. That being said, most states have also chosen to adopt the *AASHTO Green Book* as the standard for highways and roads within their jurisdiction.

Shortly after adopting the *AASHTO Green Book* in 1985, the FHWA established 13 controlling criteria from the document to guide the decisions of highway engineers and designers to achieve a balance between cost, safety, mobility, social, and

environmental impacts [3]. These controlling criteria, shown in Table 1, are expressed as minimum, maximum, or ranges of values that have been determined acceptable through previous experience and research. However, during the design process engineers occasionally encounter conditions where they are unable to meet these design values for a variety of reasons. In these cases, designers will typically attempt to incorporate additional elements or to adjust other design features to compensate for the potential safety impact of the element outside of the standard range. These efforts are formally documented and a decision, known as a design exception, must be made and approved to construct a highway or project with criteria below the minimum values. For projects on the NHS, formal design exception approval from the FHWA is required. Though there are no federal requirements for design exceptions on projects that are not on the NHS, “States are encouraged to analyze situations and document exceptions on non-NHS routes in a similar fashion when design values are used that do not meet their adopted criteria.” [1]

Table 1. Thirteen Controlling Criteria for Geometric Features in Roadway Design as Defined by Federal Highway Administration (FHWA)

	Controlling Criteria
1	Design Speed
2	Lane Width
3	Shoulder Width
4	Bridge Width
5	Horizontal Alignment
6	Superelevation
7	Vertical Alignment
8	Grade
9	Stopping Sight Distance
10	Cross Slope
11	Vertical Clearance
12	Lateral Offset to Obstruction
13	Structural Capacity

This study analyzes a sample set of 18 design exceptions approved from 2003 - 2006 taken from a total of 467 design exceptions approved in Georgia from 1995 – 2012. Crash data were obtained at the locations of each of these design exceptions three years before the let date and three years after the construction date. Similar information from a range of control sites were also obtained to compensate for causal factors other than the design exception on the roadway. By comparing the before and after crash rates of projects with design exceptions to the before and after crash rates at these control sites, the potential safety impacts of the design exceptions were evaluated.

CHAPTER 2

DESIGN EXCEPTION PROCESS

In the design of roadways and supporting infrastructure, engineers and designers must balance several key factors including cost, safety, mobility, as well as social and environment impacts [3]. The FHWA provides guidance on how to make flexible design decisions when trying to satisfy the minimum, maximum, or range of values set aside for the design criteria mentioned in Table 1 above. When these values are not met, a documented decision known as a design exception must be approved. There has been little research done on how these design exceptions affect safety due to the limited availability of crash data and resources to complete the analyses. The following section summarizes information on both the process of filing for a design exception as well as previous research done concerning the safety effects of design exceptions.

2.1 FHWA Design Exception Process

FHWA is responsible by federal regulation to establish design standards applied to the NHS. Regardless of the funding source of the project, FHWA requires a formal process to be completed for a design exception when the design values do not meet the established minimum 13 controlling criteria values or ranges of values [3]. In order to help guide state DOTs through this process, FHWA published a guidance document, *Mitigation Strategies for Design Exceptions*, in 2007 offering additional information and important strategies to mitigate potential negative effects that may be caused as the result of design exceptions. Figure 1 below taken from this publication illustrates this process.

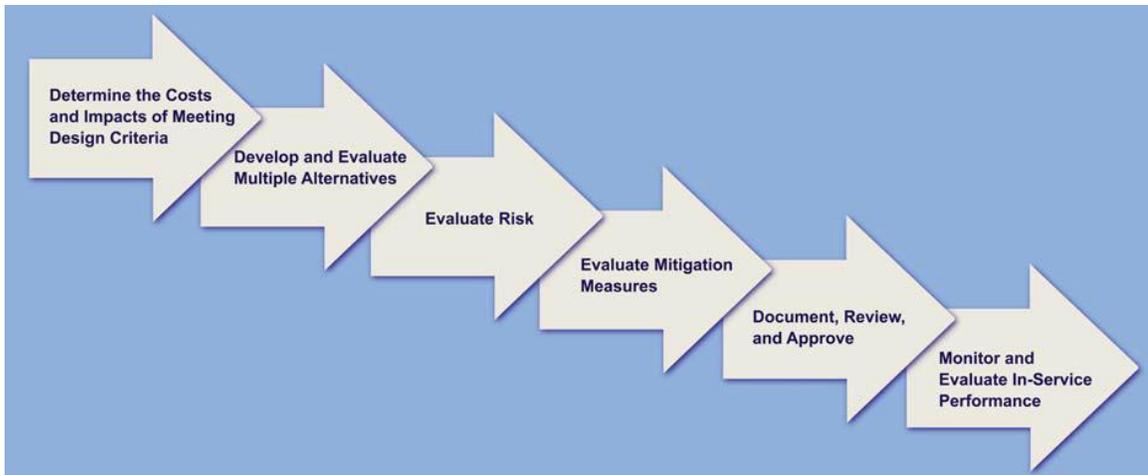


Figure 1. Illustration of the Federal Highway Administration Design Exception Process Adopted from *Mitigation Strategies for Design Exceptions*, 2007

The focus of this research will be on the final step in this process: Monitor and Evaluation In-Service Performance. In practice, the current extent of in-service evaluation varies due to limited budgets, human resources, or other factors. This is expected, as the rare and random nature of crashes implies that several years of crash data must be collected before any correlations can be made between design exceptions and their impacts on safety [3].

2.2 Nominal vs. Substantive Safety

Considering how safety is affected by design exceptions is arguably the greatest concern when making the decision to accept or reject a design exception. Nominal safety is an “either-or” condition that states whether or not a roadway, design alternative, or design element meets the minimum or maximum design criteria [3]. If the design features of a project meet the minimum values, maximum values, or ranges of the 13 controlling criteria, it is considered nominally safe. By definition, roadways, design alternatives, or design elements that require design exceptions and do not satisfy at least the minimum design criteria cannot be classified as nominally safe. This does not mean

that the road is unsafe, since the actual safety performance of a highway must be observed over time, but rather that it does not fully meet accepted design criteria.

Substantive safety is defined as the “actual long term or expected safety performance of a roadway,” [3] and can be measured quantitatively by observing crash frequency, crash type, and crash severity. Since the concept of substantive safety reflects “real world” performance of the system, it is criteria that should be used in assessing safety impacts when making sound decisions to accept or approve design exceptions [3].

By formally comparing a location or highway’s crash profile with facilities with similar characteristics, judgments about substantive safety and whether or not the design exception will meet safety expectations can be made. This formal comparison generally involves applying statistical models of crash experience from broader data sources, such as from sites in the same jurisdiction as the site being studied [3].

The key to understanding the concepts of nominal and substantive safety is to recognize that they are not necessarily dependent upon one another. Although a roadway that meets all minimum design criteria is nominally safe, it may demonstrate high crash statistics that make it substantively unsafe. Conversely, a roadway that is nominally unsafe may function at a high level of substantive safety. The reason for this discrepancy is due to the fact that the 13 controlling criteria are based on simplified models and are broadly applied to situations that in reality depend on a multitude of other factors as well [1]. Figure 2 below illustrates the concept of nominal and substantive safety with respect to their crash risk models. It can be seen that small changes in the design dimensions of a project result in small changes to crash risks. What designers and engineers should seek

to do is achieve the highest level of substantive safety while striving to meet design criteria to the extent to which they apply [3].

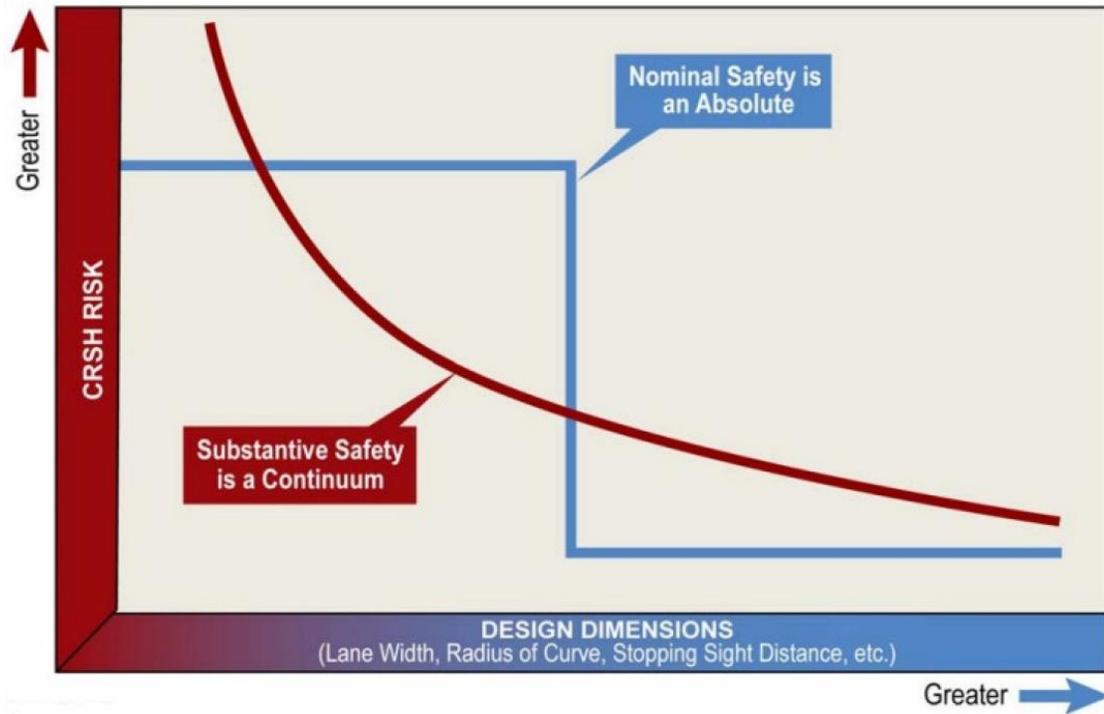


Figure 2. Relationship between Nominal and Substantive Concepts of Safety with Respect to Design Dimensions and their Effects on Crash Risks Adopted from *Mitigation Strategies for Design Exceptions, 2007*

2.3 Georgia Department of Transportation Design Exception Process

Similar to other states, Georgia Department of Transportation (GDOT) adopted the 13 controlling criteria identified by FHWA as having substantial importance in highway design, as well as the corresponding minimum values set in place by AASHTO as its primary road design standard [4]. In addition, GDOT maintains a publication entitled *GDOT Plan Development Process* (PDP) that assists project managers when carrying out their duties and responsibilities for project development, including outlining the process of filing for a design exception and/or design variance [5]. When these minimum values are not met, the design exception process outlined in both the PDP and

by FHWA is followed. GDOT has identified 12 additional design elements, known as “Standard Criteria”, which should also be reviewed during the design process. When the criteria of these design elements are not met, a design variance must be approved by the GDOT Chief Engineer and the procedures outlined in the PDP must be followed. A design variance must also be approved for projects not on the NHS that do not meet the 13 controlling criteria or GDOT’s standard criteria. GDOT’s 12 additional design elements are listed in Table 2 below.

Table 2. Additional Standard Design Criteria as Defined by Georgia Department of Transportation to Consider In Roadway Design

	Standard Criteria
1	Access Control
2	Intersection Sight Distance
3	Intersection Skew Angle
4	Later Offset to Obstruction
5	Rumble Strips
6	Safety Edge
7	Median Usage
8	Roundabout Illumination Levels
9	Pedestrian and Bicycle Warrants
10	GDOT Construction Standards
11	GDOT Drainage Manual
12	GDOT Bridge & Structural Manual

Approval of a design exception (values outside the 13 AASHTO controlling criteria) as outlined by the GDOT PDP begins with the Engineer of Record preparing a design exception request and forwarding it to the GDOT Project Manager assigned to the project. Upon receiving and reviewing the request, the Project Manager forwards the package and his/her recommendations to the Office of Design Policy and Support. The Office of Design Policy and Support likewise conducts a review and forwards the information and its recommendations to the GDOT Director of Engineering, and the

GDOT Chief Engineer, and if the facility is located on the NHS, to the FHWA for final approval or disapproval. A similar process is followed when filing for a design variance (deviation from the 12 GDOT Standard Design Criteria). After approval, GDOT does not specifically require a monitoring process for evaluating the in-service performance and impact of design exceptions after the completion of the project. Figure 3 shows a flow chart of this process.

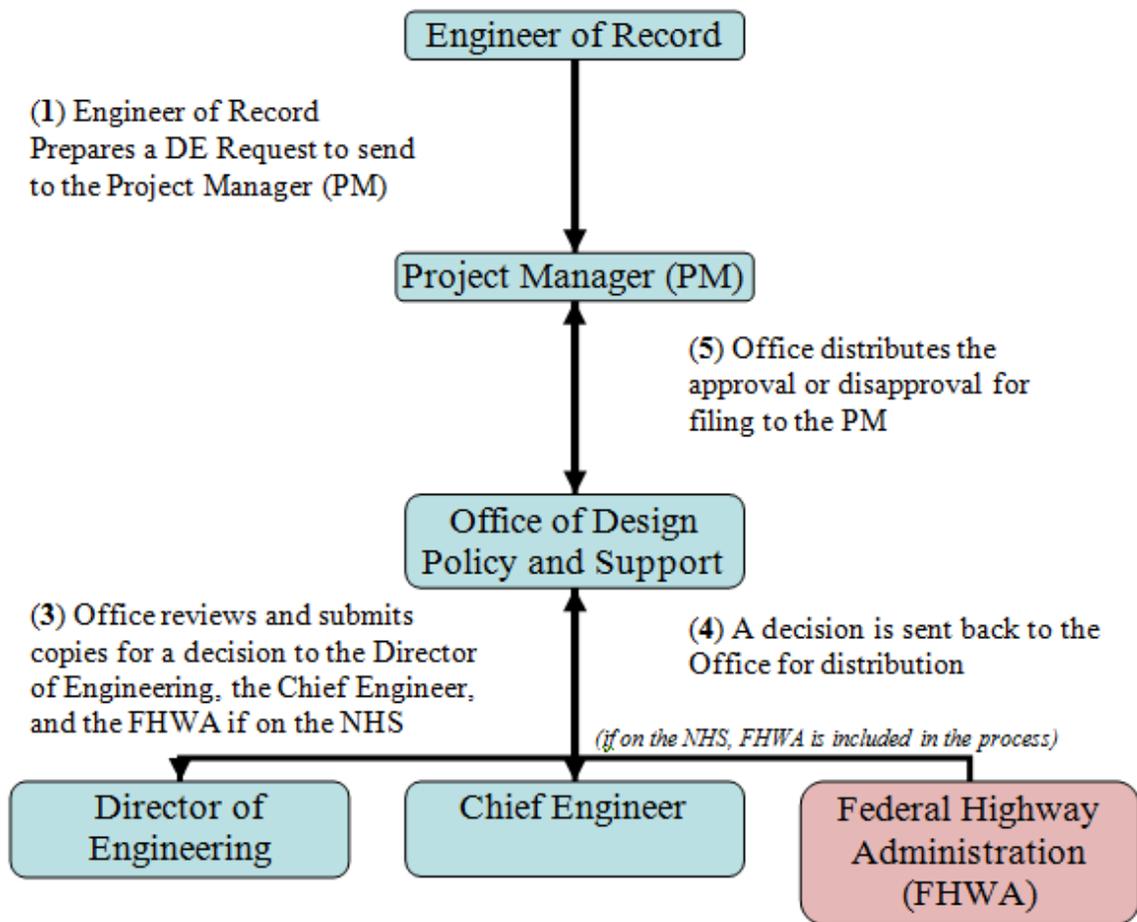


Figure 3. Flow Chart of the Georgia Department of Transportation Design Exception Filing Process Adopted from Georgia Department of Transportation *Design Policy Manual, 2010*

2.4 Other States' Design Exception Processes

All other states have adopted *A Policy on Geometric Design of Highways and Streets* published by AASHTO as their primary reference in roadway design. As part of their design manuals, State DOTs include sections on their specific design exception processes when filing for projects that are both located on and off the NHS. Manuals usually begin by establishing their adoption of the FHWA's 13 controlling criteria as standards in their own department. When designs deviate from these standards, the approval of a design exception is required and is recommended to be identified as early in

the process as possible to allow time to research alternatives and begin analysis on the potential effects of the design exception implantation [2].

In addition to the 13 controlling criteria, several State DOTs have developed their own criteria that must also be approved if design criteria of a project deviate from the minimum value or range of values. The documented decision to accept minimum or maximum values outside the ranges stated in DOT-specific manuals are generally referred to as design variances or design waivers. Design exception information can usually be found in manuals on roadway design, highway design, geometric design, or controlling criteria standards. Like the state of Georgia, criteria that falls out of the 13 controlling criteria is referred to by many other states as standard criteria. Most states call deviations from standard criteria as design variances. In a review of road design manuals, the only differences in terminology appeared in Alaska and Minnesota, where they are called design waivers and informal design exceptions respectively [6].

In order to provide guidance to highway designers and engineers, most states produce their own roadway design manuals or manuals on processes when design exceptions are necessary. As part of this review of previous research, these manuals were found and observed to find similarities in the process and documentation of design exceptions. The majority of manuals begin by stating their adoption of AASHTO's *Green Book* and highway designers and engineers' responsibility to meet the 13 controlling criteria that FHWA has set aside. Though the deviation from these criteria is usually discouraged, manuals usually provide steps on completing the process in a similar format that can be represented by six questions:

- (1) When is a design exception required?
- (2) When should the need for a design exception be identified?
- (3) How should the design exception be documented? What data/forms are necessary?
- (4) Who is responsible for approving the design exception?
- (5) Where should the design exception be filed?
- (6) What is the process if the design exception is denied? [6]

In reference to 23 CFR 625.3, most manuals state that the projects requiring design exceptions are (1) new highway construction, (2) existing highway reconstruction for lane addition, acceleration and deceleration lanes, and pavement replacement, (3) total bridge replacements on the NHS, and (4) bridge widening projects [2]. The restorations of locations where design exceptions have already been filed usually do not require an additional design exception process to be completed. Each state has DOT-specific forms for filing for design exceptions, but they generally contain the same required information. Engineers must provide the reason for approval, the alternatives considered, mitigation processes explored, and sometimes crash analyses to accompany their forms. Approval is typically required of both the Chief Engineer and the Road Engineer responsible for the project. For those projects on the NHS, FHWA approval must be obtained [2]. After the process is completed, the design exception forms and approval signatures are kept on file with the respective offices and agencies in charge of the project. The only states that currently offer a standalone manual on design exceptions are New Jersey and Utah, which were published in 2012. In Appendix A of this report, two tables summarizing what is contained in each state DOT manual when available is provided [6].

In the review of design manuals, a major component missing from guidance is the process required when a design exception process is denied. Many state DOT manuals mention that the process must be filed regardless of whether or not a design exception request is approved. They do not mention whether or not the chief engineer will explain whether or not it is approved, or what can be done to gain approval if a request has been denied. Just by referring to the manuals provided by state DOTs, it is generally not clear whether or not there is an appeal process for denied design exception requests. It is assumed that designers must find an alternative or determine additional reasons to file for the design exception again.

CHAPTER 3

PREVIOUS RESEARCH

Relatively little research has been done on design exceptions and their impacts on safety and operations. In addition, limited budgets and human resources have limited the extent to which state DOTs have monitored the design exception locations past their open dates. That being said, there has been a move recently towards studying the effects of design exceptions on safety, as well as on the efficiency of the existing controlling criteria.

3.1 National Cooperative Highway Research Program: Evaluation of the 13 Controlling Criteria for Geometric Design

The National Cooperative Highway Research Program (NCHRP) is currently studying how the 13 controlling criteria established by FHWA in 1985 have affected safety and operations as part of a reevaluation of these criteria. As the design for future projects must be customized to fit particular situations more and more, the appropriateness of the current controlling criteria is being evaluated based on new knowledge that has been gained since their implementation. Whether or not the existing criteria are still necessary or new criteria need to be developed will be determined by the end of the project. Additional research is also being done on whether or not the controlling criteria should be stratified according to roadway type, or whether or not they suffice for all roadway types. This NCHRP project is scheduled to be finished in year 2013 and should provide recommendations for further actions [7].

3.2 Washington State Department of Transportation: In-Service Evaluation of Major Urban Arterials with Landscaped Medians – Phase II

One example of how new criteria have developed in the field was provided by the Washington State Department of Transportation (WSDOT) in 2004, when an in-service evaluation was done on major urban arterials with landscaped medians [8]. While attempting to redevelop some of the arterials, such as State Route (SR) 99 north and south of Seattle, developers considered increasing road safety, creating aesthetically pleasing environments, and enhancing the attractiveness of the region and communities. In the process, the criteria that WSDOT set for clear zone width on streets was not always achieved due to trees placed in curbed medians. In order to support aesthetic designs, WSDOT chose to implement an in-service evaluation of landscaped medians to study and determine that the safety impacts were insignificant. Though clear zone width is not one of the current 13 controlling criteria implemented by FHWA, future studies done on their impacts in relation to safety could pave the way for its implementation.

3.3 Kentucky Transportation Center: Safety Implications from Design Exceptions

The Kentucky Transportation Center conducted a study by observing crash data evaluating the negative safety implications that occur from design exceptions. During the eight year period from 1993 to 2000, there were 319 design exceptions filed for. After narrowing down project sites, 65 sampled project sites were analyzed based on the availability of crash data. It was concluded that for all but six of the sampled sites that implemented design specifications other than those typically used did not negatively affect the level of safety of the project [9]. When more data is available, further research was recommended on (1) safety consequences for specific crash types, (2) analyzing the

severity of crashes, and (3) the comparison of relatively similar roadways constructed with and without design exceptions [9].

3.4 Indiana Department of Transportation: Safety Effects of Design Exceptions

The Indiana Department of Transportation (INDOT) stratifies their design exceptions into three levels of highway design criteria by how severe their effect on safety and serviceability is. Level One includes 14 design criteria that are believed by INDOT to have the most effect on highway safety and serviceability: design speed, lane widths, shoulder widths, bridge width, bridge structural capacity, horizontal curvature, superelevation transition lengths, stopping-sight distance on horizontal and vertical curves, maximum grade, superelevation rate, minimum vertical clearance, accessibility for the handicapped, and bridge rail safety [10]. In order to observe the safety impacts of design exceptions, INDOT performed a statistical analysis on crash severity and frequency on roadway segments that had both received and not received design exceptions that fell into the Level One category.

INDOT analyzed 36 Level One design exceptions that they had granted in between 1998 and 2003, as well as 71 control sites containing no design exceptions. The control sites were chosen according to their location and similarities relative to the 36 design exception project sites. By observing accidents that occurred during a five year period from January 1, 2003 to December 31, 2007 at the project sites, the impact that design exceptions, if any, had on crash frequency and severity could be determined. Using a negative binomial regression and multinomial logit model, INDOT concluded that the design exceptions did not have a “statistically significant adverse effect on the frequency or severity of accidents [10].” It is recognized that researching the extent to

which different types of design exceptions affect safety is limited by the amount of data, but should be considered in the future.

3.5 Utah Department of Transportation: Safety Impacts of Design Exceptions in Utah

Similar to the methodology used by INDOT, the Utah Department of Transportation (UDOT) also quantified crash frequency and severity on road segments where design exceptions had been approved and compared them to relatively similar road segments without exceptions in order to compare safety impacts. Between 2001 and 2006, there were a total of 63 projects that were built with design exceptions approved by UDOT, a majority of which were on road segments. Bridges, intersections, and interchanges that had been built with design exceptions were left out of the analysis because there were not enough of them represented in the sample. As a result, a total of 48 road segment projects were studied that averaged 1.77 design exceptions per road segment with a maximum of five design exceptions and minimum of one design exception [11]. Figure 4 from UDOT’s final report shows the design exception frequencies of their study.

Criteria	Count	Criteria	Count
Design Speed	3	Cross Slope	6
Lane Width	7	Stopping Sight Distance	7
Shoulder Width	24	Structural Capacity	0
Superelevation	7	Bridge Width	0
Horizontal Alignment	8	Vertical Clearance	2
Vertical Alignment	9	Horizontal Clearance	7
Grade	6	Total Exceptions	86

Figure 4. Distribution of the Sample Set of Design Exceptions Used in the Utah Department of Transportation Study on the Safety Impacts of Design Exceptions

For each project site chosen in the study, a minimum of at least two control locations with relatively similar geometric designs were chosen for comparison. In order

to evaluate the adequacy of the comparison sites, propensity scores were generated to eliminate bias from the selection process. This resulted in the selection of 132 control segments that were used in the modeling processes for crash severity and frequency. In addition, UDOT provided crash data from the years 2006 to 2008 to analyze the safety impacts of the design exceptions. For crash frequency analysis, a negative binomial regression model was used, which takes into account highway geometric design variables that are left out by traditionally used Poisson regression analyses [11]. Crash severity was analyzed using three methods in order to prevent bias and over- or under-estimating safety impacts: (1) computing severity distributions at locations with or without design exceptions, (2) producing separate negative binomial regression models by crash severity levels, and (3) using a multinomial logit model. The first two methods are explained in the *Highway Safety Manual* [12] while the multinomial logit model is a discrete choice model that is widely used in the field. It was concluded that a significant difference in the distribution of crashes along the segments constructed from 2001 to 2006 with design exceptions and those without design exceptions was not found.

CHAPTER 4

METHODOLOGY

4.1 Raw Design Exceptions Data

A comprehensive list of 467 design exceptions and 714 design variances from years 1995 – 2011 was used in this study. This list was used to evaluate design exceptions based on exception type and cross-referenced with other sources to check for accuracy. Figure 5 below shows the relevant fields used in this list and what they represent. A quality control and quality assurance (QA/QC) was performed to make sure there were no duplicates represented in the data. The focus of this study is on design exceptions, so the 714 design variances were not included. A full list with detailed information of these raw design exceptions can be found in Appendix B.

Field	Description
PROJ_CNTY_PROJ_EXT_PROJ_ID	GDOT Project ID
DS	GDOT Project Title
ROUTE_COUNTY	County of design exception location
EXCEPTION_TYP E_CD	Code (1 – 13) indicating the GDOT design exception type: <ol style="list-style-type: none"> 1. Design Speed 2. Lane Width 3. Shoulder Width 4. Bridge Width 5. Structural Capacity 6. Horizontal Clearance / Lateral Offset 7. Vertical Clearance 8. Horizontal Alignment / Intersection Skew 9. Vertical Alignment 10. Cross Slope 11. Grade 12. Superelevation 13. Stopping Sight Distance Design Variance is indicated by number 30.
APPROVED_DT	Date of design exception approval
COMNT	Detailed comments from GDOT on design exception
RC_LINK	A combination of {County Code, Route Type, and Route Number} (SR=1, CR=2, CS=3, PR=8) Ex: 1212000400 (121 2 000400) County Code = 121 (Fulton) Route Type = 2 (CR) Route Number = 000400 (4) [16]
MPOINT_ROUTE	GDOT-assigned route number
MPOINT_BEG	Beginning mile post of design exception location
MPOINT_END	Ending mile post of design exception location

Figure 5. Georgia Department of Transportation-Assigned Fields in Raw Design Exception Data Used in This Study (Sim, 2012)

The beginning and ending mile posts of the design exception locations were not provided for all of the projects. Since the exact location of where design exceptions are

located is an indispensable factor in the accuracy of this study, those projects not containing values were not analyzed. The mileposts that were provided were double-checked for accuracy using the Critical Analysis Reporting Environment (CARE) software developed by the University of Alabama [13]. Mileposts can be used in this software to generate a map visualizing the extents defined by the mileposts. The map provided by CARE was compared to the design plan documents to make sure the mileposts reflected the correct location. For example, project 122440- was a widening project located in Habersham County on SR 17. This project contained a vertical alignment design exception from GDOT-defined mileposts 9.02 – 10.02. Figure 6 below shows a screenshot of the CARE output once the mileposts are defined, and the map can be viewed in the top right.

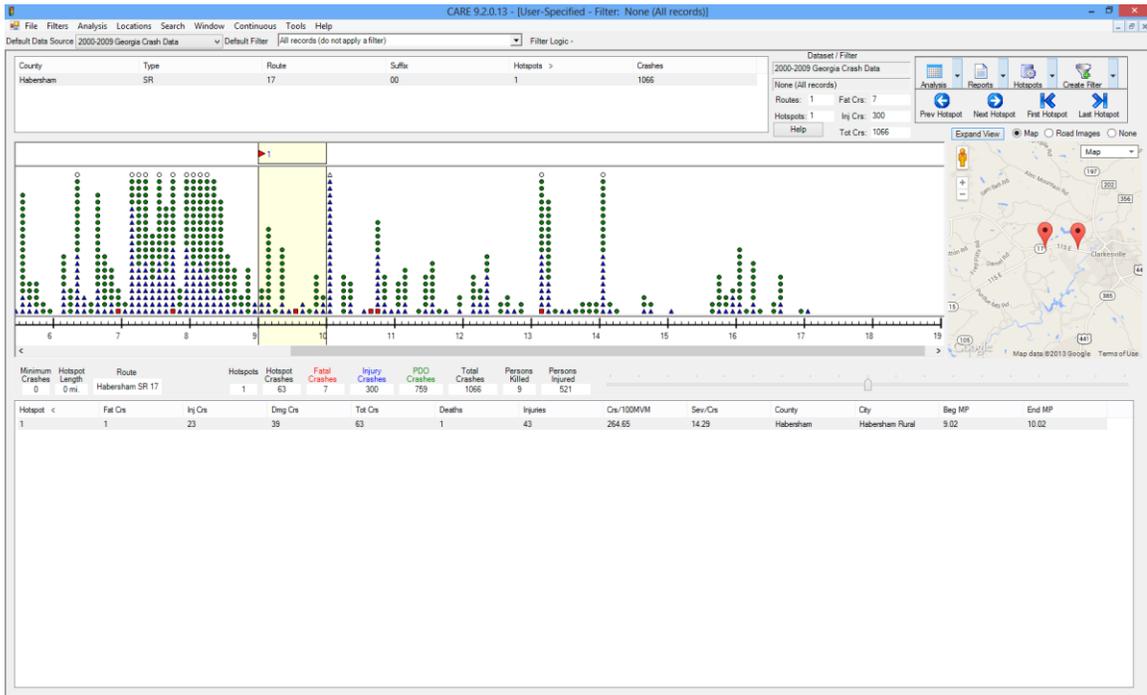


Figure 6. Screenshot of CARE Output After Defining County, Route ID, and Milepost Values for Project 122440- on State Route 17 in Habersham County, Georgia.

CARE provides an option to expand the provided map from Google Maps. When the option to expand the map is selected, an internet browser opens up with an interactive map. Figure 7 below shows a screenshot of the expanded map for this project with red markers where the mileposts begin and end.

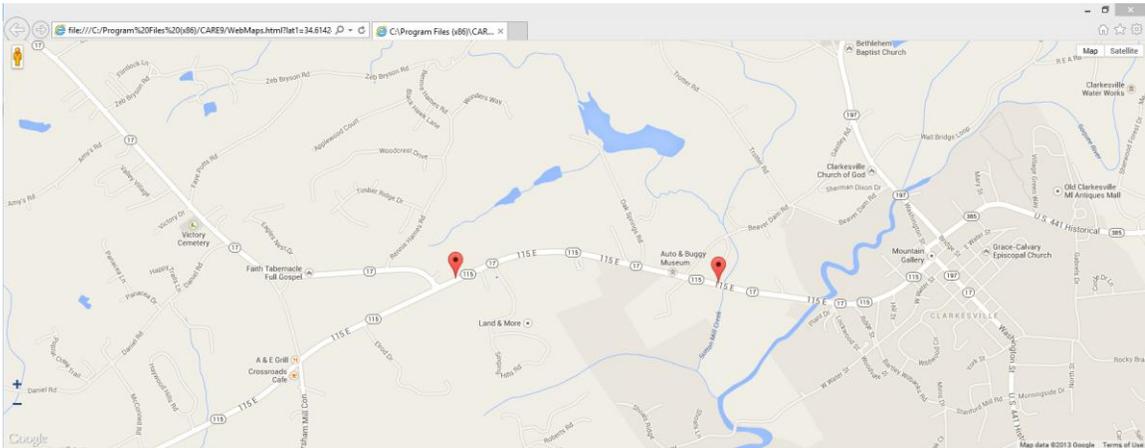


Figure 7. Screenshot of Internet Browser when “Expand Map” is Selected in the Critical Analysis Reporting Environment Output with Milepost Markers Shown

Using this map, the mileposts can be compared to the design plan documents in order to double check whether or not crashes are being obtained from the correct location. The following figure shows a drawing of the project adapted from the cover sheet in the design plan documents. It can be seen that these two locations are reflective of one another. Furthermore, coordinates are also provided if an additional step is needed to be taken in order to verify the relative location of mileposts.

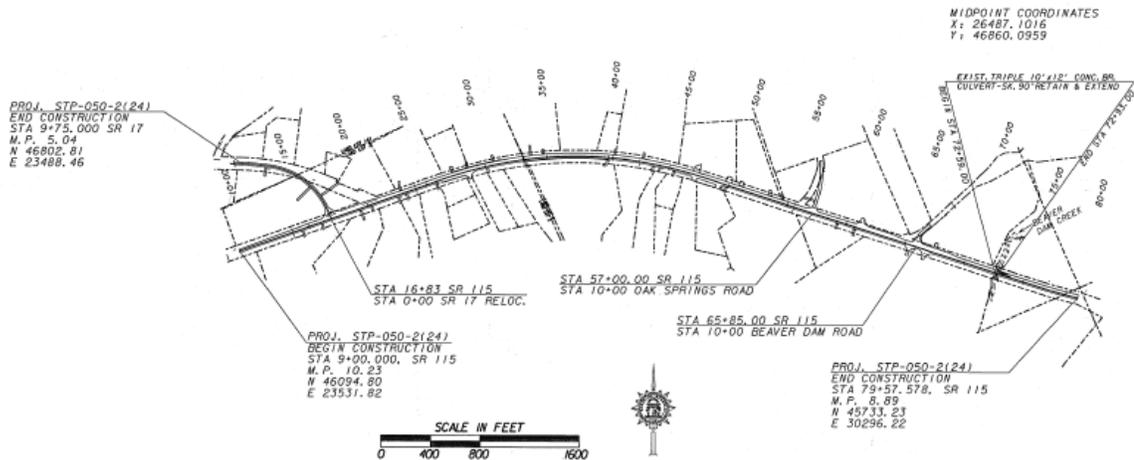


Figure 8. Project Drawing Adapted from GDOT-Project 122440- Cover Sheet of the Design Plan Documents Used to Verify Milepost Locations in Critical Analysis Reporting Environment Software

4.2 Design Plan Documents and Construction Reports

Transportation Project Information (TransPi) is a database maintained by GDOT to look up project documents and information [14]. Projects can be searched for through multiple parameters such as project type and project status. This database was used to obtain design plan documents and construction reports for those projects containing design exceptions. The design plan documents provided information such as project mileposts, AADT, road classification, etc., and helped to visualize the location of design exceptions on the entirety of a project. Construction reports were used to gather project let dates and to verify construction end dates with those provided by GDOT. These dates were needed in order to perform the three year before and after study. Figure 9 below shows a screenshot of the TransPi Interface.

Project Search (TransPI)

Please use the search options listed below to customize your search for information on transportation projects in Georgia.



The results of your search will display in a table below the form. Click on the appropriate project to view more information.

Search			
Go! Reset Close			
County	Equals	-Select One-	
Keyword	Contains		
Project ID	Contains		
Congressional District	Equals	-Select One-	
State Senate Districts	Equals	-Select One-	
State House Districts	Equals	-Select One-	
Project Status	Equals	-Select One-	
Project Accounting Number	Contains		
ROW Accounting Number	Contains		
Project Type	Equals	-Select One-	
Work Type	Equals	-Select One-	
Route	Contains		
Beginning Milepoint	Contains		
Ending Milepoint	Contains		
Go! Reset Close			
Project ID	Project Accounting No.	Project Title	Counties
Please enter the search criteria and click the GO! button.			

Figure 9. Screenshot of Transportation Project Information (TransPi) Interface

The fields used for this research were limited to county, project ID, project status, work type, and route. All other fields were left in their default state. Since there is no option to search by district, counties were individually searched one by one in order to gather district-wide data. The only project status value used in the search filter was “Complete”. Since this study is a three year before-after safety study, only projects where

construction has been completed were considered. Work type and route values varied depending upon the location of the projects containing design exceptions.

4.3 Construction Dates

A list of all federally and state funded projects completed between 1992 and 2012 was used to gather construction end dates that would be used as a limitation in the safety analysis. Table 3 shows the columns provided in this list and what they represent. GDOT verified that the “Time Charges Stop Date” referred to the day construction ended.

Table 3. Description of Fields in List of Construction Dates for All Federally and State Funded Projects in the State of Georgia

Field	Description
Contract Id	GDOT-Assigned Contract number
Federal/State Project No	FHWA-Assigned Project number GDOT-Assigned Project number
GDOT PI NO	GDOT-Assigned Project Identification number
Project Description 1	Brief description of the project
Construction Begin Date	Construction start date
Time Charges Stop Date	Construction end date

In previous analyses of the raw design exception data for the state of Georgia, specific construction dates were unavailable. Approval dates were solely used in a before and after crash data analysis [15]. By using actual construction start and end dates when gathering crash data, effects of the construction of the design exception can be more accurately observed. In addition, those crashes that occur during construction can be filtered out of the study to limit the number of crashes occurring due to reasons other than the design exception. For the before-after study in this document, construction end dates were used from this list. Construction end dates could also be found and verified in both

the design plan documents and construction reports provided on TransPi. However, the construction start dates provided in this list were not used because they could not be verified by another source. Instead, let dates were used because they could be verified in both the preconstruction report and design plan documents found on TransPi. Therefore, crashes occurring three years before the project let date and three years after the construction end date were used in this study.

4.4 Design Variance and Design Exception Reports

A total of 134 reports were identified out of the 467 design exceptions approved from 1995 – 2011. All reports were only for projects from 2008 – 2012. Crash data was only available for years 2000 – 2009 and limited the before-after study. Thus, the projects from 2008 – 2012 were not included in the sample set analyzed in this study. Therefore, none of the design variance and design exception reports are referenced in this research.

4.5 Control Sites

The TransPi database was also used to select control sites without design exceptions based on different parameters to serve as comparisons to those projects containing design exceptions. Crash rates on projects with design exceptions would be compared to crash rates without design exceptions to analyze whether or not the presence of a design exception affected the occurrence of crashes. All control sites must have had a let date and construction end date between 2003 – 2006, an available construction report, available design plan documents, be the same work type as the project with the design exception, and either be located on the same route or in the same district to be used in this study.

Control sites were found on TransPi using the same query used to find the project containing the design exception. In other words, all search fields that result in the project with the design exception being shown as a result must be also the same for the control sites. For example, in order to find project 333202- in TransPi without searching directly by project ID number, the following search fields must have this value:

- Project Status: Complete
- Work Type: Bridges

In order to filter the results that are presented after entering those values into TransPi, a county value was also provided. For Project 333202-, the county value is Meriwether. Since Meriwether County is located in District 3, all other counties located in District 3 were selected one by one in TransPi in order to filter the results with a project status of “Complete” and a work type designated as “Bridges”.

4.5.1 Control Sites by Route ID and Work Type

In order to compare crash rates at design exception locations to locations without design exceptions, control sites were needed. Ideally, control sites should be at locations where road classification and characteristics are very similar in order to represent a road condition reflective of the route where design exceptions are located. By using TransPi, all similar work type projects were found on the same routes where projects with design exceptions were found. For example, if there was a bridge replacement project occurring with a design exception on Route 17, TransPi would be used to find all other bridge replacement projects occurring on Route 17 throughout the state. If the let date and construction end dates fell between 2003 – 2006, then they would serve as a control site designated by route and work type.

4.5.2 Control Sites by District and Work Type

As control sites by route ID were searched for, it became evident that there was not a sufficient amount of projects found on identical routes. Instead of finding control sites only by identical routes, control sites were then found by district. Since there is no field to specify district on TransPi, a GDOT district map shown in Figure 10 below was used to identify which counties were contained in which GDOT-specified district. Each individual county in each respective district was then selected in TransPi to gather district-wide data. For example, if a design exception was found on a bridge replacement projects in Habersham County, the district was identified from Figure 10 below. All other counties in that same district were searched for completed, bridge replacement projects regardless of route ID. If the let date and construction end dates fell between 2003 – 2006, then they would serve as a control site designated by district and work type.

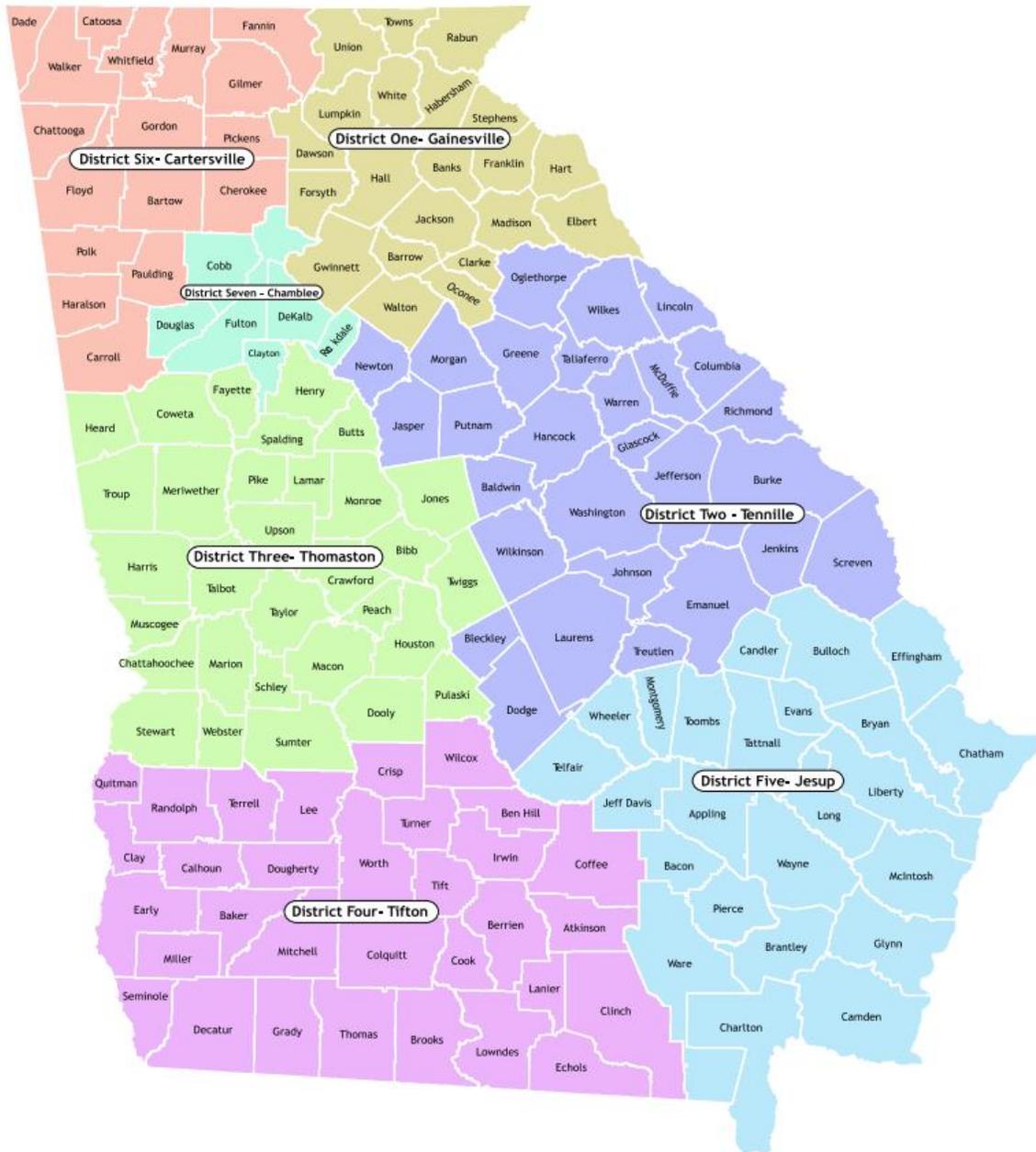


Figure 10. Map of GDOT-Defined Districts in the State of Georgia with District Office Locations Shown (Georgia Department of Transportation Website)

4.5.3 HSM Area Type, HSM Facility Type, and AADT

When gathering control sites, HSM area type, HSM facility type, and AADT values were also recorded. Often times, routes travel across county and district borders and the road characteristics change. For example, a rural two-lane portion of a route may

turn into an urban arterial as it traverses through another county. By gathering these values, it can be determined how reflective a control site is of a location where a design exception is located. It is especially important that AADT values are relatively close when comparing crash rates. While a control site might experience more or less crashes than a project with a design exception, if the AADT is significantly different, then there is little value to comparing those two sites. Future efforts will be made to compare whether or not HSM area and facility types affect the predicted number of crashes with respect to a design exception.

The HSM categorizes roadways with respect to their physical characteristics which include, but are not limited to, their area type and facility type. The raw list of design exceptions contains fields for HSM Area and Facility Type. Area type is defined by three different values in the HSM: rural, suburban, or urban, while there are many facility types that the HSM identifies [16]. These two values, along with AADT, can also be found on the cover sheet of the GDOT design plan documents under “functional classification” of the project. For example, in the same GDOT-project 122440-referenced above, the project had a functional classification as “rural major collector”. When the number of lanes is not specified, street view used in Google Maps® could be used to locate the area to verify the number of lanes. Table 4 below lists which area and facility types are discussed by the HSM. This study is only concerned with general facility types, but detailed facility types are listed for reference.

Area Type	Facility Type	Detailed Facility Type by Roadway or Intersection Type
Rural	Rural two-lane roads	Two-lane undivided segments
		Three-leg intersections with minor-road STOP control
		Four-leg intersections with minor-road STOP control
		Four-leg signalized intersections
	Rural multi-lane highways	Undivided segments
		Divided segments
		Three-leg intersections with minor-road STOP control
		Four-leg intersections with minor-road STOP control
		Four-leg signalized intersections
	Suburban Urban	Urban and suburban arterials
Three-lane segments with center TWLTL		
Four-lane undivided segments		
Four-lane divided segments		
Five-lane segments with center TWLTL		
Three-leg intersections with minor-road STOP control		
Three-leg signalized intersections		
Four-leg intersections with minor-road STOP control		
Four-leg signalized intersections		

Table 4. List of Area and Facility Types Adapted from the *Highway Safety Manual*, 2010

4.6 Crash Data Collection

In order to obtain before and after crash data for the design exception projects in Georgia, the Critical Analysis Reporting Environment (CARE) software was used. The University of Alabama's Center of Advanced Public Safety developed CARE for "problem identification and countermeasure development in traffic safety applications" [13]. Both the software and crash data for years 2000 – 2009 were downloaded from the center's website and used in this study. Data before 2000 and after 2009 were not available. In order to obtain crash data for any specific milepost location using CARE, the following variables must be known: county, route type, route ID, start milepost, and end milepost. Milepost locations are referred to as "hotspots" in CARE.

Though there is a field in the raw design exception data provided for county data, all of the values for every design exception were not provided. For those instances without values in field for county, the county information was gathered from their corresponding design plan documents. The route type was identified from the project title and could be one of the following values in CARE: Interstates, GA-400, State Routes, County Roads, City Streets, Public Roads, or Collector/Distributor. The route ID could be identified from the project title, in the design plan documents, or in the MPOINT_ROUTE field of the raw design exceptions data provided by GDOT. Start and end mileposts were found in the MP_BEG and MP_END fields of the raw design exception data respectively. Examples of how the MPOINT_ROUTE, MP_BEG, and MP_END fields look can be reviewed in Appendix B. These locations were checked using Google Maps® to ensure that mileposts generally reflected the location of design exceptions. The following figure is an adaptation of the cover sheet for Project 122440-

which shows where each of these values can be located. The beginning and end milepost data of each design exception were also double-checked to ensure that they fell within the limits of the entire project length beginning and end mileposts found on the design plan documents. For example, Project 122440- shown below starts at Milepost 8.89 and ends at Milepost 10.23. The vertical alignment design exception on this project is located from Milepost 9.02 to 10.02.



PROJECT STP-050-2(24)
HABERSHAM COUNTY

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

PLAN AND PROFILE OF PROPOSED WIDENING OF **SR 17** FROM 3 LANE AT BEAVER DAM CREEK TO SR 115

STATE	PROJECT NUMBER	SHEET TOTAL SHEETS
GA.	STP-050-2(24)	1 129

DESIGN DATA:
 TRAFFIC A. D. T. : 10,650 (2004)
 TRAFFIC A. D. T. : 20,300 (2024)
 TRAFFIC D. H. V. : 2390 (2024)
 DIRECTIONAL DIST. : 50%
 % TRUCKS : 4%
 24 HR. TRUCKS % : 6%
 SPEED DESIGN : 45 mph

FEDERAL AID PROJECT
STP-050-2(24)
HABERSHAM COUNTY
 FEDERAL ROUTE • NONE
 STATE ROUTE • 17/115
 P. I. NO. 122440

County

SUBMITTED BY : _____
 PARSONS BRINCKERHOFF QUAAE AND DOUGLAS, INC.
PB 3340 PEACHTREE RD, NE
 SUITE 2400, TOWER PLACE
 ATLANTA, GA 30326-1001
 PHONE: (404) 237-2115
 FAX: (404) 237-3015

MIDPOINT COORDINATES
 X: 26487.1016
 Y: 46860.0959

PROJ. STP-050-2(24)
 END CONSTRUCTION
 STA 9+75.000 SR 17
 M.P. 5.04
 N 46802.81
 E 23468.46

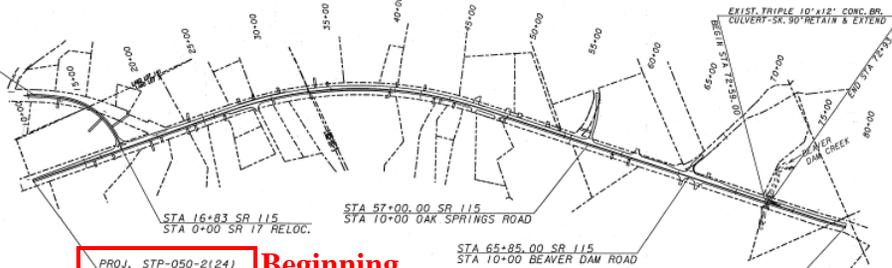
FUNCTIONAL CLASSIFICATION: RURAL MAJOR COLLECTOR
 PROJECT DESIGNATION: EXEMPT
 NOTE: THIS PROJECT IS PREPARED IN SYSTEMS ENGLISH UNITS.

THIS PROJECT IS CREATED USING ASSUMED HORIZONTAL COORDINATES AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1928.
 THE GRID FACTOR FOR THIS PROJECT IS 1.00000

THIS PROJECT IS LOCATED 100 PERCENT WITHIN CONGRESSIONAL DISTRICT NO. 9
 THIS PROJECT IS LOCATED 100 PERCENT WITHIN HABERSHAM COUNTY

NOTE :
 ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS, WRITINGS, DOCUMENTS, DRAWINGS, OR PHOTOGRAPHS USED, OR TO BE USED IN CONNECTION WITH THIS DOCUMENT, TO "STATE HIGHWAY DEPARTMENT OF GEORGIA", "STATE HIGHWAY DEPARTMENT", "GEORGIA STATE HIGHWAY DEPARTMENT", "HIGHWAY DEPARTMENT", OR "DEPARTMENT" WHEN THE CONTEXT THEREOF MEANS THE STATE HIGHWAY DEPARTMENT OF GEORGIA MEAN, AND SHALL BE DEEMED TO MEAN THE DEPARTMENT OF TRANSPORTATION.

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.



PROJ. STP-050-2(24)
Beginning Milepost
 END CONSTRUCTION
 STA 9+00.000, SR 115
 M.P. 10.23
 N 46094.80
 E 23531.82

PROJ. STP-050-2(24)
End Milepost
 END CONSTRUCTION
 STA 79+57.578, SR 115
 M.P. 8.89
 N 45733.23
 E 30296.22



LENGTH OF PROJECT	COUNTY NO. 137
NET LENGTH OF ROADWAY	MILES 1.330
NET LENGTH OF BRIDGES	0.006
NET LENGTH OF PROJECT	1.336
NET LENGTH OF EXCEPTIONS	0.000
GROSS LENGTH OF PROJECT	1.336

PROJECT STP-050-2(24)
HABERSHAM COUNTY

RECOMMENDED FOR SUBMISSION BY : _____
 DESIGN ENGINEER

SUBMITTED FOR APPROVAL BY : *Randy D. D...*

APPROVAL BY : _____

DATE 12/14/1998 LOCATION AND DESIGN APPROVAL

3-12-03 *Frank Dimick*
 DATE CHIEF ENGINEER

PLANS COMPLETED	REVISIONS
4-14-05	SHEETS 1,3,13,118,120

Figure 11. Cover Sheet for Project 122440- with Denoted Locations of Variables Needed for Critical Analysis Reporting Environment Analysis (TransPi)

In some cases, the design plan documents designate where the exception begins and ends and these values could be verified. Future efforts may include gathering those design exception reports that are not electronically available in order to verify the milepost data. Figure 12 below shows the interface of CARE software when entering these necessary values to find crash data between milepost locations.

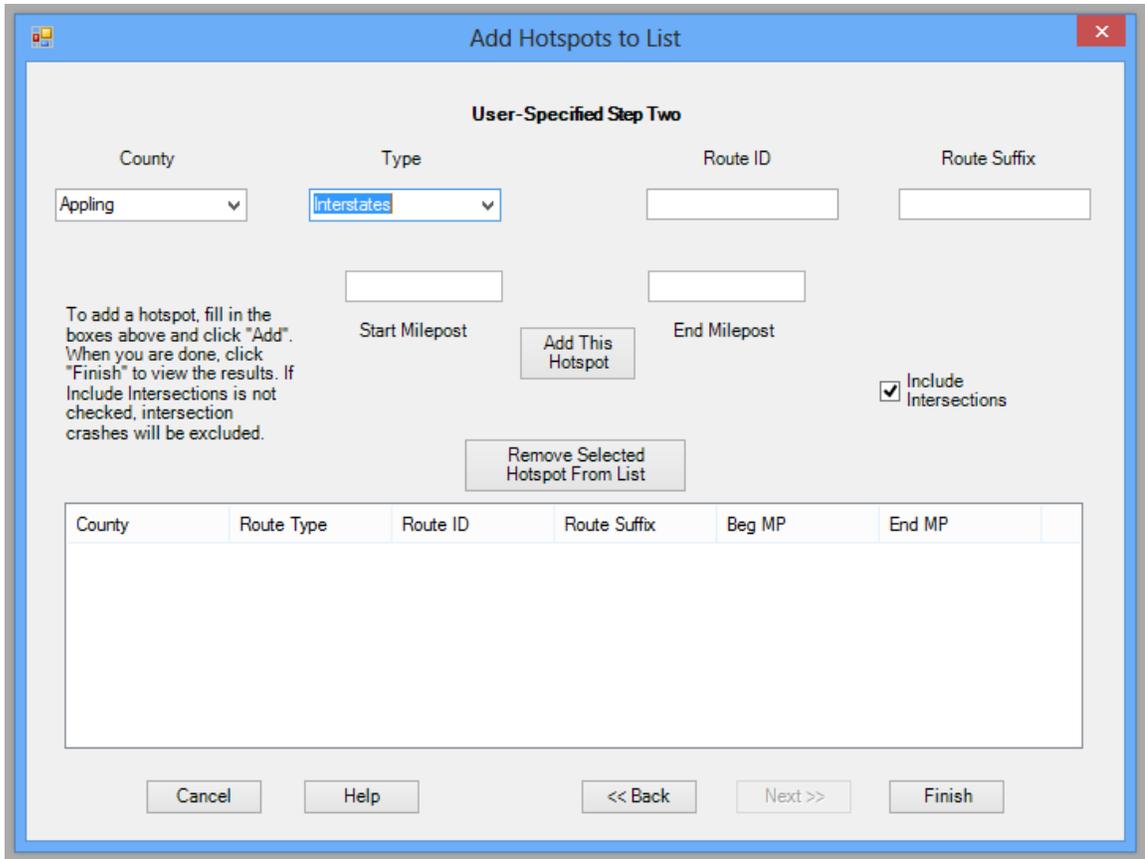


Figure 12. Screenshot of Critical Analysis Reporting Environment (CARE) Interface

Another important piece of information needed to collect crash data was the time in which the design exception was being constructed. Crashes occurring during construction were not considered as part of this study. Out of the 467 original design exceptions occurring from 1995 – 2012 in the state of Georgia, 199 of them were listed

with only approval dates and without let dates and construction end dates that could not be found in other sources. These 199 design exceptions were excluded from this study.

Again, crash data that is compatible with the CARE interface was only provided for years 2000 – 2009. Since this study requires three years of crash data before and after the let date and construction end date respectively, projects used in this study must have been started and completed between the years 2003 – 2006. Out of the 269 design exceptions with provided let dates and construction end dates, 43 of them occurred between 2003 – 2006.

The Highway Safety Manual (HSM) recommends that when performing a crash analysis, the years of construction should be ignored. For example, for a project occurring between 2004 – 2005, three years before should be considered as all crashes occurring between 2001 – 2003, and three years after would be considered as all crashes occurring between 2006 – 2009. Those crashes occurring in the calendar year of those construction years (2004 – 2005) should be disregarded to account for seasonal changes and driver adjustment [16]. The only exception to this standard in this study is for projects completed in 2006. Due to an unreliability in crash data after August 31, 2009, projects ending in 2006 would include construction year crashes in their study that occurred after the construction end date. The reason for this will be expanded upon in Section 5.2 of this report.

In addition to the availability of crash data, the specific location of the design exception was needed to make sure that the crashes being gathered were occurring where the design exception was located. In previous analyses of this data when design exception milepost data was unavailable, crashes on the entire roadway segment of a project were

collected [15]. Often times the design exception location is on a relatively small portion of the project's length, and if crashes are collected along the entire project, they may be incorporating crashes not necessarily relevant to the design exception. Therefore, only projects with GDOT-specified mileposts of design exception locations were used in this study. Out of the 43 design exceptions occurring between 2003 – 2006, only 21 of them had specified mileposts. Three of these 21 projects were considered maintenance projects and did not have electronically available design plan documents. As a result, a total of 18 design exceptions were considered in this study. An abridged list can be found below in Table 5. A more detailed list of these projects can be found in Appendix E.

Table 5. Sample Set of Design Exceptions Analyzed in this Report (Refer to Appendix E for a More Detailed Listing)

Project ID	Project Title	DE Type / Controlling Criteria
122440-	SR 17 FM 3-LANE @ BEAVERDAM CK TO SR 115	Vertical Alignment
232315-	SR 77 @ GOOSEPOND CREEK 14.5 MI NE OF LEXINGTON	Vertical Alignment
245370-	SR 22 @ LONG CREEK 3.5 MI S OF LEXINGTON	Vertical Alignment
245371-	SR 22 @ BIG CLOUDS CREEK 3.8 MI E OF SMITHSONIA	Vertical Alignment
333160-	SR 27 @ BLADEN CREEK 11 MI SW OF LUMPKIN	Vertical Alignment
333202-	SR 18/US 27 ALT. @ KENDALL CREEK 2 MI S OF GREENVILLE	Vertical Alignment
343365-	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER	Vertical Alignment
343365-	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER	Grade
422250-	SR 31/US 441 @ MILL CREEK	Cross Slope
422250-	SR 31/US 441 @ MILL CREEK	Bridge Width
431670-	SR 35/W THOMASVILLE BYP /US 319 FM SR 35BU N TO SR 38/US 84	Vertical Alignment
620399-	SR 52 @ CSX RR IN CHATSWORTH	Vertical Alignment
621580-	SR 120 FM W OF BUCHANAN BYP TO LAKE OLYMPIA	Horizontal Alignment
631580-	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY	Vertical Alignment
631580-	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY	Grade
642160-	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT	Horizontal Alignment
642160-	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT	Vertical Alignment
650460-	SR 101 OVER ETOWAH RIVER IN ROME	Vertical Alignment

Figure 13 below shows a visual representation of this process.

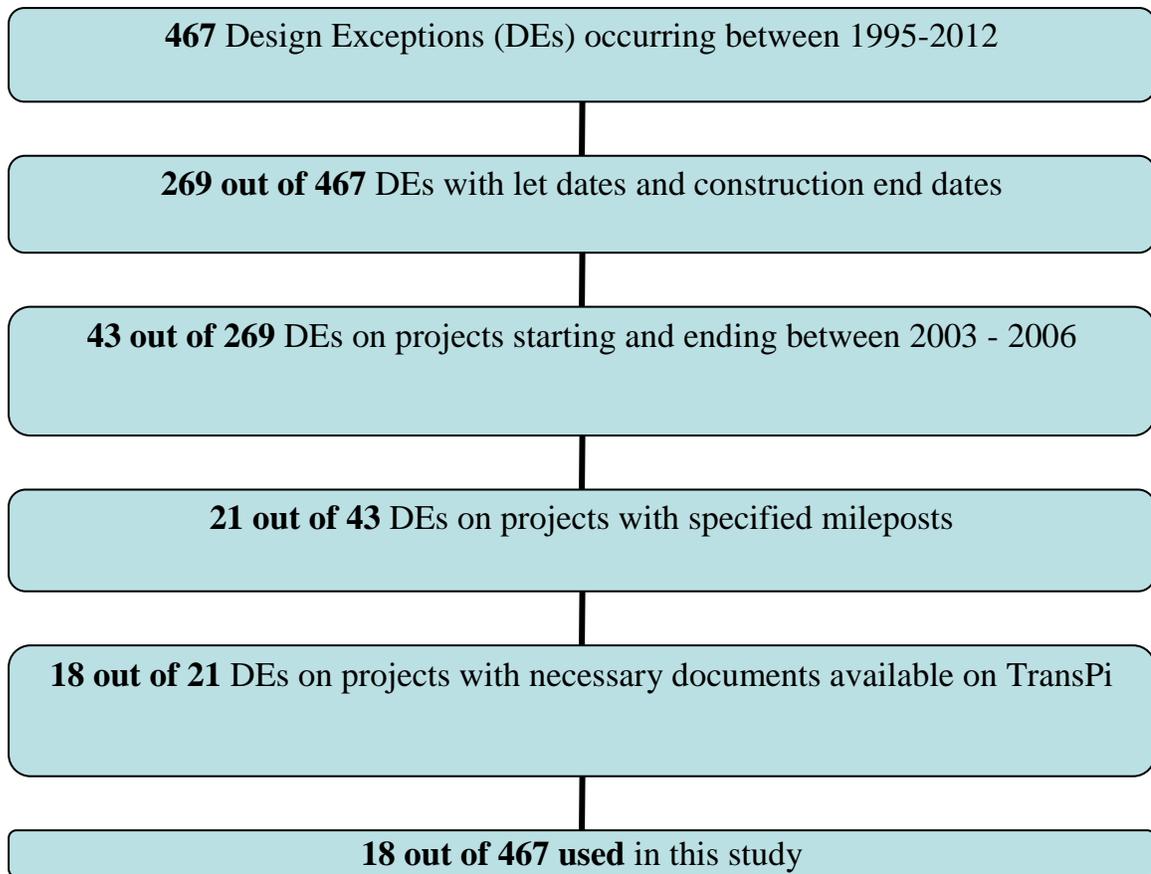


Figure 13. Flow Chart Showing the Selection Process for the Sample Set Used in This Study

For each of these 18 design exceptions, crash data was collected using CARE by entering in the mentioned necessary values: county, route type, route ID, start milepost, and end milepost. Crash data for each control site were also gathered using CARE software. Figure 14 below shows an example of how CARE presents the crash data.

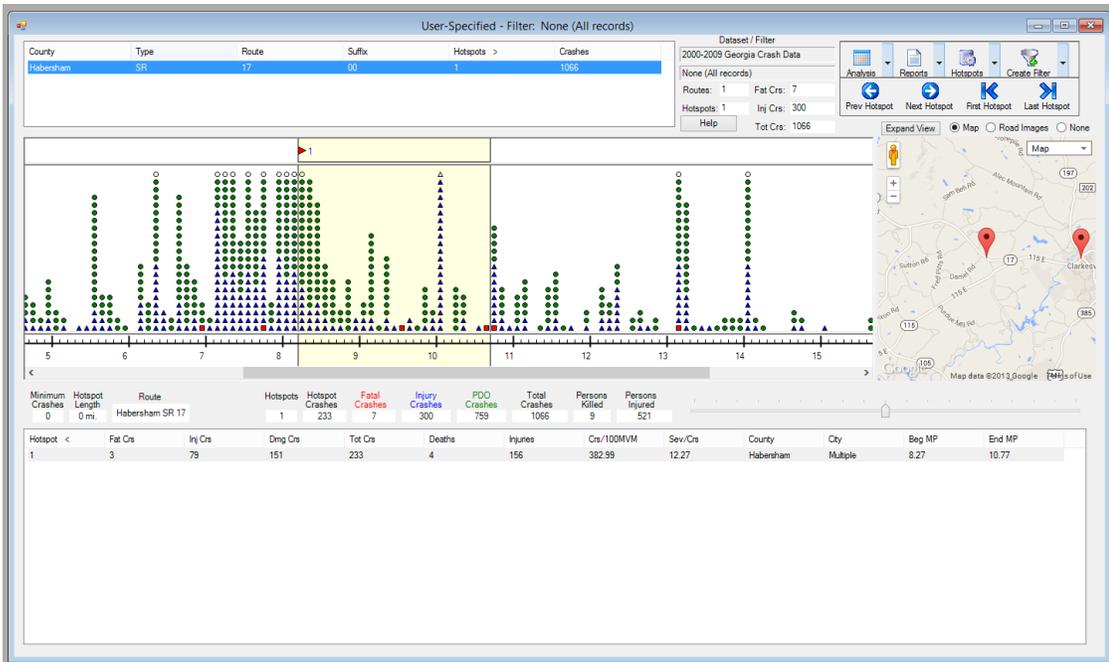


Figure 14. Screenshot of Sample Critical Analysis Reporting Environment (CARE) Output

CARE provides an option to export a Microsoft Excel® document that shows a more detailed listing of each crash. All crash data were exported to Microsoft Excel® for each respective design exception location and control site in order to analyze the data by frequency and crash severity. CARE represents crash severity by three distinct types: fatal, non-fatal injury, and property damage only (PDO) crashes. Figure 8 also shows how CARE uses Google Maps to show the relative location of mileposts on the specified roadways. As stated before, this map was compared to design plan documents to make sure that crashes were being collected from the correct locations.

4.7 Crash Data Analysis

After the crash data was collected for each design exception and control site, an analysis was done to determine how crash rates had been affected by the presence of a

design exception. First, all crash data provided by CARE from years 2000 – 2009 were examined to determine the quality of the data provided. The frequency of crashes by year for these sites was compared to the general trend of crash frequency in Georgia to examine the consistency of the data.

Based on the crash data available for 2000 – 2009, the total annual crash frequencies for three years before the let date and three years after the construction date were compared for each of the 18 design exception locations included in this study. In addition, the total annual crash frequencies during the same periods of time were compared for the 0 – 0.25 miles and 0.25 – 0.75 miles buffers away from these mileposts in both directions. For control sites without design exceptions, crash data for three years before the let date and three years after the construction end date were also compared.

CHAPTER 5

RESULTS

5.1 Raw Design Exceptions Data

An abridged list of 467 design exceptions approved in Georgia from 1995 – 2012 can be found in Appendix B. Table 6 and Figure 15 below show the distribution of these design exceptions based on design exception type.

Table 6. Distribution of All Approved Design Exceptions for the 13 Controlling Criteria from 1995 – 2012

Design Exception Type	Number of Design Exceptions
Design Speed	13
Lane Width	28
Shoulder Width	81
Bridge Width	120
Structural Capacity	24
Horizontal Clearance/Lateral Offset	4
Vertical Clearance	20
Horizontal Alignment / Intersection Skew	33
Vertical Alignment	40
Cross Slope	2
Grade	88
Superelevation	14
Stopping Sight Distance	0
Total	467

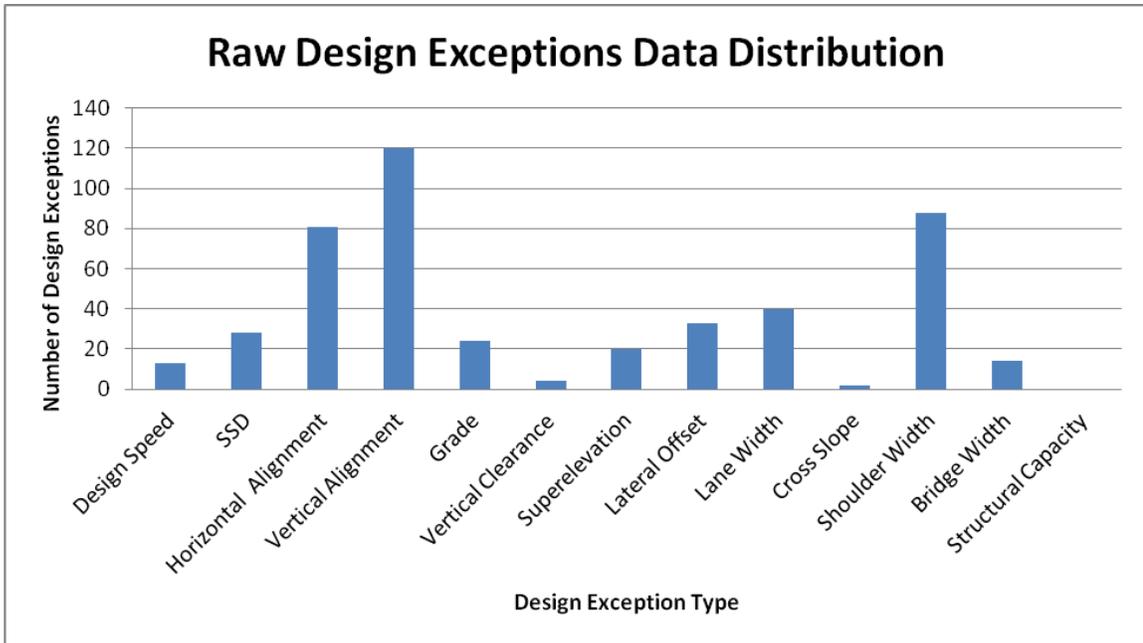


Figure 15. Distribution of All Approved Design Exceptions for the 13 Controlling Criteria from 1995 – 2012

It can be seen that the horizontal alignment, vertical alignment, and shoulder width are the most abundant types of design exceptions represented from 1995 – 2012. Structural capacity has zero design exceptions represented in this data set as Georgia does not allow design exceptions of this type. Cross slope and vertical clearance are the next least common design exception types, with two and four design exceptions during 1995 – 2012 respectively.

5.2 Sample Design Exceptions Data

Table 7 and Figure 16 below show the distribution of the sample set with respect to the raw design exceptions dataset.

Table 7. Distribution of the Sample Set of Design Exceptions Used in this Study

Design Exception Type	Number of Design Exceptions
Design Speed	0
Lane Width	0
Shoulder Width	0
Bridge Width	1
Structural Capacity	0
Horizontal Clearance/Lateral Offset	0
Vertical Clearance	0
Horizontal Alignment / Intersection Skew	2
Vertical Alignment	12
Cross Slope	1
Grade	2
Superelevation	0
Stopping Sight Distance	0
Total	18

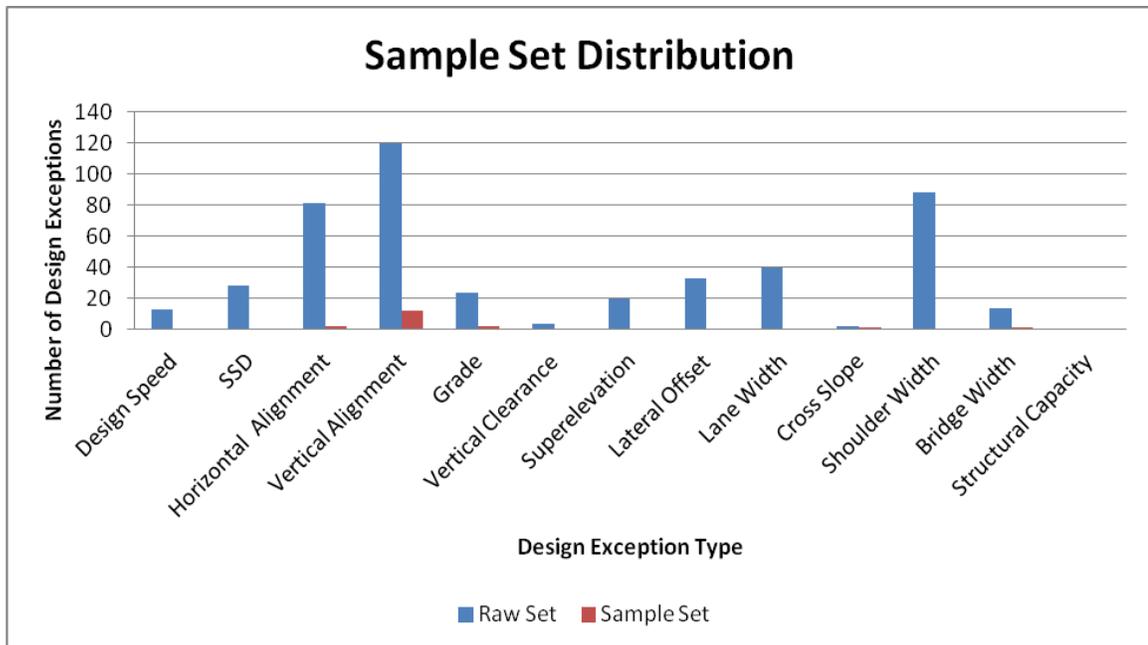


Figure 16. Distribution of the Sample Set of Design Exceptions Used in this Study with Respect to the Distribution of the Raw Design Exceptions Data

Like the raw design exceptions data set, horizontal and vertical alignment design exception types are of the most common in the data set. However, shoulder width is not represented in the sample set. Since shoulder width design exceptions make up such a large portion of the raw dataset, reasons why it was not included in the sample set were explored.

Out of the total 467 design exceptions from 1995 – 2012, 86 were shoulder width exceptions. Of those 86 exceptions, 40 of them were provided without let dates or construction end dates and could not be included in this study. Of the remaining 46 shoulder width design exceptions, all but 2 of them were started and completed outside of the years 2003 – 2006. Since these remaining two shoulder width design exceptions did not have GDOT-specified mileposts, they could not be considered in this study. Efforts will be made to include these two design exceptions in future analyses.

Before gathering crash data for each of the projects with design exceptions, a QA/QC analysis was performed to check the reliability of the crash data provided by CARE. An initial analysis was completed by Popa Prayatska, a graduate student at Georgia Tech, who found that crash data received directly by GDOT in Microsoft Access® format showed a downward trend in crashes from 2003 – 2009. It was assumed that CARE had used identical data when creating the database that is compatible with their software. Table 8 and Figure 17 below show the crash frequency values for years 2000 – 2009 contained in the dataset downloaded from CAPS.

Table 8. Sum of all Annual Crashes and the Difference in Crashes from the Previous Year From 2000 – 2009 Using Data Supplied by Critical Analysis Reporting Environment (CARE)

Year	Crash Frequency	Difference in Crash Frequency from Previous Year	Difference in Crash Frequency from Previous Year (%)
2000	310122	0	0.00%
2001	317851	7729	2.43%
2002	327710	9859	3.01%
2003	332321	4611	1.39%
2004	342932	10611	3.09%
2005	347652	4720	1.36%
2006	342062	-5590	-1.63%
2007	336063	-5999	-1.79%
2008	306386	-29677	-9.69%
2009	269531	-36855	-13.67%

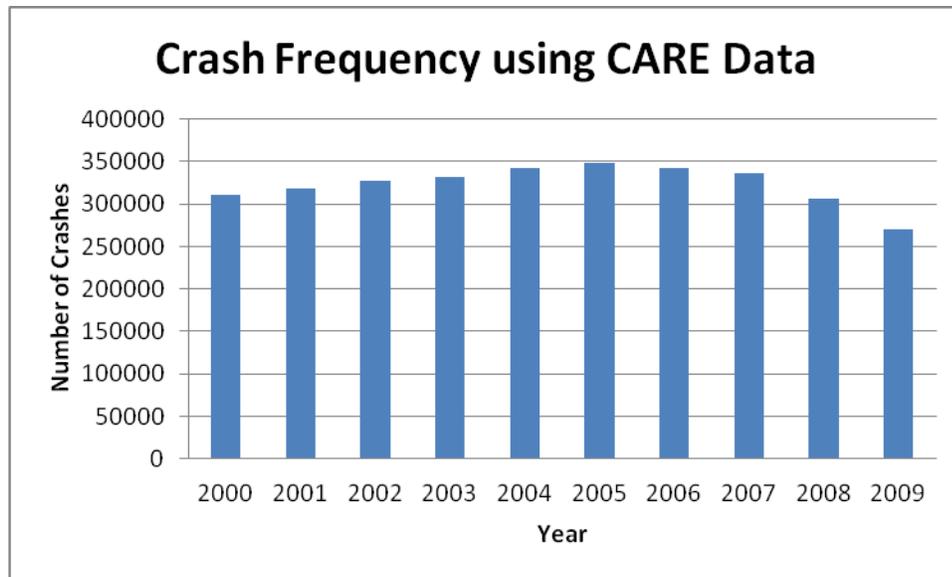


Figure 17. Sum of All Annual Crashes from Years 2000 – 2009 Using Critical Analysis Reporting Environment Data

Much like Popa Pratyaksa’s findings, it can be seen that there is a significant drop in the amount of crashes in years 2008 and 2009 relative to the previous years. In order to get a closer look at the crash data for years 2008 and 2009, crash data was analyzed and

compared by month for each year. Figure 18 below shows crash frequency by month from years 2000 – 2009.

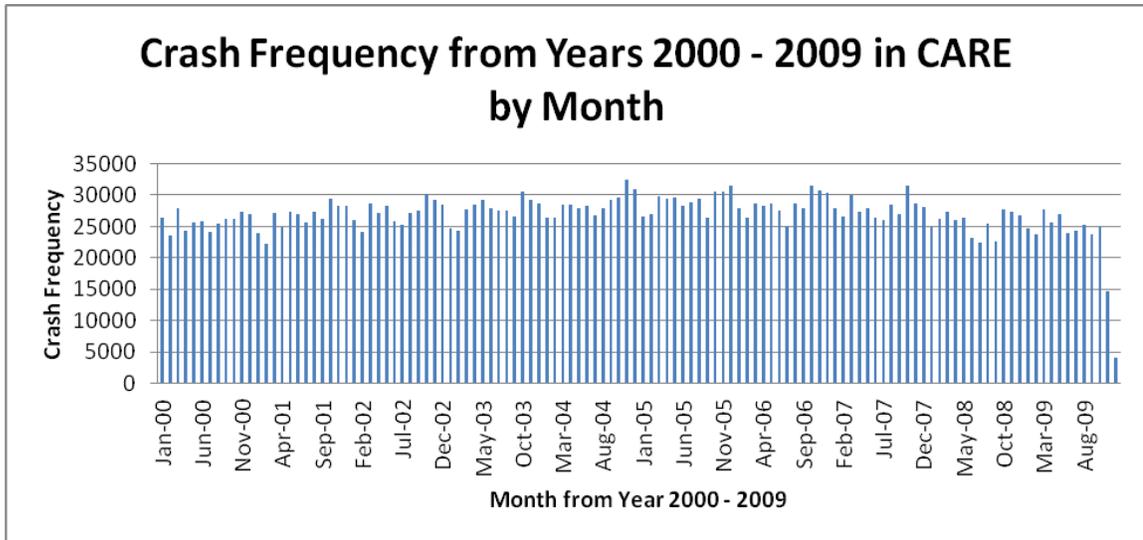


Figure 18. Sum of All Monthly Crashes from Years 2000 – 2009 Using Critical Analysis Reporting Environment Data

Note that there is a very significant drop in the frequency of crashes during the end of 2009. After speaking with GDOT, this was determined to be the result of the organization changing who was responsible for handling crash data. As a result, the information that was sent to CARE was assumed to be either incomplete or in a format that could not be evaluated the same way as the previous years. Therefore, crash data after August 31, 2009 was determined to be unreliable in this study. All of the projects in the sample set were completed by August 31, 2009, and the crashes occurred after this date were not gathered. Future efforts are being made to gather more updated, complete data.

5.2.1 General Trends of Crash Data for the Sample Set

Crash data was gathered for each of the 18 design exceptions for three locations: (1) at the exact location of the design exception, (2) at a buffer of 0 - 0.25 upstream and downstream of the design exception location, and (3) a buffer of 0.25 – 0.50 upstream and downstream the design exception location. A total of 0.75 miles in each direction were observed before and after the exact design exception location. Table 9 below shows a summary of crash frequency values for each of these distances. Each project with a design exception has been given a Project Reference Letter to simplify the discussion in this section. It should be noted that lowercase reference numbers refer to projects with design exceptions, while uppercase reference letters will be given to control sites without design exceptions. Values that increased after construction are designated in bold. The following Figures 19, 20, and 21 illustrate the data in Table 9.

Table 9. Summary of All Crashes Occuring Three Years Before Let Date and Three Years After the End of Construction for All Projects in the Sample Set of Design Exceptions Used in this Study

Project Reference Letter	Project ID	Exact Location		0.25 Miles		0.25 – 0.75 Miles	
		Before	After	Before	After	Before	After
a	122440-	32	18	6	28	28	23
b	232315-	0	0	1	1	1	3
c	245370-	0	0	1	0	1	1
d	245371-	1	0	1	1	1	0
e	333160-	0	0	0	0	0	0
f	333202-	1	0	3	0	2	2
g	343365-	0	0	0	0	0	1
g	343365-	0	0	0	0	0	1
h	422250-	3	1	0	0	1	1
h	422250-	3	1	0	0	1	1
i	431670-	40	93	32	31	8	8
j	620399-	0	0	0	0	0	0
k	621580-	0	0	0	0	3	3
l	631580-	2	0	5	1	5	4
l	631580-	2	0	5	1	5	4
m	642160-	0	0	2	2	1	1
m	642160-	0	0	0	0	1	1
n	650460-	170	213	68	93	334	652

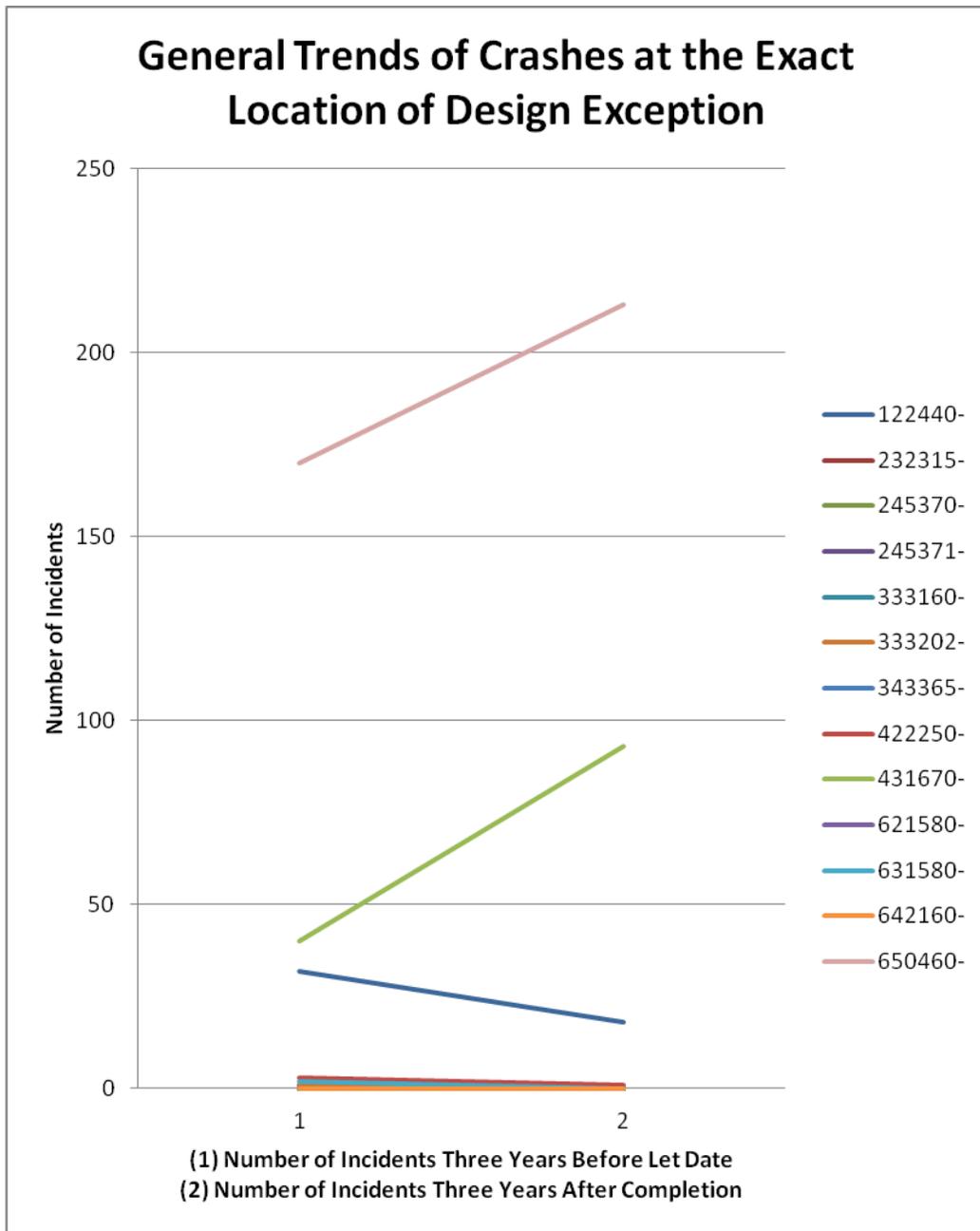


Figure 19. General Before-After Trends of Crashes at the Exact Mileposted Location of Design Exceptions for Sample Set of Design Exceptions Used in this Study

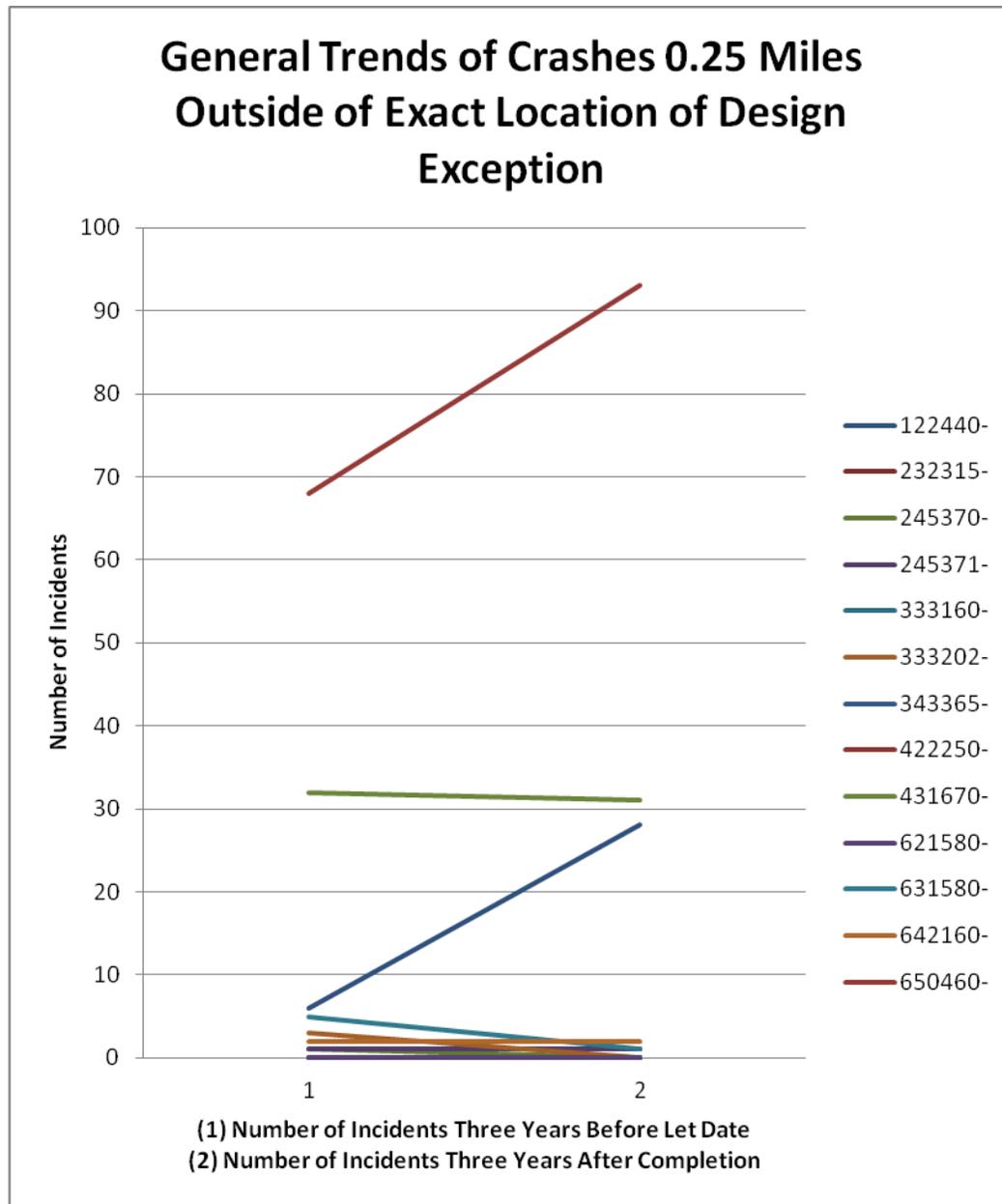


Figure 20. General Before-After Trends of Crashes 0 - 0.25 Miles Outside of the Exact Mileposted Location of Design Exceptions in Both Directions for Sample Set of Design Exceptions Used in this Study

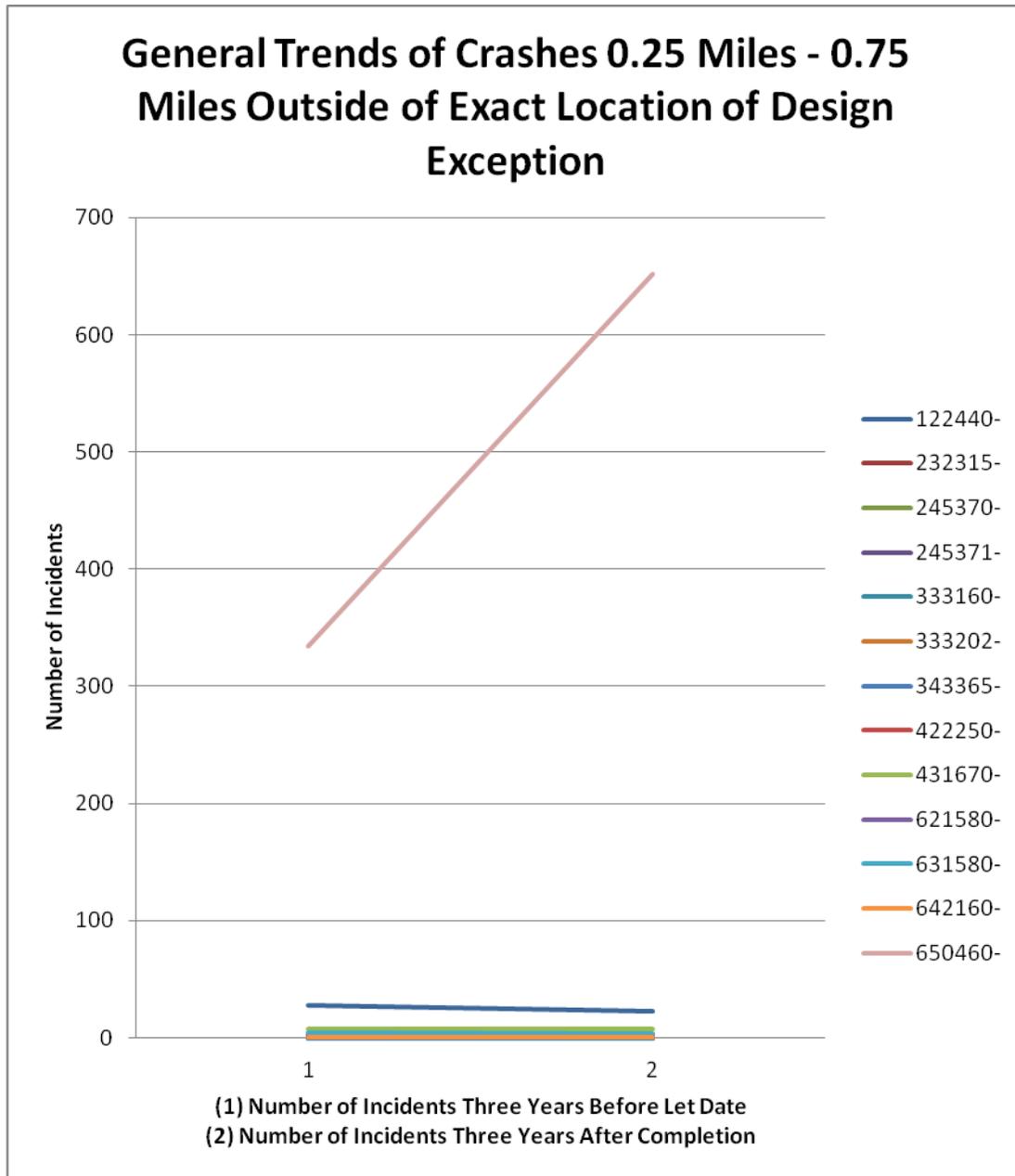


Figure 21. General Before-After Trends of Crashes 0.25 - 0.75 Miles Outside of the Exact Mileposted Location of Design Exceptions in Both Directions for Sample Set of Design Exceptions Used in this Study

Based on the general trends of crash data collected shown in Figure 19, only two of the 18 design exceptions were on locations where the crashes increased after construction for projects **i** and **n**. The design exception types of these two projects are both vertical alignments, which is the largest design exception type represented by both

the raw data and sample data. In addition, both of these projects were bridge replacement projects where the number of lanes on the bridges increased. While additional research must be done to determine the actual causes of crashes before and after construction of the design exception, observation of the AADT before and after construction were helpful. It was found that the AADT of these two locations were significantly increased. Due to the increase in AADT, it is likely the increased amount of crashes is attributed to the increase in amount of traffic at these locations.

For 0.25 miles upstream and downstream of the design exception location shown in Figure 20, projects **a** and **n** experience increases in crashes at their locations. Like stated before, project **n** could likely be experiencing higher crashes due to an increased AADT. For 0.50 miles upstream and downstream of the 0.25 mile buffer zone shown in Figure 21, projects **b** and **n**, similar to both at the design exception location and within the 0.25 mile buffer zone, experienced an increase in crashes. The increase in crashes for projects **a** and **b** are too insignificant to draw any conclusions.

With respect to the other projects, there is little to no crashes occurring at each location. There are no significant changes in the number of crashes, nor are there enough crashes to make any reasonable conclusions about the effects of design exceptions on general crash trends in this sample set. It is likely that the design exceptions in the sample set have no effect on the rate of crashes at these locations.

5.3 Control Site Data

By gathering control sites at locations where design exceptions did not exist, the possible relationship between the existence of a design exception on a project and its effects on crash data could be observed. Trying to find control sites with similar road

characteristics as those projects where design exceptions are located is key. By using different queries in TransPi, control sites were gathered by setting the county, work type, route, and project status to certain values.

5.3.1 Control Sites by Route and Work Type

Out of the 18 design exceptions in the sample set, there was only a single project that fit the discussed criteria for a project with a design exception. On State Route (SR) 18, there was a single bridge replacement project (**PI #343400**) without a design exception that had a let date and construction end date that fell between 2003 – 2006. Project **f** on the sample set list is also a bridge replacement project on SR 18 occurring within this time frame. The estimated AADT for both projects found on the design plan documents and verified with STARS is roughly 5000 [17]. Since they are projects located on the same route with relatively similar AADTs, they are likely good comparisons for one another. For the control site, there were zero crashes before and after construction. For project **f** which contains a design exception, there are also no increases in crashes after construction is completed. A more detailed description of this control site can be found in the Appendix F.

Although more control sites are needed to observe a better comparison, the crash data frequencies for this control site are still discussed due to the lack of control sites by identical route type and work type. It is also important to note that the safety data availability for a small window of ten years places a limit on the data that can be gathered. Bridge replacements are often done in periods much longer than ten years, so the likelihood of finding a bridge replacement project on the same route is lowered. It would

be helpful to repeat searching for control sites by route type and work type when additional crash data becomes available.

5.3.2 Control Sites by District and Work Type

In addition to searching for control sites by identical route and work type, TransPi was also used to find control sites by GDOT-specified district and work type. For example, if a bridge replacement project with a design exception was found in District 1, then bridge replacement projects without design exceptions all across District 1 were used as comparisons. Since there is no option to search for district-wide data on TransPi, the map found in Figure 10 shown above was used to identify all other counties in each district. Then, counties were individually searched on TransPi for control sites that met the criteria mentioned above. None of the design exceptions are on projects located in District 5 or 7. The three design exceptions designated as maintenance projects in the original sample set of 21 design exceptions were located in District 7, but not included in this sample set due to the lack of electronically available design documents. Therefore, Districts 5 and 7 are not represented in this study. Additional data on all projects, both with and without design exceptions, can be found in the Appendix F.

5.3.2.1 Control Sites for District 1

Project **a** is the only project located in District 1 out of the sample set. It was a widening project and only experienced an increase in crashes 0.25 miles outside of the exact design exception location. It experienced no increase in crashes at the exact location of the design exception. A single control site, project **A**, was found within District 1 that met the criteria mentioned above to serve as a control site. Detailed information concerning this project can be found in the Appendix F. After crash data for

the control site was gathered, it was observed that a significant decrease in crashes at the control site occurred. Table 10 below shows the crash data for these two sites.

Table 10. List of Widening Projects in GDOT-Defined District 1 Showing Crash Frequency Three Years Before Let Date and After Construction End Date of Projects in the Sample Set with Design Exceptions and Control Sites Without Design Exceptions

Project Reference Letter	Project ID	Exact Location		0.25 Miles		0.25 – 0.75 Miles	
		Before	After	Before	After	Before	After
a	122440-	32	18	6	28	28	23
A	122300- (control site)	172	57	-	-	-	-

However, given that only one control site was identified, it is difficult to make any conclusions about the effect of design exceptions on projects in District 1. Figure 22 below shows the number of incidents graphed for both Project a and the control site, project A. All graphs shown in this section will show the projects with the design exceptions in red, and the control site(s) in blue.



Figure 22. Number of Incidents of Before-After Study of Sample Set Projects Located in GDOT-Defined District 1 With Design Exceptions vs. Control Sites Without Design Exceptions

5.3.2.2 Control Sites for District 2

Projects **b**, **c**, and **d** all contained design exceptions and were located in District 2. All three of these projects were bridge replacement projects. Therefore, all control sites found were bridge replacement projects found throughout District 2 and that met the criteria discussed above. Unlike the single project found for District 1, there were 15 bridge replacement projects found without design exceptions in District 2 that started and ended within the years 2003 – 2006. Out of these 15 projects, 4 were not used in this study because they traversed county lines and milepost data could not be accurately collected.

Table 11 below shows the crash frequency data for both the projects with design exceptions and for the 11 remaining control sites used in this comparison. The projects with design exceptions that are part of the sample set are shown in bold. AADT is referenced in order to show how similar the control site is relative to the projects with design exceptions. A Project Reference Letter was assigned to all control sites to make the discussion of comparisons simpler.

Table 11. List of Bridge Replacement Projects in GDOT-Defined District 2 Showing Crash Frequency Three Years Before Let Date and After Construction End Date of Projects in the Sample Set with Design Exceptions and Control Sites Without Design Exceptions

Project Reference Letter	Project ID	AADT	Crashes Occuring at Exact Location of Design Exception or Over the Entire Project Length of Control Site	
			Before Let Date	After Construction End Date
b	232315-	1000	0	0
c	245370-	1750	0	0
d	245371-	1750	1	0
A	232285-	2100	0	0
B	232300-	2400	0	0
C	232320-	2000	0	0
D	245110-	3500	0	0
E	245377-	1150	0	0
F	245385-	850	0	0
G	245398-	1250	0	0
H	232270-	2400	1	1
I	245100-	3500	1	2
J	222720-	38000	8	16
K	0000809	1200	39	52

Those that are closest to the projects with design exceptions are projects **E**, **F**, **G**, and **K**. Project **J** is obviously not a good control site for District 2 bridge replacement projects, as the AADT suggests it recieves a much larger traffic volume. Table 12 below shows only those control sites that serve as good comparisons to the projects with design exceptions.

Table 12. List of Bridge Replacement Projects in GDOT-Defined District 2 Showing Crash Frequency Three Years Before Let Date and After Construction End Date of Projects in the Sample Set with Design Exceptions and Control Sites with Closest AADT Values Without Design Exceptions

Project Reference Letter	Project ID	AADT	Crashes Occuring at Exact Location of Design Exception or Over the Entire Project Length of Control Site	
			Before Let Date	After Construction End Date
b	232315-	1000	0	0
c	245370-	1750	0	0
d	245371-	1750	1	0
E	245377-	1150	0	0
F	245385-	850	0	0
G	245398-	1250	0	0
K	0000809	1200	39	52

Figure 23 below shows a graphical representation of Table 12. Again, projects shown in red are projects containing design exceptions, while those shown in blue reflect control sites.

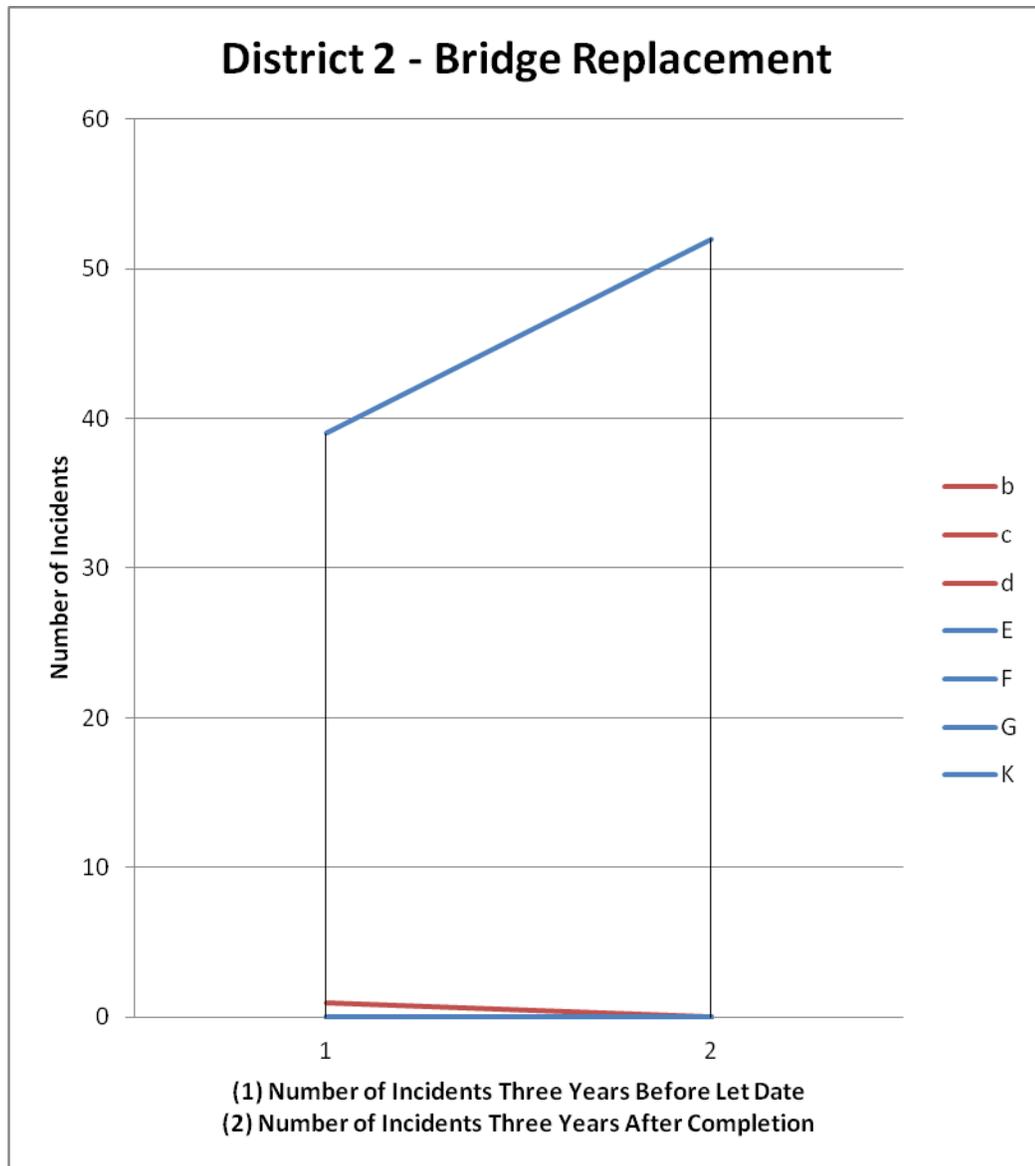


Figure 23. Bridge Replacement Projects in GDOT-Defined District 2 Showing Crash Frequency Three Years Before Let Date and After Construction End Date of Projects in the Sample Set with Design Exceptions and Control Sites with Closest AADT Values Without Design Exceptions

Each of the projects containing design exceptions did not experience an increase in crash frequency. In fact, two of them experienced no crashes during the observed years. Three of the control sites without design exceptions experienced an increase in crash frequency after construction was completed. Of these three control sites, project **I** experienced an increase of a single crash, and project **J** represents a roadway that had an AADT that is

too unlike the projects with design exceptions to be considered an effective control site. All of the other control sites found for District 2 experienced no crashes before or after construction, much like the three projects with design exceptions. Thus, there is little evidence to suggest that the design exceptions of these projects had any significant effects on the safety of the roadway. More detailed information on these control sites can be found in Appendix F.

5.3.2.3 Control Sites for District 3

Projects **e**, **f**, and **g** were all bridge replacement projects located in District 3. There were two design exceptions approved for project **g**. All control sites found were bridge replacement projects found throughout District 3 and that met the criteria discussed above. Much like District 2, there were several control sites found for District 3. There were 11 projects found with all the necessary documents available and fitting the criteria discussed above for control sites. However, three out of these 11 projects were located across county boundaries and were not considered in this study due to the lack of accurate milepost data. The remaining eight projects are shown in Table 13 below. Note that Project **F (PI #343400-)** was discussed above in Section 4.3.1 because it was identified as the only control site on the same route as a project with a design exception. The projects containing design exceptions are shown in bold. Again, Project Reference Letters are assigned to the control sites to simplify this discussion.

Table 13. List of Bridge Replacement Projects in GDOT-Defined District 3 With and Without Design Exceptions Showing Crash Frequency Three Years Before Let Date and After Construction End Date

Project Reference Letter	Project ID	AADT	Crashes Occuring at Exact Location of Design Exception or Over the Entire Project Length of Control Site	
			Before Let Date	After Construction End Date
e	333160-	5000	0	0
f	333202-	1350	1	0
g	343365-	900	0	0
g	343365-	900	0	0
A	322345-	32000	168	79
B	333180-	2500	1	1
C	333182-	4000	6	2
D	333184-	2700	2	0
E	343167-	1200	0	0
F	343400-	5000	0	2
G	343415-	750	0	0
H	343450-	700	1	0

For project **f**, projects **E**, **G** and **H** are most similar in AADT. For project **e**, projects **C** and **F** are most similar. For project **g**, projects **E**, **G**, and **H** are most similar with respect to AADT. Project **A** is most unlike all of the other data and has an AADT too high to effectively serve as a control site. Furthermore, projects **B** and **D** are least like any of the three projects containing design exceptions. That being said, the only project with significant crash frequency data is project **A**. There is an increase almost equal to half after construction is completed, but the AADT is much too high to serve as an effective control site in this analysis. Again, a more detailed description of all control sites can be found in Appendix F. The only control site with a similar AADT that shows an increase in crashes is project **F**. However, since there is only an increase from 0 to 2 crashes, there is insufficient data to make a reasonable conclusion. Figure 24 below shows only those control sites that have similar AADT values for District 3.

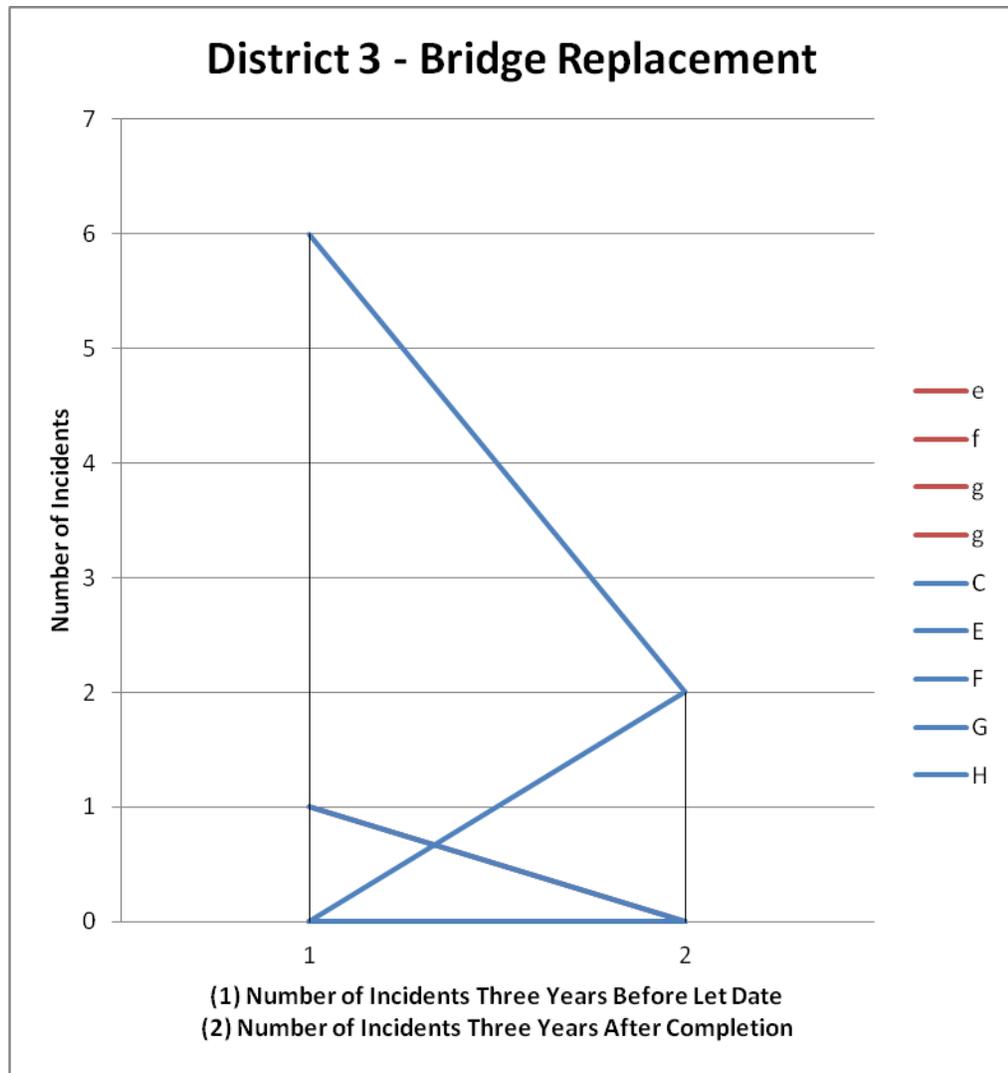


Figure 24. Bridge Replacement Projects in GDOT-Defined District 3 Showing Crash Frequency Three Years Before Let Date and After Construction End Date of Projects in the Sample Set with Design Exceptions and Control Sites with Closest AADT Values Without Design Exceptions

5.3.2.4 Control Sites for District 4 (Widening)

District 4 was the only district that contains projects with design exceptions of two different work types: widening and bridge replacement projects. Project **i** is the only widening project in the sample set for District 4. Although two other widening projects without design exceptions were found in District 4 as control sites, neither had GDOT-

specified mileposts and could not be used in this study. Therefore, control sites for widening projects in District 4 are not represented in this study. It is important to note that project **i** is one of the projects that had a larger AADT after construction, and any increases or decreases in crash data must be carefully examined before coming to a conclusion about causes.

5.3.2.5 Control Sites for District 4 (Bridge Replacements)

Project **h** is a bridge replacement project with a design exception in the sample set. Project **h** had two approved design exceptions. For the bridge replacement projects located in District 4, there were 28 bridge replacement projects found without design exceptions using TransPi queries. However, only 19 of these projects had all supporting documents available and met the criteria discussed above for control sites. Table 14 below shows these 19 bridge replacement projects as well as those projects in District 4 in the sample set with design exceptions shown in bold. Again, Project Reference Numbers are assigned to control sites in order to simplify the discussion. Appendix F contains more detailed information on all projects analyzed in District 4.

Table 14. List of Bridge Replacement Projects in GDOT-Defined District 4 With and Without Design Exceptions Showing Crash Frequency Three Years Before Let Date and After Construction End Date

Project Reference Number	Project ID	AADT	Crashes Occuring at Exact Location of Design Exception or Over the Entire Project Length of Control Site	
			Before Let Date	After Construction End Date
h	422250-	3400	3	1
h	422250-	3400	3	1
i	431670-	7050	40	93
A	0000688	2600	2	1
B	0005813	300	3	3
C	431710-	3200	4	1
D	432107-	2500	0	0
E	432115-	7000	5	3
F	432116-	14000	0	1
G	432118-	5500	2	3
H	432120-	7000	4	3
I	432140-	3000	1	0
J	432141-	4000	2	0
K	432145-	9500	2	4
L	442930-	900	0	0
M	442931-	4100	0	1
N	442950-	1300	0	1
O	442960-	4300	14	2
P	442975-	650	0	2
Q	442976-	1200	0	1
R	442981-	1300	0	0
S	442986-	450	1	0

For project **h**, the projects without design exceptions with similar AADTs include projects **C**, **I**, **J**, **M**, and **O**. For project **i**, the projects without design exceptions with similar AADTs include **E** and **H**. That being said, there are no significant increases or decreases in crash frequency for any of the control sites found for bridge replacements in District 4. It is likely, like the other scenarios up until this point, that design exceptions have not had a significant impact on crash frequency data. Figure 25 below shows a graphical representation of this data of those projects with design exceptions and control

sites with similar AADT values. Again, those projects containing design exceptions are shown in red while those without design exceptions are shown in blue. A more detailed list of these control sites can be found in Appendix F. There are no significant increases or decreases in the number of crashes occurring before and after construction.

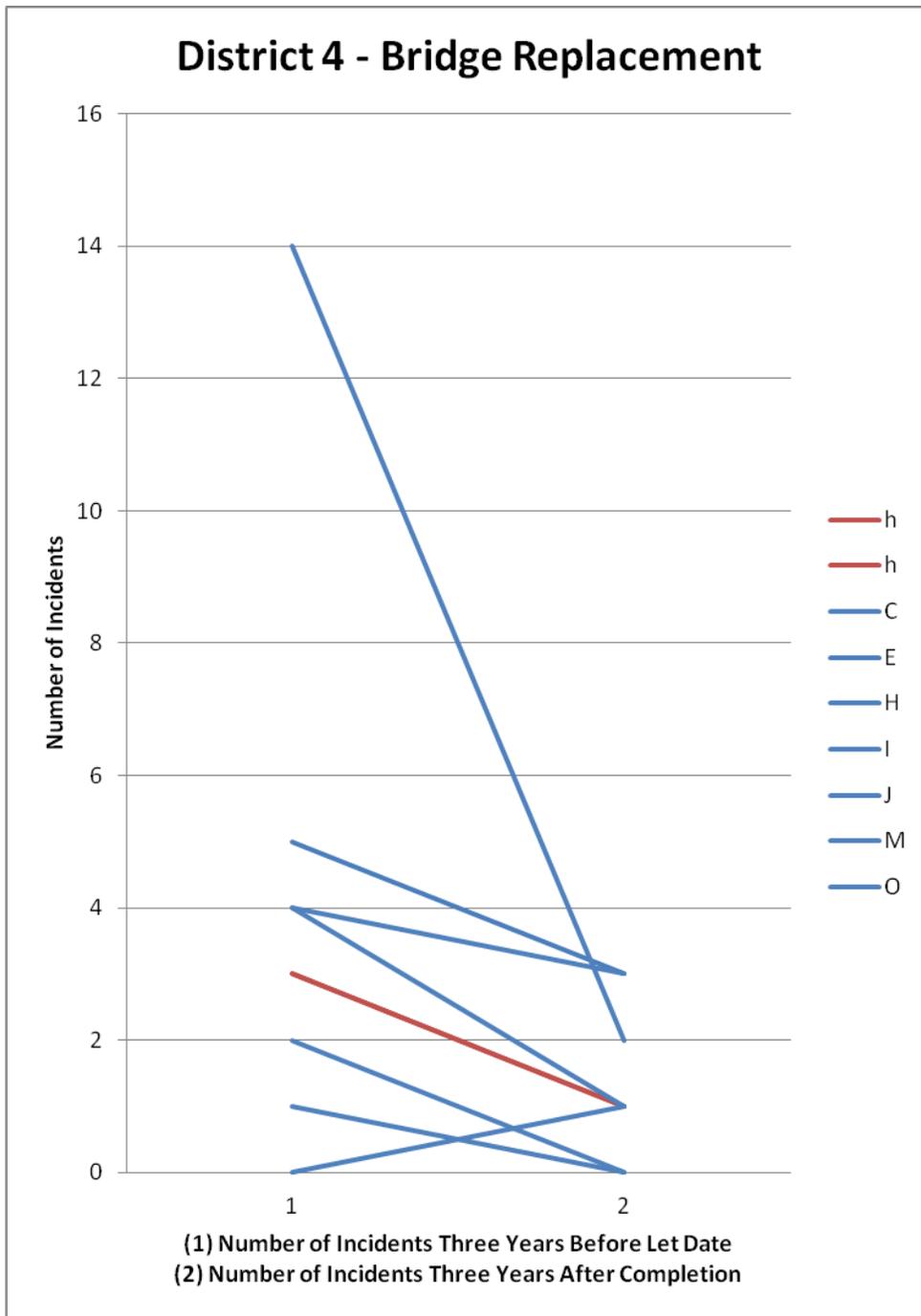


Figure 25. Bridge Replacement Projects in GDOT-Defined District 4 Showing Crash Frequency Three Years Before Let Date and After Construction End Date of Projects in the Sample Set with Design Exceptions and Control Sites with Closest AADT Values Without Design Exceptions

5.3.2.6 Control Sites for District 6 (Bridge Replacements)

There were two control sites found for District 6, but milepost data and design plan documents were not made available. Therefore, there were no control sites made available to compare to District 6 projects containing design exceptions. A list of design exceptions located in District 6 can be found in Appendix F.

CHAPTER 6

FUTURE APPLICATION OF HIGHWAY SAFETY MANUAL (HSM)

PREDICTIVE METHODS

The Highway Safety Manual (HSM) provides the tools necessary to help engineers make educated decisions in safety analyses. It provides guidance on conducting quantitative safety analyses that help demonstrate the effects safety performance has on performance measures such as traffic operations, environmental impacts, and construction costs [16]. One very important tool it provides is a predictive method that helps to estimate crash frequency and severity. By understanding these performance measures in advance, engineers can make more effective decisions when mitigating safety issues and choosing alternative roadway designs.

The current edition of the HSM provides predictive methods for rural two-lane, two-way roads, rural multilane highways, and urban / suburban arterials. While the HSM has extensive guidance on predicting the safety impacts of different site characteristics on these facility types, not all of the 13 design exceptions are discussed. Table 15 below shows which design exceptions are addressed in the HSM for each respective facility type.

Table 15. Design Exceptions Discussed by the Highway Safety Manual and Predictive Methods Provided by Rural, Suburban, or Urban Facility Type (Highway Safety Manual, 2012)

Design Exception	HSM Facility Type		
	Rural two-lane, two-way highways	Rural multilane highways	Urban and suburban arterials
Design Speed			
Lane Width	X	X	
Shoulder Width	X	X	
Bridge Width			
Structural Capacity			
Horizontal Clearance/Lateral Offset			X
Vertical Clearance			
Horizontal Alignment / Intersection Skew	X	X	
Vertical Alignment			
Cross Slope			
Grade	X		
Superelevation	X		
Stopping Sight Distance			

Six of the 13 design exception types are represented in the HSM predictive methods, but not for all different types of facility types. The most common type of design exception in the state of Georgia in relatively the last two decades has been vertical alignment design exceptions. The HSM does not focus on any mitigation involving the design of vertical curves. That being said, the HSM can be used to evaluate other common design exception types such as shoulder width and horizontal alignment.

Another important tool that the HSM provides are crash modification factors (CMF) that help represent the predicted change in crash frequency and severity based on a particular implemented safety treatment. CMFs often account for different types of design features that may be present at multiple locations. While the HSM provides multiple CMFs for different geometric features, the majority of them are dependent upon

the facility type’s physical features. For example, Figure 26 below shows the CMFs for rural two-lane highway segments provided by the HSM [18].

Table 16. Summary of Crash Modification Factors (CMFs) Adopted from Table 10-7 in the *Highway Safety Manual, 2010*

Facility Type	CMF	CMF Description
Rural Two-Lane Two-Way Roadway Segments	CMF _{1r}	Lane Width
	CMF _{2r}	Shoulder Width and Type
	CMF _{3r}	Horizontal Curves: Length, Radius, and Presence or Absence of Spiral Transitions
	CMF _{4r}	Horizontal Curves: Superelevation
	CMF _{5r}	Grades
	CMF _{6r}	Driveway Density
	CMF _{7r}	Centerline Rumble Strips
	CMF _{8r}	Passing Lanes
	CMF _{9r}	Two-Way Left-Turn Lanes
	CMF _{10r}	Roadside Design
	CMF _{11r}	Lighting
	CMF _{12r}	Automated Speed Enforcement

It can be seen that other important features, such as AADT, are not included when predicting crash severity and frequency. Based on the sample set and control sites studied in this report, it can definitely be seen that AADT often plays a large role on the number of crashes. Predictive methods would not take into account the variability of AADT across different projects, which would mean that CMFs should be calibrated to fit adjusted AADT values. This is where using control sites with relatively similar AADT values would be useful. If the user ensures that the local design features of two project sites were as similar as possible, then the misrepresentation in predictive methods would be less severe. With that being said, there is some value in developing CMFs for each specific design exception type to make sure that road treatments are accurately being reflected in predicted crash severity and crash frequency rates.

Several statistical methods are used in conjunction with the HSM predictive methods, one of which is an Empirical Bayes (EB) method. Hauer suggests that there are three main types of before and after studies that can be used to compare the change in crashes at a particular site: (1) the simple before and after study that simply looks at crashes before and after a period of treatment, (2) a before and after study that takes into account a comparison group that did not receive the treatment, and (3) an Empirical Bayes (EB) before and after study that introduces an average crash frequency estimated from a Safety Performance Function (SPF) which has been calibrated from characteristics of a control site that has not received treatment, such as AADT [19].

The EB method deals with regression to the mean (RTM) bias, which exists often in naïve before and after studies. If applied properly, this method can be used to calibrate CMFs that are without RTM bias [19]. These CMFs can be used to predict more accurate crash severity and crash frequency rates on all types of facilities that will not underestimate or overestimate the effects of a treatment on a certain site. An EB statistical analysis was not performed as part of this study because the sample size was considered too small. Furthermore, the number of crashes obtained for projects with and without design exceptions was not significant enough to perform a meaningful EB analysis.

Previously, a naïve before and after study had been completed on the raw design exception data. The focus of this research study was to identify comparison groups to use as control sites in a before and after study of the design exceptions. By identifying comparison sites without design exceptions, causes other than the design exception were compensated for. However, RTM bias was not accounted for when making these

comparisons. It is recommended that effort be made to incorporate the EB method when additional data is available to reduce the amount of bias in predicting crashes for locations with and without design exceptions.

CHAPTER 7

CONCLUSION

When designing roadways and their supporting infrastructure, it is important to consider the many different relationships between design vehicles, users of the system, and the surrounding environment. Organizations such as the FHWA, AASHTO, and the DOTs in each state provide guidance to engineers to ensure they are considering the safety effects that different features will have on the users of the roadway system. When project sites on the NHS consist of substandard design elements according to standards set by the FHWA, design exceptions are implemented. A design exception is a documented decision that must be made and approved in order to construct a highway or project with these substandard values.

There were 467 design exceptions documented and approved in the state of Georgia from 1995 – 2012. The goal of this thesis was to analyze a sample set of 18 design exceptions approved in Georgia from 2003 – 2006. Crash data were available for years 2000 – 2009 and dictated the selection of the sample set. In order to perform the safety analysis in this study, three years of data were needed both before and after the let date and construction end date respectively. Crash data were obtained at the locations of each of these design exceptions three years before the let date and three years after the construction end date. Design plan documents and construction reports were available for all of the design exceptions in the sample set.

Similar information from a range of control sites were also obtained to compensate for causal factors other than the design exception on the roadway. All of the control sites selected for this study were started and completed within the same time

constraints, and did not contain any design exceptions. In addition, control sites were of the same work type (i.e. bridge replacement), and were either located on the same route or within the same district as those projects with design exceptions. By comparing the before and after crash rates of projects with design exceptions to the before and after crash rates of control sites without design exceptions, the potential safety impacts of the design exceptions were evaluated.

There was only a single control site without a design exception found on an identical route as a project with a design exception. There were control sites without design exceptions found in districts 1, 2, 3, and 4 that were similar to projects with design exceptions. Control sites for districts 5, 6, and 7 were not represented in this study. Based on similarity of AADT, the before and after crash rates at the control sites without design exceptions were compared to the before and after crash rates of projects with design exceptions. No statistically significant relationship between the existence of a design exception and crash rates was identified based on this data.

Although there were no significant relationships observed, this could be due to the limited availability of crash data. There were very low crashes found on both projects with design exceptions and control sites without design exceptions. Predictive methods provided by the HSM may help to compare crash rates based on different types of design features. However, an obstacle of using this method is that the HSM does not currently provide predictive methods for all 13 of the controlling criteria on all facility types in rural, suburban, and urban settings.

The method used in this study of comparing projects with design exceptions to control sites without design exceptions may not entirely rule out causal factors of crashes

other than design exceptions. Causal factors other than the design exception may introduce a regression to the mean (RTM) bias that will misrepresent the trends in data. Performing an Empirical Bayesian analysis would limit RTM bias, but was not performed in this study due to a limited sample set. The number of crashes appearing on those projects that were in the sample set was not significant enough to conduct a meaningful EB analysis. A future EB before and after analysis is recommended to compensate for any potential RTM bias when additional data is available on design exceptions.

APPENDIX A

REVIEW OF STATE ROADWAY DESIGN MANUALS

Table A-1. Summary of Content in the State DOT Design Manuals with Respect to Design Exceptions

STATE	When is it required?	When to identify it?	How to document it?	Who approve it?	Where to file it?	What if denied?
Alaska			X	X	X	
Arizona	X	X	X	X	X	
Connecticut	X		X		X	
Colorado	X	X	X	X	X	X
Delaware	X	X	X	X		
Florida	X	X		X		
Georgia	X	X	X	X	X	X
Idaho	X					
Illinois	X	X	X	X	X	
Indiana			X	X	X	
Iowa	X	X	X	X	X	X
Kentucky	X	X	X	X	X	
Louisiana				X	X	X
Maine	X	X	X	X		
Massachusetts	X		X	X		X
Michigan	X	X		X		
Minnesota	X	X	X			
Mississippi	X		X	X	X	
Montana	X		X	X	X	
Nebraska	X			X		
Nevada	X	X	X	X	X	X
New Hampshire	X		X	X		
New Jersey	X	X	X	X	X	X
New Mexico	X	X	X	X	X	
New York	X		X	X		X
North Carolina		X	X			
North Dakota	X	X	X			
Ohio	X	X	X	X	X	
Oregon	X	X	X	X	X	X
South Dakota	X	X				
Tennessee	X	X	X	X	X	
Texas	X		X	X		

Table A-1. Continued

STATE	When is it required?	When to identify it?	How to document it?	Who approve it?	Where to file it?	What if denied?
Washington	X		X			
Utah	X	X	X	X	X	X
Vermont	X					
Virginia	X	X	X	X	X	X
Washington	X	X				
Wisconsin	X	X	X	X	X	X
Wyoming	X	X	X	X	X	X

NOTE: An updated list is maintained by the FHWA and can be found at (<http://www.fhwa.dot.gov/programadmin/statemanuals.cfm>)

Table A-2. Summary of Which State Departments of Transportation have Design Manuals and if They Have DOT-Specific Exceptions other than the Federal Highway Administration’s 13 Controlling Criteria

STATE	Design Manual	DOT Specific Exceptions
Alabama		
Alaska		Design Waivers
Arizona	Y	Design Variances
Arkansas		
California	Y	
Colorado	Y	Design Variances
Connecticut	Y	
Delaware	Y	
Florida	Y	
Georgia	Y	Design Variances
Hawaii		
Idaho	Y	
Illinois	Y	Design Variances
Indiana	Y	
Iowa	Y	Design Variances
Kansas	Y	
Kentucky	Y	Design Variances
Louisiana	Y	Design Variances
Maine	Y	
Maryland		
Massachusetts	Y	
Michigan	Y	
Minnesota	Y	Informal Design Exception

Table A-2. Continued

STATE	Design Manual	DOT Specific Exceptions
Mississippi	Y	
Missouri		
Montana	Y	
Nebraska	Y	
Nevada	Y	
New Hampshire	Y	
New Jersey	Y*	
New Mexico		
New York	Y	Nonstandard feature
North Carolina	Y	
North Dakota	Y	
Ohio	Y	
Oklahoma		
Oregon	Y	
Pennsylvania	Y	
Rhode Island		
South Carolina		
South Dakota	Y	
Tennessee	Y	
Texas	Y	
Utah	Y	Design Waivers
Vermont	Y	
Virginia	Y	Design Waivers
Washington	Y	
West Virginia		
Wisconsin	Y	
Wyoming	Y	

NOTE: Absent entries do not necessarily mean a design manual does not exist. It could either not be located, or is not provided on the Internet. For alternative names, absent entries mean that it is either not specified or DOT-specific standard deviations are simply called design exceptions as well.

** Indicates a standalone design exception manual*

APPENDIX B

DETAILED LIST OF APPROVED DESIGN EXCEPTIONS FROM 1995 - 2012

Table B-1. Detailed List of Design Exceptions (DEs) Data from 1995 – 2012

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
104	CRABAPPLE STREETScape	Fulton	Lane Width	0			-	-
104	CRABAPPLE STREETScape	Fulton	Lane Width	0			-	-
135	ETOWAH RIVER GREENWAY/BIKE-PED PATH IN CANTON	Cherokee	Bridge Width	0			-	-
184	ATLANTA - LAKEWOOD HEIGHTS TOWN CENTER STREETScape	Fulton	Lateral Offset	0	4.65	4.76	-	-
259	CR 65/JONES BRIDGE ROAD @ CR 64/DOUGLAS ROAD	Fulton	Intersect Skew	65			6/13/2006	7/31/2007
261	CR 70/WEBB BRIDGE ROAD @ PARK BRIDGE PARKWAY/SHIRLEY BR RD	Fulton	Intersect Skew	70			-	-
266	CR 1661/MAYFIELD ROAD @ CR 27/PROVIDENCE ROAD	Fulton	Horizontal Alignment	1661	1.56	1.62	6/1/2005	8/16/2006
266	CR 1661/MAYFIELD ROAD @ CR 27/PROVIDENCE ROAD	Fulton	Vertical Alignment	1661			6/1/2005	8/16/2006
337	EAST WESLEY SIDEWALK FM PEACHTREE RD TO PIEDMONT RD&BIKE/PED	Fulton	Horizontal Alignment	6			-	-
399	SR 92 @ CR 204/HILO RD & CR 375/KINGWOOD DRIVE - TURN LANE	Fayette	Vertical Alignment	92	8.53	8.53	5/11/2010	4/30/2011

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
399	SR 92 @ CR 204/HILO RD & CR 375/KINGWOOD DRIVE - TURN LANE	Fayette	Vertical Alignment	92	8.53	8.53	5/11/2010	4/30/2011
418	SR 15 FROM SR 242 TO NEWMAN ST IN SANDERSVILLE	Washington	Intersect Skew	15	14.34	14.34	3/17/2009	11/25/2009
476	CR 1061/OLD SR 5 @ HICKORY RD & HOLLY ST IN HOLLY SPRINGS	Cherokee	Vertical Alignment	1061			8/23/2007	6/30/2008
554	ALEXANDER ST FM LUCKIE STREET TO WEST PEACHTREE STREET- GRTA	Fulton	Vertical Alignment	1810			-	-
683	CR 134/COUNTY LINE ROAD @ POLECAT CREEK @ MURRAY CO LINE	Gordon, Murray	Horizontal Alignment	134			-	-
687	CR 4/DENNIS MILL ROAD @ ROCK CREEK 5.6 MI SE OF CHATSWORTH	Murray	Superelevation	4			-	-
716	HARTSFIELD AIRPORT: RELOC SR 139/RIVERDALE & SR 314/W. FAYET	Clayton	Horizontal Alignment	139			-	-
762	I-75 FM N OF SR 133 TO COOK COUNTY LINE - PHASE II	Lowndes	Shoulder Width	401	22	29.4	-	-
810	SR 9 @ 6 INTERSECTIONS AND SR 20 @ TRIBBLE RD	Forsyth	Intersect Skew	9			6/4/2008	5/12/2010
810	SR 9 @ 6 INTERSECTIONS AND SR 20 @ TRIBBLE RD	Forsyth	Vertical Alignment	9			6/4/2008	5/12/2010
810	SR 9 @ 6 INTERSECTIONS AND SR 20 @ TRIBBLE RD	Forsyth	Vertical Alignment	9			6/4/2008	5/12/2010

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
810	SR 9 @ 6 INTERSECTIONS AND SR 20 @ TRIBBLE RD	Forsyth	Grade	9			6/4/2008	5/12/2010
846	CR 325/FH 12/HAMMOND GAP ROAD @ RUFF CREEK NW OF SUBLIGNA	Chattooga	Horizontal Alignment	325	0.32	0.32	9/19/2006	9/19/2007
1038	SR 124 @ SR 211	Barrow	Horizontal Alignment	124	22.4	23.1	-	-
1077	SR 16 FM JEFFERSON AVE TO EAST OF ROOTY CREEK IN EATONTON	Putnam	Vertical Alignment	16			12/18/2006	10/13/2009
1077	SR 16 FM JEFFERSON AVE TO EAST OF ROOTY CREEK IN EATONTON	Putnam	Lane Width	16			12/18/2006	10/13/2009
1077	SR 16 FM JEFFERSON AVE TO EAST OF ROOTY CREEK IN EATONTON	Putnam	Shoulder Width	16			12/18/2006	10/13/2009
1097	THURMOND TANNER PWY FM PLAINVIEW RD TO SR 53 - PHASE III	Hall	Superelevation	0			2/11/2009	5/31/2012
1297	17TH STREET FM NORTHSIDE DR OVER NS RR TO ATLANTIC STATION	Fulton	Vertical Alignment	0			11/27/2002	6/9/2004
1297	17TH STREET FM NORTHSIDE DR OVER NS RR TO ATLANTIC STATION	Fulton	Grade	0			11/27/2002	6/9/2004
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Stopping Sight Distance	9			5/21/2007	5/28/2010
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Stopping Sight Distance	9			5/21/2007	5/28/2010

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Stopping Sight Distance	9			5/21/2007	5/28/2010
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Vertical Alignment	9			5/21/2007	5/28/2010
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Vertical Alignment	9			5/21/2007	5/28/2010
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Shoulder Width	9	10.39	10.43	5/21/2007	5/28/2010
1364	SR 56/NAIL BRIDGE @ OHOOPEE RIVER 2 MILES W OF REIDSVILLE	Tattnall	Stopping Sight Distance	56	2.6	3.36	8/31/2009	9/30/2010
1364	SR 56/NAIL BRIDGE @ OHOOPEE RIVER 2 MILES W OF REIDSVILLE	Tattnall	Vertical Alignment	56	2.6	3.36	8/31/2009	9/30/2010
1365	SR 4/US 1 @ SWIFT CREEK N OF LYONS CITY LIMIT	Toombs	Bridge Width	4			-	-
1398	BUCKHEAD PEDESTRIAN AND TRAFFIC SAFETY IMPROVEMENTS	Fulton	Lane Width	0			2/14/2002	9/15/2002
1558	SR 520 FM W OF BRANTLEY CO LINE TO CR 21/EMANUEL CHURCH RD	Brantley, Glynn	Intersect Skew	520	27.03	11.25	4/23/2010	2/11/2011
1559	SR 38/US 84 MEDIAN TURN LANES FM QUITMAN TO VALDOSTA	Brooks	Horizontal Alignment	38			-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
1559	SR 38/US 84 MEDIAN TURN LANES FM QUITMAN TO VALDOSTA	Brooks	Shoulder Width	38	4.67	4.75	-	-
1574	SR 3/US 41 FM COBB CO LINE TO SR 293 CONN - MEDIAN TURN LNS	Bartow	Intersect Skew	3			9/16/2009	5/31/2011
1575	SR 53 MEDIAN TURN LANES FROM EAST ROME BYPASS TO GORDON CO	Floyd	Intersect Skew	53			12/1/2009	12/29/2011
1759	I-75 FROM SR 54 NORTH TO AVIATION BLVD - FOR HOV LANES	Clayton	Shoulder Width	401			-	-
1759	I-75 FROM SR 54 NORTH TO AVIATION BLVD - FOR HOV LANES	Clayton	Shoulder Width	401			-	-
1769	SR 53 @ THOMPSON ROAD/ETOWAH RIVER ROAD	Dawson	Vertical Alignment	53	12.89	12.89	-	-
2041	SR 104 @ CR 16/HALALI FARM ROAD IN COLUMBIA COUNTY	Columbia	Vertical Alignment	104	6.96	7.03	5/17/2009	4/30/2010
2250	PETTIT CREEK TRAIL PROJECT	Bartow	Bridge Width	0			-	-
2282	DOUGLAS GREENWAY TRAIL	Coffee	Bridge Width	0			-	-
2799	CHAMBLEE-DUNWOODY RD FM CLAIRVIEW/CUMBERLAND TO BUFORD HWY	DeKalb	Lane Width	5156			-	-
2848	RAILROAD STREET TRAIL IN CANTON - PHASE I - LCI PROJECT	Cherokee	Lateral Offset	0			-	-
2861	SR 40 FM W OF CS 481/GROVE BLVD TO E OF PR 718/TRUSS PLANT	Camden	Intersect Skew				-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
3085	CR 140/WHITESVILLE ROAD @ STANDING BOY CREEK TRIB. SOUTH	Harris	Horizontal Alignment	140	1.89	1.94	12/13/2005	5/31/2007
3086	CR 140/WHITESVILLE ROAD @ STANDING BOY CREEK SO OF SR 315	Harris	Horizontal Alignment	140	2.93	2.97	12/13/2005	5/31/2007
3090	CR 219/BROWN CREEK RD @ BROWN CREEK 5 MI NW OF WAVERLY HALL	Harris	Superelevation	219			11/22/2005	3/31/2006
3430	CR 75/CARPENTER RD IN TIFTON FM SR 520/US 82 TO DAVIS RD	Tift	Intersect Skew	15			-	-
3430	CR 75/CARPENTER RD IN TIFTON FM SR 520/US 82 TO DAVIS RD	Tift	Lane Width	15			-	-
3452	CR 835/HAPPY VALLEY RD @ CHATTANOOGA & OVERFLOW	Walker	Superelevation	835	0.1	0.5	5/9/2011	9/26/2012
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Horizontal Alignment	3	12.4	12.4	-	-
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Horizontal Alignment	3	13.1	13.1	-	-
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Vertical Alignment	3	11.78	11.86	-	-
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Vertical Alignment	3	11.99	12.03	-	-
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Vertical Alignment	3	12.15	12.21	-	-
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Vertical Alignment	3	12.98	13.02	-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Vertical Alignment	3	13.27	13.29	-	-
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Vertical Alignment	3	13.3	13.38	-	-
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Vertical Alignment	3	13.59	13.63	-	-
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Vertical Alignment	3	13.67	13.73	-	-
4166	SR 3/NORTHSIDE DRIVE @ CS 53/COLLIER RD;CS364; 38; 6; 135	Fulton	Bridge Width	3	12.8	12.8	-	-
4266	SR 1/US 27 FM SR 151 TO LAFAYETTE BYPASS	Walker	Vertical Alignment	1			5/11/2005	4/15/2008
4399	PONCE DE LEON @5 LOC; NORTH AVE @5 LOC; LINDEN @2 LOC - GRTA	Fulton	Horizontal Alignment	8			-	-
4399	PONCE DE LEON @5 LOC; NORTH AVE @5 LOC; LINDEN @2 LOC - GRTA	Fulton	Horizontal Alignment	8			-	-
4399	PONCE DE LEON @5 LOC; NORTH AVE @5 LOC; LINDEN @2 LOC - GRTA	Fulton	Lane Width	8			-	-
4403	SR 3 CONN @ SR 120 ALT - GRTA	Cobb	Shoulder Width	3			9/1/2009	8/11/2011
4405	SR 5/AUSTELL @ 6 LOCS BTWN CLAY RD TO SANDTOWN RD - GRTA	Cobb	Design Speed	5			1/21/2009	4/29/2010
4405	SR 5/AUSTELL @ 6 LOCS BTWN CLAY RD TO SANDTOWN RD - GRTA	Cobb	Intersect Skew	5			1/21/2009	4/29/2010

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
4405	SR 5/AUSTELL @ 6 LOCS BTWN CLAY RD TO SANDTOWN RD - GRTA	Cobb	Horizontal Alignment	5			1/21/2009	4/29/2010
4405	SR 5/AUSTELL @ 6 LOCS BTWN CLAY RD TO SANDTOWN RD - GRTA	Cobb	Shoulder Width	5			1/21/2009	4/29/2010
4424	CR 7001/PERIMETER CENTER PARKWAY STREETSCAPE - GRTA	DeKalb	Horizontal Alignment	7001			-	-
4446	LEWIS RD FM SR 6/CH JAMES PKWY TO SR 6BU/NEW S SQ [PE-LCI]	Cobb	Intersect Skew	2122			9/16/2008	1/31/2011
4650	CR 666/SIGMAN ROAD @ CR 157/GEES MILL ROAD - GRTA	Rockdale	Intersect Skew	666			-	-
5071	I-95 FM NORTH OF SR 303 TO CR 586	Glynn	Vertical Alignment	405	33.56	33.66	8/28/2006	6/28/2010
5531	SR 191 @ SCULL SHOAL CREEK 4 MILES NE OF DANIELSVILLE	Madison	Horizontal Alignment	191			-	-
5531	SR 191 @ SCULL SHOAL CREEK 4 MILES NE OF DANIELSVILLE	Madison	Superelevation	191			-	-
5905	CR 5150/PANOLA ROAD FM THOMPSON MILL ROAD TO FAIRINGTON ROAD	DeKalb	Intersect Skew	5150			-	-
6016	I-75 FROM SR 32 TO SR 159	Turner	Lateral Offset	401			3/14/2005	9/15/2009
6043	I-575 @ ROPE MILL CONNECTOR/RIDGEWALK PKWY - NEW INTERCHANGE	Cherokee	Lateral Offset	417	8.2	10	-	-
6073	I-75 FM COOK COUNTY LINE TO CR 204/SOUTHWELL BLVD - PHASE I	Tift	Lateral Offset	401			5/7/2007	1/13/2011

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
6332	I-85 FM CAMP CREEK PKWY TO SR 74 - ATMS COMMUNIC/SURVEILANCE	Fulton	Lane Width	403			12/18/2006	11/14/2009
6334	I-75 FM WADE GREEN RD TO SR 92 - ATMS COMMUNIC/SURVEILANCE	Cobb	Lane Width	401			12/15/2006	2/29/2008
6365	SR 20 @ SR 212	Newton	Shoulder Width	20	0.3	0.6	2/13/2009	12/11/2009
6396	I-75 N ATMS RAMP METERS FROM I-85 TO CR 4395/CHASTAIN ROAD	Cobb, Fulton	Shoulder Width	401			5/14/2007	10/31/2008
6397	I-85 N ATMS RAMP METERS FM BUFORD HWY TO PLEASANT HILL	Gwinnett, DeKalb, Fulton	Lane Width	403			4/6/2007	9/11/2008
6399	I-75/I-85 ATMS RAMP METERS FM UNIVERSITY AVE TO 10TH ST	Fulton	Horizontal Alignment	403			6/15/2007	7/31/2008
6399	I-75/I-85 ATMS RAMP METERS FM UNIVERSITY AVE TO 10TH ST	Fulton	Lane Width	403			6/15/2007	7/31/2008
6399	I-75/I-85 ATMS RAMP METERS FM UNIVERSITY AVE TO 10TH ST	Fulton	Shoulder Width	403			6/15/2007	7/31/2008
6402	I-20 FM I-285/FULTON TO I-285/DEKALB - ATMS RAMP METERS	DeKalb	Shoulder Width	402			1/3/2008	1/29/2009
6432	CR 251/SEVEN ISLANDS RD @ BIG INDIAN CREEK & OVERFLOW	Morgan	Lane Width	251	1.84	2.24	-	-
6471	CR 69/BROWNS CROSSING ROAD @ FISHING CREEK	Baldwin	Lane Width	69	2.686	2.797	10/3/2011	4/30/2012

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
6572	ANSLEY PARK PEDESTRIAN & STREETScape PROJECT	Fulton	Lateral Offset	0			-	-
6867	CR 895/TOWER ROAD FROM SR 5/CHURCH STREET TO RR #340395	Cobb	Shoulder Width	895			1/18/2010	4/30/2011
6887	CITY OF LITHONIA STREETScape AND SIDEWALKS	DeKalb	Intersect Skew	0			-	-
6902	CR 812/CHAPEL HILL RD @ CR 153/DOUGLAS BLVD/TIMBER RIDGE DR	Douglas	Horizontal Alignment	812			-	-
6952	SIMPSON STREET/JONES AVE FM NORTHSIDE DR TO LUCKIE ST- GRTA	Fulton	Vertical Alignment	2409	2.7	2.7	-	-
6957	CR 130/CANNON ROAD @ WHITE OAK CREEK 3.5 MI NE OF MORELAND	Coweta	Horizontal Alignment	130	2.14	2.16	2/15/2010	11/30/2010
6957	CR 130/CANNON ROAD @ WHITE OAK CREEK 3.5 MI NE OF MORELAND	Coweta	Superelevation	130			2/15/2010	11/30/2010
6979	SR 154 FROM FRASER STREET TO CONNALLY STREET - LCI PROJECT	Fulton	Vertical Alignment	154			-	-
6989	NORCROSS DOWNTOWN PEDESTRIAN STREETScapeS - LCI PROJECT	Gwinnett	Lateral Offset	0			-	-
6989	NORCROSS DOWNTOWN PEDESTRIAN STREETScapeS - LCI PROJECT	Gwinnett	Lane Width	0			-	-
7020	CS 540/ROCK LANE ROAD @ NS #733038W	Putnam	Horizontal Alignment	540			-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
7061	SR 141/MEDLOCK BRIDGE ROAD @ SR 120/ABBOTTS BRIDGE ROAD	Fulton	Shoulder Width	120			8/29/2011	5/31/2012
7069	SR 5/BILL ARP ROAD @ CR 192/BRIGHT STAR ROAD	Douglas	Stopping Sight Distance	5			11/10/2008	8/15/2009
7069	SR 5/BILL ARP ROAD @ CR 192/BRIGHT STAR ROAD	Douglas	Horizontal Alignment	5			11/10/2008	8/15/2009
7069	SR 5/BILL ARP ROAD @ CR 192/BRIGHT STAR ROAD	Douglas	Vertical Alignment	5			11/10/2008	8/15/2009
7070	SR 140/HOLCOMB BRIDGE ROAD @ CR 107/BARNWELL ROAD	Fulton	Stopping Sight Distance	140			6/22/2010	7/15/2011
7096	CR 1385/BUFFINGTON RD FM I-85 TO SR 14/US 29/ROOSEVELT HWY	Fulton	Vertical Alignment	1385			-	-
7131	SR 10/MEMORIAL DRIVE FM WOODCROFT RD TO GOLDSMITH RD	DeKalb	Intersect Skew	10			-	-
7169	SR 136 @ ETOWAH RIVER 5.7 MI EAST OF DAWSONVILLE	Dawson	Vertical Alignment	136	22.7	23	-	-
7217	SOCIAL CIRCLE BYPASS FROM EAST HIGHTOWER TRAIL TO SR 11	Newton, Walton	Horizontal Alignment	0	13.04	13.1	-	-
7240	I-985/US 23 @ SR 11/US 129	Hall	Horizontal Alignment	419	7.85	8.27	1/7/2008	7/31/2008
7392	CR 154/OLD BUCKHEAD ROAD @ NORTH SUGAR CREEK	Morgan	Shoulder Width	154	1.25	1.55	-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
7415	SR 242 @ CR 210/WACO MILL RD & @ CS 659/SOUTH HOSPITAL RD	Washington	Intersect Skew	242	4.55	4.58	-	-
7493	SR 70/SR 154 @ SR 92/CAMPBELLTON-FAIRBURN ROAD	Fulton	Stopping Sight Distance	70	14.4	14.68	4/7/2007	11/16/2007
7493	SR 70/SR 154 @ SR 92/CAMPBELLTON-FAIRBURN ROAD	Fulton	Intersect Skew	70	14.4	14.68	4/7/2007	11/16/2007
7493	SR 70/SR 154 @ SR 92/CAMPBELLTON-FAIRBURN ROAD	Fulton	Vertical Alignment	70	14.4	14.68	4/7/2007	11/16/2007
7641	ATLANTA RD MULTI-USE TRAIL FM SPRING/CONCORD RD TO RIDGE RD	Cobb	Lateral Offset	0			-	-
7950	CR 812/CHAPEL HILL RD @ CR 160/CENTRAL & BOMAR CHURCH RD	Douglas	Horizontal Alignment	812			-	-
7950	CR 812/CHAPEL HILL RD @ CR 160/CENTRAL & BOMAR CHURCH RD	Douglas	Vertical Alignment	812			-	-
8066	MAYSVILLE STREETSCAPE - PHASE I & II	Banks	Lateral Offset	52			-	-
8137	CS 6000/DOUG DAVIS DR/VIRGINIA AVE STREETSCAPES IN HAPEVILLE	Fulton	Lane Width	6000			-	-
8194	CUTHBERT DOWNTOWN SQUARE STREETSCAPE IN RANDOLPH COUNTY	Randolph	Lateral Offset	50			-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
8234	I-85 NB FROM I-985 TO SR 20	Gwinnett	Stopping Sight Distance	403	15.92	16.11	6/27/2007	5/1/2008
8234	I-85 NB FROM I-985 TO SR 20	Gwinnett	Stopping Sight Distance	403	16.26	16.49	6/27/2007	5/1/2008
8274	I-75 SB FM I-675 TO EAGLES LANDING PKWY- AUXILIARY LANE	Henry	Shoulder Width	401			-	-
8295	SR 120/OLD MILTON PKWY @ CS 9216/NORTH POINT PKWY	Fulton	Vertical Alignment	120	1.22	1.39	-	-
8296	CR 452/HERNDON ROAD @ ROCKY CREEK 9.5 MI S OF WAYNESBORO	Burke	Lane Width	452			-	-
8299	CR 1349/FAIRBURN ROAD @ CSX RR	Fulton	Vertical Alignment	1349			1/4/2012	8/3/2012
8374	SR 236/LAVISTA ROAD @ OAK GROVE ROAD	DeKalb	Horizontal Alignment	236	3.47	3.67	-	-
8396	CR 146/GALILEE CHURCH ROAD @ MIDDLE OCONEE RIVER	Jackson	Shoulder Width	146			-	-
8409	SR 26/US 80 @ SR 30/US 280	Bryan	Horizontal Alignment	26	4.3	4.7	8/23/2011	7/31/2012
8635	SCHATULGA RD/EASTERN CONN FM CHATSWORTH RD TO SR 22/MACON RD	Muscogee	Vertical Alignment	36			9/2/2010	7/31/2012
8965	SR 20 WB FM MP 20.24 TO MP 21.86	Bartow	Horizontal Alignment	20			-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
9069	HISTORIC DOWNTOWN BUFORD STREETScape - PHASE V	Gwinnett	Lateral Offset	0			-	-
9091	PINE MOUNTAIN DOWNTOWN STREETScape - PHASE IV	Harris	Lateral Offset	0			-	-
9099	WADLEY DOWNTOWN STREETScape	Jefferson	Lateral Offset	0			-	-
9138	LAFAYETTE DOWNTOWN STREETScape - PHASE II	Walker	Lateral Offset	0			-	-
9156	I-75 FM EAGLES LANDING PKWY TO SR 155 - MANAGED LANES - PH I	Henry	Lane Width	401	216.26	228.5	-	-
9156	I-75 FM EAGLES LANDING PKWY TO SR 155 - MANAGED LANES - PH I	Henry	Shoulder Width	401	216.26	228.5	-	-
9157	I-75 FM SR 138 TO EAGLES LANDING PKWY - MANAGED LANES - PH I	Henry	Lane Width	401			-	-
9157	I-75 FM SR 138 TO EAGLES LANDING PKWY - MANAGED LANES - PH I	Henry	Shoulder Width	401			-	-
9159	I-285 @ SR 9 IN SANDY SPRINGS-BRIDGE SAFETY&OPERATIONAL IMP	Fulton	Cross Slope	407			1/9/2012	10/31/2012
9542	I-20 EB FROM I-285 TO CR 5150/PANOLA ROAD - CD SYSTEM	DeKalb	Lane Width	402	69.65	70.51	-	-
9542	I-20 EB FROM I-285 TO CR 5150/PANOLA ROAD - CD SYSTEM	DeKalb	Shoulder Width	402	66.64	74.08	-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
9542	I-20 EB FROM I-285 TO CR 5150/PANOLA ROAD - CD SYSTEM	DeKalb	Shoulder Width	402	69.67	69.72	-	-
9542	I-20 EB FROM I-285 TO CR 5150/PANOLA ROAD - CD SYSTEM	DeKalb	Shoulder Width	402	70.48	70.5	-	-
9542	I-20 EB FROM I-285 TO CR 5150/PANOLA ROAD - CD SYSTEM	DeKalb	Bridge Width	402	69.67	69.72	-	-
9725	I-285 @ CR 1764/ASHFORD DUNWOODY ROAD	DeKalb	Horizontal Alignment	407	0.77	1.24	1/16/2012	11/14/2012
9725	I-285 @ CR 1764/ASHFORD DUNWOODY ROAD	DeKalb	Superelevation	407	0.77	1.24	1/16/2012	11/14/2012
10126	I-75 NB FM CR 659/EAGLES LANDING PKWY/HUDSON BRIDGE TO I-675	Henry	Shoulder Width	401	225.91	226.04	-	-
10194	WEST CLEVELAND BYP FROM N OF SR 115 TO E OF SR 11 - PH II	White	Vertical Alignment	0			-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Vertical Alignment	403	104.1		-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Vertical Alignment	403	104.1		-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Vertical Alignment	403	104.4		-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Vertical Alignment	403	104.4		-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Vertical Alignment	403	105.2		-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Vertical Alignment	403	105.6		-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Vertical Alignment	403	105.7		-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Vertical Alignment	403	105.7		-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Vertical Alignment	403	105.8		-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Lane Width	403	104	104	-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Lane Width	403	104.1		-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Shoulder Width	403	0.7	0.9	-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Shoulder Width	403	104.1		-	-
110530-	I-85 @ SR 316 INTERCHANGE & HOV LANES	Gwinnett	Shoulder Width	403	106.3	110.4	-	-
110600-	I-85 FM I-985 TO N OF CR 134/HAMILTON MILL RD	Gwinnett	Vertical Alignment	403	121.14	125.14	-	-
110610-	I-85 FM N OF CR 134/HAMILTON MILL ROAD TO N OF SR 211	Barrow	Vertical Alignment	403			-	-
110620-	I-85 FM N OF SR 211/BARROW TO N OF SR 53/JACKSON	Barrow, Jackson	Shoulder Width	403	125.4	129.8	-	-
110640-	I-85 FM N OF SR 11 TO N OF SR 82	Jackson	Shoulder Width	403	137.5	137.5	-	-
110640-	I-85 FM N OF SR 11 TO N OF SR 82	Jackson	Shoulder Width	403	140.4		-	-
110650-	I-85 FM N OF SR 82 TO N OF SR 98	Jackson	Shoulder Width	403	141.4	141.4	-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
110650-	I-85 FM N OF SR 82 TO N OF SR 98	Jackson	Shoulder Width	403	143.1	143.1	-	-
110660-	I-85 FM N OF SR 98 TO N OF SR 15 IN BANKS	Jackson	Shoulder Width	403	146.6	146.6	-	-
110660-	I-85 FM N OF SR 98 TO N OF SR 15 IN BANKS	Jackson	Shoulder Width	403	146.7	146.7	-	-
110660-	I-85 FM N OF SR 98 TO N OF SR 15 IN BANKS	Jackson	Shoulder Width	403	149.3	149.3	-	-
110670-	I-85 FM N OF SR 15/US 441 TO N OF SR 63	Banks	Shoulder Width	403	153.75	153.75	-	-
110680-	I-85 FM N OF SR 63 TO N OF SR 51 IN FRANKLIN COUNTY	Banks	Shoulder Width	403	155.44	155.44	-	-
110690-	I-85 FM N OF SR 51 TO N OF SR 320	Franklin	Shoulder Width	403	162.23	162.23	-	-
110690-	I-85 FM N OF SR 51 TO N OF SR 320	Franklin	Shoulder Width	403	163.9	163.9	-	-
110700-	I-85 FM N OF SR 320 TO N OF SR 17	Franklin	Shoulder Width	403	164.82	164.82	-	-
110700-	I-85 FM N OF SR 320 TO N OF SR 17	Franklin	Shoulder Width	403	165.93	165.93	-	-
110700-	I-85 FM N OF SR 320 TO N OF SR 17	Franklin	Shoulder Width	403	167.9	167.9	-	-
110700-	I-85 FM N OF SR 320 TO N OF SR 17	Franklin	Shoulder Width	403	170.03	170.03	-	-
110700-	I-85 FM N OF SR 320 TO N OF SR 17	Franklin	Shoulder Width	403	173.14	173.14	-	-
110700-	I-85 FM N OF SR 320 TO N OF SR 17	Franklin	Shoulder Width	403	173.24	173.24	-	-
110710-	I-85 FM N OF SR 17 TO N/SC STATE LINE IN HART	Franklin, Hart	Shoulder Width	403	174.83	177.29	-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
121720-	SR 124 FM CENTERVILLE-ROSEBUD RD TO HENRY CLOWER BLVD	Gwinnett	Horizontal Alignment	124			7/28/2003	12/29/2005
121720-	SR 124 FM CENTERVILLE-ROSEBUD RD TO HENRY CLOWER BLVD	Gwinnett	Vertical Alignment	124			7/28/2003	12/29/2005
121970-	CR 600/DANIELSVILLE RD FM 4-LN NEAR CR 109 TO WALKER DRIVE	Clarke	Design Speed	600			-	-
121970-	CR 600/DANIELSVILLE RD FM 4-LN NEAR CR 109 TO WALKER DRIVE	Clarke	Design Speed	600			-	-
121970-	CR 600/DANIELSVILLE RD FM 4-LN NEAR CR 109 TO WALKER DRIVE	Clarke	Vertical Alignment	600			-	-
122320-	SR 15/US 441 FM N OF TALLULAH FALLS TO S CL OF CLAYTON	Rabun	Vertical Alignment	15	1.89	9.45	10/27/2004	9/21/2008
122320-	SR 15/US 441 FM N OF TALLULAH FALLS TO S CL OF CLAYTON	Rabun	Shoulder Width	15	1.8		10/27/2004	9/21/2008
122400-	SR 53 NEAR HOSCHTON NB FM MP 6.8-8.4 [N&S OF CR 421]	Jackson	Shoulder Width	53	6.8	8	5/22/2001	9/28/2001
122400-	SR 53 NEAR HOSCHTON NB FM MP 6.8-8.4 [N&S OF CR 421]	Jackson	Shoulder Width	53	6.8	8	5/22/2001	9/28/2001
122440-	SR 17 FM 3-LANE @ BEAVERDAM CK TO SR 115	Habersham	Vertical Alignment	17	9.02	10.02	9/16/2003	11/22/2005
122850-	SR 10 LOOP @ CR 141/PETER STREET/OLYMPIC DRIVE	Clarke	Vertical Alignment	10	5.9	6.1	-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
132230-	SR 51 RELOC FM MAIN ST ALONG ATHENS ST/MOON DR TO SR 51	Hall	Horizontal Alignment		1.2	1.3	3/28/1997	5/22/1997
132660-	SR 10/US 78 FM CR 166/WHIT DAVIS RD TO CR 26/SMOKEY/& OGLETH	Clarke, Oglethorpe	Lane Width	10	17.33	3.4	-	-
132670-	SR 53 @ CR 4/ROCKWELL CHURCH RD NORTH OF WINDER	Barrow	Grade	53	13.5	14.1	2/11/2002	12/31/2003
142230-	CR 127/OLD HULL RD FM CR 600/NORTH AVE TO CR 1149/4TH ST	Clarke	Horizontal Alignment	127			-	-
142291-	SR 284 @ CHATTAHOOCHEE RVR/LAKE LANIER 4 MI N OF GAINESVILLE	Hall	Vertical Alignment	284			-	-
150210-	CR 473/EPPS BRIDGE RD FM SR 10 TO SR 10 BU/US 78/CLARKE CO	Clarke	Vertical Alignment	700			1/13/1998	3/15/2002
150210-	CR 473/EPPS BRIDGE RD FM SR 10 TO SR 10 BU/US 78/CLARKE CO	Clarke	Vertical Alignment	700			1/13/1998	3/15/2002
150210-	CR 473/EPPS BRIDGE RD FM SR 10 TO SR 10 BU/US 78/CLARKE CO	Clarke	Vertical Alignment	700			1/13/1998	3/15/2002
150210-	CR 473/EPPS BRIDGE RD FM SR 10 TO SR 10 BU/US 78/CLARKE CO	Clarke, Oconee	Vertical Alignment	700			1/13/1998	3/15/2002
150210-	CR 473/EPPS BRIDGE RD FM SR 10 TO SR 10 BU/US 78/CLARKE CO	Clarke	Grade	900	4.76	5.16	1/13/1998	3/15/2002

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
162390-	W CLEVELAND BYP FM S OF HOPE DR TO N OF SR 115 - PH I	White	Vertical Alignment	962	4.68		-	-
170900-	CR 213 OVER WATERS/DICKS CREEK	Lumpkin	Lane Width				-	-
170900-	CR 213 OVER WATERS/DICKS CREEK	Lumpkin	Bridge Width				-	-
171004-	CR 86/JEFFERSON RIVER RD @ CURRY CREEK 3.6 MI E OF ARCADE	Jackson	Vertical Alignment	86			11/26/2003	10/29/2004
171210-	CR 235/ALCOVY ROAD @ ALCOVY RIVER 3 MI NE OF LAWRENCEVILLE	Gwinnett	Grade	235			4/12/1999	3/31/2000
171560-	MULTI-USE TRAIL FM MARTIN FARM ROAD TO SR 13/BUFORD HIGHWAY	Gwinnett	Bridge Width	0			-	-
210440-	I-520 FM NORTH OF I-20 TO SR 4/US 1 REPR & PART WIDEN TO 6LN	Richmond	Shoulder Width	415	0	0.16	11/19/1997	10/23/2000
210440-	I-520 FM NORTH OF I-20 TO SR 4/US 1 REPR & PART WIDEN TO 6LN	Richmond	Shoulder Width	415	0.52	0.65	11/19/1997	10/23/2000
210440-	I-520 FM NORTH OF I-20 TO SR 4/US 1 REPR & PART WIDEN TO 6LN	Richmond	Shoulder Width	415	0.53	0.89	11/19/1997	10/23/2000
210660-	I-16 AT TURKEY CK- PUGHES CK & MERCER CK	Laurens, Treutlen	Superelevation	404	65.65	65.88	3/1/2000	8/29/2003
210810-	I-20 FM ALCOVY ROAD INCL INTERCHANGE TO SR 142 IN COVINGTON	Newton	Horizontal Alignment	74			1/10/2007	7/30/2009

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
210890-	BRIDGE JACKING IN DISTRICT 2	Newton	Vertical Alignment	0	15.63	15.63	1/31/2000	9/30/2000
220680-	SR 4/15TH ST/AUGUSTA FM MILLEDGEVILLE RD TO GOVERNMENT ST	Richmond	Horizontal Alignment	4			-	-
221180-	SR 56 FM SR 56 SPUR/BURKE TO N OF BENNOCK MILL PART NEW LOC	Richmond, Burke	Grade	56	0.32	5.54	11/8/1999	5/31/2002
221180-	SR 56 FM SR 56 SPUR/BURKE TO N OF BENNOCK MILL PART NEW LOC	Burke, Richmond	Grade	56	35.4	5.52	11/8/1999	5/31/2002
221540-	SR 19/26 CONSTRUCT TURN LANES @ LAURENS CO ELEMENTARY SCH	Laurens, Treutlen	Grade	19			10/1/2001	12/21/2001
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Design Speed	27			-	-
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Design Speed	27			-	-
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Design Speed	27			-	-
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Design Speed	27			-	-
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Design Speed	27			-	-
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Stopping Sight Distance	27			-	-
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Stopping Sight Distance	27			-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Stopping Sight Distance	27			-	-
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Stopping Sight Distance	27			-	-
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Stopping Sight Distance	27			-	-
221940-	SR 27/US 341 FM 4700' SE/CR 266 TO WEST CL/CHAUNCEY	Dodge	Horizontal Alignment	27			-	-
222350-	I-520 @ SR 56 ADD WB LOOP & ADD LANES ON SR 56	Richmond	Vertical Alignment	415	8	9.2	4/22/2002	7/19/2007
222350-	I-520 @ SR 56 ADD WB LOOP & ADD LANES ON SR 56	Richmond	Cross Slope	415	8	9.2	4/22/2002	7/19/2007
222350-	I-520 @ SR 56 ADD WB LOOP & ADD LANES ON SR 56	Richmond	Shoulder Width	415	8	9.2	4/22/2002	7/19/2007
222460-	SR 10: OGLETHORPE MP13.7-15 (EB); 15.3-16.2 (WB)& WILKES: 0-1.5 (EB); 5.5-7.0 (WB)	Oglethorpe, Wilkes	Vertical Alignment	10	13.8	14.3	-	-
222550-	SR 121/US 25/SAVANNAH RVR PKWY FM CR 16 TO CR 118/BURKE	Jenkins, Burke	Vertical Alignment	121			4/15/2004	10/1/2007
231150-	CR 191 @ OGEECHEE RIVER OVERFLOW N OF EMANUEL COUNTY LINE	Jenkins	Lane Width	191	1.05	1.09	-	-
231152-	CR 191 @ OGEECHEE RIVER NORTH OF EMANUEL COUNTY LINE	Jenkins	Lane Width	191	1.61	1.79	-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
231220-	SR 142 FM SOUTH OF SR 12/US 278 TO CR 72 IN COVINGTON	Newton	Superelevation	142	8.4	11.56	3/1/2010	11/13/2012
231910-	CRAWFORD/LEXINGTON BYP FM E OF CR 26/SMOKEY RD TO E OF SR 22	Oglethorpe	Lane Width	10			-	-
232240-	SR 22/SR 24 @ CR 472/LAKE LAUREL RD EAST OF MILLEDGEVILLE	Baldwin	Horizontal Alignment	22	13.41	13.83	3/7/2006	4/3/2007
232260-	SR 22 @ CS 558/TATTNALL STREET IN WEST MILLEDGEVILLE	Baldwin	Vertical Alignment	22			-	-
232260-	SR 22 @ CS 558/TATTNALL STREET IN WEST MILLEDGEVILLE	Baldwin	Vertical Clearance	22	10.05	10.05	-	-
232310-	SR 47 @ LITTLE RIVER 10.5 MI SE OF LINCOLNTON	Columbia, Lincoln	Shoulder Width	47			-	-
232315-	SR 77 @ GOOSEPOND CREEK 14.5 MI NE OF LEXINGTON	Oglethorpe	Vertical Alignment	77	31.76	31.98	11/20/2003	10/14/2004
245370-	SR 22 @ LONG CREEK 3.5 MI S OF LEXINGTON	Oglethorpe	Vertical Alignment	22	11.3	11.52	10/23/2003	11/15/2004
245371-	SR 22 @ BIG CLOUDS CREEK 3.8 MI E OF SMITHSONIA	Oglethorpe	Vertical Alignment	22	24.34	24.56	1/5/2004	12/2/2004
245400-	SR 83/BOSTWICK HWY @ LITTLE SANDY CRK 4.6 MI S OF BOSTWICK	Morgan	Vertical Alignment	83	0.01	0.03	3/18/2011	6/30/2012
262370-	CR 160/THOMAS FIELD RD FM SR 243/US 441B TO CR 425/OGDEN RD	Baldwin	Grade	467			-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
262370-	CR 160/THOMAS FIELD RD FM SR 243/US 441B TO CR 425/OGDEN RD	Baldwin	Grade	160			-	-
311380-	I-75 @ SR 36 FM .5 MI SW/I-75 TO.55 MI NE/I-75 & BR / LAMAR	Butts, Lamar	Superelevation	401			1/8/1997	10/14/1999
311445-	I-185/COLUMBUS FM SR 520 TO ST MARYS ROAD	Muscogee	Shoulder Width	411	0	0.46	7/9/2007	5/14/2011
311445-	I-185/COLUMBUS FM SR 520 TO ST MARYS ROAD	Muscogee	Shoulder Width	411	1.47	2.38	7/9/2007	5/14/2011
311445-	I-185/COLUMBUS FM SR 520 TO ST MARYS ROAD	Muscogee	Shoulder Width	411	1.85	2.86	7/9/2007	5/14/2011
311630-	I-185 INTERCHANGE @ SR 1/SR 520	Muscogee	Horizontal Alignment	411	0	0.4	7/9/2007	10/31/2009
311685-	I-16 FM JCT I-75 TO TWIGGS/BLECKLEY CL...TWIGGS	Twiggs, Bibb	Shoulder Width		1.14	1.18	4/7/1995	7/15/1996
311700-	I-75 @ THE PROPOSED RICHARD RUSSELL PARKWAY	Peach	Vertical Alignment	401			4/1/2002	8/9/2005
312113-	I-75 SAFETY UPGRADES @ LOCUST GROVE ROAD/BILL GARDNER PKWY	Henry	Shoulder Width	401			-	-
322020-	SR 96 FM E CL/JUNCTION CITY TO CR 48 W/BUTLER IN TAYLOR CO	Talbot, Taylor	Superelevation	96			-	-
322130-	SR 1/US 27 FM S/LUMPKIN NEAR CR 101 TO WIMBERLY MILL BR	Stewart	Grade	1	12.36	12.6	-	-
322350-	SR 74 FM JUST SOUTH OF CROSSTOWN RD NW TO SR 54	Fayette	Stopping Sight Distance	74	13.7	13.7	9/11/2006	12/31/2008

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
322420-	SR 3/US 19 FM ANGELICA CK/SUMTER TO SR 271/SCHLEY	Sumter, Schley	Grade	3	13.5	14.8	2/23/2005	5/30/2008
322710-	SR 3/US 19 FM CR 201/COOPER RD TO BUTLER BYPASS & NEW LOC	Taylor	Grade	3	7.21	7.3	6/3/2005	3/4/2009
322922-	SR 3/US 19 @ POTATO CREEK IN THOMASTON	Upton	Vertical Alignment	3	17.02	17.3	-	-
323075-	SR 138 @ SR 155	Henry	Vertical Alignment	138	18.94	19.24	-	-
331620-	SR 230 @ SOUTH PRONG BIG TUCSAWHATCHEE CRK W/HAWKINSVILLE	Pulaski	Vertical Alignment	230	0.38	0.38	10/7/1997	7/31/1998
331850-	SR 18 EB MP 14.88-15.92 WB MP 17.14-18.7 EB MP 21.39-22.59	Jones	Vertical Alignment	18	17.14	18.7	1/14/1999	11/24/1999
332360-	SR 42/US 23 PASSING LANES @ 2 LOC BT JACKSON & JENKINSBURG	Butts	Shoulder Width	42	13.56	13.68	3/31/2010	12/30/2011
333160-	SR 27 @ BLADEN CREEK 11 MI SW OF LUMPKIN	Stewart	Vertical Alignment	27	0.662	0.889	5/3/2004	12/14/2005
333185-	SR 85 NBL @ MORNING CREEK 3.5 MI N OF FAYETTEVILLE	Fayette	Vertical Alignment	85	14.27	14.34	5/9/2006	5/15/2008
333202-	SR 18/US 27 ALT. @ KENDALL CREEK 2 MI S OF GREENVILLE	Meriwether	Vertical Alignment	18	13	13.17	12/8/2004	2/9/2006
342960-	CR 317/HENRY BRYANT ROAD @ WAHOO CREEK 3.5 MI NW OF NEWNAN	Coweta	Shoulder Width	317			-	-
342970-	JONESBORO RD FM W OF SR 3/US 41/CLAYTON TO I-75/HENRY	Clayton, Henry	Superelevation	920			-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
343345-	SR 153 @ LITTLE MUCKALEE CREEK 3.0 MI E OF JCT SR 45	Schley	Vertical Alignment	153	4.9	5.03	8/10/2006	6/15/2007
343355-	SR 137 @ OOCHEE CREEK 2.5 MI E OF JCT SR 41	Marion	Grade	137	11.14	11.14	-	-
343365-	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER	Taylor	Vertical Alignment	137	0.52	0.81	11/27/2003	11/17/2004
343365-	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER	Taylor	Grade	137	0.78	0.88	11/27/2003	11/17/2004
343385-	SR 109 @ ELKINS CREEK 0.5 MI EAST OF MOLENA	Pike	Vertical Alignment	109	3.54	3.73	1/30/2006	4/30/2007
350710-	CS 877/W MCINTOSH RD/GRIFFIN FM OLD ATLANTA RD TO SR 3/US 41	Spalding	Vertical Alignment	877			10/21/2004	10/31/2005
350820-	HOUSTON RD FM WALDEN/SARDIS CH RDS TO SR 11	Bibb	Shoulder Width	739			10/29/1999	6/15/2002
350820-	HOUSTON RD FM WALDEN/SARDIS CH RDS TO SR 11	Bibb	Shoulder Width	739			10/29/1999	6/15/2002
351120-	BLOOMFIELD RD/LOG CABIN DR FM ROCKY CK RD TO SR 22/EISENHOWE	Bibb	Horizontal Alignment	1023			1/9/2008	3/1/2010
351150-	CR 79/NORTHSIDE DR FM WESLEYAN DR TO CR 723/FOREST HILL RD	Bibb	Stopping Sight Distance	79			8/15/2001	12/23/2003
351170-	SR 14/US 29 LEFT TURN LANE FROM MEADOW WAY DR TO SR 14 SPUR	Troup	Vertical Alignment	14	19.2	19.26	1/15/2008	3/19/2009

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
351170-	SR 14/US 29 LEFT TURN LANE FROM MEADOW WAY DR TO SR 14 SPUR	Troup	Vertical Alignment	14	19.5	19.59	1/15/2008	3/19/2009
351210-	SR 3/US 19 TURN LANES AT SR 362 IN GRIFFIN	Spalding	Lateral Offset	3			9/29/2003	2/18/2004
351210-	SR 3/US 19 TURN LANES AT SR 362 IN GRIFFIN	Spalding	Shoulder Width	3			9/29/2003	2/18/2004
363540-	US 19 CORR FM SR 22/US 80 NW TO CR 421/LOG TOWN RD	Upson	Vertical Alignment	3			-	-
363557-	SR 3/US 19 FM CR 219 NEAR NCL/BUTLER TO NORTH OF SR 208	Taylor	Grade	3	16.24	20.29	-	-
410240-	I-75 FM N CITY LIMITS OF TIFTON TO TURNER COUNTY LINE-PH-1	Tift	Lateral Offset	401			10/9/2001	9/6/2005
410240-	I-75 FM N CITY LIMITS OF TIFTON TO TURNER COUNTY LINE-PH-1	Tift	Lateral Offset	401			10/9/2001	9/6/2005
410245-	I-75 FM TIFT COUNTY LINE TO SR 32 - PHASE I	Turner	Lateral Offset	401			-	-
410250-	I-75 FM SR 159 NR ASHBURN TO SR 300/CRISP	Turner, Crisp	Vertical Alignment	401	85.7	96.6	-	-
410250-	I-75 FM SR 159 NR ASHBURN TO SR 300/CRISP	Crisp, Turner	Lateral Offset	401			-	-
410250-	I-75 FM SR 159 NR ASHBURN TO SR 300/CRISP	Turner, Crisp	Lateral Offset	401			-	-
410500-	I-75 FM NORTH OF SR 133 TO COOK COUNTY LINE - PHASE 1	Lowndes	Lateral Offset	401			3/14/2002	9/15/2007
410500-	I-75 FM NORTH OF SR 133 TO COOK COUNTY LINE - PHASE 1	Lowndes	Shoulder Width	401			3/14/2002	9/15/2007

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
410510-	I-75 FM LOWNDES COUNTY LINE TO NORTH OF SR 37 - PHASE I	Cook	Lateral Offset	401			11/8/2004	5/13/2008
410520-	I-75 FM SR 37 TO CR 246/KINARD BRIDGE RD - PHASE I	Cook	Lateral Offset	401			8/8/2006	3/9/2011
410530-	I-75 FM CR 246/KINARD BRIDGE RD TO TIFT COUNTY LINE- PHASE I	Cook	Lateral Offset	401			5/7/2007	1/13/2011
421980-	SR 49 OVER KINCHAFOONEE CREEK/ ALSO SUMTER CO	Terrell, Sumter	Superelevation	49	4.28	4.29	5/12/1998	6/30/1999
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Horizontal Alignment	31			9/2/2003	1/13/2005
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Cross Slope	31	27.7	28.43	9/2/2003	1/13/2005
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Bridge Width	31	27.7	28.43	9/2/2003	1/13/2005
431290-	SR 27 OVER TOBANNEE CREEK NORTH OF GEORGETOWN	Quitman	Grade		1.45	1.78	9/22/1998	4/23/1999
431550-	SR 111 @ TIRED CREEK & OVERFLOW SOUTH OF CAIRO	Grady	Grade	111	13.58	14.08	3/9/2001	7/30/2002
431670-	SR 35/W THOMASVILLE BYP /US 319 FM SR 35BU N TO SR 38/US 84	Thomas	Vertical Alignment	35	6.93	9.54	6/7/2004	6/1/2006
431830-	SR 135 FM SR 31/US 441 EAST TO SR 32 INCLUDING RR SEPARATION	Coffee	Intersect Skew	135	10.67	10.67	-	-
442550-	SR 188 OVER W. BRANCH BARNETTS CK NE OF CAIRO	Grady	Horizontal Alignment	188	7.64	8.01	11/2/1998	12/31/1999
442682-	CR 275 @ PISCOLA CREEK APPROXIMATELY 2.5 MILES SE OF DIXIE	Brooks	Superelevation	275			5/17/1999	2/25/2000

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
442740-	CR 307/OLD GA HWY 3 @ BIG SLOUGH & OVERFLOW IN NORTH CAMILLA	Mitchell	Bridge Width	307			-	-
471080-	CR 598 OVER BEAR CREEK @ HILLARDS LAKE 5 MILES SW OF DOUGLAS	Coffee	Intersect Skew	598			12/11/1997	2/20/1998
511070-	I-95 FM FLA LINE TO HARRIETTS BLUFF RD/INCL BR @ CROOKED RVR	Camden	Stopping Sight Distance		3	3	7/17/1996	6/17/1999
511070-	I-95 FM FLA LINE TO HARRIETTS BLUFF RD/INCL BR @ CROOKED RVR	Camden	Shoulder Width				7/17/1996	6/17/1999
511075-	I-95 @ ST MARY'S RIVER @ FLA STATE LINE	Camden	Vertical Alignment				4/23/1996	10/26/1998
511080-	I-95 FM HARRIETT'S BLUFF ROAD TO SR 25 SPUR/51Y080	Camden	Vertical Alignment	405	2.64	2.64	1/9/1998	11/12/1999
511100-	I-95 FM N OF CSX RR TO N OF S ALTAMAHA RIVER;EXC SR 99 INT	Glynn	Lateral Offset	405	14.64	14.64	7/13/2007	6/11/2010
511110-	I-95 FM JUST N OF ALTAMAHA RIVER BRIDGE TO SR 251	McIntosh	Lateral Offset	405	49	49	7/13/2007	6/11/2010
511120-	I-95 FM 1 MILE NORTH OF SR 251 TO NORTH OF SR 57 - PHASE I	McIntosh	Lateral Offset	405	51.3	51.3	6/6/2007	11/15/2010
511120-	I-95 FM 1 MILE NORTH OF SR 251 TO NORTH OF SR 57 - PHASE I	McIntosh	Lateral Offset	405	53.6	53.6	6/6/2007	11/15/2010
511120-	I-95 FM 1 MILE NORTH OF SR 251 TO NORTH OF SR 57 - PHASE I	McIntosh	Lateral Offset	405	55.6	55.6	6/6/2007	11/15/2010

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
511120-	I-95 FM 1 MILE NORTH OF SR 251 TO NORTH OF SR 57 - PHASE I	McIntosh	Lateral Offset	405	58.2	58.2	6/6/2007	11/15/2010
511150-	I-95 FM JERICO RIVER TO US 17	Bryan	Design Speed	405	85.9	85.9	9/5/1999	2/26/2003
511180-	I-16 @ I-516 & @ STILES AVE - BRIDGE REPAIRS	Chatham	Vertical Clearance	404			2/16/2009	7/27/2010
521570-	SR 31/US 441 @ ALLIGATOR BIG HORSE OFLOW BIG HORSE CKS	Telfair	Cross Slope	31			5/2/2004	6/30/2006
521570-	SR 31/US 441 @ ALLIGATOR BIG HORSE OFLOW BIG HORSE CKS	Telfair	Bridge Width	31			5/2/2004	6/30/2006
521705-	SR 21-NEW PARALLEL BRIDGE @ LITTLE EBENEZER CREEK	Effingham	Bridge Width				-	-
521780-	SR 26/GARDEN CITY FM CR 704 TO SR 27/US 17 INCL CLVT EXT	Chatham	Horizontal Alignment				3/17/1997	7/6/1998
521780-	SR 26/GARDEN CITY FM CR 704 TO SR 27/US 17 INCL CLVT EXT	Chatham	Superelevation				3/17/1997	7/6/1998
522000-	SR 73/US 301 FM N CL/GLENNVILLE TO EVANS CO LINE	Tattnall	Vertical Alignment	73	3.68	4.51	7/24/1998	5/30/2002
522470-	SR 26/US 80 EB MP 7.1-8.2 WB MP 8.1-9.3	Bulloch	Vertical Alignment	26	8.21	8.4	6/11/1999	6/30/2000
522520-	SR 15 BTWN HIGGSTON & TARRYTOWN/ NB MP 5.0-6.4;SB 8.7-9.7	Montgomery	Vertical Alignment	15	6.08	9.71	-	-
522520-	SR 15 BTWN HIGGSTON & TARRYTOWN/ NB MP 5.0-6.4;SB 8.7-9.7	Montgomery	Vertical Alignment	15	6.11	9.81	-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
532690-	SR 99 FM SR 520 TO SR 32	Glynn	Superelevation		6.64	6.75	4/15/1996	4/25/1997
550570-	MIDDLEGROUND/MONTGOMERY CROSS RD FM SR 204/ABERCORN TO SR204	Chatham	Horizontal Alignment	1144			7/16/2004	9/12/2008
550570-	MIDDLEGROUND/MONTGOMERY CROSS RD FM SR 204/ABERCORN TO SR204	Chatham	Superelevation	1144			7/16/2004	9/12/2008
610755-	I-75 @ SR 225 N OF CALHOUN (INCLUDING I-75 BRIDGE)	Gordon	Shoulder Width	401	1.33	1.37	5/12/2000	5/30/2001
611310-	I-59 @ 3 LOC I-24 @ 1 I-75 @ 4 WHITFIELD/CATOOSA--611310 X Z	Catoosa, Dade, Whitfield	Shoulder Width	406	4.38	4.4	12/4/2000	8/15/2002
620399-	SR 52 @ CSX RR IN CHATSWORTH	Murray	Vertical Alignment	52	7.44	7.52	5/12/2004	6/14/2006
620590-	SR 1/US 27 IN ROME FM 5TH AVE TO JOHN DAVENPORT DR	Floyd	Vertical Alignment	1	14.14	14.2	7/5/2006	5/29/2009
621070-	SR 1/US 27 FM NEAR SR 156/FLOYD TO CR 329/CHATTOOGA-62107X	Floyd, Chattooga	Design Speed	1			-	-
621580-	SR 120 FM W OF BUCHANAN BYP TO LAKE OLYMPIA	Haralson	Horizontal Alignment	120	10.65	10.79	2/20/2005	7/31/2006
621580-	SR 120 FM W OF BUCHANAN BYP TO LAKE OLYMPIA	Haralson	Vertical Alignment	120			2/20/2005	7/31/2006
621590-	SR 53 - WB PASSING LNS EAST OF TATE MP 20.4-21.3 & 22.6-24.1	Pickens	Horizontal Alignment	53			7/11/2001	7/31/2002
621590-	SR 53 - WB PASSING LNS EAST OF TATE MP 20.4-21.3 & 22.6-24.1	Pickens	Vertical Alignment	53	23	24	7/11/2001	7/31/2002

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
621660-	WEST ROME BYPASS FM 0.34 MI S OF COOSA RIVER TO SR 20	Floyd	Stopping Sight Distance	0			-	-
630673-	CANTON HWY FM CR 351/PALM ST TO N/SIXES RD[INC RR BR]-63Y673	Cherokee	Design Speed	754			10/25/1997	11/24/1999
631100-	SR 282/ELLIJAY FM WEST OF SR 5 ALT EAST TO SR 2 & BRIDGE	Gilmer	Shoulder Width	282	11.8	11.8	12/15/1997	7/9/1999
631430-	SR 2/SR 52 @ MOUNTAINTOWN CREEK 6.7 MI NW OF ELLIJAY	Gilmer	Vertical Alignment	2	6.26	6.5	10/8/1998	5/2/2001
631430-	SR 2/SR 52 @ MOUNTAINTOWN CREEK 6.7 MI NW OF ELLIJAY	Gilmer	Shoulder Width	2	6.25	6.5	10/8/1998	5/2/2001
631580-	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY	Gilmer	Vertical Alignment	282	3.8	4.2	11/6/2004	2/28/2006
631580-	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY	Gilmer	Grade	282	3.8	4.2	11/6/2004	2/28/2006
631630-	SR 61 @ RIDGE ROAD/MULBERRY ROCK RD SOUTH OF DALLAS	Paulding	Stopping Sight Distance	61	1.75	2.3	5/11/2010	2/18/2011
631630-	SR 61 @ RIDGE ROAD/MULBERRY ROCK RD SOUTH OF DALLAS	Paulding	Vertical Alignment	61	1.75	2.3	5/11/2010	2/18/2011
641910-	SR 100 NB MP 5.5-6.8; NB MP 13.3-14.55; SB MP 15.3-16.8	Carroll	Vertical Alignment	100			9/6/2005	11/29/2006
642160-	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT	Fannin	Horizontal Alignment	60	2.02	2.1	12/29/2004	4/28/2006

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
642160-	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT	Fannin	Vertical Alignment	60	1.982	2.257	12/29/2004	4/28/2006
642165-	SR 60 @ SKEENAH CREEK & CHAPEL BRANCH; INC BIKE LN	Fannin	Horizontal Alignment	60	5.36	13.32	6/7/2006	7/31/2007
642165-	SR 60 @ SKEENAH CREEK & CHAPEL BRANCH; INC BIKE LN	Fannin	Horizontal Alignment	60	5.36	13.32	6/7/2006	7/31/2007
642165-	SR 60 @ SKEENAH CREEK & CHAPEL BRANCH; INC BIKE LN	Fannin	Vertical Alignment	60	5.36	13.32	6/7/2006	7/31/2007
642165-	SR 60 @ SKEENAH CREEK & CHAPEL BRANCH; INC BIKE LN	Fannin	Vertical Alignment	60	5.36	13.32	6/7/2006	7/31/2007
650460-	SR 101 OVER ETOWAH RIVER IN ROME	Floyd	Vertical Alignment	101	10.98	11.52	9/18/2003	8/31/2006
650470-	TOWNE LAKE PARKWAY FM EAGLE DR/TOWNE LAKE PKWY TO I-575	Cherokee	Grade				-	-
662350-	SR 293/ROME FM KINGSTON AVE E TO EAST ROME BYP	Floyd	Design Speed		6	7	-	-
662400-	SR 1/US 27 FM CEDARTOWN BYP TO CR 633/BOOZE RD/FLOYD CO	Polk, Floyd	Design Speed	1	11.09	14.8	-	-
671040-	CR 394/HICKORY LEVEL-SAND HILL RD @ HOMINY CK SW/VILLA RICA	Carroll	Shoulder Width	394			10/5/1998	6/30/1999
671951-	CR 107/HOWELL BRIDGE RD @ SHARP MTN CREEK SW OF BALL GROUND	Cherokee	Vertical Alignment	107			11/30/2009	8/12/2010
712420-	I-75 FM US 41/OLD DIXIE HWY TO I-285/INCL BR & FNTGE RDS	Clayton	Superelevation	401	238.22	238.36	1/19/1994	11/23/1996

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
712630-	I-75 FM MEADOW BROOK DR TO MORROW CITY LIMITS & SR 54 INTERCH	Clayton	Shoulder Width	54	232.4	232.5	9/15/2008	6/15/2012
712870-	I-20 @ LITHONIA INDUSTRIAL BLVD	DeKalb	Stopping Sight Distance	402			9/22/2003	11/4/2005
712870-	I-20 @ LITHONIA INDUSTRIAL BLVD	DeKalb	Shoulder Width	402			9/22/2003	11/4/2005
713240-	I-285 @ PACES FERRY ROAD - INTERCHANGE RECST	Cobb	Vertical Alignment	407			11/16/2000	8/31/2003
713240-	I-285 @ PACES FERRY ROAD - INTERCHANGE RECST	Cobb	Grade	407			11/16/2000	8/31/2003
713290-	I-285 @ SR 155/FLAT SHOALS ROAD	DeKalb	Lateral Offset	407	48.3	48.35	-	-
713290-	I-285 @ SR 155/FLAT SHOALS ROAD	DeKalb	Shoulder Width	407	48.3	48.35	-	-
713371-	I-285 ATMS/SURVEIL FM I-85/UNION CITY NORTH TO I-20 WEST	Fulton	Lane Width	407			12/18/2006	3/19/2009
713372-	I-285 ATMS/SURVEIL FM I-85/UNION CITY-FULTN E TO I-75/CLAYTN	Clayton, Fulton	Lane Width	407			-	-
713405-	I-285 ATMS RAMP METERS FM NORTHSIDE DR/FULTON TO I-85/DEKALB	DeKalb, Fulton	Lane Width	407			-	-
713405-	I-285 ATMS RAMP METERS FM NORTHSIDE DR/FULTON TO I-85/DEKALB	Fulton, DeKalb	Lane Width	407			-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
713470-	I-85 RESURFACING- MARKING FM I-75 TO PIEDMONT RD FOR HOV	Fulton	Lane Width		84.9	95.8	6/12/1995	5/29/1996
713470-	I-85 RESURFACING- MARKING FM I-75 TO PIEDMONT RD FOR HOV	Fulton	Shoulder Width		84.9	95.8	6/12/1995	5/29/1996
713472-	I-85 RESURFACING- MARKING FM PIEDMONT RD TO I-285 FOR HOV	DeKalb, Fulton	Lane Width		85	95	7/26/1995	5/30/1996
713472-	I-85 RESURFACING- MARKING FM PIEDMONT RD TO I-285 FOR HOV	DeKalb	Shoulder Width		85	95	7/26/1995	5/30/1996
713474-	I-75 RESURFACING- MARKING FM I-285 S. TO EDGEWOOD FOR HOV	Clayton	Lane Width	401	38.5	58.9	6/12/1995	5/29/1996
713474-	I-75 RESURFACING- MARKING FM I-285 S. TO EDGEWOOD FOR HOV	Clayton	Shoulder Width	401	38.5	58.85	6/12/1995	5/29/1996
713760-	I-85 FM CHAMBLEE-TUCKER RD TO SR 316/GWINNETT-FOR HOV/71376X	DeKalb, Gwinnett	Stopping Sight Distance	403	5.9	8.75	3/1/1999	10/31/2001
713760-	I-85 FM CHAMBLEE-TUCKER RD TO SR 316/GWINNETT-FOR HOV/71376X	DeKalb, Gwinnett	Lane Width	403	5.9	8.75	3/1/1999	10/31/2001
713760-	I-85 FM CHAMBLEE-TUCKER RD TO SR 316/GWINNETT-FOR HOV/71376X	DeKalb, Gwinnett	Shoulder Width	403	5.9	8.75	3/1/1999	10/31/2001
714090-	I-575 ATMS/COMM/SURVEILLANCE FM I-75/COBB TO SR 92/CHEROKEE	Cherokee, Cobb	Lane Width	5			12/15/2006	1/20/2009

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
714090-	I-575 ATMS/COMM/SURVEILLANCE FM I-75/COBB TO SR 92/CHEROKEE	Cobb, Cherokee	Lane Width	5			12/15/2006	1/20/2009
714190-	17TH ST FM ATLANTIC STA. TO W.PEACHTREE & SR I-75/85 RMPS	Fulton	Vertical Alignment	401			1/14/2002	3/1/2004
721310-	SR 120/ROSWELL RD FM SR 120 ALT TO BRIDGEGATE DR - GRTA	Cobb	Vertical Alignment	120	13.67	13.81	3/8/2010	10/31/2012
721310-	SR 120/ROSWELL RD FM SR 120 ALT TO BRIDGEGATE DR - GRTA	Cobb	Grade	120	13.67	13.88	3/8/2010	10/31/2012
721470-	SR 5 N&SB FM S/SWEETWATER RD TO S/DOG RIVER BRIDGE	Douglas	Horizontal Alignment				11/6/1995	5/22/1998
721470-	SR 5 N&SB FM S/SWEETWATER RD TO S/DOG RIVER BRIDGE	Douglas	Vertical Alignment				11/6/1995	5/22/1998
721470-	SR 5 N&SB FM S/SWEETWATER RD TO S/DOG RIVER BRIDGE	Douglas	Shoulder Width				11/6/1995	5/22/1998
721510-	SR 120/ALPHARETTA FM SR 9/MAIN ST EASTERLY TO SR 400	Fulton	Vertical Alignment		8.2	8.25	6/11/1996	8/29/1997
721530-	SR 124 FM ROCKBRIDGE RD TO CENTERVILLE-ROSEBUD RD/GWINET*GF	DeKalb, Gwinnett	Horizontal Alignment	124			3/16/1999	8/24/2001
721530-	SR 124 FM ROCKBRIDGE RD TO CENTERVILLE-ROSEBUD RD/GWINET*GF	DeKalb, Gwinnett	Vertical Alignment	124			3/16/1999	8/24/2001
721530-	SR 124 FM ROCKBRIDGE RD TO CENTERVILLE-ROSEBUD RD/GWINET*GF	DeKalb, Gwinnett	Vertical Alignment	124			3/16/1999	8/24/2001

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
721580-	SR 20/138 FROM RELOCATED SR 138 TO I-20	Rockdale	Horizontal Alignment	138			1/15/1998	6/23/2000
721940-	SR 410 ATMS/COMM/SURVEIL FM LAWRENCEVILLE HWY TO E PARK PL	DeKalb, Gwinnett	Horizontal Alignment	410			11/19/2007	10/31/2009
722010-	SR 400 FROM SR 140/HOLCOMB BRIDGE RD TO MCFARLAND RD GRTA	Fulton, Forsyth	Stopping Sight Distance	400	17.73	17.96	11/29/2005	7/31/2008
722010-	SR 400 FROM SR 140/HOLCOMB BRIDGE RD TO MCFARLAND RD GRTA	Fulton, Forsyth	Stopping Sight Distance	400	18.21	18.43	11/29/2005	7/31/2008
722010-	SR 400 FROM SR 140/HOLCOMB BRIDGE RD TO MCFARLAND RD GRTA	Forsyth, Fulton	Shoulder Width	400	13.75	1.48	11/29/2005	7/31/2008
722010-	SR 400 FROM SR 140/HOLCOMB BRIDGE RD TO MCFARLAND RD GRTA	Fulton, Forsyth	Shoulder Width	400	14.46	20.11	11/29/2005	7/31/2008
730753-	SOUTH FULTON PKWY FM COCHRAN MILL RD TO SR 154 - GRTA	Fulton	Stopping Sight Distance	2043			12/17/2003	9/11/2006
730753-	SOUTH FULTON PKWY FM COCHRAN MILL RD TO SR 154 - GRTA	Fulton	Bridge Width	2043			12/17/2003	9/11/2006
730756-	NEW WOOTEN ROAD FM CAPPS FERRY RD TO COCHRAN MILL RD *GF	Fulton	Shoulder Width	2043			8/17/1998	12/21/2000
731047-	SR 138/SR 20 FROM NORTH OF I-20 TO SIGMAN ROAD	Rockdale	Horizontal Alignment	20			8/12/2005	12/31/2007
731520-	SR 3/US 19 @ CEN OF GA RAILROAD .35 MI S OF JCT I-285	Clayton	Horizontal Alignment	3			1/12/2007	8/19/2008

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
742510-	OLD COVINGTON HWY @ ROCKDALE INDUST. BLVD & FARMER RD	Rockdale	Horizontal Alignment				9/25/1996	7/31/1997
751300-	JOHNSON FERRY RD FM COLUMNS DR TO ABERNATHY & BRIDGE	Cobb, Fulton	Intersect Skew	947			5/28/2009	1/28/2013
751300-	JOHNSON FERRY RD FM COLUMNS DR TO ABERNATHY & BRIDGE	Cobb, Fulton	Horizontal Alignment	947			5/28/2009	1/28/2013
751300-	JOHNSON FERRY RD FM COLUMNS DR TO ABERNATHY & BRIDGE	Cobb, Fulton	Grade	947			5/28/2009	1/28/2013
751310-	ABERNATHY RD FM JOHNSON FERRY RD TO ROSWELL RD - GRTA	Fulton	Horizontal Alignment	947			5/28/2009	1/28/2013
751320-	CR 5189/ROCKBRIDGE RD @ SNAPFINGER CREEK	DeKalb	Vertical Alignment	857			10/6/2003	5/19/2005
751940-	CR 5109/STEPHENSON RD @ CROOKED CRK	DeKalb	Vertical Alignment	5109			1/11/1996	7/16/1996
752015-	CS 1868/COURTLAND STREET @ CSX RR	Fulton	Superelevation	1868			-	-
752020-	PEACHTREE ST @ GEORGIA RR & MARTA @ UNDERGROUND ATLANTA	Fulton	Horizontal Alignment	661			-	-
752020-	PEACHTREE ST @ GEORGIA RR & MARTA @ UNDERGROUND ATLANTA	Fulton	Lane Width	661			-	-
752030-	INTERNATIONAL BLVD @ CSX & NORFOLK-SOUTHERN RR @ WCC	Fulton	Vertical Alignment	2001			6/12/2002	12/1/2004

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
752086-	SR 999/CS 3586/SPRING STREET OVER CSX RAILROAD	Fulton	Stopping Sight Distance	3586			-	-
752086-	SR 999/CS 3586/SPRING STREET OVER CSX RAILROAD	Fulton	Horizontal Alignment	3586			-	-
752100-	CR 5151/E PONCE DE LEON FM W OF IDLEWOOD TO E/SAGEWOOD CIR E	DeKalb	Superelevation	5151			11/10/1997	7/31/1998
752130-	AUBURN AVE PEDESTRIAN SYSTEM FM BELL ST TO HILLIARD ST	Fulton	Lateral Offset				-	-
752140-	P'TREE ST PEDESTRIAN SYS FM MEMORIAL DR TO PINE STREET	Fulton	Lateral Offset				-	-
752295-	KENNEDY INTCH-RIVERWOOD PKWY FM US 41 TO CUMBERLAND CIR	Cobb	Vertical Alignment	5142			5/30/2002	11/30/2003
752560-	SR 999/CS 3586/SPRING STREET @ SOU RR- CSX RR REPLACEMENT	Fulton	Stopping Sight Distance	3586			-	-
752560-	SR 999/CS 3586/SPRING STREET @ SOU RR- CSX RR REPLACEMENT	Fulton	Intersect Skew	3586			-	-
752570-	CR 1349/FAIRBURN ROAD @ CSX RAILROAD NORTH OF CASCADE RD	Fulton	Vertical Alignment	1349			9/17/2002	9/30/2005
752570-	CR 1349/FAIRBURN ROAD @ CSX RAILROAD NORTH OF CASCADE RD	Fulton	Grade	1349			9/17/2002	9/30/2005

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
752870-	SR 154/MEMORIAL DRIVE AT MORELAND AVE DEKALB/FULTON CO LN	Fulton, DeKalb	Stopping Sight Distance	154			1/21/2004	8/31/2004
752870-	SR 154/MEMORIAL DRIVE AT MORELAND AVE DEKALB/FULTON CO LN	Fulton, DeKalb	Superelevation	154			1/21/2004	8/31/2004
752940-	CR 5194/FLAT SHOALS ROAD @ DOLITTLE CREEK JUST SOUTH OF I-20	DeKalb	Vertical Alignment	5194			9/17/2003	11/8/2004
752960-	CR 186/HEMBREE ROAD @ FOE KILLER CREEK 2 MI SW OF ALPHARETTA	Fulton	Vertical Alignment	186	2.3	2.4	-	-
753025-	SR 6BU/MARIETTA ST FM NEW MACLAND RD TO BROWNSVILLE RD/BIKE	Cobb	Lateral Offset	6			-	-
753050-	CR 4176/CASCADE RD FM DANFORTH RD TO ATLANTA CTY LIM;ADD MED	Fulton	Superelevation	4176			7/25/2002	4/26/2005
753100-	CR 810/KINGS HIGHWAY @ CR 173/CENTRAL CHURCH RD	Douglas	Horizontal Alignment	810			11/12/2009	3/1/2011
753110-	CR 812/CHAPEL HILL RD @ CR 145/WEST CHAPEL HILL RD	Douglas	Horizontal Alignment	812			5/16/2007	7/27/2007
753170-	SR 155/CANDLER ROAD ENHANCEMENTS @ GLENWOOD RD - PHASE 1	DeKalb	Horizontal Alignment	155	3.45	3.63	-	-
762380-	SR 400/I-85 CONNECTOR RAMPS	Fulton	Stopping Sight Distance	400			-	-
762624-	PEACHTREE HILLS FM PEACHTREE TO LINDBERGH & SIDEWALKS	Fulton	Vertical Alignment	390	0.208	0.297	-	-

Table B-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
771273-	CR 629/JOHNSON ROAD @ PEEKS CREEK 1 MI E OF PALMETTO	Fulton	Vertical Alignment	629			6/6/2005	10/31/2005
M000355	SR 83 @ CHURCH STREET IN MONTICELLO - DRAINAGE IMPROVEMENTS	Jasper	Lateral Offset	83	13.46	13.46	-	-
M001994	I-75 @ 3 LOCS IN HENRY & 1 LOC IN SPALDING - BRIDGE JACKING	Spalding, Henry	Vertical Alignment	401	0.87	0.87	5/30/2005	2/28/2006
M001994	I-75 @ 3 LOCS IN HENRY & 1 LOC IN SPALDING - BRIDGE JACKING	Henry, Spalding	Vertical Alignment	401	1.13	1.13	5/30/2005	2/28/2006
M002434	I-85 FROM SR 34 TO FULTON COUNTY LINE	Coweta	Lane Width	403	47	61	10/2/2006	7/29/2010
M002434	I-85 FROM SR 34 TO FULTON COUNTY LINE	Coweta	Shoulder Width	403	47	61	10/2/2006	7/29/2010
M003235	I-20 FROM SR 12/SR 124/TURNER HILL ROAD TO SR 20/SR 138	DeKalb, Rockdale	Shoulder Width	402	3.34	3.57	4/24/2009	12/16/2009
M003235	I-20 FROM SR 12/SR 124/TURNER HILL ROAD TO SR 20/SR 138	DeKalb, Rockdale	Shoulder Width	402	16.38	4.99	4/24/2009	12/16/2009
M003243	I-75 FM CRISP CO LINE TO CR 323/PINEHURST-HAWKINSVILLE RD	Dooly	Shoulder Width	401	108.19	109.2	-	-
M003480	I-85 FROM COWETA COUNTY LINE TO SR 74	Fulton	Lane Width	403	47	61	1/26/2007	4/28/2010
M003480	I-85 FROM COWETA COUNTY LINE TO SR 74	Fulton	Shoulder Width	403	47	61	1/26/2007	4/28/2010

APPENDIX C

DETAILED LIST OF PROJECTS WITH DESIGN EXCEPTIONS WITH PROVIDED LET AND CONSTRUCTION END DATES

Table C-1. Detailed Design Exception Data for Those Projects with Available Let Dates and Construction End Dates

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
259	CR 65/JONES BRIDGE ROAD @ CR 64/DOUGLAS ROAD	Fulton	Intersect Skew	65			6/13/2006	7/31/2007
266	CR 1661/MAYFIELD ROAD @ CR 27/PROVIDENCE ROAD	Fulton	Horizontal Alignment	1661	1.56	1.62	6/1/2005	8/16/2006
266	CR 1661/MAYFIELD ROAD @ CR 27/PROVIDENCE ROAD	Fulton	Vertical Alignment	1661			6/1/2005	8/16/2006
399	SR 92 @ CR 204/HILO RD & CR 375/KINGWOOD DRIVE - TURN LANE	Fayette	Vertical Alignment	92	8.53	8.53	5/11/2010	4/30/2011
399	SR 92 @ CR 204/HILO RD & CR 375/KINGWOOD DRIVE - TURN LANE	Fayette	Vertical Alignment	92	8.53	8.53	5/11/2010	4/30/2011
418	SR 15 FROM SR 242 TO NEWMAN ST IN SANDERSVILLE	Washington	Intersect Skew	15	14.34	14.34	3/17/2009	11/25/2009
476	CR 1061/OLD SR 5 @ HICKORY RD & HOLLY ST IN HOLLY SPRINGS	Cherokee	Vertical Alignment	1061			8/23/2007	6/30/2008
810	SR 9 @ 6 INTERSECTIONS AND SR 20 @ TRIBBLE RD	Forsyth	Intersect Skew	9			6/4/2008	5/12/2010
810	SR 9 @ 6 INTERSECTIONS AND SR 20 @ TRIBBLE RD	Forsyth	Vertical Alignment	9			6/4/2008	5/12/2010

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
810	SR 9 @ 6 INTERSECTIONS AND SR 20 @ TRIBBLE RD	Forsyth	Vertical Alignment	9			6/4/2008	5/12/2010
810	SR 9 @ 6 INTERSECTIONS AND SR 20 @ TRIBBLE RD	Forsyth	Grade	9			6/4/2008	5/12/2010
846	CR 325/FH 12/HAMMOND GAP ROAD @ RUFF CREEK NW OF SUBLIGNA	Chattooga	Horizontal Alignment	325	0.32	0.32	9/19/2006	9/19/2007
1077	SR 16 FM JEFFERSON AVE TO EAST OF ROOTY CREEK IN EATONTON	Putnam	Vertical Alignment	16			12/18/2006	10/13/2009
1077	SR 16 FM JEFFERSON AVE TO EAST OF ROOTY CREEK IN EATONTON	Putnam	Lane Width	16			12/18/2006	10/13/2009
1077	SR 16 FM JEFFERSON AVE TO EAST OF ROOTY CREEK IN EATONTON	Putnam	Shoulder Width	16			12/18/2006	10/13/2009
1097	THURMOND TANNER PWY FM PLAINVIEW RD TO SR 53 - PHASE III	Hall	Superelevation	0			2/11/2009	5/31/2012
1297	17TH STREET FM NORTHSIDE DR OVER NS RR TO ATLANTIC STATION	Fulton	Vertical Alignment	0			11/27/2002	6/9/2004
1297	17TH STREET FM NORTHSIDE DR OVER NS RR TO ATLANTIC STATION	Fulton	Grade	0			11/27/2002	6/9/2004
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Stopping Sight Distance	9			5/21/2007	5/28/2010

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Stopping Sight Distance	9			5/21/2007	5/28/2010
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Stopping Sight Distance	9			5/21/2007	5/28/2010
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Vertical Alignment	9			5/21/2007	5/28/2010
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Vertical Alignment	9			5/21/2007	5/28/2010
1298	I-75/85 ATLANTIC STATION:14TH ST BR; RAMP; WILLIAMS ST RELOC	Fulton	Shoulder Width	9	10.39	10.43	5/21/2007	5/28/2010
1364	SR 56/NAIL BRIDGE @ OHOOPEE RIVER 2 MILES W OF REIDSVILLE	Tattnall	Stopping Sight Distance	56	2.6	3.36	8/31/2009	9/30/2010
1364	SR 56/NAIL BRIDGE @ OHOOPEE RIVER 2 MILES W OF REIDSVILLE	Tattnall	Vertical Alignment	56	2.6	3.36	8/31/2009	9/30/2010
1398	BUCKHEAD PEDESTRIAN AND TRAFFIC SAFETY IMPROVEMENTS	Fulton	Lane Width	0			2/14/2002	9/15/2002
1558	SR 520 FM W OF BRANTLEY CO LINE TO CR 21/EMANUEL CHURCH RD	Brantley, Glynn	Intersect Skew	520	27.03	11.25	4/23/2010	2/11/2011
1574	SR 3/US 41 FM COBB CO LINE TO SR 293 CONN - MEDIAN TURN LNS	Bartow	Intersect Skew	3			9/16/2009	5/31/2011

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
1575	SR 53 MEDIAN TURN LANES FROM EAST ROME BYPASS TO GORDON CO	Floyd	Intersect Skew	53			12/1/2009	12/29/2011
2041	SR 104 @ CR 16/HALALI FARM ROAD IN COLUMBIA COUNTY	Columbia	Vertical Alignment	104	6.96	7.03	5/17/2009	4/30/2010
3085	CR 140/WHITESVILLE ROAD @ STANDING BOY CREEK TRIB. SOUTH	Harris	Horizontal Alignment	140	1.89	1.94	12/13/2005	5/31/2007
3086	CR 140/WHITESVILLE ROAD @ STANDING BOY CREEK SO OF SR 315	Harris	Horizontal Alignment	140	2.93	2.97	12/13/2005	5/31/2007
3090	CR 219/BROWN CREEK RD @ BROWN CREEK 5 MI NW OF WAVERLY HALL	Harris	Superelevation	219			11/22/2005	3/31/2006
3452	CR 835/HAPPY VALLEY RD @ CHATTANOOGA & OVERFLOW	Walker	Superelevation	835	0.1	0.5	5/9/2011	9/26/2012
4266	SR 1/US 27 FM SR 151 TO LAFAYETTE BYPASS	Walker	Vertical Alignment	1			5/11/2005	4/15/2008
4403	SR 3 CONN @ SR 120 ALT - GRTA	Cobb	Shoulder Width	3			9/1/2009	8/11/2011
4405	SR 5/AUSTELL @ 6 LOCS BTWN CLAY RD TO SANDTOWN RD - GRTA	Cobb	Design Speed	5			1/21/2009	4/29/2010
4405	SR 5/AUSTELL @ 6 LOCS BTWN CLAY RD TO SANDTOWN RD - GRTA	Cobb	Intersect Skew	5			1/21/2009	4/29/2010
4405	SR 5/AUSTELL @ 6 LOCS BTWN CLAY RD TO SANDTOWN RD - GRTA	Cobb	Horizontal Alignment	5			1/21/2009	4/29/2010

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
4405	SR 5/AUSTELL @ 6 LOCS BTWN CLAY RD TO SANDTOWN RD - GRTA	Cobb	Shoulder Width	5			1/21/2009	4/29/2010
4446	LEWIS RD FM SR 6/CH JAMES PKWY TO SR 6BU/NEW S SQ [PE-LCI]	Cobb	Intersect Skew	2122			9/16/2008	1/31/2011
5071	I-95 FM NORTH OF SR 303 TO CR 586	Glynn	Vertical Alignment	405	33.56	33.66	8/28/2006	6/28/2010
6016	I-75 FROM SR 32 TO SR 159	Turner	Lateral Offset	401			3/14/2005	9/15/2009
6073	I-75 FM COOK COUNTY LINE TO CR 204/SOUTHWELL BLVD - PHASE I	Tift	Lateral Offset	401			5/7/2007	1/13/2011
6332	I-85 FM CAMP CREEK PKWY TO SR 74 - ATMS COMMUNIC/SURVEILANCE	Fulton	Lane Width	403			12/18/2006	11/14/2009
6334	I-75 FM WADE GREEN RD TO SR 92 - ATMS COMMUNIC/SURVEILANCE	Cobb	Lane Width	401			12/15/2006	2/29/2008
6365	SR 20 @ SR 212	Newton	Shoulder Width	20	0.3	0.6	2/13/2009	12/11/2009
6396	I-75 N ATMS RAMP METERS FROM I-85 TO CR 4395/CHASTAIN ROAD	Cobb, Fulton	Shoulder Width	401			5/14/2007	10/31/2008
6397	I-85 N ATMS RAMP METERS FM BUFORD HWY TO PLEASANT HILL	Gwinnett, DeKalb, Fulton	Lane Width	403			4/6/2007	9/11/2008
6399	I-75/I-85 ATMS RAMP METERS FM UNIVERSITY AVE TO 10TH ST	Fulton	Horizontal Alignment	403			6/15/2007	7/31/2008

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
6399	I-75/I-85 ATMS RAMP METERS FM UNIVERSITY AVE TO 10TH ST	Fulton	Lane Width	403			6/15/2007	7/31/2008
6399	I-75/I-85 ATMS RAMP METERS FM UNIVERSITY AVE TO 10TH ST	Fulton	Shoulder Width	403			6/15/2007	7/31/2008
6402	I-20 FM I-285/FULTON TO I-285/DEKALB - ATMS RAMP METERS	DeKalb	Shoulder Width	402			1/3/2008	1/29/2009
6471	CR 69/BROWNS CROSSING ROAD @ FISHING CREEK	Baldwin	Lane Width	69	2.686	2.797	10/3/2011	4/30/2012
6867	CR 895/TOWER ROAD FROM SR 5/CHURCH STREET TO RR #340395	Cobb	Shoulder Width	895			1/18/2010	4/30/2011
6957	CR 130/CANNON ROAD @ WHITE OAK CREEK 3.5 MI NE OF MORELAND	Coweta	Horizontal Alignment	130	2.14	2.16	2/15/2010	11/30/2010
6957	CR 130/CANNON ROAD @ WHITE OAK CREEK 3.5 MI NE OF MORELAND	Coweta	Superelevation	130			2/15/2010	11/30/2010
7061	SR 141/MEDLOCK BRIDGE ROAD @ SR 120/ABBOTTS BRIDGE ROAD	Fulton	Shoulder Width	120			8/29/2011	5/31/2012
7069	SR 5/BILL ARP ROAD @ CR 192/BRIGHT STAR ROAD	Douglas	Stopping Sight Distance	5			11/10/2008	8/15/2009
7069	SR 5/BILL ARP ROAD @ CR 192/BRIGHT STAR ROAD	Douglas	Horizontal Alignment	5			11/10/2008	8/15/2009
7069	SR 5/BILL ARP ROAD @ CR 192/BRIGHT STAR ROAD	Douglas	Vertical Alignment	5			11/10/2008	8/15/2009

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
7070	SR 140/HOLCOMB BRIDGE ROAD @ CR 107/BARNWELL ROAD	Fulton	Stopping Sight Distance	140			6/22/2010	7/15/2011
7240	I-985/US 23 @ SR 11/US 129	Hall	Horizontal Alignment	419	7.85	8.27	1/7/2008	7/31/2008
7493	SR 70/SR 154 @ SR 92/CAMPBELLTON-FAIRBURN ROAD	Fulton	Stopping Sight Distance	70	14.4	14.68	4/7/2007	11/16/2007
7493	SR 70/SR 154 @ SR 92/CAMPBELLTON-FAIRBURN ROAD	Fulton	Intersect Skew	70	14.4	14.68	4/7/2007	11/16/2007
7493	SR 70/SR 154 @ SR 92/CAMPBELLTON-FAIRBURN ROAD	Fulton	Vertical Alignment	70	14.4	14.68	4/7/2007	11/16/2007
8234	I-85 NB FROM I-985 TO SR 20	Gwinnett	Stopping Sight Distance	403	15.92	16.11	6/27/2007	5/1/2008
8234	I-85 NB FROM I-985 TO SR 20	Gwinnett	Stopping Sight Distance	403	16.26	16.49	6/27/2007	5/1/2008
8299	CR 1349/FAIRBURN ROAD @ CSX RR	Fulton	Vertical Alignment	1349			1/4/2012	8/3/2012
8409	SR 26/US 80 @ SR 30/US 280	Bryan	Horizontal Alignment	26	4.3	4.7	8/23/2011	7/31/2012
8635	SCHATULGA RD/EASTERN CONN FM CHATSWORTH RD TO SR 22/MACON RD	Muscogee	Vertical Alignment	36			9/2/2010	7/31/2012
9159	I-285 @ SR 9 IN SANDY SPRINGS-BRIDGE SAFETY&OPERATIONAL IMP	Fulton	Cross Slope	407			1/9/2012	10/31/2012

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
9725	I-285 @ CR 1764/ASHFORD DUNWOODY ROAD	DeKalb	Horizontal Alignment	407	0.77	1.24	1/16/2012	11/14/2012
9725	I-285 @ CR 1764/ASHFORD DUNWOODY ROAD	DeKalb	Superelevation	407	0.77	1.24	1/16/2012	11/14/2012
121720-	SR 124 FM CENTERVILLE-ROSEBUD RD TO HENRY CLOWER BLVD	Gwinnett	Horizontal Alignment	124			7/28/2003	12/29/2005
121720-	SR 124 FM CENTERVILLE-ROSEBUD RD TO HENRY CLOWER BLVD	Gwinnett	Vertical Alignment	124			7/28/2003	12/29/2005
122320-	SR 15/US 441 FM N OF TALLULAH FALLS TO S CL OF CLAYTON	Rabun	Vertical Alignment	15	1.89	9.45	10/27/2004	9/21/2008
122320-	SR 15/US 441 FM N OF TALLULAH FALLS TO S CL OF CLAYTON	Rabun	Shoulder Width	15	1.8		10/27/2004	9/21/2008
122400-	SR 53 NEAR HOSCHTON NB FM MP 6.8-8.4 [N&S OF CR 421]	Jackson	Shoulder Width	53	6.8	8	5/22/2001	9/28/2001
122400-	SR 53 NEAR HOSCHTON NB FM MP 6.8-8.4 [N&S OF CR 421]	Jackson	Shoulder Width	53	6.8	8	5/22/2001	9/28/2001
122440-	SR 17 FM 3-LANE @ BEAVERDAM CK TO SR 115	Habersham	Vertical Alignment	17	9.02	10.02	9/16/2003	11/22/2005
132230-	SR 51 RELOC FM MAIN ST ALONG ATHENS ST/MOON DR TO SR 51	Hall	Horizontal Alignment		1.2	1.3	3/28/1997	5/22/1997
132670-	SR 53 @ CR 4/ROCKWELL CHURCH RD NORTH OF WINDER	Barrow	Grade	53	13.5	14.1	2/11/2002	12/31/2003

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
150210-	CR 473/EPPS BRIDGE RD FM SR 10 TO SR 10 BU/US 78/CLARKE CO	Clarke	Vertical Alignment	700			1/13/1998	3/15/2002
150210-	CR 473/EPPS BRIDGE RD FM SR 10 TO SR 10 BU/US 78/CLARKE CO	Clarke	Vertical Alignment	700			1/13/1998	3/15/2002
150210-	CR 473/EPPS BRIDGE RD FM SR 10 TO SR 10 BU/US 78/CLARKE CO	Clarke	Vertical Alignment	700			1/13/1998	3/15/2002
150210-	CR 473/EPPS BRIDGE RD FM SR 10 TO SR 10 BU/US 78/CLARKE CO	Clarke, Oconee	Vertical Alignment	700			1/13/1998	3/15/2002
150210-	CR 473/EPPS BRIDGE RD FM SR 10 TO SR 10 BU/US 78/CLARKE CO	Clarke	Grade	900	4.76	5.16	1/13/1998	3/15/2002
171004-	CR 86/JEFFERSON RIVER RD @ CURRY CREEK 3.6 MI E OF ARCADE	Jackson	Vertical Alignment	86			11/26/2003	10/29/2004
171210-	CR 235/ALCOVY ROAD @ ALCOVY RIVER 3 MI NE OF LAWRENCEVILLE	Gwinnett	Grade	235			4/12/1999	3/31/2000
210440-	I-520 FM NORTH OF I-20 TO SR 4/US 1 REPR & PART WIDEN TO 6LN	Richmond	Shoulder Width	415	0	0.16	11/19/1997	10/23/2000
210440-	I-520 FM NORTH OF I-20 TO SR 4/US 1 REPR & PART WIDEN TO 6LN	Richmond	Shoulder Width	415	0.52	0.65	11/19/1997	10/23/2000
210440-	I-520 FM NORTH OF I-20 TO SR 4/US 1 REPR & PART WIDEN TO 6LN	Richmond	Shoulder Width	415	0.53	0.89	11/19/1997	10/23/2000

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Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
210660-	I-16 AT TURKEY CK- PUGHES CK & MERCER CK	Laurens, Treutlen	Superelevation	404	65.65	65.88	3/1/2000	8/29/2003
210810-	I-20 FM ALCOVY ROAD INCL INTERCHANGE TO SR 142 IN COVINGTON	Newton	Horizontal Alignment	74			1/10/2007	7/30/2009
210890-	BRIDGE JACKING IN DISTRICT 2	Newton	Vertical Alignment	0	15.63	15.63	1/31/2000	9/30/2000
221180-	SR 56 FM SR 56 SPUR/BURKE TO N OF BENNOCK MILL PART NEW LOC	Richmond, Burke	Grade	56	0.32	5.54	11/8/1999	5/31/2002
221180-	SR 56 FM SR 56 SPUR/BURKE TO N OF BENNOCK MILL PART NEW LOC	Burke, Richmond	Grade	56	35.4	5.52	11/8/1999	5/31/2002
221540-	SR 19/26 CONSTRUCT TURN LANES @ LAURENS CO ELEMENTARY SCH	Laurens, Treutlen	Grade	19			10/1/2001	12/21/2001
222350-	I-520 @ SR 56 ADD WB LOOP & ADD LANES ON SR 56	Richmond	Vertical Alignment	415	8	9.2	4/22/2002	7/19/2007
222350-	I-520 @ SR 56 ADD WB LOOP & ADD LANES ON SR 56	Richmond	Cross Slope	415	8	9.2	4/22/2002	7/19/2007
222350-	I-520 @ SR 56 ADD WB LOOP & ADD LANES ON SR 56	Richmond	Shoulder Width	415	8	9.2	4/22/2002	7/19/2007
222550-	SR 121/US 25/SAVANNAH RVR PKWY FM CR 16 TO CR 118/BURKE	Jenkins, Burke	Vertical Alignment	121			4/15/2004	10/1/2007
231220-	SR 142 FM SOUTH OF SR 12/US 278 TO CR 72 IN COVINGTON	Newton	Superelevation	142	8.4	11.56	3/1/2010	11/13/2012
232240-	SR 22/SR 24 @ CR 472/LAKE LAUREL RD EAST OF MILLEDGEVILLE	Baldwin	Horizontal Alignment	22	13.41	13.83	3/7/2006	4/3/2007

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
232315-	SR 77 @ GOOSEPOND CREEK 14.5 MI NE OF LEXINGTON	Oglethorpe	Vertical Alignment	77	31.76	31.98	11/20/2003	10/14/2004
245370-	SR 22 @ LONG CREEK 3.5 MI S OF LEXINGTON	Oglethorpe	Vertical Alignment	22	11.3	11.52	10/23/2003	11/15/2004
245371-	SR 22 @ BIG CLOUDS CREEK 3.8 MI E OF SMITHSONIA	Oglethorpe	Vertical Alignment	22	24.34	24.56	1/5/2004	12/2/2004
245400-	SR 83/BOSTWICK HWY @ LITTLE SANDY CRK 4.6 MI S OF BOSTWICK	Morgan	Vertical Alignment	83	0.01	0.03	3/18/2011	6/30/2012
311380-	I-75 @ SR 36 FM .5 MI SW/I-75 TO.55 MI NE/I-75 & BR / LAMAR	Butts, Lamar	Superelevation	401			1/8/1997	10/14/1999
311445-	I-185/COLUMBUS FM SR 520 TO ST MARYS ROAD	Muscogee	Shoulder Width	411	0	0.46	7/9/2007	5/14/2011
311445-	I-185/COLUMBUS FM SR 520 TO ST MARYS ROAD	Muscogee	Shoulder Width	411	1.47	2.38	7/9/2007	5/14/2011
311445-	I-185/COLUMBUS FM SR 520 TO ST MARYS ROAD	Muscogee	Shoulder Width	411	1.85	2.86	7/9/2007	5/14/2011
311630-	I-185 INTERCHANGE @ SR 1/SR 520	Muscogee	Horizontal Alignment	411	0	0.4	7/9/2007	10/31/2009
311685-	I-16 FM JCT I-75 TO TWIGGS/BLECKLEY CL...TWIGGS	Twiggs, Bibb	Shoulder Width		1.14	1.18	4/7/1995	7/15/1996
311700-	I-75 @ THE PROPOSED RICHARD RUSSELL PARKWAY	Peach	Vertical Alignment	401			4/1/2002	8/9/2005
322350-	SR 74 FM JUST SOUTH OF CROSSTOWN RD NW TO SR 54	Fayette	Stopping Sight Distance	74	13.7	13.7	9/11/2006	12/31/2008
322420-	SR 3/US 19 FM ANGELICA CK/SUMTER TO SR 271/SCHLEY	Sumter, Schley	Grade	3	13.5	14.8	2/23/2005	5/30/2008

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Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
322710-	SR 3/US 19 FM CR 201/COOPER RD TO BUTLER BYPASS & NEW LOC	Taylor	Grade	3	7.21	7.3	6/3/2005	3/4/2009
331620-	SR 230 @ SOUTH PRONG BIG TUCSAWHATCHEE CRK W/HAWKINSVILLE	Pulaski	Vertical Alignment	230	0.38	0.38	10/7/1997	7/31/1998
331850-	SR 18 EB MP 14.88-15.92 WB MP 17.14-18.7 EB MP 21.39-22.59	Jones	Vertical Alignment	18	17.14	18.7	1/14/1999	11/24/1999
332360-	SR 42/US 23 PASSING LANES @ 2 LOC BT JACKSON & JENKINSBURG	Butts	Shoulder Width	42	13.56	13.68	3/31/2010	12/30/2011
333160-	SR 27 @ BLADEN CREEK 11 MI SW OF LUMPKIN	Stewart	Vertical Alignment	27	0.662	0.889	5/3/2004	12/14/2005
333185-	SR 85 NBL @ MORNING CREEK 3.5 MI N OF FAYETTEVILLE	Fayette	Vertical Alignment	85	14.27	14.34	5/9/2006	5/15/2008
333202-	SR 18/US 27 ALT. @ KENDALL CREEK 2 MI S OF GREENVILLE	Meriwether	Vertical Alignment	18	13	13.17	12/8/2004	2/9/2006
343345-	SR 153 @ LITTLE MUCKALEE CREEK 3.0 MI E OF JCT SR 45	Schley	Vertical Alignment	153	4.9	5.03	8/10/2006	6/15/2007
343365-	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER	Taylor	Vertical Alignment	137	0.52	0.81	11/27/2003	11/17/2004
343365-	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER	Taylor	Grade	137	0.78	0.88	11/27/2003	11/17/2004
343385-	SR 109 @ ELKINS CREEK 0.5 MI EAST OF MOLENA	Pike	Vertical Alignment	109	3.54	3.73	1/30/2006	4/30/2007
350710-	CS 877/W MCINTOSH RD/GRIFFIN FM OLD ATLANTA RD TO SR 3/US 41	Spalding	Vertical Alignment	877			10/21/2004	10/31/2005

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
350820-	HOUSTON RD FM WALDEN/SARDIS CH RDS TO SR 11	Bibb	Shoulder Width	739			10/29/1999	6/15/2002
350820-	HOUSTON RD FM WALDEN/SARDIS CH RDS TO SR 11	Bibb	Shoulder Width	739			10/29/1999	6/15/2002
351120-	BLOOMFIELD RD/LOG CABIN DR FM ROCKY CK RD TO SR 22/EISENHOWE	Bibb	Horizontal Alignment	1023			1/9/2008	3/1/2010
351150-	CR 79/NORTHSIDE DR FM WESLEYAN DR TO CR 723/FOREST HILL RD	Bibb	Stopping Sight Distance	79			8/15/2001	12/23/2003
351170-	SR 14/US 29 LEFT TURN LANE FROM MEADOW WAY DR TO SR 14 SPUR	Troup	Vertical Alignment	14	19.2	19.26	1/15/2008	3/19/2009
351170-	SR 14/US 29 LEFT TURN LANE FROM MEADOW WAY DR TO SR 14 SPUR	Troup	Vertical Alignment	14	19.5	19.59	1/15/2008	3/19/2009
351210-	SR 3/US 19 TURN LANES AT SR 362 IN GRIFFIN	Spalding	Lateral Offset	3			9/29/2003	2/18/2004
351210-	SR 3/US 19 TURN LANES AT SR 362 IN GRIFFIN	Spalding	Shoulder Width	3			9/29/2003	2/18/2004
410240-	I-75 FM N CITY LIMITS OF TIFTON TO TURNER COUNTY LINE-PH-1	Tift	Lateral Offset	401			10/9/2001	9/6/2005
410240-	I-75 FM N CITY LIMITS OF TIFTON TO TURNER COUNTY LINE-PH-1	Tift	Lateral Offset	401			10/9/2001	9/6/2005
410500-	I-75 FM NORTH OF SR 133 TO COOK COUNTY LINE - PHASE 1	Lowndes	Lateral Offset	401			3/14/2002	9/15/2007

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
410500-	I-75 FM NORTH OF SR 133 TO COOK COUNTY LINE - PHASE 1	Lowndes	Shoulder Width	401			3/14/2002	9/15/2007
410510-	I-75 FM LOWNDES COUNTY LINE TO NORTH OF SR 37 - PHASE 1	Cook	Lateral Offset	401			11/8/2004	5/13/2008
410520-	I-75 FM SR 37 TO CR 246/KINARD BRIDGE RD - PHASE I	Cook	Lateral Offset	401			8/8/2006	3/9/2011
410530-	I-75 FM CR 246/KINARD BRIDGE RD TO TIFT COUNTY LINE-PHASE I	Cook	Lateral Offset	401			5/7/2007	1/13/2011
421980-	SR 49 OVER KINCHAFOONEE CREEK/ ALSO SUMTER CO	Terrell, Sumter	Superelevation	49	4.28	4.29	5/12/1998	6/30/1999
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Horizontal Alignment	31			9/2/2003	1/13/2005
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Cross Slope	31	27.7	28.43	9/2/2003	1/13/2005
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Bridge Width	31	27.7	28.43	9/2/2003	1/13/2005
431290-	SR 27 OVER TOBANNEE CREEK NORTH OF GEORGETOWN	Quitman	Grade		1.45	1.78	9/22/1998	4/23/1999
431550-	SR 111 @ TIRED CREEK & OVERFLOW SOUTH OF CAIRO	Grady	Grade	111	13.58	14.08	3/9/2001	7/30/2002
431670-	SR 35/W THOMASVILLE BYP /US 319 FM SR 35BU N TO SR 38/US 84	Thomas	Vertical Alignment	35	6.93	9.54	6/7/2004	6/1/2006
442550-	SR 188 OVER W. BRANCH BARNETTS CK NE OF CAIRO	Grady	Horizontal Alignment	188	7.64	8.01	11/2/1998	12/31/1999
442682-	CR 275 @ PISCOLA CREEK APPROXIMATELY 2.5 MILES SE OF DIXIE	Brooks	Superelevation	275			5/17/1999	2/25/2000

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Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
471080-	CR 598 OVER BEAR CREEK @ HILLARDS LAKE 5 MILES SW OF DOUGLAS	Coffee	Intersect Skew	598			12/11/1997	2/20/1998
511070-	I-95 FM FLA LINE TO HARRIETTS BLUFF RD/INCL BR @ CROOKED RVR	Camden	Stopping Sight Distance		3	3	7/17/1996	6/17/1999
511070-	I-95 FM FLA LINE TO HARRIETTS BLUFF RD/INCL BR @ CROOKED RVR	Camden	Shoulder Width				7/17/1996	6/17/1999
511075-	I-95 @ ST MARY'S RIVER @ FLA STATE LINE	Camden	Vertical Alignment				4/23/1996	10/26/1998
511080-	I-95 FM HARRIETT'S BLUFF ROAD TO SR 25 SPUR/51Y080	Camden	Vertical Alignment	405	2.64	2.64	1/9/1998	11/12/1999
511100-	I-95 FM N OF CSX RR TO N OF S ALTAMAHA RIVER;EXC SR 99 INT	Glynn	Lateral Offset	405	14.64	14.64	7/13/2007	6/11/2010
511110-	I-95 FM JUST N OF ALTAMAHA RIVER BRIDGE TO SR 251	McIntosh	Lateral Offset	405	49	49	7/13/2007	6/11/2010
511120-	I-95 FM 1 MILE NORTH OF SR 251 TO NORTH OF SR 57 - PHASE I	McIntosh	Lateral Offset	405	51.3	51.3	6/6/2007	11/15/2010
511120-	I-95 FM 1 MILE NORTH OF SR 251 TO NORTH OF SR 57 - PHASE I	McIntosh	Lateral Offset	405	53.6	53.6	6/6/2007	11/15/2010
511120-	I-95 FM 1 MILE NORTH OF SR 251 TO NORTH OF SR 57 - PHASE I	McIntosh	Lateral Offset	405	55.6	55.6	6/6/2007	11/15/2010
511120-	I-95 FM 1 MILE NORTH OF SR 251 TO NORTH OF SR 57 - PHASE I	McIntosh	Lateral Offset	405	58.2	58.2	6/6/2007	11/15/2010

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Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
511150-	I-95 FM JERICO RIVER TO US 17	Bryan	Design Speed	405	85.9	85.9	9/5/1999	2/26/2003
511180-	I-16 @ I-516 & @ STILES AVE - BRIDGE REPAIRS	Chatham	Vertical Clearance	404			2/16/2009	7/27/2010
521570-	SR 31/US 441 @ ALLIGATOR BIG HORSE OFLOW BIG HORSE CKS	Telfair	Cross Slope	31			5/2/2004	6/30/2006
521570-	SR 31/US 441 @ ALLIGATOR BIG HORSE OFLOW BIG HORSE CKS	Telfair	Bridge Width	31			5/2/2004	6/30/2006
521780-	SR 26/GARDEN CITY FM CR 704 TO SR 27/US 17 INCL CLVT EXT	Chatham	Horizontal Alignment				3/17/1997	7/6/1998
521780-	SR 26/GARDEN CITY FM CR 704 TO SR 27/US 17 INCL CLVT EXT	Chatham	Superelevation				3/17/1997	7/6/1998
522000-	SR 73/US 301 FM N CL/GLENNVILLE TO EVANS CO LINE	Tattnall	Vertical Alignment	73	3.68	4.51	7/24/1998	5/30/2002
522470-	SR 26/US 80 EB MP 7.1-8.2 WB MP 8.1-9.3	Bulloch	Vertical Alignment	26	8.21	8.4	6/11/1999	6/30/2000
532690-	SR 99 FM SR 520 TO SR 32	Glynn	Superelevation		6.64	6.75	4/15/1996	4/25/1997
550570-	MIDDLEGROUND/MONTGOMERY CROSS RD FM SR 204/ABERCORN TO SR204	Chatham	Horizontal Alignment	1144			7/16/2004	9/12/2008
550570-	MIDDLEGROUND/MONTGOMERY CROSS RD FM SR 204/ABERCORN TO SR204	Chatham	Superelevation	1144			7/16/2004	9/12/2008
610755-	I-75 @ SR 225 N OF CALHOUN (INCLUDING I-75 BRIDGE)	Gordon	Shoulder Width	401	1.33	1.37	5/12/2000	5/30/2001

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Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
611310-	I-59 @ 3 LOC I-24 @ 1 I-75 @ 4/WHITFIELD/CATOOSA--611310 X Z	Catoosa, Dade, Whitfield	Shoulder Width	406	4.38	4.4	12/4/2000	8/15/2002
620399-	SR 52 @ CSX RR IN CHATSWORTH	Murray	Vertical Alignment	52	7.44	7.52	5/12/2004	6/14/2006
620590-	SR 1/US 27 IN ROME FM 5TH AVE TO JOHN DAVENPORT DR	Floyd	Vertical Alignment	1	14.14	14.2	7/5/2006	5/29/2009
621580-	SR 120 FM W OF BUCHANAN BYP TO LAKE OLYMPIA	Haralson	Horizontal Alignment	120	10.65	10.79	2/20/2005	7/31/2006
621580-	SR 120 FM W OF BUCHANAN BYP TO LAKE OLYMPIA	Haralson	Vertical Alignment	120			2/20/2005	7/31/2006
621590-	SR 53 - WB PASSING LNS EAST OF TATE MP 20.4-21.3 & 22.6-24.1	Pickens	Horizontal Alignment	53			7/11/2001	7/31/2002
621590-	SR 53 - WB PASSING LNS EAST OF TATE MP 20.4-21.3 & 22.6-24.1	Pickens	Vertical Alignment	53	23	24	7/11/2001	7/31/2002
630673-	CANTON HWY FM CR 351/PALM ST TO N/SIXES RD[INC RR BR]-63Y673	Cherokee	Design Speed	754			10/25/1997	11/24/1999
631100-	SR 282/ELLIJAY FM WEST OF SR 5 ALT EAST TO SR 2 & BRIDGE	Gilmer	Shoulder Width	282	11.8	11.8	12/15/1997	7/9/1999
631430-	SR 2/SR 52 @ MOUNTAINTOWN CREEK 6.7 MI NW OF ELLIJAY	Gilmer	Vertical Alignment	2	6.26	6.5	10/8/1998	5/2/2001
631430-	SR 2/SR 52 @ MOUNTAINTOWN CREEK 6.7 MI NW OF ELLIJAY	Gilmer	Shoulder Width	2	6.25	6.5	10/8/1998	5/2/2001
631580-	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY	Gilmer	Vertical Alignment	282	3.8	4.2	11/6/2004	2/28/2006

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
631580-	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY	Gilmer	Grade	282	3.8	4.2	11/6/2004	2/28/2006
631630-	SR 61 @ RIDGE ROAD/MULBERRY ROCK RD SOUTH OF DALLAS	Paulding	Stopping Sight Distance	61	1.75	2.3	5/11/2010	2/18/2011
631630-	SR 61 @ RIDGE ROAD/MULBERRY ROCK RD SOUTH OF DALLAS	Paulding	Vertical Alignment	61	1.75	2.3	5/11/2010	2/18/2011
641910-	SR 100 NB MP 5.5-6.8; NB MP 13.3-14.55; SB MP 15.3-16.8	Carroll	Vertical Alignment	100			9/6/2005	11/29/2006
642160-	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT	Fannin	Horizontal Alignment	60	2.02	2.1	12/29/2004	4/28/2006
642160-	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT	Fannin	Vertical Alignment	60	1.982	2.257	12/29/2004	4/28/2006
642165-	SR 60 @ SKEENAH CREEK & CHAPEL BRANCH; INC BIKE LN	Fannin	Horizontal Alignment	60	5.36	13.32	6/7/2006	7/31/2007
642165-	SR 60 @ SKEENAH CREEK & CHAPEL BRANCH; INC BIKE LN	Fannin	Horizontal Alignment	60	5.36	13.32	6/7/2006	7/31/2007
642165-	SR 60 @ SKEENAH CREEK & CHAPEL BRANCH; INC BIKE LN	Fannin	Vertical Alignment	60	5.36	13.32	6/7/2006	7/31/2007
642165-	SR 60 @ SKEENAH CREEK & CHAPEL BRANCH; INC BIKE LN	Fannin	Vertical Alignment	60	5.36	13.32	6/7/2006	7/31/2007
650460-	SR 101 OVER ETOWAH RIVER IN ROME	Floyd	Vertical Alignment	101	10.98	11.52	9/18/2003	8/31/2006

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
671040-	CR 394/HICKORY LEVEL-SAND HILL RD @ HOMINY CK SW/VILLA RICA	Carroll	Shoulder Width	394			10/5/1998	6/30/1999
671951-	CR 107/HOWELL BRIDGE RD @ SHARP MTN CREEK SW OF BALL GROUND	Cherokee	Vertical Alignment	107			11/30/2009	8/12/2010
712420-	I-75 FM US 41/OLD DIXIE HWY TO I-285/INCL BR & FNTGE RDS	Clayton	Superelevation	401	238.22	238.36	1/19/1994	11/23/1996
712630-	I-75 FM MEADOW BROOK DR TO MORROW CITY LIMITS &SR 54 INTERCH	Clayton	Shoulder Width	54	232.4	232.5	9/15/2008	6/15/2012
712870-	I-20 @ LITHONIA INDUSTRIAL BLVD	DeKalb	Stopping Sight Distance	402			9/22/2003	11/4/2005
712870-	I-20 @ LITHONIA INDUSTRIAL BLVD	DeKalb	Shoulder Width	402			9/22/2003	11/4/2005
713240-	I-285 @ PACES FERRY ROAD - INTERCHANGE RECST	Cobb	Vertical Alignment	407			11/16/2000	8/31/2003
713240-	I-285 @ PACES FERRY ROAD - INTERCHANGE RECST	Cobb	Grade	407			11/16/2000	8/31/2003
713371-	I-285 ATMS/SURVEIL FM I-85/UNION CITY NORTH TO I-20 WEST	Fulton	Lane Width	407			12/18/2006	3/19/2009
713470-	I-85 RESURFACING- MARKING FM I-75 TO PIEDMONT RD FOR HOV	Fulton	Lane Width		84.9	95.8	6/12/1995	5/29/1996
713470-	I-85 RESURFACING- MARKING FM I-75 TO PIEDMONT RD FOR HOV	Fulton	Shoulder Width		84.9	95.8	6/12/1995	5/29/1996

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
713472-	I-85 RESURFACING- MARKING FM PIEDMONT RD TO I-285 FOR HOV	DeKalb, Fulton	Lane Width		85	95	7/26/1995	5/30/1996
713472-	I-85 RESURFACING- MARKING FM PIEDMONT RD TO I-285 FOR HOV	DeKalb	Shoulder Width		85	95	7/26/1995	5/30/1996
713474-	I-75 RESURFACING- MARKING FM I-285 S. TO EDGEWOOD FOR HOV	Clayton	Lane Width	401	38.5	58.9	6/12/1995	5/29/1996
713474-	I-75 RESURFACING- MARKING FM I-285 S. TO EDGEWOOD FOR HOV	Clayton	Shoulder Width	401	38.5	58.85	6/12/1995	5/29/1996
713760-	I-85 FM CHAMBLEE-TUCKER RD TO SR 316/GWINNETT-FOR HOV/71376X	DeKalb, Gwinnett	Stopping Sight Distance	403	5.9	8.75	3/1/1999	10/31/2001
713760-	I-85 FM CHAMBLEE-TUCKER RD TO SR 316/GWINNETT-FOR HOV/71376X	DeKalb, Gwinnett	Lane Width	403	5.9	8.75	3/1/1999	10/31/2001
713760-	I-85 FM CHAMBLEE-TUCKER RD TO SR 316/GWINNETT-FOR HOV/71376X	DeKalb, Gwinnett	Shoulder Width	403	5.9	8.75	3/1/1999	10/31/2001
714090-	I-575 ATMS/COMM/SURVEILLANCE FM I-75/COBB TO SR 92/CHEROKEE	Cherokee, Cobb	Lane Width	5			12/15/2006	1/20/2009
714090-	I-575 ATMS/COMM/SURVEILLANCE FM I-75/COBB TO SR 92/CHEROKEE	Cobb, Cherokee	Lane Width	5			12/15/2006	1/20/2009

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
714190-	17TH ST FM ATLANTIC STA. TO W.PEACHTREE & SR I-75/85 RMPS	Fulton	Vertical Alignment	401			1/14/2002	3/1/2004
721310-	SR 120/ROSWELL RD FM SR 120 ALT TO BRIDGEGATE DR - GRTA	Cobb	Vertical Alignment	120	13.67	13.81	3/8/2010	10/31/2012
721310-	SR 120/ROSWELL RD FM SR 120 ALT TO BRIDGEGATE DR - GRTA	Cobb	Grade	120	13.67	13.88	3/8/2010	10/31/2012
721470-	SR 5 N&SB FM S/SWEETWATER RD TO S/DOG RIVER BRIDGE	Douglas	Horizontal Alignment				11/6/1995	5/22/1998
721470-	SR 5 N&SB FM S/SWEETWATER RD TO S/DOG RIVER BRIDGE	Douglas	Vertical Alignment				11/6/1995	5/22/1998
721470-	SR 5 N&SB FM S/SWEETWATER RD TO S/DOG RIVER BRIDGE	Douglas	Shoulder Width				11/6/1995	5/22/1998
721510-	SR 120/ALPHARETTA FM SR 9/MAIN ST EASTERLY TO SR 400	Fulton	Vertical Alignment		8.2	8.25	6/11/1996	8/29/1997
721530-	SR 124 FM ROCKBRIDGE RD TO CENTERVILLE-ROSEBUD RD/GWINET*GF	DeKalb, Gwinnett	Horizontal Alignment	124			3/16/1999	8/24/2001
721530-	SR 124 FM ROCKBRIDGE RD TO CENTERVILLE-ROSEBUD RD/GWINET*GF	DeKalb, Gwinnett	Vertical Alignment	124			3/16/1999	8/24/2001
721530-	SR 124 FM ROCKBRIDGE RD TO CENTERVILLE-ROSEBUD RD/GWINET*GF	DeKalb, Gwinnett	Vertical Alignment	124			3/16/1999	8/24/2001
721580-	SR 20/138 FROM RELOCATED SR 138 TO I-20	Rockdale	Horizontal Alignment	138			1/15/1998	6/23/2000

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
721940-	SR 410 ATMS/COMM/SURVEIL FM LAWRENCEVILLE HWY TO E PARK PL	DeKalb, Gwinnett	Horizontal Alignment	410			11/19/2007	10/31/2009
722010-	SR 400 FROM SR 140/HOLCOMB BRIDGE RD TO MCFARLAND RD GRTA	Fulton, Forsyth	Stopping Sight Distance	400	17.73	17.96	11/29/2005	7/31/2008
722010-	SR 400 FROM SR 140/HOLCOMB BRIDGE RD TO MCFARLAND RD GRTA	Fulton, Forsyth	Stopping Sight Distance	400	18.21	18.43	11/29/2005	7/31/2008
722010-	SR 400 FROM SR 140/HOLCOMB BRIDGE RD TO MCFARLAND RD GRTA	Forsyth, Fulton	Shoulder Width	400	13.75	1.48	11/29/2005	7/31/2008
722010-	SR 400 FROM SR 140/HOLCOMB BRIDGE RD TO MCFARLAND RD GRTA	Fulton, Forsyth	Shoulder Width	400	14.46	20.11	11/29/2005	7/31/2008
730753-	SOUTH FULTON PKWY FM COCHRAN MILL RD TO SR 154 - GRTA	Fulton	Stopping Sight Distance	2043			12/17/2003	9/11/2006
730753-	SOUTH FULTON PKWY FM COCHRAN MILL RD TO SR 154 - GRTA	Fulton	Bridge Width	2043			12/17/2003	9/11/2006
730756-	NEW WOOTEN ROAD FM CAPPS FERRY RD TO COCHRAN MILL RD *GF	Fulton	Shoulder Width	2043			8/17/1998	12/21/2000
731047-	SR 138/SR 20 FROM NORTH OF I-20 TO SIGMAN ROAD	Rockdale	Horizontal Alignment	20			8/12/2005	12/31/2007
731520-	SR 3/US 19 @ CEN OF GA RAILROAD .35 MI S OF JCT I-285	Clayton	Horizontal Alignment	3			1/12/2007	8/19/2008

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
742510-	OLD COVINGTON HWY @ ROCKDALE INDUST. BLVD & FARMER RD	Rockdale	Horizontal Alignment				9/25/1996	7/31/1997
751300-	JOHNSON FERRY RD FM COLUMNS DR TO ABERNATHY & BRIDGE	Cobb, Fulton	Intersect Skew	947			5/28/2009	1/28/2013
751300-	JOHNSON FERRY RD FM COLUMNS DR TO ABERNATHY & BRIDGE	Cobb, Fulton	Horizontal Alignment	947			5/28/2009	1/28/2013
751300-	JOHNSON FERRY RD FM COLUMNS DR TO ABERNATHY & BRIDGE	Cobb, Fulton	Grade	947			5/28/2009	1/28/2013
751310-	ABERNATHY RD FM JOHNSON FERRY RD TO ROSWELL RD - GRTA	Fulton	Horizontal Alignment	947			5/28/2009	1/28/2013
751320-	CR 5189/ROCKBRIDGE RD @ SNAPFINGER CREEK	DeKalb	Vertical Alignment	857			10/6/2003	5/19/2005
751940-	CR 5109/STEPHENSON RD @ CROOKED CRK	DeKalb	Vertical Alignment	5109			1/11/1996	7/16/1996
752030-	INTERNATIONAL BLVD @ CSX & NORFOLK-SOUTHERN RR @ WCC	Fulton	Vertical Alignment	2001			6/12/2002	12/1/2004
752100-	CR 5151/E PONCE DE LEON FM W OF IDLEWOOD TO E/SAGEWOOD CIR E	DeKalb	Superelevation	5151			11/10/1997	7/31/1998
752295-	KENNEDY INTCH-RIVERWOOD PKWY FM US 41 TO CUMBERLAND CIR	Cobb	Vertical Alignment	5142			5/30/2002	11/30/2003

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
752570-	CR 1349/FAIRBURN ROAD @ CSX RAILROAD NORTH OF CASCADE RD	Fulton	Vertical Alignment	1349			9/17/2002	9/30/2005
752570-	CR 1349/FAIRBURN ROAD @ CSX RAILROAD NORTH OF CASCADE RD	Fulton	Grade	1349			9/17/2002	9/30/2005
752870-	SR 154/MEMORIAL DRIVE AT MORELAND AVE DEKALB/FULTON CO LN	Fulton, DeKalb	Stopping Sight Distance	154			1/21/2004	8/31/2004
752870-	SR 154/MEMORIAL DRIVE AT MORELAND AVE DEKALB/FULTON CO LN	Fulton, DeKalb	Superelevation	154			1/21/2004	8/31/2004
752940-	CR 5194/FLAT SHOALS ROAD @ DOLITTLE CREEK JUST SOUTH OF I-20	DeKalb	Vertical Alignment	5194			9/17/2003	11/8/2004
753050-	CR 4176/CASCADE RD FM DANFORTH RD TO ATLANTA CTY LIM;ADD MED	Fulton	Superelevation	4176			7/25/2002	4/26/2005
753100-	CR 810/KINGS HIGHWAY @ CR 173/CENTRAL CHURCH RD	Douglas	Horizontal Alignment	810			11/12/2009	3/1/2011
753110-	CR 812/CHAPEL HILL RD @ CR 145/WEST CHAPEL HILL RD	Douglas	Horizontal Alignment	812			5/16/2007	7/27/2007
771273-	CR 629/JOHNSON ROAD @ PEEKS CREEK 1 MI E OF PALMETTO	Fulton	Vertical Alignment	629			6/6/2005	10/31/2005
M001994	I-75 @ 3 LOCS IN HENRY & 1 LOC IN SPALDING - BRIDGE JACKING	Spalding, Henry	Vertical Alignment	401	0.87	0.87	5/30/2005	2/28/2006

Table C-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEG)	End Milepost (MPOINT_END)	Let Date (BEGIN)	Construction End Date (END)
M001994	I-75 @ 3 LOCS IN HENRY & 1 LOC IN SPALDING - BRIDGE JACKING	Henry, Spalding	Vertical Alignment	401	1.13	1.13	5/30/2005	2/28/2006
M002434	I-85 FROM SR 34 TO FULTON COUNTY LINE	Coweta	Lane Width	403	47	61	10/2/2006	7/29/2010
M002434	I-85 FROM SR 34 TO FULTON COUNTY LINE	Coweta	Shoulder Width	403	47	61	10/2/2006	7/29/2010
M003235	I-20 FROM SR 12/SR 124/TURNER HILL ROAD TO SR 20/SR 138	DeKalb, Rockdale	Shoulder Width	402	3.34	3.57	4/24/2009	12/16/2009
M003235	I-20 FROM SR 12/SR 124/TURNER HILL ROAD TO SR 20/SR 138	DeKalb, Rockdale	Shoulder Width	402	16.38	4.99	4/24/2009	12/16/2009
M003480	I-85 FROM COWETA COUNTY LINE TO SR 74	Fulton	Lane Width	403	47	61	1/26/2007	4/28/2010
M003480	I-85 FROM COWETA COUNTY LINE TO SR 74	Fulton	Shoulder Width	403	47	61	1/26/2007	4/28/2010

APPENDIX D

DETAILED LIST OF PROJECTS WITH DESIGN EXCEPTIONS WITH PROVIDED LET AND CONSTRUCTION END DATES BETWEEN 2003 – 2006

Table D-1. Detailed List of Design Exceptions Data for Projects with Let Dates and Construction End Dates Between 2003 – 2006

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BE G)	Ending Milepost (MPOINT_E ND)	Let Date (BEGIN)	Construction End Date (END)
266	CR 1661/MAYFIELD ROAD @ CR 27/PROVIDENCE ROAD	Fulton	Horizontal Alignment	1661	1.56	1.62	6/1/2005	8/16/2006
266	CR 1661/MAYFIELD ROAD @ CR 27/PROVIDENCE ROAD	Fulton	Vertical Alignment	1661			6/1/2005	8/16/2006
3090	CR 219/BROWN CREEK RD @ BROWN CREEK 5 MI NW OF WAVERLY HALL	Harris	Superelevatio n	219			11/22/2005	3/31/2006
121720-	SR 124 FM CENTERVILLE- ROSEBUD RD TO HENRY CLOWER BLVD	Gwinnett	Horizontal Alignment	124			7/28/2003	12/29/2005
121720-	SR 124 FM CENTERVILLE- ROSEBUD RD TO HENRY CLOWER BLVD	Gwinnett	Vertical Alignment	124			7/28/2003	12/29/2005
122440-	SR 17 FM 3-LANE @ BEAVERDAM CK TO SR 115	Habersham	Vertical Alignment	17	9.02	10.02	9/16/2003	11/22/2005
171004-	CR 86/JEFFERSON RIVER RD @ CURRY CREEK 3.6 MI E OF ARCADE	Jackson	Vertical Alignment	86			11/26/2003	10/29/2004
232315-	SR 77 @ GOOSEPOND CREEK 14.5 MI NE OF LEXINGTON	Oglethorpe	Vertical Alignment	77	31.76	31.98	11/20/2003	10/14/2004

Table D-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BE G)	Ending Milepost (MPOINT_E ND)	Let Date (BEGIN)	Construction End Date (END)
245370-	SR 22 @ LONG CREEK 3.5 MI S OF LEXINGTON	Oglethorpe	Vertical Alignment	22	11.3	11.52	10/23/2003	11/15/2004
245371-	SR 22 @ BIG CLOUDS CREEK 3.8 MI E OF SMITHSONIA	Oglethorpe	Vertical Alignment	22	24.34	24.56	1/5/2004	12/2/2004
333160-	SR 27 @ BLADEN CREEK 11 MI SW OF LUMPKIN	Stewart	Vertical Alignment	27	0.662	0.889	5/3/2004	12/14/2005
333202-	SR 18/US 27 ALT. @ KENDALL CREEK 2 MI S OF GREENVILLE	Meriwether	Vertical Alignment	18	13	13.17	12/8/2004	2/9/2006
343365-	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER	Taylor	Vertical Alignment	137	0.52	0.81	11/27/2003	11/17/2004
343365-	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER	Taylor	Grade	137	0.78	0.88	11/27/2003	11/17/2004
350710-	CS 877/W MCINTOSH RD/GRIFFIN FM OLD ATLANTA RD TO SR 3/US 41	Spalding	Vertical Alignment	877			10/21/2004	10/31/2005
351210-	SR 3/US 19 TURN LANES AT SR 362 IN GRIFFIN	Spalding	Lateral Offset	3			9/29/2003	2/18/2004
351210-	SR 3/US 19 TURN LANES AT SR 362 IN GRIFFIN	Spalding	Shoulder Width	3			9/29/2003	2/18/2004
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Horizontal Alignment	31			9/2/2003	1/13/2005
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Cross Slope	31	27.7	28.43	9/2/2003	1/13/2005
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Bridge Width	31	27.7	28.43	9/2/2003	1/13/2005
431670-	SR 35/W THOMASVILLE BYP /US 319 FM SR 35BU N TO SR 38/US 84	Thomas	Vertical Alignment	35	6.93	9.54	6/7/2004	6/1/2006
521570-	SR 31/US 441 @ ALLIGATOR BIG HORSE OFLOW BIG HORSE CKS	Telfair	Cross Slope	31			5/2/2004	6/30/2006

Table D-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BE G)	Ending Milepost (MPOINT_E ND)	Let Date (BEGIN)	Construction End Date (END)
521570-	SR 31/US 441 @ ALLIGATOR BIG HORSE OFLOW BIG HORSE CKS	Telfair	Bridge Width	31			5/2/2004	6/30/2006
620399-	SR 52 @ CSX RR IN CHATSWORTH	Murray	Vertical Alignment	52	7.44	7.52	5/12/2004	6/14/2006
621580-	SR 120 FM W OF BUCHANAN BYP TO LAKE OLYMPIA	Haralson	Horizontal Alignment	120	10.65	10.79	2/20/2005	7/31/2006
621580-	SR 120 FM W OF BUCHANAN BYP TO LAKE OLYMPIA	Haralson	Vertical Alignment	120			2/20/2005	7/31/2006
631580-	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY	Gilmer	Vertical Alignment	282	3.8	4.2	11/6/2004	2/28/2006
631580-	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY	Gilmer	Grade	282	3.8	4.2	11/6/2004	2/28/2006
641910-	SR 100 NB MP 5.5-6.8; NB MP 13.3-14.55; SB MP 15.3-16.8	Carroll	Vertical Alignment	100			9/6/2005	11/29/2006
642160-	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT	Fannin	Horizontal Alignment	60	2.02	2.1	12/29/2004	4/28/2006
642160-	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT	Fannin	Vertical Alignment	60	1.982	2.257	12/29/2004	4/28/2006
650460-	SR 101 OVER ETOWAH RIVER IN ROME	Floyd	Vertical Alignment	101	10.98	11.52	9/18/2003	8/31/2006
712870-	I-20 @ LITHONIA INDUSTRIAL BLVD	DeKalb	Stopping Sight Distance	402			9/22/2003	11/4/2005
712870-	I-20 @ LITHONIA INDUSTRIAL BLVD	DeKalb	Shoulder Width	402			9/22/2003	11/4/2005

Table D-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BE G)	Ending Milepost (MPOINT_E ND)	Let Date (BEGIN)	Construction End Date (END)
730753-	SOUTH FULTON PKWY FM COCHRAN MILL RD TO SR 154 - GRTA	Fulton	Stopping Sight Distance	2043			12/17/2003	9/11/2006
730753-	SOUTH FULTON PKWY FM COCHRAN MILL RD TO SR 154 - GRTA	Fulton	Bridge Width	2043			12/17/2003	9/11/2006
751320-	CR 5189/ROCKBRIDGE RD @ SNAPFINGER CREEK	DeKalb	Vertical Alignment	857			10/6/2003	5/19/2005
752870-	SR 154/MEMORIAL DRIVE AT MORELAND AVE DEKALB/FULTON CO LN	Fulton, DeKalb	Stopping Sight Distance	154			1/21/2004	8/31/2004
752870-	SR 154/MEMORIAL DRIVE AT MORELAND AVE DEKALB/FULTON CO LN	Fulton, DeKalb	Superelevatio n	154			1/21/2004	8/31/2004
752940-	CR 5194/FLAT SHOALS ROAD @ DOLITTLE CREEK JUST SOUTH OF I-20	DeKalb	Vertical Alignment	5194			9/17/2003	11/8/2004
771273-	CR 629/JOHNSON ROAD @ PEEKS CREEK 1 MI E OF PALMETTO	Fulton	Vertical Alignment	629			6/6/2005	10/31/2005
M001994	I-75 @ 3 LOCS IN HENRY & 1 LOC IN SPALDING - BRIDGE JACKING	Spalding, Henry	Vertical Alignment	401	0.87	0.87	5/30/2005	2/28/2006
M001994	I-75 @ 3 LOCS IN HENRY & 1 LOC IN SPALDING - BRIDGE JACKING	Henry, Spalding	Vertical Alignment	401	1.13	1.13	5/30/2005	2/28/2006

APPENDIX E

DETAILED LIST OF SAMPLE SET OF PROJECTS WITH DESIGN EXCEPTIONS USED IN THIS STUDY

Table E-1. Detailed List of Sample Set of Design Exceptions Used in This Study

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Beginning Milepost (BEGIN)	Construction End Date (END)
122440-	SR 17 FM 3-LANE @ BEAVERDAM CK TO SR 115	Habersham	Vertical Alignment	17	9.02	10.02	9/16/2003	11/22/2005
232315-	SR 77 @ GOOSEPOND CREEK 14.5 MI NE OF LEXINGTON	Oglethorpe	Vertical Alignment	77	31.76	31.98	11/20/2003	10/14/2004
245370-	SR 22 @ LONG CREEK 3.5 MI S OF LEXINGTON	Oglethorpe	Vertical Alignment	22	11.3	11.52	10/23/2003	11/15/2004
245371-	SR 22 @ BIG CLOUDS CREEK 3.8 MI E OF SMITHSONIA	Oglethorpe	Vertical Alignment	22	24.34	24.56	1/5/2004	12/2/2004
333160-	SR 27 @ BLADEN CREEK 11 MI SW OF LUMPKIN	Stewart	Vertical Alignment	27	0.662	0.889	5/3/2004	12/14/2005
333202-	SR 18/US 27 ALT. @ KENDALL CREEK 2 MI S OF GREENVILLE	Meriwether	Vertical Alignment	18	13	13.17	12/8/2004	2/9/2006
343365-	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER	Taylor	Vertical Alignment	137	0.52	0.81	11/27/2003	11/17/2004
343365-	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER	Taylor	Grade	137	0.78	0.88	11/27/2003	11/17/2004
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Cross Slope	31	27.7	28.43	9/2/2003	1/13/2005
422250-	SR 31/US 441 @ MILL CREEK	Coffee	Bridge Width	31	27.7	28.43	9/2/2003	1/13/2005

Table E-1. Continued

Project ID	Project Title	County	DE Type / Controlling Criteria	Route Number (MPOINT_ROUTE)	Beginning Milepost (MPOINT_BEGIN)	End Milepost (MPOINT_END)	Beginning Milepost (BEGIN)	Construction End Date (END)
431670-	SR 35/W THOMASVILLE BYP /US 319 FM SR 35BU N TO SR 38/US 84	Thomas	Vertical Alignment	35	6.93	9.54	6/7/2004	6/1/2006
620399-	SR 52 @ CSX RR IN CHATSWORTH	Murray	Vertical Alignment	52	7.44	7.52	5/12/2004	6/14/2006
621580-	SR 120 FM W OF BUCHANAN BYP TO LAKE OLYMPIA	Haralson	Horizontal Alignment	120	10.65	10.79	2/20/2005	7/31/2006
631580-	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY	Gilmer	Vertical Alignment	282	3.8	4.2	11/6/2004	2/28/2006
631580-	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY	Gilmer	Grade	282	3.8	4.2	11/6/2004	2/28/2006
642160-	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT	Fannin	Horizontal Alignment	60	2.02	2.1	12/29/2004	4/28/2006
642160-	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT	Fannin	Vertical Alignment	60	1.982	2.257	12/29/2004	4/28/2006
650460-	SR 101 OVER ETOWAH RIVER IN ROME	Floyd	Vertical Alignment	101	10.98	11.52	9/18/2003	8/31/2006

APPENDIX F

DETAILED LIST OF CONTROL SITES WITHOUT DESIGN

EXCEPTIONS USED IN THIS STUDY

Table F-1. Project Data for Projects with Design Exceptions in District 1

Project ID	122440-
Title	SR 17 FM 3-LANE @ BEAVERDAM CK TO SR 115
County	Habersham
City	Clarkesville
District	1
Exception Type/ Detail	4 (Vertical Alignment) 1-substandard VC "K" value (SR17/115)
Project Type	Widening
Let Date	6/20/03
Construction End Date	11/22/05
Mileposts	9.02 – 10.02
AADT	10650

Table F-2. Project Data for Projects without Design Exceptions (Control Sites) in District 1

Project ID	122300-
Title	SR 15/US 441 FROM THE CLARKE/JACKSON COUNTY LINE TO SR 335
County	Jackson
District	1
Project Type	Widening
Let Date	10/22/04
Construction End Date	12/31/06
Mileposts	0 – 6
AADT	16000

Table F-3. Project Data for Projects with Design Exceptions in District 2

Project ID	232215-
Title	SR 77 @ GOOSEPOND CREEK 14.5 MI NE OF LEXINGTON
County	Oglethorpe
City	Lexington
District	2
Exception Type/ Detail	4 (Vertical Alignment)
Project Type	Bridge replacement
Let Date	9/19/2003
Construction End Date	10/14/2004
Mileposts	31.76 – 31.98
AADT	1000
Project ID	245370-
Title	SR 22 @ LONG CREEK 3.5 MI S OF LEXINGTON
County	Oglethorpe
City	Lexington
District	2
Exception Type/ Detail	4 (Vertical Alignment)
Project Type	Bridge replacement
Let Date	8/22/2003
Construction End Date	11/15/2004
Mileposts	11.3 – 11.52
AADT	1750
Project ID	245371-
Title	SR 22 @ BIG CLOUDS CREEK 3.8 MI E OF SMITHSONIA
County	Oglethorpe
City	Lexington
District	2
Exception Type/ Detail	4 (Vertical Alignment)
Project Type	Bridge replacement
Let Date	10/17/2003
Construction End Date	12/2/2004
Mileposts	24.34 – 24.56
AADT	1750

Table F-4. Project Data for Projects without Design Exceptions (Control Sites) in District 2

Project ID	232285-
Title	SR 57 @ LITTLE OHOOPEE RIVER .5 MI E OF KITE
County	Johnson
District	2
Project Type	Bridge replacement
Let Date	9/19/2003
Construction End Date	3/4/2005
Mileposts	24.69 – 25.15
AADT	2100
Project ID	232300-
Title	SR 44 @ KETTLE CREEK 6.5 MI SW OF WASHINGTON
County	Wilkes
District	2
Project Type	Bridge replacement
Let Date	2/20/2004
Construction End Date	5/30/2005
Mileposts	4.38 – 4.77
AADT	2400
Project ID	232320-
Title	SR 47/US 221 @ HEADSTALL CREEK 5.3 MI S OF DEARING
County	McDuffie
District	2
Project Type	Bridge replacement
Let Date	8/19/2005
Construction End Date	9/30/2006
Mileposts	3.59 – 3.92
AADT	2000
Project ID	245110-
Title	SR 15 OVER FISHING CREEK 7.9 MILES NW OF GREENSBORO
County	Greene
District	2
Project Type	Bridge replacement
Let Date	2/20/2004
Construction End Date	5/23/2006
Mileposts	22.405 – 22.841
AADT	3500

Table F-4. Continued

Project ID	245377-
Title	SR 47 @ HARDEN CREEK & TRIBUTARY 8 MI NE OF CRAWFORDVILLE
County	Taliaferro
District	2
Project Type	Bridge replacement
Let Date	8/20/2004
Construction End Date	1/3/2006
Mileposts	9.91 – 10.5
AADT	1150
Project ID	245385-
Title	SR 44 @ FISHING CREEK 5 MI NE OF WASHINGTON
County	Wilkes
District	2
Project Type	Bridge replacement
Let Date	3/19/2004
Construction End Date	5/31/2005
Mileposts	17.4 – 17.76
AADT	850
Project ID	245398-
Title	SR 199 @ PUGHES CREEK 6.9 MI SE OF EAST DUBLIN
County	Laurens
District	2
Project Type	Bridge replacement
Let Date	11/19/2004
Construction End Date	1/3/2006
Mileposts	7.56 – 7.85
AADT	1250
Project ID	232270-
Title	SR 26/US 80 @ PUGHES CREEK 2.8 MI SE OF BREWTON
County	Laurens
District	2
Project Type	Bridge replacement
Let Date	8/19/2005
Construction End Date	11/17/2006
Mileposts	26.96 – 27.26
AADT	2400

Table F-4. Continued

Project ID	245100-
Title	SR 15 @ HARRIS BRANCH 9.7 MILES NW OF GREENSBORO
County	Greene
District	2
Project Type	Bridge replacement
Let Date	1/16/2004
Construction End Date	5/17/2005
Mileposts	24.23 – 24.6
AADT	3500
Project ID	222720-
Title	SR 4/US 1 NBL & SBL @ BUTLER CREEK 7 MI N OF HEPHZIBAH
County	Richmond
District	2
Project Type	Bridge replacement
Let Date	1/24/2003
Construction End Date	8/19/2005
Mileposts	16.43 – 16.62
AADT	38000
Project ID	0000809-
Title	SR 232 @ CRAWFORD CREEK 4.4 MI NE OF GROVETOWN
County	Columbia
District	2
Project Type	Bridge replacement
Let Date	3/18/2005
Construction End Date	8/18/2006
Mileposts	8.803 – 9.478
AADT	12000
Project ID	245336-
Title	SR 126 @ GUM SWAMP CREEK 5.8 MI E OF COCHRAN
County	Bleckley
District	2
Project Type	Bridge replacement
Let Date	11/17/2006
Construction End Date	12/31/2007
Mileposts	5.27 – 5.56
AADT	1350

Table F-5. Project Data for Projects with Design Exceptions in District 3

Project ID	333160-
Title	SR 27 @ BLADEN CREEK 11 MI SW OF LUMPKIN
County	Stewart
City	Lumpkin
District	3
Exception Type/ Detail	4 (Vertical Alignment)
Project Type	Bridge replacement
Let Date	5/3/2004
Construction End Date	12/14/2005
Mileposts	0.662 – 0.889
AADT	1350
Project ID	333202-
Title	SR 18/US 27 ALT. @ KENDALL CREEK 2 MI S OF GREENVILLE
County	Meriwether
City	Greenville
District	3
Exception Type/ Detail	4 (Vertical Alignment)
Project Type	Bridge replacement
Let Date	8/20/2004
Construction End Date	2/9/2006
Mileposts	13 – 13.17
AADT	5000
Project ID	343365
Title	SR 137 @ CEDAR CREEK 13.3 MI SW OF BUTLER
County	Taylor
City	Butler
District	3
Exception Type/ Detail	4 (Vertical Alignment)
Project Type	Bridge replacement
Let Date	11/27/2003
Construction End Date	11/17/2004
Mileposts	0.52 – 0.81 (2 substandard VC “k” values, meets 94 but not 2001) 0.78 – 0.88 (Grade exceeds 2001 AASHTO 7.63%)
AADT	900

**Table F-6. Project Data for Projects without Design Exceptions on Identical Routes
(Control Sites) in District 3**

Project ID	343400- (ALSO ON THE SAME ROUTE AS PI #333202)
Title	SR 18 @ WALNUT CREEK 6 MI W OF GRAY
County	Jones
District	3
Project Type	Bridge replacement
Let Date	10/22/2004
Construction End Date	12/31/2005
Mileposts	7.73 – 8.18
AADT	5000

**Table F-7. Project Data for Projects without Design Exceptions (Control Sites) in
District 3**

Project ID	322345-
Title	SR 34 @ SHOAL CREEK
County	Coweta
District	3
Project Type	Bridge replacement
Let Date	11/21/2003
Construction End Date	8/11/2006
Mileposts	19.1 – 22.46
AADT	32000
Project ID	333180-
Title	SR 85 – SR 74 @ PAPPYS CREEK .5 MI N OF WOODBURY
County	Meriwether
District	3
Project Type	Bridge replacement
Let Date	6/17/2005
Construction End Date	12/31/2006
Mileposts	15.72 – 16.16
AADT	2500

Table F-7. Continued

Project ID	333182-
Title	SR 85 – SR 74 @ WHITE OAK CREEK .4 MI N OF ALVATON
County	Meriwether
District	3
Project Type	Bridge replacement
Let Date	8/20/2004
Construction End Date	3/23/2006
Mileposts	2.69 – 3.26
AADT	4000
Project ID	333184-
Title	SR 85 ALT @ POUND CREEK 2 MI S OF WOODBURY
County	Meriwether
District	3
Project Type	Bridge replacement
Let Date	6/17/2005
Construction End Date	12/31/2006
Mileposts	10.87 – 11.22
AADT	2700
Project ID	343167-
Title	SR 42 @ ECHECONNIE CREEK 6 MI E OF CULLODEN
County	Monroe
District	3
Project Type	Bridge replacement
Let Date	2/18/2005
Construction End Date	4/21/2006
Mileposts	1.18 – 1.56
AADT	1200
Project ID	343400- (ALSO ON THE SAME ROUTE AS PI #333202)
Title	SR 18 @ WALNUT CREEK 6 MI W OF GRAY
County	Jones
District	3
Project Type	Bridge replacement
Let Date	10/22/2004
Construction End Date	12/31/2005
Mileposts	7.73 – 8.18
AADT	5000

Table F-7. Continued

Project ID	343415-
Title	SR 39 @ TALIPAHOGA CREEK APP 2 MI S OF OMAHA
County	Stewart
District	3
Project Type	Bridge replacement
Let Date	12/19/2003
Construction End Date	10/31/2004
Mileposts	10.09 – 10.43
AADT	750
Project ID	343450-
Title	CR 290/FINCHERVILLE ROAD @ TUSSAHAW CREEK 5 MI N OF JACKSON
County	Butts
District	3
Project Type	Bridge replacement
Let Date	6/18/2004
Construction End Date	11/21/2005
Mileposts	2.48 – 2.94
AADT	700

Table F-8. Project Data for Projects with Design Exceptions (Control Sites) in District 4

Project ID	422250-
Title	SR 31/US 441 @ MILL CREEK
County	Coffee
City	Broxston
District	4
Exception Type/ Detail	3 (Horizontal alignment) 10 (Cross slope) 12 (Bridge width)
Project Type	Bridge replacement
Let Date	6/20/2003
Construction End Date	1/13/2005
Mileposts	27.7 – 28.43
AADT	3400
Project ID	431670-
Title	SR 35/W THOMASVILLE BYP /US 319 FM SR 35BU N TO SR 38/US 84
County	Thomas
City	Thomasville
District	4
Exception Type/ Detail	4 (Vertical alignment)
Project Type	Widening
Let Date	3/19/2004
Construction End Date	6/1/2006
Mileposts	6.93 – 9.54
AADT	7050

Table F-9. Project Data for Projects without Design Exceptions (Control Sites) in District 4

Project ID	0000688
Title	SR 135 @ DARK BAY CREEK APP 4 MI N OF WILLACOOCHEE
County	Atkinson
District	4
Project Type	Bridge replacement
Let Date	3/18/2005
Construction End Date	3/31/2006
Mileposts	7 – 7.64
AADT	2600
Project ID	0005813
Title	I-75 @ FRANKS CREEK RD & DETOUR-EMERGENCY BRIDGE REPLACEMENT
County	Lowndes
District	Bridge replacement
Project Type	4
Let Date	5/16/2003
Construction End Date	12/31/2003
Mileposts	7.46 – 7.73
AADT	300
Project ID	431710-
Title	SR 91/PETER ZACK GEER HWY @ ICHAWAYNOCHAWAY CK N OF SR 253
County	Baker
District	Bridge replacement
Project Type	4
Let Date	1/21/2005
Construction End Date	10/15/2006
Mileposts	4.1 – 4.83
AADT	3200
Project ID	432107-
Title	SR 135 @ PUDDING CREEK APP 1.5 MI N JCT SR 520
County	Atkinson
District	4
Project Type	Bridge replacement
Let Date	1/24/2003
Construction End Date	4/26/2004
Mileposts	4.8 – 5.32
AADT	2500

Table F-9. Continued

Project ID	432115-
Title	SR 135 @ SATILLA RIVER APP 6 MI S OF DOUGLAS
County	Coffee
District	4
Project Type	Bridge replacement
Let Date	5/16/2003
Construction End Date	12/7/2004
Mileposts	2.5 – 3
AADT	7000
Project ID	432116-
Title	SR 135 @ INDIAN CREEK APP 3.5 MI S OF DOUGLAS
County	Coffee
District	4
Project Type	Bridge replacement
Let Date	12/19/2003
Construction End Date	5/31/2005
Mileposts	5.15 – 5.45
AADT	14000
Project ID	432118-
Title	SR 135/US 221 @ RR PROP. (NO TRACKS) @ SW WEST GREEN CTY LIM
County	Coffee
District	4
Project Type	Bridge replacement
Let Date	5/21/2004
Construction End Date	4/15/2005
Mileposts	19.32 – 19.38
AADT	5500
Project ID	432120-
Title	SR 93 – SR 111 @ GIN BRANCH APP 2 MI N OF CAIRO
County	Grady
District	4
Project Type	Bridge replacement
Let Date	3/21/2003
Construction End Date	2/4/2004
Mileposts	15.57 – 15.88
AADT	7000

Table F-9. Continued

Project ID	432140-
Title	SR 91 @ AYCOCK CREEK APP 4 MI S OF COLQUITT
County	Miller
District	4
Project Type	Bridge replacement
Let Date	9/19/2003
Construction End Date	3/5/2005
Mileposts	7.6 – 8
AADT	3000
Project ID	432141-
Title	SR 91 @ CYPRESS CREEK 2.5 MI W OF COLQUITT
County	Miller
District	4
Project Type	Bridge replacement
Let Date	12/19/2003
Construction End Date	6/16/2005
Mileposts	8.3 – 8.7
AADT	4000
Project ID	432145-
Title	SR 300 SBL @ JONES CREEK 1.4 MI S OF OAKFIELD
County	Worth
District	4
Project Type	Bridge replacement
Let Date	1/23/2003
Construction End Date	3/31/2004
Mileposts	7.54 – 8.43
AADT	9500
Project ID	442930-
Title	SR 168 @ FIVE MILE CREEK 3 MI WEST OF JCT SR 135
County	Berrien
District	4
Project Type	Bridge replacement
Let Date	2/18/2005
Construction End Date	10/20/2006
Mileposts	8.436 – 8.72
AADT	900

Table F-9. Continued

Project ID	442931-
Title	SR 37 @ CAT CREEK IN RAY CITY
County	Berrien
District	4
Project Type	Bridge replacement
Let Date	5/21/2004
Construction End Date	9/30/2005
Mileposts	7.52 – 7.79
AADT	4100
Project ID	442950-
Title	SR 216 @ LITTLE PACHITLA CREEK 1 MI N OF EDISON
County	Calhoun
District	4
Project Type	Bridge replacement
Let Date	3/18/2005
Construction End Date	6/27/2006
Mileposts	10.2 – 10.6
AADT	1300
Project ID	442960-
Title	SR 122 @ WITHLACOOCHEE RIVER APP 4.5 MI E OF HAHIRA
County	Lowndes
District	4
Project Type	Bridge replacement
Let Date	12/17/2004
Construction End Date	12/20/2006
Mileposts	9.4 – 10.2
AADT	4300
Project ID	442975-
Title	SR 93 @ LOST CREEK APP 1.5 MI N OF COTTON
County	Mitchell
District	4
Project Type	Bridge replacement
Let Date	10/17/2003
Construction End Date	4/16/2005
Mileposts	11.47 – 11.95
AADT	650

Table F-9. Continued

Project ID	442976-
Title	SR 93 @ SPENCE MILL CREEK .2 MI N OF GRADY COUNTY LINE
County	Mitchell
District	4
Project Type	Bridge replacement
Let Date	10/17/2003
Construction End Date	11/13/2004
Mileposts	0.1 – 0.4
AADT	1200
Project ID	442981-
Title	SR 112 @ DOUBLE RUN CREEK 1 MI SW OF REBECCA
County	Turner
District	4
Project Type	Bridge replacement
Let Date	6/20/2003
Construction End Date	11/19/2004
Mileposts	19.3 – 19.6
AADT	1300
Project ID	442986-
Title	SR 94 @ TOMS CREEK APP 10.3 MI E OF JCT SR 11
County	Echols
District	4
Project Type	Bridge replacement
Let Date	3/19/2004
Construction End Date	4/15/2005
Mileposts	18.5 – 19.1
AADT	450

Table F-10. Project Data for Projects with Design Exceptions in District 6

Project ID	621580-
Title	SR 120 FM W OF BUCHANAN BYP TO LAKE OLYMPIA
County	Haralson
City	Buchanon
District	6
Exception Type/ Detail	3 (Horizontal alignment)
Project Type	Passing lanes and bridge replacement
Let Date	12/17/2004
Construction End Date	7/31/2006
Mileposts	10.65 – 10.79
AADT	5000
Project ID	631580-
Title	SR 282 BRIDGE REPLACEMENT OVER TAILS CREEK WEST OF ELLIJAY
County	Gilmer
City	Elijay
District	6
Exception Type/ Detail	4 (Vertical alignment) 5 (Grade)
Project Type	Bridge replacement
Let Date	9/17/2004
Construction End Date	2/28/2006
Mileposts	3.8 – 4.2
AADT	5550
Project ID	642160-
Title	SR 60 @ COOPERS CREEK - BRIDGE REPLACEMENT
County	Fannin
City	Morganton
District	6
Exception Type/ Detail	3 (Horizontal alignment) 4 (Vertical alignment)
Project Type	Bridge replacement
Let Date	10/22/2004
Construction End Date	4/28/2006
Mileposts	2.02 – 2.1 1.982 – 2.257
AADT	500

Table F-10. Continued

Project ID	650460-
Title	SR 101 OVER ETOWAH RIVER IN ROME
County	Floyd
City	Rome
District	6
Exception Type/ Detail	4 (Vertical alignment)
Project Type	Bridge replacement
Let Date	7/25/2003
Construction End Date	8/31/2006
Mileposts	10.98 – 11.52
AADT	24500

REFERENCES

- [1] Federal Highway Administration. (1997). *Flexibility in Highway Design*, 1st Ed., United States Department of Transportation, Washington, D.C.
- [2] Federal Highway Administration. (1997). *Federal-Aid Policy Guide*, Title 23 Code of Federal Regulations Section 625, Federal Highway Administration, Washington, D.C.
- [3] Stein, W.J., and T.R. Neuman. (2007). *Mitigation Strategies for Design Exceptions*, Report No. FHWA-SA-07-011, Federal Highway Administration, Washington, D.C.
- [4] Georgia Department of Transportation. (2007). *GDOT Design Policy Manual*, Georgia Department of Transportation, Atlanta, GA.
- [5] Georgia Department of Transportation. (2011). *GDOT Plan Development Process*, Georgia Department of Transportation, Atlanta, GA.
- [6] Nunez, Johnathan. (2012). "Design Exceptions." Undergraduate Research, Georgia Institute of Technology, Atlanta, GA.
- [7] National Cooperative Highway Research Program. (2011). "NCHRP 17-53: *Evaluation of the 13 Controlling Criteria for Geometric Design.*" <<http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=2977>> (March 1, 2013).
- [8] Brigilia, J.P., Howard, Z., Fishkin, E., Hallenbeck, M., and A. St. Martin. (2009). *In Service Evaluation of Major Urban Arterials with Landscaped Medians – Phase II*, Report No. WA-RD 636.2, Washington Department of Transportation, Seattle, Washington.
- [9] Agent, K., Pigman, J., and N. Stamatiadis. (2002). *Safety Implications from Design Exceptions*, Report No. KTC-02-09, Kentucky Transportation Center, Lexington, Kentucky.

- [10] Malyshkina, N., Mannering, F. and J. Thomaz. (2009). *Safety Impacts of Design Exceptions*, Report No. FHWA/IN/JTRP-2008/25, Indiana Department of Transportation, West Lafayette, Indiana.
- [11] Porter, Richard J., Jonathan S. Wood. (2002). *Safety Impacts of Design Impacts in Utah*, Report No. UT-12.10, Utah Department of Transportation, Salt Lake City, Utah.
- [12] American Association of State Highway and Transportation Officials. (2010). *An Introduction to the Highway Safety Manual*, 1st Ed., Washington, D.C.
- [13] University of Alabama Center for Advanced Public Safety. (2011). “Critical Analysis Reporting Environment.” *CARE*, <<http://caps.ua.edu/caresoftware.aspx>> (January, 1, 2013).
- [14] Georgia Department of Transportation. (2010). “Transportation Project Information.” *TransPi*, <<http://www.dot.ga.gov/projects/transpi/Pages/ProjectSelection.aspx>> (January 1, 2013).
- [15] Sim, Samuel. (2012). “An Initial Investigation For a Monitoring Program for the Safety Performance of Design Exceptions in Georgia.” M.S. thesis, Georgia Institute of Technology, Atlanta, GA.
- [16] American Association of State Highway and Transportation Officials. (2010). *Highway Safety Manual*, 1st Ed., Federal Highway Administration, Washington, D.C.
- [17] “Georgia’s State Traffic and Report Statistics (STARS).” (2011). <<http://www.dot.state.ga.us/statistics/stars/Pages/default.aspx>> (January 1, 2013)
- [18] Niessner, Charles W. (2008). *Research Results Digest: Highway Safety Manual Data Needs Guide*, Issue 329, Transportation Research Board, Washington, D.C.
- [19] Hauer, Ezra. (2007) *Observational Before/After Studies in Road Safety*, 1st Ed., Emerald Group Publishing, London.