State Highway-Rail Grade Crossing Action Plan

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Georgia Department of Transportation

Office of Utilities

Prepared with assistance from:

MorelandAltobelli Associates,Inc

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1.0 Introduction

1.1 Plan Genesis

Section 202 of the Rail Safety Improvement Act of 2008 (RSIA08), Public Law 110-432 (H.R.2095 / S.1889), that was signed into law on 16 October 2008 required the U.S. Secretary of Transportation to identify the ten States with the most highway-rail grade crossing collisions, on average, over the past three years, and to require those States to develop State highway-rail grade crossing action plans. Section 202 further provided that these plans must identify specific solutions for improving safety at crossings, including highway-rail grade crossing closures or grade separations, and must focus on crossings that have experienced multiple collisions, or are at high risk for such collisions.

The Federal Railroad Administration (FRA) (http://www.fra.dot.gov/) published a Final Rule in the 28 June 2010 *Federal Register* (Volume 75, No. 123) addressing the development, review, and approval of the State highway-rail grade crossing action plans required by the Rail Safety Improvement Act.[1] The Rule requires that State highway-rail crossing action plans cover a five year time period.

Alabama, California, Florida, Georgia, Illinois, Indiana, Iowa, Louisiana, Ohio, and Texas were identified as the ten states with the most highway-rail grade crossing collisions in the 2006-2008 three calendar year period. The Georgia Department of Transportation (GDOT) (http://www.dot.state.ga.us/Pages/default.aspx) Office of Utilities, Railroad Safety Program, led and coordinated the preparation of this Plan to conform with the requirements of 49 CFR Part 234, Grade Crossing Signal System Safety and State Action Plans; Subpart B, Reports and Plans; § 234.11 State highway-rail grade crossing action plans.

[1] Click underlined webpage addresses in electronic version of document for hyperlinks to webpages.

1.2 Scope and Objective

The regulatory requirement for the preparation of this State Highway-Rail Grade Crossing Safety Action Plan, hereinafter Plan, is based on Georgia 2006, 2007, and 2008 collision data. Collision data from the broader and more current 2006-2010 period were used in the development of this Plan. Also, the use of five year collision experience in evaluating crossing collision risk is customary, and is the period GDOT weighs most heavily in prioritizing highway-rail crossing safety improvements. This Plan, upon approval by FRA and adoption by GDOT, applies through 2017.

The focus of the Plan is road user safety at highway-rail grade crossings where the general public road system and general railroad system intersect within Georgia. This Plan considers only highway-rail grade crossings located on the network of highways, roads and streets that constitute the general public highway system located within Georgia. It does not include the highway-rail grade crossings of privately owned roads or drives, although the general public may have access to and use such private crossings. It also does not include the highway-rail grade crossings of publicly owned roads that are not part of the general public highway network, such as crossings located within the secure areas of U.S. military installations, or crossings otherwise secured from use by the general public. Hereinafter references to a "crossing" or "crossings" refer to public highway-rail grade crossings as defined above, unless otherwise indicated.

Crossing warning devices may be classified as passive or active warning devices. Passive warning devices typically consist of warning and regulatory signs and pavement markings. Hereinafter references to passive crossings should be understood to refer to crossings without any active warning devices. Active warning devices typically consist of automatic gates, and/or flashing lights, and bells.[2] Hereinafter references to "gates" or "gate crossing" or crossings should be understood to be crossings equipped with automatic gates, flashing lights and bells, and "flashers" or "flasher crossings" understood to refer to crossings equipped with automatic flashing lights and bells only.

The objective of this Plan is to identify specific solutions that will reduce collisions between trains or on-track equipment, and pedestrians or vehicles at crossings. Crash is a widely used within the traffic engineering field that refers to collisions, accidents or wrecks. The term crash hereinafter should be understood to refer to such incidents.

Crossing closures and grade separations are integral to this Plan because they greatly reduce, or in the case of grade separations, eliminate crashes.[3] The Plan will also focus on crossings with a history of multiple crashes or otherwise have risk factors associated with multiple crash crossings. The Rail Safety Improvement Act recognized that such crossings account for a disproportionately high fraction of crashes, and thus offer a great opportunity to reduce the total numbers of crashes. Multiple crash crossings hereinafter generally refer to crossings that have experienced more than one crash in the 2006-2010 period.

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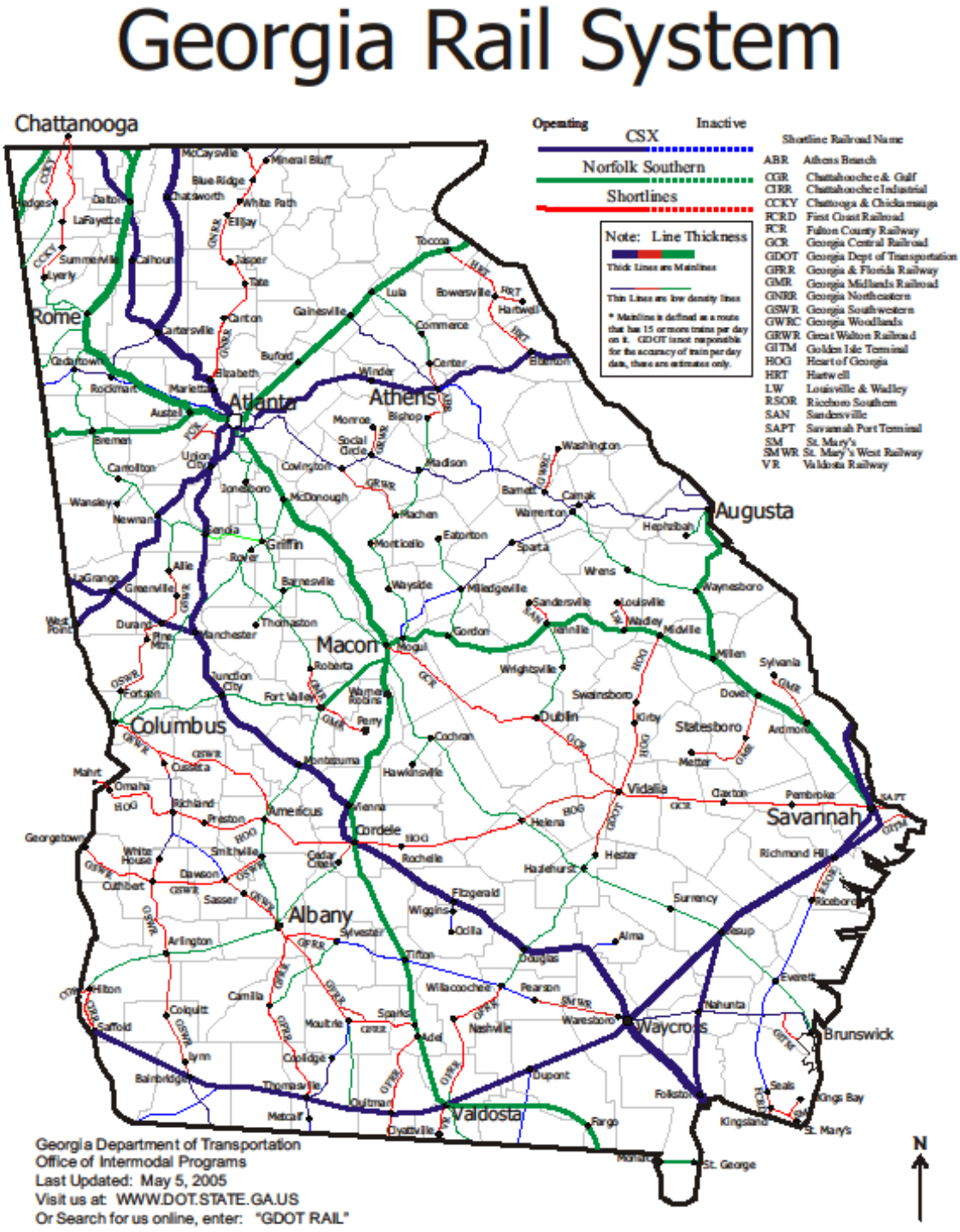
[2] Signs such as "No Left Turn" actuated in connection with pre-emption, an interconnection between active warning devices at a crossings and a nearby intersection signal, though regulatory in nature, may be considered to be active warning devices.

[3] Rerouting of traffic from a closed crossing to another crossing does not completely eliminate crash risk at the closed crossing.

Figure 1 Georgia Railroad System



1.3 Georgia Railroad System

The general railroad system in Georgia consists of the networks of Class I railroads CSX Transportation (CSXT) and Norfolk Southern (NS), and 24 Class III railroads that collectively operate approximately three dozen branch line segments.[4] Short line railroad is an informal term applied to small railroad companies operating over relatively short distances that have much smaller gross revenue than Class I railroads. Georgia's Class III railroads conform to this informal definition. Hereinafter Georgia railroads, exclusive of CSXT, NS and Amtrak, collectively may be referred to as short lines. The Georgia Railroad System is depicted in Figure 1 on the preceding page.

The 1,676 route mile CSXT and 1,778 route mile NS Georgia railroad networks extend throughout Georgia.[5] CSXT, because of its larger presence in Florida, has greater through traffic and generally higher average train traffic density on its Georgia network than NS.[6]

CSXT and NS each operate a pair of major trunk lines that cross in Atlanta. One trunk line of each pair broadly parallels Interstate 75 (I-75). The other trunk line of the pairs generally parallels Interstate 85 northeast of Atlanta. On the other side of Atlanta the CSXT trunk line parallels Interstate 85 (I-85) southwest of Atlanta, and the NS trunk line Interstate 20 (I-20) west of Atlanta.[7]

Both NS and CSXT railroads have been constructing additional capacity in the form of second main track, and new and extended passing sidings on these trunk lines. The NS I-85 northeast/ I-20 west trunk line is part of NS' Crescent Corridor, a national-scale $2 billion public-private partnership (NS, USDOT, various states and localities) to improve railroad transportation between the northern mid-Atlantic and the central southeastern regions of the US.[8]

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[4] Class followed by Roman numerals refers to the size of a railroad based on revenue. Class followed by with Arabic numbers refers to a standard of track. Class I railroads are defined as those with $378.8 million in operating revenue in 2009. No Class II railroads currently operate within Georgia. The Louisville and Wadley Railroad (L&W) has not operated its 10 mile track in many years, and is not included among the 24 Class III railroads. Amtrak is a Class I railroad, but does not own any of the 316 route miles over which it operates within Georgia.

[5] Revised from 1,908 NS miles reported in the 2009 State Rail Plan to 1,778 miles per Georgia Railroads Association website. (Independent tabulation of consists of 1,510 Georgia Division route miles, including approximately 50 miles of major lead tracks + 286 other Division routes miles = 1,796 route miles.) Independent rudimentary calculation is 1,583 CSXT route miles in Georgia.

[6] The 2009 State Rail Plan (SRP) reported approximately one-half of the total rail tonnage in Georgia is through traffic. Georgia is a net destination state for rail traffic, largely because of coal traffic to power plants.

[7] CSXT and NS apply various names to their various corridors. This description associates them with interstates that are more familiar to those outside of the railroad industry.

[8] The Crescent Corridor is network corridor of more than a single route. A small segment of a second Crescent Corridor route is located in Dade County, Georgia's most northwestern county.

Other notable trunk lines experiencing or subject to construction of additional capacity include the CSXT lines along the Atlantic Coast generally paralleling Interstate 95 (I-95); the CSXT line between Manchester and Birmingham, AL, an important intermodal route between Florida and the Midwest route that connects to the CSXT I-75 corridor; and the NS Macon-Savannah line serving intermodal traffic to and from the Georgia Ports Authority's Garden City Terminal in Savannah, the third largest international container traffic port in the U.S.

CSXT and NS both operate a number of secondary trunk lines in Georgia, and relatively little in the way of light or very light density lines.[9] Maximum freight train speeds on Georgia Class I railroad trunk lines, exclusive of speed restrictions, is typically 60 miles per hour (mph) for intermodal trains, and 50 mph for other freight trains.[10] Maximum freight train speeds on Georgia Class I secondary lines are generally 25-40 mph.

Twenty-four Georgia short lines collectively operate over 1,200 route miles, including nearly 400 route miles leased by owner GDOT to various short lines.[11] Most of Georgia's short line route miles are located in southwest Georgia or in the southeast central Georgia quadrangle bounded by Macon, Augusta, Savannah and Cordele. A large majority of the Georgia short line network consists of light (<5 mega gross tons, MGT) or very light (<1 MGT) traffic lines. [12] The majority of Georgia's short line trackage was divested by CSXT and NS in the late 1980's and 1990's. Georgia short line main track is generally Class 2 (25 mph maximum freight speed) track, though some short lines operate Class 1 (10 mph maximum freight speed) main track.

1.3.1 Passenger Service

Georgia intercity passenger service currently consists of six daily Amtrak trains operating on CSXT along the Atlantic Coast (Silver Service and Auto Train), and one pair of Amtrak trains (Crescent) operating between New York and New Orleans via Washington and Atlanta.[13] The latter operates on NS' Crescent Corridor within Georgia.

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[9] The 2009 State Rail Plan identified 31% of NS and 15% of CSXT route miles as light density lines.

[10] Unit auto carrier trains may be operated as intermodal trains. Intermodal trains may operate at up to 70mph on portions of the CSXT A-Line , the only line in Georgia where freight trains may operate in excess of 60mph.

[11] The 39 GDOT-owned route miles of the western Preston-Omaha portion of the HOG, and the 17 route miles of the NS-owned ABR between Bishop and Madison are not included because these segments have not been operated in many years. The 27 miles between Shady Dale and Covington and last operated by GRWR, and the 17 miles between Chattanooga and Hedges, last operated by CCKY, are not included because these segments have been inactive for over a year. The latter two segments are owned by NS.

[12] The Sandersville Railroad, and perhaps a small segment of the HOG, are likely the only Georgia short lines with traffic greater than 5MGT.

[13] All six trains Amtrak trains on CSXT operate on the CSXT A-Line (former Atlantic Coast Railroad) south of Savannah. One pair of trains (Silver Star) operate on the S-Line (former Seaboard Air Line Railroad) north of Savannah, and the others on the A-Line north of Savannah. The six trains Amtrak trains on CSXT do not include Amtrak Trains 79 and 80 (Palmetto) that terminate and originate in Savannah and operate only on the 12 miles of the A-Line north of the Savannah Amtrak station.

These 79 mph passenger routes are the only lines within Georgia where trains operate in excess of 60 mph.[14]

Commuter service between Macon and Atlanta, and Athens and Atlanta, was under active development in the first years of the new century.[15] Grade crossing safety was given great attention in the commuter service planning, and would receive great attention in the event of the active resumption of planning activity. [16]

The SAM Shortline, under the asupices of the Georgia Department of Natural Resources, annually operates approximately 140 excursion trains over a 34 mile route between Cordele and Plains in southwest Georgia on the Heart of Georgia (HOG) Railroad.[17] The Blue Ridge Scenic Railway annually operates approximately 240 excursion trains in Fannin County on the 13 mile portion of the Georgia Northeastern Railroad between Blue Ridge, and McCaysville bordering Tennessee. The Tennessee Valley Railway Museum operates about two dozen excursion trains annually on the Chattooga and Chickamauga Railway (CCKY) in northwestern Georgia. All three of these excrusion services operate on GDOT-owned lines.

There are three federally designated Southeast high speed rail corridors in Georgia. One of the corridors is the NS Crescent Corridor. Another is on CSXT along the Atlantic Coast. The third Atlanta-Macon-Jesup corridor on NS connects the other two. A Chattanooga-Atlanta High Speed Ground Transportation (HSGT) study is currently underway.

Any implementation of high speed passenger service would not occur until after the 2017 period of this Plan. Like commuter rail, grade crossing safety receives great attention in the planning process. More information on the characteristics of the Georgia railroad network and high speed rail in Georgia is available in the 2009 State Rail Plan (http://www.dot.state.ga.us/travelingingeorgia/rail/Documents/StateRailPlan2009.pdf).

2.0 Problem Identification

Crossing crashes have decreased dramatically since the advent of the federal aid crossing safety program of Title 23, United States .Code, Chapter 1, Section 130 (23 USC § 130), commonly and hereinafter referred to as the Section 130 Program. Crashes have decreased despite significant increases in highway and railroad traffic. The Section 130 Program funds hazard elimination at crossings, typically but not limited to installation of active warning devices.

[14] There are numerous permanent speed restrictions along the lines, particularly on the NS lines.

[15] Development was progressed to FTA issuing Findings of No Significant Impact in the first half of the last decade.

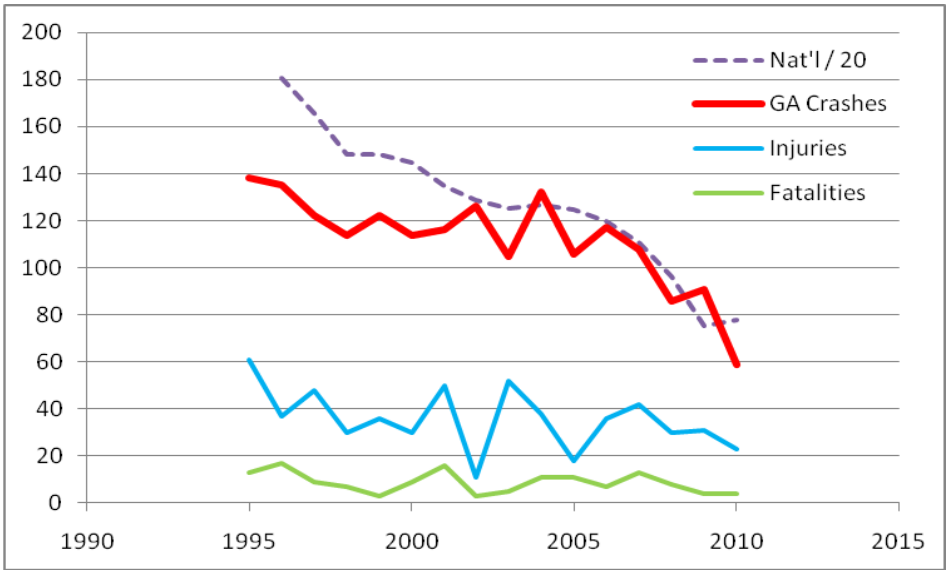
[16] It is unlikely that Athens-Atlanta commuter service will be implemented during the 2012-2017 period of this Plan. Griffin-Atlanta commuter service is currently being considered for inclusion among the $7B in metro Atlanta transportation projects that would be funded by a regional one percent sales tax (T-SPLOST) if approved by the metro Atlanta electorate on 31 July 2012. The project list will be determined in Oct 2011.

[17] SAM derives its name from Savannah, Americus and Montgomery Railroad, a HOG predecessor railroad over which SAM trains operate.

Nationally there were 10,973 motor vehicle crashes resulting in 786 fatalities and 3,596 injuries at public crossings in 1975. Those numbers decreased to 1,559 crashes, 135 fatalities and 638 injuries in 2010. The rate of decrease was greatest in the late 1970's through 1998, and flattened during the 1999-2006 period. The number of crashes began to decline at a greater rate in the 2007, perhaps reflecting at least in part diminished economic activity resulting in less highway and train traffic.

There were 345 Georgia motor vehicle crashes resulting in 23 fatalities and 130 injuries at public crossings in 1975. There were 59 Georgia crashes resulting in four fatalities and 23 injuries in 2010. Figure 2 depicts the numbers of national and Georgia crashes, and Georgia casualties the 1995-2010 period. Georgia experienced experience of one fatality for every 13 motor vehicle crashes (7.7%), and one casualty for nearly every third crash (32%) at public crossings in the 1995-2010 period. These fractions remaining rather constant throughout that period.[18]

Figure 2 Georgia Motor Vehicle Crossing Crashes 1995-2010



Nat'l / 20 is number of crashes nationally divided by 20. National crashes have been divided by 20 simply to place the resulting quotient on a scale similar in magnitude to the number of Georgia crashes for the purpose of comparing trend. (The 2003 spike in injuries coinciding with a dip in crashes was the result of an Amtrak crash resulting in 25 passenger injuries.)
Source: FRA (http://safetydata.fra.dot.gov/officeofsafety/publicsite/Query/gxrtab.aspx)

Georgia's reduction in crashes since 1975 has tended to lag the reduction nationally, a circumstance explained in part by the fact that Georgia's population and hence traffic growth have significantly exceeded the national average since 1975. Georgia has of late closed the gap to near-parity with the nation for the 1975-2010 period. This was due in part to a slight uptick in crashes nationally in 2010, while Georgia has had improvement generally exceeding the national average since 2004, including its best year ever and one of its best years of improvement in 2010.

[18] It should be understood that casualty crashes constitute slightly smaller fractions than those indicated because some crashes have multiple casualties.

The decrease in the number of Georgia crashes since 2004 invites new and re-invigorated efforts to sustain if not improve upon the rate of decrease in the numbers of Georgia crashes and casualties. Georgia, a state with large numbers of crossings and crashes, is positioned to significantly contribute to reductions in crashes and casualities nationally.

The numbers of 2011 Georgia public crossings and route miles by CSXT, NS, Amtrak and short lines are detailed in Table 1. Table 1 also details 2006-2010 period crash experience by warning device category; passive, flashers, or gates.

Table 1 2011 Georgia Public Crossings and 2006-2010 Public Crossing Crashes [1]

Railroad [2]	Route Miles	2011 Crossings and 2006-2010 Crossing Crashes							
		Passive [3]		*Flashers*		*Gates* [4]		*Totals*	
		Xings	Crashes	Xings	Crashes	Xings	Crashes	Xings	Crashes
CSXT	1,676	636	67	85	24	821	113	1,542	204
Amtrak (CSX) [5]	157	19	1	1		58	3	78	4
NS	1,778	1,174	79	106	34	915	84	2,195	197
Amtrak (NS) [5]	159	7	1			116	3	123	4
Short lines [6]	1,223	1,049	25	64	8	286	6	1,646	39
Totals [5,6]	**4,677**	**3,010**	**173**	**255**	**66**	**2,022**	**209**	**5,287**	**448**
% of Total		57%	39%	5%	15%	38%	47%		

1 Motor vehicle crashes. Includes some crossings that are officially open but for practical purposes are closed crossings. There are a number of crossings within Georgia that are functionally one crossing but are counted as two crossings because there are separate USDOT IDs applied to the adjacent track(s) of each railroad at the crossing.
2 Crashes have been assigned to the maintenance railroad when the maintenance railroad is an operating railroad.
3 Consists of all crossings other than gate or flasher crossings, and therefore includes a few crossings with extraordinary active warning devices such as bell-only crossings.
4 includes less than one dozen four quadrant gate crossings.
5 Amtrak route miles and crossings are for information only. Amtrak route miles and crossings are included within CSXT and NS route miles and crossings. CSXT Amtrak route miles consists of 126 A-Line routes miles with with 43 gates and 14 crossbuck crossings, of which seven are gate crossings located on the 11.6 route-miles north of Central Jct in Savannah, and 31 S-Line route miles wti 15 gate, one flasher and five crossbuck crossings.
6 Short line route miles, including route miles owned by a NS but last operated by a short line, exclude approximately 100 route miles of track that have not been operated for a year of more. There are approximately 96 crossings on this 100 miles of track, approximately 18 of which are equipped with gates, two with flashers, and 80 are passive crossings. See footnote 11 .

Approximately 43% of the approximately 5,287 total public grade crossings within Georgia are equipped with active warning devices.[19] Approximately 59% of the 1.542 CSXT crossings, and 47% of the 2,195 NS crossings are equipped with active warning devices. The higher fraction of CSXT crossings equipped with active warning devices reflects the generally higher density train traffic on the CSXT network in Georgia.

Approximately 21% of shortline public crossings are equipped with active warning devices. Flasher crossings constitute 22% of the shortline active warning device crossings, twice that of the 11% of Class I railroad crossings. This is a result of older active warning device installations that occurred when there were higher traffic volumes on the lines prior to NS and CSXT disvestiture of light density lines in the late 1980's and 1990's, at a time when flashers were more commonly installed than at present.

[19] There are officially 5,383 Georgia public crossings. See Table 1 note 6 and footnote 11 for explanation.

Sixty-one percent of the 448 Georgia public crossing crashes in the 2006-2010 period occurred at active warning device crossings. Flashing light crossings account for five percent of total crossings, and approximately 11% percent of the active warning device crossings (255 of 2,277), but account for approximately 15% of the total crashes, and 24% of the active warning device crossing crashes (66 of 275).

The numbers of 2006-2010 period multiple crash public crossing crashes by CSXT, NS, Amtrak and short lines by type of warning device are detailed in Table 2. Multiple crash crossing crashes are substantially more likely to occur at active warning device crossings than passive crossings. One-quarter of crashes at passive crossings occur at multipe crash crossings, while nearly twice as many, 46%, of crashes at active warning device crossings occur at multiple crash crossings. There were no crashes at 90% , and only one crash at 7.2%, of active warning device crossings in the 2006-2010 period. There were no crashes at 95%, only one crash at 4.3%, of passive crossings in the same period.

Table 2 2006-2010 Multiple Crash Public Crossings By Warning Device Category [1]

Railroad [2]	**2011 Public Grade Crossings and 2006-2010 Multiple Crash Crossings**							
	Passive [3]		*Flashers*		*Gates* [4]		*Totals*	
	Xings	Crashes	Xings	Crashes	Xings	Crashes	Xings	Crashes
CSXT	636	11	85	14	821	55	1,542	80
Amtrak (CSX)	19		1		58	3	78	3
NS	1,172	27	106	19	915	29	2,193	75
Amtrak (NS)	7	1			116	2	123	3
Short lines	1,202	4	64	4	286	2	1,648	10
Totals	**3,010**	**43**	**255**	**37**	**2,022**	**91**	**5,287**	**171**
% of Total	57%	25%	5%	22%	38%	53%		

1 Motor vehicle crashes. Includes some crossings that are officially open but for practical purposes are closed crossings. There are a number of crossings within Georgia that are functionally one crossing but are counted as two crossings because there are separate USDOT IDs applied to the track(s) of each railroad at the crossing.
2 Crashes have been assigned to the maintenance railroad when maintenance railroad is an operating railroad.
3 Consists of all crossings other than gate or flasher crossings, and therefore includes some crossings with extraordinary active warning devices such as bell-only crossings.
4 includes a less than one dozen four quadrant gate crossings.
5 Amtrak crossings are for information only. Amtrak route miles and crossings are included within CSXT and NS route miles and crossings. See note 5 of Table 1 for additional details.
6 Excludes approximately 96 crossings, approximately 18 of which are equipped with gates, two with flashers, and 80 are passive crossings on inactive lines. See footnote 11

Table 3 identifies the numbers of crashes at active and passive public crossings by NS and CSXT railroad segments, including Amtrak crashes. (See Appendix C for short line crash information.) A comparison of crashes at the Class I railroad segment level is subject to distortions attributable to individual crossings that result in segment misrepresentation. For instance, eleven crashes at a CSXT A&WP Subdivision flasher crossing over a few year period spanning the 2001-2005 and 2006-2010 period distorts comparisons. (There have not been any additional crashes at the crossing since gates were installed.) GDOT anticipates performing additional crash analysis as described in Section 7.1 in further pinpointing particular problem segments.

Table 3 NS and CSXT 2001-2010 Crashes By Railroad Segment

			2001-2005			2006-2010			2001-2010		
District / Subdivision	Segments	Miles	Act	Pass	Tot	Act	Pass	Tot	Act	Pas	Tot
	Norfolk Southern										
AGS	TN-Trenton-AL	24	1	2	3	1	1	2	2	3	5
Americus	Columbus-Cusseta	10	0	1	1	0	0	0	0	1	1
	Macon-Ft Valley	28	2	0	2	3	2	5	5	2	7
Albany	Ft Valley-Albany	77	0	3	3	1	0	1	1	3	4
	Albany-AL (Blakely)	59	1	4	5	0	1	1	1	5	6
Atl-North	Cohutta-Austell	113	18	7	25	12	11	23	30	18	48
	Austell-Atlanta	15	2	0	2	1	0	1	3	0	3
Atl-South	Atlanta-McDonough-Macon	92	12	4	16	16	5	21	28	9	37
Augusta	Millen-Augusta	53	4	4	8	6	1	7	10	5	15
Birmingham	Austell-AL (Tallapoosa)	50	18	8	26	17	4	21	35	12	47
Brunswick	Macon-Ocmulgee R.	90	2	5	7	1	3	4	3	8	11
	Ocmulgee R.-Brunswick	93	2	7	9	3	6	9	5	13	18
CGA	Bremen-Rome	37	1	4	5	0	3	3	1	7	8
	Senoia-Newnan-Bremen	54	0	4	4	2	3	5	2	7	9
Charlotte	SC (Toccoa)-Atlanta	94	17	12	29	19	5	24	36	17	53
Columbus	Ft Valley-Columbus	72	0	8	8	2	6	8	2	14	16
Dublin	Sandersville-Dublin	36	0	0	0	0	0	0	0	0	0
Eatonton	Gordon-Eatonton	40	0	2	2	0	3	3	0	5	5
Fairbanks-Krannert	Rome-Krannert	22	1	1	2	0	0	0	1	1	2
Griffin	Atlanta-Griffin-Macon	102	19	19	38	17	7	24	36	26	62
Lula	Lula-Center	32	0	2	2	1	2	3	1	4	5
Macon	Macon-Arabi	78	11	4	15	10	2	12	21	6	27
	Arabi-Valdosta	76	10	13	23	6	7	13	16	20	36
Valdosta	Valdosta-FL (Jax)	66	2	0	2	2	0	2	4	0	4
Madison	Macon-Monticello-Machen	50	3	1	4	3	2	5	6	3	9
Navair	Valdosta-FL (Lake Park)	18	0	2	2	0	1	1	0	3	3
Savannah	Millen-Macon	111	0	1	1	0	5	5	0	6	6
	Savannah-Millen	79	1	4	5	2	2	4	3	6	9
Camak	Waynesboro-Camak	48	0	3	3	1	0	1	1	3	4
Thomaston	Barnesville-Thomaston	18	0	1	1	0	0	0	0	1	1
	NS Totals		**127**	**126**	**253**	**126**	**82**	**208**	**253**	**208**	**461**
	CSX Transportation										
A&WP	East Point-West Point	81	26	13	39	21	7	28	47	20	67
Abbeville	SC (Elberton)-Atlanta	116	25	5	30	18	3	21	43	8	51
Augusta	Augusta-SC	19	3	2	5	3	4	7	6	6	12
	A&S in Augusta	1	0	2	2	0	0	0	0	2	2
Bainbridge	FL-Bainbridge	10	0	3	3	0	1	1	0	4	4
Brunswick	Waycross-Brunswick	49	0	4	4	0	3	3	0	7	7
Camak	Camak-Milledgeville	49	0	0	0	0	0	0	0	0	0
Cartersville	Cartersville-Cedartown	37	0	3	3	0	0	0	0	3	3
Charleston	Savannah	12	3	2	5	4	1	5	7	3	10
Chattanooga	Chattanooga-AL	5	0	1	1	0	0	0	0	1	1
Columbia	Savannah-SC (Cylo)	31	2	4	6	1	4	5	3	8	11
Dothan	Thomasville-AL	66	3	5	8	1	1	2	4	6	10
Etowah	Cartersville-TN (Tennga)	60	4	2	6	4	1	5	8	3	11
	Cordele-Manchester	103	13	10	23	5	3	8	18	13	31
Fitzgerald	Waycross-Cordele	96	8	35	43	16	15	31	24	50	74
	Ocilla Branch	5	0	0	0	0	2	2	0	2	2
Gainesville	Athens-Gainesville	38	0	8	8	0	4	4	0	12	12
Georgia	Augusta-Lake Oconee	81	5	14	19	7	7	14	12	21	33
Georgia	Lake Oconee-Atlanta	89	17	8	25	21	6	27	38	14	52
Jesup	Jesup-Waycross	39	6	2	8	2	1	3	8	3	11
	Waycross-Nahunta	34	0	3	3	0	1	1	0	4	4
Lineville	Manchester-AL	43	4	0	4	3	1	4	7	1	8
Manchester	Manchester-Atlanta	78	6	4	10	9	3	12	15	7	22
Nahunta	Jesup-Folkston	96	2	6	8	1	3	4	3	9	12
	Folkston	3	2	0	2	0	0	0	2	0	2
Savannah	Savannah-Ogeechee R.	25	2	2	4	3	3	6	5	5	10
Thomasville	Waycross-Thomasvile	107	1	3	4	2	6	8	3	9	12
W&A	Atlanta-Cartersville	89	19	3	22	23	0	23	42	3	45
	Cartersville-TN (Graysville)	48	7	5	12	8	0	8	15	5	20
	CSXT Totals		**158**	**149**	**307**	**152**	**80**	**232**	**310**	**229**	**539**

1 NS districts or CSXT subdivisions were divided into smaller segments where lengths exceeded 120 miles, or generally where there is a distinct change in train traffic volumes.
2 The CSXT Atlanta Terminal Subdivsion was disaggregated to the A&WP, Abbeville, Georgia, Manchester and W&A subdivisions from which it was created.

2.1 Pedestrians

Pedestrians may be struck by or collide with trains or on-track equipment at crossings. There have been between one and five Georgia pedestrian incidents at public crossings each year, and an average of 2.8 pedestrian incidents annually, during the 1995-2010 period. The relatively constant number of incidents is a nominal decrease in the rate of occurance given increased population and train traffic over the 1995-2010 period. Pedestrian incidents, while rather constant in absolute terms, are increasing as a fraction of total incidents because of the decline in motor vehicle crashes. Pedestrian incidents accounted for a five year rolling average of 2.2% of total incidents in 1999, and for 3.1% in 2010.[20]

There were 25 Georgia fatalities and 16 personal injuries resulting from the 45 pedestrian incidents at public crossings in the 1995-2010 period. Pedestrian fatalities constituted 15% of the total crash fatalities in the 1995-2010 period.

2.2 Problem Solutions Categorization

Crashes are a safety concern largely associated with crossing hazard and road user's poor judgment. Hazards may be remediated by increasing hazard awareness and fostering better judgment, and implementing physical changes to reduce physical hazards. The multi-disciplinary three E's of safety; education, engineering and enforcement that have long been applied to improve crossing safety are central to reducing crashes.

Education must be an important element of the Plan. Activation failures, the term applied to the circumstance wherein an active crossing warning system fails to indicate the approach of a train at least 20 seconds prior to the train's arrival at the crossing, or to indicate the presence of a train occupying the crossing, is a very uncommon occurrence. As previously mentioned, 61% all Georgia crashes in the 2006-2010 period occurred at crossings equipped with active warning devices. These crashes typically resulted from poor judgment on the part of road users, and/or willful disregard of an active warning, circumstances that additional and better education can remediate.

Education and enforcement complement each other.[21] Law enforcement disciplinary actions applied to road users change driver behavior by reinforcing education and improving judgment on one hand, and deterring willful disregard on the other.

[20] Rolling average is used to better convey overall trend because of the relatively small number of incidents in a given year.

[21] There is also an education element applicable to law enforcement personnel understanding both the law and the adverse consequence to road user non-compliance.

Engineering develops and determines the most cost effective infrastructure to reduce or eliminate crossing hazards, and prioritizes the application of limited resources to maximize safety benefits. Gates are installed at approximately three dozen Georgia crossings each year, including improvement from flashers to gates at some crossings.[22] Statewide there are 3,010 passive and 255 flasher public crossing candidates to consider for installation of gates. There are other active warning device improvements to consider as well, such as improved control equipment, new or improved pre-emption, and flashing light unit improvements.

There are a number of passive warning devices beyond the general basic passive advance warning and crossing warning devices mandated by the Manual on Uniform Traffic Control Devices (MUTCD) (http://mutcd.fhwa.dot.gov/kno_2009.htm). The identification of extraordinary hazards, and the judicious application of special circumstance passive warning devices, is another element of Engineering.

Beyond the three E's, it is important to measure and monitor progress to insure goals and objectives are met in an efficient and cost effective manner. Measurement and analysis are necessary to improve hazard elimination strategies, as well as develop and evaluate new strategies and measures to reduce crashes. Measurement requires data. The fourth principal action item category of this Plan is thus data and data analysis.

[22] Georgia standards do not preclude new flasher installations, but as a practical matter new installations of flashers are rare in Georgia. The majority of the three dozen gate installations are funded by the Section 130 Program.

3.0 Action Items Summary

The objective of this Plan is to identify specific solutions that will reduce collisions between trains or on-track equipment, and pedestrians or vehicles at crossings. The three E's of safety, education, engineering and enforcement, were discussed in the foregoing section. Table 4 summarizes and categorized Plan action items as one of the three E's, or a fourth category, data and data analysis.

Table 4 Summary of Action Items

No. [1]	Action Item	Organizations (other than GDOT)	Duration Completion
4.0	***Education***		
4.1	Increase Publicity and Awareness	GA Operation Lifesaver (GOL), Gov's Office of Hwy Safety, Railroads	Ongoing, quarterly and annual meetings
4.1	Publicity materials	GOHS, GOL, Railroads via Georgia Railroad Association	Periodically
4.2	Review and update as necessary Driver's, CDL, and Motorcycle Operator's Manuals, and Teen/Parent Driving Guide crossing elements. Review and update as necessary DUI / defensive driving school crossing elements.	GA Dept of Driver Svcs (DDS), GOL	Dates of next publication of manuals and guides, and school regu-lation update
4.3	Continuing Driver Education	GOL, DDS, Georgia Motor Trucking Ass'n (GMTA), Georgia Ass'n for Pupil Transportation (GAPT)	Ongoing
5.0	***Engineering***		
5.1	Leverage Section 130 funds to promote crossing closures and consolidations	Local governments	Ongoing
5.2	New Grade Separations	Local governments	Ongoing
5.3	Active Warning Device Improvements	Local governments	Ongoing
5.4	Other Warning Device Improvements	Local governments	Ongoing
6.0	***Enforcement***		
6.1	Georgia Code change	Georgia General Assembly, Governor	Indefinite
6.2	Law Enforcement Training	GOL	Ongoing
6.3	Law Enforcement Activity	Georgia State Patrol, local governments / local law enforcement agencies	Ongoing
7.0	***Data and Data Analysis***		
7.1	Inventory and crash data	Railroads	Ongoing
7.2	Programmatic Corridor Study and Corridor Improvements	Railroads, Local governments	Ongoing
7.3	School Bus Use of Crossing Reporting	School districts	Ongoing

1 The number is that of the action item section within the Plan document.

4.0 Education

4.1 Increase Publicity and Awareness

Table 5 Georgia's Multiple Crash Locations

(Crossings equipped with gates at the time of crash that have experienced the most crashes)

County *City*	Road Name	USDOT ID	2005-2010 Crashes	Comment
Gwinnett	Jones Mill Road [1]	916933L	6	Three 2010 crashes. Located adjacent to Buford Hwy south of Norcross.
Marietta	Whitlock Ave	340388B	6 [2]	SR120, 2008 fatality and 2007 pedestrian personal injury crashes
Buford	Church Street	717824J	5	2005 double fatality crash
Bartow	Sandtown Rd	340426H	5	Located southeast of Emerson, Crossing situated on reverse curve
DeKalb	Turner Hill Rd	279681D	4	SR124, 2008 fatality crash
Cobb	White Circle	340400F	4	Located north of Marietta
Marietta	Waverly Way	340387U	4	Next crossing south of Whitlock Ave
Chatham *Garden City* [3]	Borne Ave (SR307)	632473Y	3	Quadruple fatality, and 2 single fatality crashes, 2 of which were Amtrak crashes, during of 22 days in Oct 2007
Locust Grove	Peeksville Rd	718425B	3	2007 and 2008 fatality crashes
Douglas Co. (Lithia Springs)	Sweetwater Road	726570V	3	2009 Amtrak crash, and a fatality crash nine days
Douglasville	Rose Avenue	726590G	3	2009 Amtrak crash
Sugar Hill	Lanier Avenue	717828L	3	2009 Amtrak crash
Barrow	Johns-Manville Rd	640133H	3	Two of three involved pickup truck
Atlanta	Sylvan Road	718082W	3	Two 2009 crashes
Gordon.	Hill City Road	719730P	3	Crossing situated on reverse curve
Conyers	Rockbridge Rd	279669W	3	Two crashes involving tractor-trailers stuck on crossing
Douglasville	Brown Street	726586S	3	One crash was an auto driven off side of crossing and stuck
12 fatalities and one personal injury			**64**	**of 567 total crashes and of 259 gated crossing crashes statewide**

1 Placed ahead of Whitlock Ave with 6 crashes, two of which had casualties, because of a 12 Jan 2011 crash that is not included in the six 2005-2010 crashes.
2 The six 2005-2010 crashes excludes a 2007 pedestrian fatality crash.
3 The railroad is the Garden City municipal limit.

GDOT will assist in the development of subject matter to be shared with print and broadcast media, and local governments, created to increase awareness of crossing hazards in general, and multiple crash or high risk crossings in particular. Table 5, consisting of the seventeen gate crossings that have experienced three of more crashes in the 2005-2010 period, exemplifies such subject matter.[23] The 64 multiple crash crossing crashes in the 2005-2010 period in Table 5 represent to 11% of all crashes, and one-quarter of all crashes at gate crossings, that occurred statewide during that period.

[23] Note a six year instead of five year period is used.

GDOT will consult with Georgia Railroads, Georgia Operation Lifesaver (GOL) (http://georgiaol.org/), and the Governor's Office of Highway Safety (GOHS) (http://www.gahighwaysafety.org/) in preparing such materials.[24] Future materials may be based on various other criteria than that used for Table 5, such as passive crossings with multiple crashes, crossings experiencing tractor-trailer crashes, or a geographic focus within Georgia. GOL and GOHS will use the materials as appropriate in presentations and activities. GDOT will furnish the list to the local governments associated with the materials as applicable.

GOHS will add a link on the GOHS home page to the Georgia GOL home page, and will add a link to the FRA Office of Safety webpage (http://safetydata.fra.dot.gov/officeofsafety/) to the GOHS Questions and Answers webpage that addresses the question concerning sources of statistics and data.

4.2 Georgia Department of Drivers Services

The Georgia Department of Driver Services (DDS) (http://www.dds.ga.gov/) produces four publications for Georgia Motor Vehicle operators:

- Commercial Driver's Manual (CDL), current edition 2009, http://www.dds.ga.gov/docs/forms/CDL_Drivers_Manual_4_17_09.pdf, next revision tentatively late 2011 or 2012
- Parent/Teen Driving Guide, current edition July 1, 2010, http://www.dds.ga.gov/docs/forms/40Hour_ParentTeen_DrivingGuide.pdf, next revision tentatively 2012
- 2010 Drivers Manual, current edition 2010, http://www.dds.ga.gov/docs/forms/FullDriversManual.pdf, next revision tentatively late 2011
- Motorcycle Operators Manual, current edition 2009, http://www.dds.ga.gov/docs/forms/MotorManual.pdf, next revision tentatively 2012

The DDS publications will be reviewed for crossing content by GDOT, GOL and others, and revised as necessary in conjunction with their next periodic updates. (The process of GDOT offering suggestions for consideration is already underway for the CDL Manual that is currently in the process of being revised.[25]) One change that will be considered is the inclusion of a brief explanation of Emergency Notification Signs (ENS) at crossings. Road users will be directed to first call the telephone number on the sign, then call 911, in situations where stopping trains that may be approaching the crossing is absolutely the most important immediate reporting action that should be taken.

[24] GOL is the Georgia unit of Operation Lifesaver, Inc. OLI, founded in 1972, is a non-profit organization providing public education programs to prevent collisions, injuries and fatalities on and around railroad tracks and crossings. The GOHS mission is to educate the public on traffic safety and facilitate the implementation of programs that reduce crashes, injuries and fatalities on Georgia roadways.

[25] GDOT suggestions included changes reflective of 2009 MUTCD changes that require yield or stop signs at passive crossings.

DDS sets the standards for basic Driver Education Programs, and sets standards for and approves Driving Under the Influence (DUI) and Defensive Driving Schools in Georgia. Driver attendance of courses at such schools may be required in connection with motor vehicle infractions. Other drivers may attend at the behest of their employers, or to seek motor vehicle insurance discounts. GOL will make crossing safety presentations at both public and private Driving Schools. DDS will review crossing content standards, and revise standards as appropriate.

4.3 Continuing Driver Education

GOL will make presentation to businesses on crossings safety including employers that operate large vehicle fleets of vehicles such as United Parcel Service, (UPS), a GOL member. The national support center, Operation Lifesaver, Inc. (OLI http://oli.org/) has recently launched an on-line program for professional truck drivers (http://oli.org/e-learning-survey/) that is being used by Georgia Motor Trucking Association (GMTA http://www.gmta.org/), UPS and YRC Worldwide.

5.0 Engineering

5.1 Crossing Closures and Consolidations

(See Section 6.1 for discussion of Georgia statutory authority to close crossings.)

GDOT routinely examines adjacent crossings for closure potential when it assesses crossings for improvement. GDOT has actively sought to leverage Section 130 improvements to close crossings, including crossings that are already equipped with active warning devices. One strategy employed by GDOT is to develop a package of active warning improvements that includes a crossing closure or closures, and active warning device improvement at a crossing or crossings that would not otherwise warrant improvement if a crossing or crossings were not closed. This provides local officials the incentive of additional warning device improvements in promoting closure to crossing stakeholders. This approach may also be particularly effective when the combination of closure(s) and additional gate installation result in all crossings within a municipality or county (or a substantial segment of a railroad line within a county) are equipped with gates. GDOT routinely includes development of packages of improvements that include closures in its Section 130 corridor crossing studies (see Section 7.2 for discussion of crossing corridor studies).

Packaging together warning device improvements and closures is approaching fruition with respect to closing two crossings in Adel on NS, and two crossings in Waycross on CSXT. It is progressing on closure of a Floyd County crossing. Crossing closures are promising in connection with improving flashers to gates at a Quitman and a Collins crossing, and equipping a couple of Coweta County crossing with gates.

GDOT has been supportive of the general success that CSXT and NS have had in Georgia in demanding three crossing closures for each new grade crossing. NS was successful in closing three Jackson County crossings in conjunction with the Steve Reynolds Blvd crossing 717714Y. Jackson County is considering another new crossing, and is seeking to identify crossing closure candidates. Barrow County is seeking to reopen 640131U, and is aware that CSXT will require closure of three crossings.

5.2 Grade Separations

Crossing safety is but one of many elements considered with respect to new grade separations. Road user delay is usually the most important consideration from an economic perspective.

Many Georgia grade separations have been and are being constructed in connection with new or relocated highways, in addition to new grade separations replacing grade crossings at or near the same location. The new grade separations improve crossing safety even when grade crossings are not closed in connection with the new construction because traffic is attracted to the grade separation, or diverted from grade crossings to grade separations.

Table 6 identifies grade separations that are under construction, in the GDOT Construction Work Program (CWP), or in Long Range Plan (LRP). Other grade separations may be in the proposal/pre-planning stage ,and not yet included in the LRP. The CWP is updated annually for the subsequent six fiscal year period, and the current CWP covers projects through June 2016. The CWP consists of projects for which funding has been identified, and for which concrete steps toward project implementation, including up to initiation and completion of construction, are anticipated to occur during the period of the CWP.

The LRP identifies projects for further development where construction, if it were to occur, would not commence until after the period covered by the CWP. LRP projects are mentioned in the Plan because they may be further developed over the course of this Plan. They are also mentioned to demonstrate that grade separation projects, or the inclusion of grade separations as an element of larger or broader larger projects, are regularly considered in Georgia's transportation planning processes. Grade separations as stand-alone projects, or as elements of other projects, will continue to be included in transportation planning.

The Governor's Road Improvement Program (GRIP) was initiated by the Georgia General Assembly to connect 95% of Georgia cities with a population of 2,500 or more to the Interstate system by a four-lane road.[26] GRIP implementation would place 98% of the state's population within 20 miles of a four-lane road. The 19 corridor GRIP is currently three-quarters complete or in the process of being completed, and many new grade separations have been constructed in connection with GRIP.

There are currently approximately two dozen locations where the remaining approximately 1,000 miles of incomplete GRIP corridors cross railroads.[27] New grade separations are anticipated at a number of these crossings upon GRIP buildout.

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[26] GRIP: http://www.dot.state.ga.us/informationcenter/programs/roadimprovement/GRIP/Pages/default.aspx The General Assembly increased the original 2,845 mile 1989 GRIP network in 2001 and 2005. It currently totals 3,273 miles.

[27] Eight crossings on the 169 mile on East-West corridor connecting I-85 and I-59, five-six crossings on that part of US280 corridor between Cordele and I-16, four-five on US441 corridor, and three on the Fall Line Freeway corridor, three each crossings on the SR133 corridor and that part of the SR32 corridor between Dawson and Ashburn, and one each on the US27 and SR17 corridors.

Table 6 New Grade Separations [1]

County (City)	Name	USDOT ID	P.I. No. [2]	Comment
(Garden City)	Borne Avenue	734155V	0000345	Under construction
Cobb	Lewis Road	719826E	0004446	Under construction
(Kennesaw)	S. of Cherokee St	New	0004509	Ped underpass under const
(Stockbridge)	Park Trail	New	0007946	Ped underpass under const
Troup	S. LaGrange Loop	New	0008292	Under construction
Lithonia	Lithonia Ind Blvd	New	753230	Under construction
(Atlanta)	C.W. Grant Pkwy	717985E	**0001817**	Design underway
Barrow	W. Winder Byp	719816Y	**0006327**	
Chatham	DeLoach Pkwy	New	**0008690**	Over Pt. Wentworth Lead
(Jackson)	SR36	718448H	**333171**	Alternately / also 322440
(Valdosta)	W. Hill Street	723530M	**422710**	SR38 (US84)
Whitfield	Carbondale Rd	New	**610890**	
Floyd	W. Rome Byp	New	**621660**	
Murray	Haden Tyler Rd	340661F	**642370**	
(Hazlehurst)	Tallahassee St	729021L	*0001810*	SR19-US23
DeKalb	Montreal Road	639803B	*0001814*	T-SPLOST project [3]
Gwinnett	Rock Bridge Rd	639794E	*0001815*	
(Auburn)	Sixth Street	640138S	*0001816*	
Griffin	A.K. Bolton Pkwy	904053X	*0001818*	SR16
(Waycross)	SR4-US1Bus	New	*0002870*	
Bleckley	SR87	729305R	*0003625*	In connection with widening
Peach	Fort Valley Byp	New	*0006963*	SR49C ext to SR96 in NE quad
(LaGrange)	Roanoke Road	638738K	*350920*	SR109
(Douglas)	SR135	638202N	*431830*	Douglas Bypass
(Cordele)	Midway Road	638311S	*442660*	
Telfair	S. McRae Byp	New	*531100*	grade seps at NS & HOG RR
Rockdale	Sigman Road	903962J	*752215*	Alternately 752210
(Kennesaw)	Moon Station Rd	340486U	TIA-CO-021	T-SPLOST project [3]

1 Sources: TREX http://app5-trex-web.dot.ga.gov/trex_external/viewer.htm),
Trans Pi (http://www.dot.state.ga.us/informationcenter/transpi/Pages/ProjectSelection.aspx)

2 Projects in the Construction Work Program are in **red bold font**. Project Identification numbers of projects in the Long Range Program (construction would not begin until July 2017, if ever) are in *italic font*. In some instances the projects are large and the grade separation is but an element of the project.

3 Project to be under construction prior to 2022 if project is selected for T-SPLOST, and T-SPLOST is approved. See footnote 16 for T-SPLOST information.

5.3 Active Warning Device Improvements

GDOT utilizes the Peabody-Dimmick formula in the objective portion of its prioritization process for installation of gates in administering the Section 130 Program.[28] The formula result, referred to as the Hazard Index, is then adjusted for five year crash history and crash severity, and school bus use of crossings, resulting in an Adjusted Hazard Index (AHI). AHI is thus a prioritization tool with a crash experience element, and the decrease in total crashes indicates it useful in prioritizing the installation of gates.

Table 7 2005-2010 Multiple Crash Crossings Programmed for Gates [1]

Location	Name	USDOT ID	2005-2010 Crashes	P.I. No.	Comment
Augusta	Arthern Road	633711T	2	0005934	Two-track crossing
Sandersville	Riddleville Rd	865801H	2	0007415	SR242, existing flashers
Warner Robins	Ignico Road	729216Y	5	0008952	Existing flashers
Dodge Co	Garrison Road	729365A	2	0008953	NS line serving Brunswick
Gordon Co	Midway Road	719727G	2	0009730	Relocation to improve geometry
Madison	Jefferson St	279605K	3	0009735	4 track joint CSXT-SCS xing [2]
Augusta	L. Walker Blvd	723120U	2	0009736	3 track joint NS-CSXT xing [3]
Atlanta	Brown's Mill Rd	717958H	4	0009895	Non-main 3-track crossing
Lithonia	Main Street	279684Y	3	0010191	Two-track flasher crossing
Homerville	Mulch Plant Rd	637404H	2	0010358	Plus a 2004 fatality crash
East Point	Bayard Street	718006D	3	0002165	2007 & 2-2002 crashes, 4 trk fls
Gordon Co.	Henry Owens Rd	719723E	2	0004607	2004 & 2003 crashes
Tyrone	Valleywood Rd	639492C	2	0010309	2001 & 2008 crashes, 2 tracks
Total [1]	**10 Crossings**		**27**	**13 Xings,**	**34 crashes inc the latter three**

1 Multiple crash crossings programmed for installation of gates that are not included in totals because the multiple crashes occurred outside of the 2005-2010 period are highlighted gray.
2 USDOT ID is that of the CSXT crossing. The Squaw Creek Southern Railroad crossing USDOT ID is 733136M.
3 USDOT ID is that of the NS crossing. The CSXT crossing USDOT ID is 633713G.

Gates have already been installed at six crossings where collectively 19 crashes have occurred in the 2005-2010 period.[29] The installation of gates, though not certain to eliminate future crashes, has been effective as there have not been any crashes at any of the six crossings since gate installation.

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[28] The circumstances under which GDOT would consider installation of flashers are so limited that it is installation of gates instead of installation of active warning devices more aptly describes improvement of active warning devices at passive crossings.

[29] Note this is the most recent six year period but consists of crossings with two or more crashes within a consecutive five year period. Fourteen of the 19 crashes occurred at four flasher crossings. The 19 crashes at multiple crash crossings do not include two crashes at the Paces Ferry Road crossing where four-quadrant gates have since been installed to replace two-quadrant gates in connection with a new quiet zone.

The six crossings are as follows: Weldon Rd 050409R (6 crashes, flashers); Aaron Blvd (4 crashes excluding a pedestrian fatality, four-track flashers); and Roper Rd (3 crashes, passive); two crashes each at Athens St 640124J (two-track flashers), Minchew Rd 638165N (passive), and Barber St 639913L (two-track flashers).

GDOT has programmed the installation of gates at ten other multiple crash crossings where 27 other crashes have occurred since 2005. These crossings are identified in Table 7. GDOT anticipates installation of gates at all of the Table 7 crossings, with the possible exception of Riddleville Road 865801H where gates will be installed in connection with SR242 road widening, to be completed prior to 2014.[30]

GDOT will continue its emphasis on close examination of multiple crash crossings by initiating comprehensive diagnostic analyses at the ten multiple crash crossings identified in Table 8 prior to the end of 2012. Gates will be programmed for installation if warranted as a result of the diagnostic analysis, with installation anticipated to be completed prior to 2016. Gates will have been installed at 26 passive crossings that collectively experienced 69 of the 228 total multiple passive crossing crashes in the 2005--2010 period if gates are installed at all Table 7 and Table 8 crossings.

Table 8 Multiple Crash Crossings for Diagnostic Analysis [1]

Location	Name	USDOT ID	2005-2010 Crashes	Comment
Winder	Beulah Street	640128J	3	Multi-track flashers
Thomson	Greenway St	279506M	3	Flashers
Atlanta	Old Dixie Hwy	717987T	3	SR3, Single non-main track flashers
Quitman	M.L. King Jr. Dr	643305Y	2	Multi-track flashers [1]
Fort Valley	S. Macon St	733469N	2	Multi-track flashers
Griffin	13th Street	718191A	2	Multi-track flashers
Tate	SR53	340856T	2	Short line GNRR multi-track flashers
College Park	Roberts Road	050364L	2	Plus 2-2002 crashes at passive xing
Fairburn	Johnston Circle	050408J	2	Plus 2002 crash at passive crossing
Palmetto	Harper Street	050404G	2	Main trk & major sdg at passive xing
Total	**10 crossings**		**21**	

1 This crossing is included in a corridor study that was completed in Feb 2011 and is expected to be programmed for gates, and will be pursed as part of a package of improvements that would result in a crossing closure.

GDOT has also programmed the installation of gates at many non-multiple crash crossings not identified in this Plan. Tables 6 and 7 are included herein because of the Plan's focus on multiple crash crossings.

This Plan includes more specific detail within its first few years. Other multiple crash crossings will be subjected to diagnostic investigation and programmed for installation of gates as warranted prior to 2018, in addition to investigation and the programming of installation of gates at non-multiple crash crossings.

Georgia has not installed four-quadrant gates with Section 130 funds. GDOT will consider using Section 130 funds to install four-quadrant gates (not in connection with the establishment of a quiet zone) at crossings equipped with gates that have experienced multiple crashes however.

[30] GDOT gate installations are typically completed within two years of being programmed.

5.4 Other Safety Improvements

GDOT does not require a monetary local match to install active warning devices at crossings in its administration of Section 130 funds. GDOT leverages Section 130 funds however by typically requiring local road authority contribution in the form of installing or renewing passive warning devices at crossings (advance warning signs and pavement markings, center line and lane line markings, and special hazard signs, etc) where active warning devices are being installed or improved.[31]

GDOT also often requires local road authorities contribute in the form of installing or widening hard surface pavements to minimum widths and distances from the crossing prior to gate installations.[32] Other geometry improvements such road or crossing relocation, or road profile improvements by local road authorities may be required. GDOT will consider requiring a wider minimum width pavement, depending on crossing circumstances, so as to accommodate bollards or some other type of median divider.

Passive warning device improvements may cost effectively improve crossing safety. GDOT has also used Section 130 funds for comprehensive passive warning device improvement, typically subsequent to completion of crossing corridor studies that are discussed hereafter in Section 7.2. GDOT plans to continue to follow up on corridor studies by correcting passive warning device deficiencies, and making passive warning device improvements across corridors.

GDOT, when making passive warning device improvements, is focusing more attention to passive warning devices that identify special crossing hazards, particularly high profile crossings, and limited storage distance between crossing and nearby stop signs on crossing roads where the stop sign may result in vehicles being stopped on crossings.[33] GDOT will consider including performance-based specifications in connection with passive warning device and regulatory signage improvements to increase the cost-effectiveness of the improvements.

GDOT in connection with passive warning device improvement projects works with local road authorities to change traffic controls at adjacent intersections, or prohibit use of crossings by certain types of vehicles in place of hazard warnings.[34] The most recent revision of the MUTCD added a new the ninth signal warrant that provides

[31] Local road authority herein means County or municipal governing authority as concerns county road or city street system respectively.

[32] Currently a minimum 20 foot width hard surface pavement a minimum 200 feet from the crossing is typically required, though greater widths, and greater or lesser distance from crossing may be required, depending on circumstances.

[33] GDOT's informal general standard concerning storage distance is to display W10-11 series signs whenever the vehicle storage distance is 40 feet or less because bus use of such crossings is of concern. The general informal standard is that W10-11 series signs are displayed whenever vehicle storage distance is less than 75 feet on other than local roads, based on a tractor-53 foot trailer combination.

[34] An example is changing stop sign control to give the crossing traffic right-of-way. In some instances change from two-way stop to all-way stop has been made. Though not as desirable as giving crossing traffic right-of-way, a four-way reduces crossing hazard relative to a two-way crossing road stop.

guidance concerning use of highway intersection signal at intersections adjacent to crossings as a means to control queuing. GDOT is routinely considering the warrant in its diagnostic crossing evaluations.

Twenty-two percent (39 of 175) of the 2006-2010 period public crossing crashes at passive Georgia crossings involved vehicles striking a train. One implication is that many road users may be traveling too fast approaching the crossing based on sight conditions. GDOT will more closely consider treatments, particularly on relatively high speed highways, that augment standard crossing advance warnings to alert road users to a crossing ahead, or encourage reduced speed approaching crossings, such as rumble strips.[35]

Georgia is also actively examining and as warranted installing pre-emption at crossings. The City of Marietta has plans to install pre-emption at the Whitlock Avenue crossing, a multiple crash crossing identified in Table 5. GDOT will be investigating installation of pre-emption at the Waverly Way crossing, another crossing identified in Table 5. Traffic queued on these crossings because of the signals appears to have been a contributing factor in one-half dozen crashes in the 2005-2010 period though the highway intersections are located more than 200 feet from each of these crossings.

GDOT corridor crossing studies, described in Section 7.2, have also identified crossings where pre-emption is required or recommended but not present, with GDOT subsequently programming pre-emption installation projects.[36]

6.0 Enforcement

6.1 Georgia Code *(See Section 7.3 for discussion of Georgia statutes governing school bus use of crossings.)*

Crossing surface condition may affect crossing safety. Georgia statute, the Official Code of Georgia Annotated (O.C.G.A.), proscribes the railroad's grade crossing surface maintenance responsibility. GDOT has developed a means of resolving disputes between railroads and road authorities concerning crossing surface and geometry.

More importantly as concerns crossing safety, O.C.G.A. § 32-6-193.1, *Elimination of grade crossings by physical removal; procedures*, provides a means to close public crossings that are not "reasonably necessary in the interest of public safety". "Reasonably necessary in the interest of public safety" in the statue "means that the enhancement of public safety resulting from such elimination of the grade crossing will outweigh any inconvenience to the reasonable passage of public traffic, specifically including without limitation emergency vehicle traffic, caused by such rerouting of traffic." The statue requires each of eleven identified factors be considered in as concerns crossings closures.

[35] Rumble strips in many instances can do the double duty of helping alert drivers to a crossing as well as a stop sign at nominal distance beyond the crossing.

[36] Madison St 636976F in Thomasville, and Broad St 636831U in Cairo were identified by a Corridor Crossing Study completed in Feb 2011, and are expected to be programmed for installation of pre-emption.

The statute permits railroads to petition to close crossings, and notably allows railroads to request a GDOT review of a local road authority's rejection of a petition to close a local road crossing. Railroads have exercised the latter provision, and GDOT has reversed the local road authority's decision to deny crossing closure, most recently in Casseels Road 637344B.[37] GDOT will continue to apply statute standards in evaluating crossings for closure.

6.2 Law Enforcement Training

Georgia was one of the first states in the nation to offer specialized training to law enforcement and emergency responders in how to respond to train-vehicle collisions, Grade Crossing Collision Investigation (GCCI), and Rail Safety for Emergency Responders (RSER). Georgia Operation Lifesaver (GOL), using funding channeled through GOHS, will be providing this training in 2011 and 2012. GOL will also provide special school bus driver training through the Georgia Association for Pupil Transportation (http://www.gaptonline.org/), and commercial truck drivers through the Georgia Motor Trucking Association (http://www.gmta.org/).

6.3 Law Enforcement Activity

The crossing crash subject matter prepared as described in Section 4.1 (Table 5 for example) can be used to focus enforcement activity as well as serve as an education and awareness tool. GDOT will furnishing the information to the Georgia State Patrol in addition to local governments, and will suggest local government target enforcement activities at the subject crossings or corridors.

7.0 Data Collection and Analysis

7.1 Inventory and Crash Data

The Rail Safety Improvement Act required this Plan focus on multiple crash crossings, or crossings that are at high risk for multiple crashes, and identify specific solutions for improving safety at such crossings. Much of this Plan as described thus far has focused on specific solutions at crossings that have experienced multiple crashes.

The Federal Highway Administration's *Railroad-Highway Grade Crossing Handbook* (http://safety.fhwa.dot.gov/xings/com_roaduser/07010/) is an excellent general source of crossing crash risk factors and prediction of crashes and crash severity based on risk factors. This Plan section will focus on the identification of Georgia crossings that are at high risk for multiple crashes.

Analysis of past crash experience may be the single best source of identifying risk factors. GDOT recently completed a comprehensive update of USDOT and GDOT crossing inventory information. Updated inventory information can result in better crash report information, and consequently better crash analysis.

[37] The petition was motivated in part by a 2003 fatality crash involving Amtrak that also injured 25 passengers.

Crash analysis has been an integral part of GDOT's administration of the Section 130 Program. Plan development was grounds for initiating additional analysis that is yet underway. The examination of 2005-2010 multiple crash public crossing data thus far indicate that the following characteristics are associated with Georgia multiple crash crossings (in no particular order of importance):

- Amtrak crossings – Six of the eight total 2006-2010 Amtrak scrashes occurred at multiple crash crossings. Five of those six crossings were equipped with gates. The other was a passive crossing. (One gate and one passive crossing round out the eight.)[38]
- Flasher crossings, particularly multi-track flasher crossings – There are many multiple crash crossing crashes occurring at flasher crossings, including short line flashing light crossings. Twenty-three of the 45 multiple crash flasher crossing crashes in the 2005-2010 period occurred at multi-track crossings.[39]

  Flasher crossings accounted for 29% (37 of 128 per Table 2) of active warning device multiple crash crossing crashes in the 2006-2010 period but account for 11% of active warning device crossings. This experience is what would be expected based on USDOT national level research that indicates that gates may be expected to reduce crashes at flasher crossings by roughly two-thirds, everything else being equal.

  Georgia flasher crossings are more likely to be located on lower railroad and higway traffic volume crossings than gate crossings however. The expectation, given lower railroad and higway traffic volumes, is that there would be fewer multiple crash flasher crossing crashes than have occurred.
- Crossings with irregular or poor highway alignment – These include crossings where the highway alignment as a high vertical profile or hump at the crossing that may result in low ground clearance vehicles becoming stuck on the crossing. Also included are crossings where there is a change in horizontal curvature or change from tangent to curvature at or very near the crossing. There two alignment characteristics exacerbate each other. The latter is of extra concern where the highway is narrow roadways. Vehicles are more apt to leave the crossing surface at the crossing and become stuck while fouling the crossing.

Generally speaking, Amtrak crossings are high hazard Georgia crossings in that the number of Amtrak crashes relative to freight train crashes on segments where Amtrak operates is slightly high. Amtrak crossing crashes in the 2006-2010 period account for 15% (3 of 20) of the crashes on those CSXT segments, and 9% (4 of 45) of the crashes on those NS segments, where Amtrak operates in Georgia.[40]

[38] All of the Amtrak multiple crash crossings were multiple crash crossings because of NS or CSXT crashes.

[39] Two single track flasher crossings together accounted for 11 of the remaining 22 multiple crash flasher crossing crashes. Ten of the 16 flasher crossings with multiple crashes are multi-track crossings.

[40] There are 56% more Amtrak crashes on NS than on CSXT in Georgia after adjusting for train volume and numbers of crossings. This may be explained by the fact that 108 of the 123 NS Amtrak crossings are located in metropolitan Atlanta where highway traffic volumes are higher.

This experience may be indicative of more crashes occurring where trains operate at higher speeds because the Amtrak routes are the only Georgia routes where train speeds may exceed 60 mph. This experience is may also be indicate the role of a wide mixture of train speeds, because freight trains other than intermodal trains are restricted to 60 mph on CSXT and 50 mph on NS Amtrak routes within Georgia.

Georgia flasher crossings collectively are no more hazardous than flasher crossings elsewhere in the US. Installing gates at flasher crossings however, may produce a greater safety return on investment that installation of gates at passive crossings even though the installation of gates at a passive crossing reduces the relative risk by more than the two-thirds reduction of the installation of gates at a flasher crossing.

GDOT anticipates using the Class I railroad segment crash information developed in the preparation of Table 3 to perform additional crash analysis. Likewise GDOT anticipates performing additional analysis to identify specific characteristics associated where the proximity of intersections is a cause of contributing factor, and develop and implement mitigation accordingly.

7.2 Programmatic Corridor Study and Corridor Improvements

GDOT has long taken a programmatic corridor approach in prioritizing crossings for diagnostic evaluation and programming improvements based on the evaluation. Amtrak routes and the Strategic Rail corridor Network (STRACNET), which in Georgia are medium or high train traffic routes, have been the focus of past corridor studies.[41]

GDOT's corridor approach appears to be producing results. Corridors used by Amtrak were examined in the early years of the last decade, and passive warning device improvements and gate installations were subsequently made at crossings used by Amtrak. Amtrak crashes at passive public crossings decreased from six in the 2001-2005 period to one in the 2006-2010 period. Freight train crashes at passive crossings on those same corridors decreased too, from 28 to 18 in the same periods, resulting in a 44% reduction crossings crashes for combined Amtrak and freight trains at corridor crossings.[42]

Crash experience and the existing types of warning devices ares very important to GDOT in the selection of corridors for crossing studies.[43] Train traffic characteristics, and to a lesser degree train and highway traffic trends, are also considered when selecting

[41] FRA and the U.S. Department of Defense (DoD) have identified a 38,800 mile long STRACNET important to national defense. This rail network serves 193 DoD installations that have missions that require rail service. It includes 32,500 miles of rail lines critical for movement of military equipment to various ports, and 5,000 miles of rail lines that connect DoD installations to each other.

[42] The number of crashes is rather small, and the reductions have not been subjected to rigorous mathematical analysis, but the warning device improvements seem to have resulted in significant improvement. See Charlotte and Birmingham Districts, and Columbia, Charleston, Savannah, and Nahunta Subdivisions in Table 3.

[43] The existing type of warning devices is relevant in that these studies are taken with the primary purpose of making active warning device improvements.

corridors for diagnostic crossing evaluation. Considering traffic trends in selecting corridors proactively addresses crossing safety.

GDOT as part of its administration of the Section 130 Program has identified the following corridors for possible crossing corridor studies over the next few years.[44]

- CSXT Augusta-Atlanta based on a relatively high number of crashes per route-mile at passive crossings, and a relatively high number of flasher crossings (Georgia Subdivision in Table 3).
- NS Atlanta-Macon based on increasing Savannah Port traffic in addition to already heavy existing heavy railroad traffic (Atl South District in Table 3)
- NS Macon-Brunswick based on freight traffic that had been flat or declining for years recently increase significantly because of increased motor vehicle import-export traffic through the port (Brunswick District in Table 3).
- NS Rome-Bremen-Newnan based on steady mostly coal traffic on a line located in rapidly developing exurban metropolitan Atlanta (CGA District in Table 3).
- CSXT Athens-Gainesville based on a relatively high number of crashes per route-mile at passive crossings on a line located at the fringe of exurban metropolitan Altnata (Gainesville Subdivision in Table 3).

GDOT crossing corridor studies have largely focused on Engineering. Future corridor studies will include more emphasis on the education and enforcement components of crossing safety.

7.3 School Bus Use of Crossing Reporting

Georgia statue requires that public school districts exercise best efforts to avoid use of passive warning device only crossings, that they annually report school bus use of passive crossings to GDOT, and that GDOT use that information as an important factor in prioritizing installation of active warning devices. GDOT uses school bus use of crossings in its Adjusted Hazard Index as previously mentioned.

GDOT in 2011 will conclude preparation and dissemination of instructions for counting school bus use of crossings to promote uniformity of reporting across school districts, and furnish the instructions to school districts. Likewise GDOT is completing geographically ordered lists of crossings by railroad line and county to assist school districts in reporting school bus use of passive crossings as they are required to do by state law. School districts will be requested to report school bus use of crossings equipped with active warning devices every five years (years ending in five or zero) with that information used to update GDOT and USDOT crossing inventory databases.

[44] The Griffin-Atlanta corridor will be examined if new Griffin-Atlanta commuter service is included in the pool of projects to be submitted to the metro Atlanta electorate in a 31 July 2012 referendum, and the referendum is approved. Section 130 participation in the funding any Griffin-Atlanta crossing corridor study in that circumstance has not been determined at this time.

Appendix A - 49 CFR Part 234, Subpart B, § 234.11

49 CFR Part 234, Grade Crossing Signal System Safety and State Action Plans

Subpart B, Reports and Plans

§ 234.11 State highway-rail grade crossing action plans

(a) *Purpose.* The purpose of this section is to reduce collisions at highway-rail grade crossings in the ten States that have had the most highway-rail grade crossing collisions, on average, during the calendar years 2006, 2007, and 2008. This section does not restrict any other State, or other entity, from adopting a highway-rail grade crossing action plan. This section also does not restrict any of the States required to develop action plans under this section from adopting a highway-rail grade crossing action plan with additional or more stringent requirements not inconsistent with this section.

(b) *Application.* This section applies to the ten States that have had the most highway-rail grade crossing collisions, on average, during the calendar years 2006, 2007, and 2008.

(c) *Action plans.* (1) The ten identified States shall each develop a State highway-rail grade crossing action plan and submit such a plan to FRA for review and approval not later than August 27, 2011.

(2) A State highway-rail grade crossing action plan shall:

(i) Identify specific solutions for improving safety at crossings, including highway-rail grade crossing closures or grade separations;

(ii) Focus on crossings that have experienced multiple accidents or are at high risk for such accidents; and

(iii) Cover a five-year time period.

(d) *Review and approval.* (1) State highway-rail grade crossing action plans required under paragraph (c) of this section shall be submitted for FRA review and approval using at least one of the following methods: Mail to the Associate Administrator for Railroad Safety/Chief Safety Officer, U.S. Department of Transportation, Federal Railroad Administration, 1200 New Jersey Ave., SE., Washington, DC 20590; or e-mail to *rrs.correspondence@fra.dot.gov.*

(2) FRA will review and approve or disapprove a State highway-rail grade crossing action plan submitted pursuant to paragraph (d) of this section within 60 days of receipt.

(3) If the proposed State highway-rail grade crossing action plan is disapproved, FRA will notify the affected State as to the specific areas in which the proposed plan is deficient. A State shall correct all deficiencies within 30 days following receipt of written notice from FRA.

(4) FRA may condition the awarding of any grants under 49 U.S.C. 20158, 20167, or 22501 to an identified State on the development of an FRA approved State highway-rail grade crossing action plan.

Appendix B – Georgia Code

School Buses

O.C.G.A. § 32-6-200 (d) (2): Each local school district in this state shall survey its established school bus routes annually and submit to the Department of Transportation a list identifying each rail crossing that does not have active warning devices on an established bus route. Each local school district shall be required to submit this information to the department each year by no later than September 1.

O.C.G.A. § 32-6-200 (d) (3): Each local school district shall exercise best efforts to minimize the number of established school bus routes that cross rail crossings that do not have active warning devices.

O.C.G.A. § 32-6-200 (d) (4): The department [GDOT] shall use the information about school bus routes as an important factor in selecting rail crossings to upgrade with active warning devices.

Crossing Closures

O.C.G.A. § 32-6-193.1 (c) (3) (A): Any railroad aggrieved by an order of a local governing authority under this subsection [rejection of railroad petition to close crossing] may make a written request to the department for review of such order. Such request shall be accompanied by a $500.00 filing fee. The department [GDOT] shall within 60 days after the filing of such request review the matter.

O.C.G.A. § 32-6-193.1 (c) (3) (C): Upon review of the order and findings of the local governing authority and any filings by the railroad, if the department determines that elimination of a grade crossing in accordance with this Code section is reasonably necessary in the interest of public safety, the department shall issue an order to eliminate the crossing.

Crossing Surfaces

O.C.G.A. § 32-6-190: Any railroad whose track or tracks cross a public road at grade shall have a duty to maintain such grade crossings in such condition as to permit the safe and reasonable passage of public traffic. Such duty of maintenance shall include that portion of the public road lying between the track or tracks and for two feet beyond the ends of the crossties on each side and extending four feet beyond the traveled way or flush with the edge of a paved shoulder, whichever is greater, of such crossing.

A P P E N D I X C-1 - Driver Age and Sex

Age of Driver	Georgia Motor Vehicle Hwy-RR Grade Crossing Crashes (Public and Private Crossings) Year												
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total	Average	Male
<19	10	10	6	6	5	6	8	3	2	2	58	5.8	69.0%
19-24	31	36	31	28	9	11	12	12	7	4	181	18.1	77.3%
25-34	19	24	21	22	13	21	24	19	17	7	187	18.7	76.5%
35-44	19	25	16	24	32	18	15	22	19	11	201	20.1	80.6%
45-54	19	22	18	29	15	20	30	11	16	6	186	18.6	79.1%
55-64	6	8	10	10	12	14	11	4	12	9	96	9.6	83.3%
65-74	3	5	5	3	6	5	7	8	1	3	46	4.6	84.8%
>74	5	1	1	5	5	3	2	4	2	3	31	3.1	74.2%
Total	112	131	108	127	97	98	109	83	76	45	986	98.6	
Age not rptd	10	9	4	25	31	34	26	24	28	21			
Average age	36.3	35.4	35.9	39.1	43.3	40.8	40.9	40.8	41.9	46.4	39.4		
Male	74.1%	79.4%	81.5%	85.8%	82.5%	69.4%	75.2%	73.5%	80.6%	77.8%			78.2%

Source: FRA. Average age includes pedestrian incidents. Median age in GA: 1990, 31.5 yrs; 2000, 33.4 yrs; 2010 35.3 yrs.

The average age of drivers involved in Georgia crossing crashes over the course of the 2001-2010 period seems to be increasing in excess of the increase in age of the driving population in Georgia. The median age of Georgia residents increased by nearly two years between 2000 and 2010 from 33.4 years to 35.3 years. The five year rolling average driver age (where driver age was reported) of Georgia drivers involved in crossing crashes increased from 38 years to 42 years in the shorter 2005-2010 time period. Male drivers accounted for a little over three-quarters of the drivers involved in crossing crashes. The fraction of drivers that are male generally increases with driver age, except for drivers 75 years old and older, reflecting the longer life expectancy of women.

The average age of drivers involved in Georgia crossing crashes in the 2001-2010 period increased for multiple reasons. Most importantly there has been a large reduction in the number crashes involving drivers less than 25 years of age. There has also been a smaller reduction in the number of crashes involving drivers between the ages 25 and 54 inclusive. The number of crashes involving drivers 55 years old and older increased from 2001 to 2005 and then decreased from 2006 to 2010, ending the decade at approximately the same number of crashes as in 2001.

Georgia enacted legislation in 1997 (TADRA), 2001 and 2005 (Joshua's Law) that significantly increased driver education requirements for drivers less than 18 years of age, and imposed restrictions on passengers for drivers under the age of 18. 16 year old driver's license applicants currently must complete a driver's education course with 30 hours of classroom study and 6 hours of behind the wheel training, complete at least 40 hours of supervised driving, and pass a comprehensive on-the-road driving test. 17 years olds currently must complete at least 40 hours of supervised driving and pass a comprehensive on-the-road driving test. The Georgia legislation imposes a midnight to 6am curfew on Class D (less than 18 year old) licensees. The legislation may have contributed to fewer crossing crashes for drivers less than 19 years of age. It may also have contributed to significantly fewer crashes for drivers 19-24 years of age as evidenced by a reduction in crossings crashes trailing the legislation and improvement of 16-18 year old driver crossing crash experience by a few years.

A P P E N D I X C-2 - Short Line Railroad and Amtrak Crashes

	Shortline	Segment	Route Miles	Year										Total Crashes	Pub Xing Crashes	Comment
				2001	2002	2003	2004	2005	2006	2007	2008	2009	2010			
ABR	Athens Line	Note 1	21				1							1		Leased from NS
CBR	Chattahoochee Bay Railroad		2													
CIRR	Chattahoochee Industrial RR		15													
CCKY	Chattooga & Chickamauga Rwy	Chattanooga-Lyerly	48													
(NS)	Last operated as CCKY	Chattanooga-Hedges	Note 2					1						1	1	Inactive since 2009
FCRD	First Coast Railroad		10													Leased from CSXT
FCR	Fulton County Railway		8													Leased from CSXT
GC	Georgia Central Railway	Macon-Vidalia (Note 3)	95	2	1	1	2					2	1	9	7	6 (inc 2 pvt) in Laurens Co.
.	.	Vidalia-Savannah	78	1	1		1	1		1	1	1	1	8	7	All in Toombs or Evans Co.
.	.	Albany-Thomasville	58										1	1	1	
.	.	Albany-Sparks	58	1	2		1	1	3				1	9	9	Leased from NS
GFRR	Georgia & Florida Railway	Adel-Foley, FL	35						1				1	2	2	
.	.	Albany-Sylvestor	10	1										1	1	
.	.	Valdosta-Willacoochee	43	2									1	3	3	
GITM	Golden Isles Terminal RR		13					1	3	1	2			7	3	Leased from GPA
GNRR	Georgia Northeastern RR	Marietta-White Path	70	1		1			3	2			1	8	8	2001 CSX on GNRR
		White Path-McCaysville	22			1								1	1	
GRWR	Great Walton Railroad		10		1					1	1			3	3	2007 on E-Line of Note 6
		Midville-Kirby	23													
GS	Georgia Southern Railway	Dover-Metter	28				1	1						2	2	Pioneer Railcorp
		Roberta-Perry	30									1		1	1	
.	.	Cuthbert-Bainbridge	68						1		2			3	3	
GSWR	Georgia Southwestern Railroad	Columbus-Americus	60													Leased from NS
.	.	Columbus-Ft. Benning	9													Note 4
.	.	Smithville-Eufaula	66	1								1		2	1	Inc 8 mi GDOT-owned br
GWRC	Georgia Woodlands Railroad		17													
HOG	Heart of Georgia Railroad	Note 5	136				3				1			4	4	All 4 crashes in Americus
HRT	Hartwell Railroad		58			2			1			2		5	5	
LW	Louisville & Wadley Railroad	10 miles														Inactive for many years
ORC	Ogeechee Railroad		22				1							1	1	Ardmore-Sylvania only
RSOR	Riceboro Southern Railway		17					1						1		Leased from CSXT
SAN	Sandersville Railroad		13	1	1	1				1	1	2	2	9	9	
SAPT	Savannah Port Terminal RR		10	1	3	1	4	4	4	5	6			30		Leased from GPA
SCS	Squaw Creek Southern RR	Note 6	22													Leased from NS
SM	St. Marys Railroad		14		2		1							3	3	Boatwright Companies
SMWR	St Marys West Railway		24													
VR	Valdosta Rwy		10				1		1					2	1	
Totals (short line route miles and all crashes)			**1223**	**11**	**11**	**7**	**16**	**10**	**17**	**11**	**16**	**9**	**9**	**117**		
Public Crossing Crashes				**9**	**8**	**6**	**10**	**5**	**11**	**4**	**6**	**8**	**9**		**76**	
ATK	Amtrak	on CSXT	157	1	3	1	2	1		4		2		14	13	
		on NS	159	3		2	1	1	1			3		11	11	

Genesee & Wyoming Railroads — GDOT-owned

Omnitrax Railroads

Shared railroad management

Crashes shown for current short line railroad where short line railroads have changed

Private crossing crashes

Private crossing crash reported by CSXT

One of the crashes occurred at a private crossing.

Notes:

1 - Excludes 17 Bishop-Madison route miles that have been out of service for years.

2 - 17 route miles owned by NS and last operated by CCKY.

3 - Include 3 mile Vidalia branch owned by City of Vidalia.

4 - Excludes 15 GDOT-owned Ft. Benning-Cusseta route miles that have not been operated in years.

5 - Excludes 39 GDOT-owned Preston-Omaha route miles that have not been operated in years.

6 - Excludes 27 Shady Dale-Covington route miles that have been out of service for over a year.

A P P E N D I X C-3 - Crashes by Year, Type of Warning Device and Railroad

			Public Crossing Crashes - Year Ending																																					
		Route	2001-2010 crashes				1			2			3			4			5			6			7			8			9			10		
RR	Segment	Miles	X	F	G	Tot	X	F	G	X	F	G	X	F	G	X	F	G	X	F	G	X	F	G	X	F	G	X	F	G	X	F	G	X	F	G	X	F	G
CSXT			220	68	244	532	39	9	15	34	6	24	27	8	21	25	11	30	23	8	24	19	8	32	17	5	29	13	5	20	14	3	29	9	5	20			
Amtrak	CSXT		6	1	5	12	1			1		1	1			1	1		1			1					4												
NS		1778	190	76	179	445	18	9	16	18	13	22	25	4	14	28	10	18	25	5	19	21	6	21	24	14	17	11	8	24	14	5	17	6	2	11			
Amtrak	NS	316	1	0	9	10	1		2						2			1			1											3							
ABR		21																																						
CBR		2																																						
CIRR		15																																						
CCKY	Chattanooga-Lyerly	48																																						
(NS)	Chattanooga-Hedges	Out of svc			1	1															1																			
FCRD		10																																						
FCR		8																																						
GC	Macon-Vidalia	95	6		1	7	1					1	1			1															2			1					
.	Vidalia-Savannah	78	7			7	1			1						1			1									1			1			1					
.	Albany-Thomasville	58	1			1																												1						
.	*Camilla Spur*	*2.2*																																						
GFRR	Albany-Sparks	58	7	1	1	9	1			1		1				1			1			2	1											1						
.	Adel-Foley, FL	35	2			2																1												1						
.	Albany-Sylvestor	10	1			1	1																																	
.	Valdosta-Willacoochee	43	3			3	2																											1						
GITM		13	1	2		3													1				2																	
GNRR	Marietta-White Path	70	4	2	2	8			1				2										2	1	2									1						
	White Path-McCaysville	22	1			1																																		
GRWR		10	3			3				1															1			1												
	Midville-Kirby	23																																						
GS	Dover-Metter	28	2			2										1			1																					
	Roberta-Perry	30			1	1																											1						
.	Cuthbert-Bainbridge	68	2		1	3																1						1		1									
.	Columbus-Americus	60																																						
GSWR	Columbus-Ft. Benning	9																																						
.	Smithville-Eufaula	66	1			1	1																																	
.	*Sasser Branch*	*8*																																						
GRWC		17																																						
HOG	. .	136	4			4										3												1												
HRT		58	4	1		5							2									1									1	1								
.	*orig HRT branch*	*9.4*																																						
LW		Out of svc																																						
ORC		22	1			1										1																								
RSOR		17																																						
SAN		13	3	4	2	9		1			1		1												1				1				2	1	1				
SAPT		10																																						
SCS		22																																						
SM		14	2		1	3				1		1				1																								
SMWR		24																																						
VR		10	1			1										1																								
Shortlines		1223	56	10	10	76	7	1	1	4	1	3	6	0	0	10	0	0	4	0	1	5	5	1	4	0	0	4	1	1	4	1	3	8	1	0			
All Railroads			473	155	447	1075	66	19	34	57	20	50	59	12	37	64	22	49	53	13	45	46	19	54	45	19	50	28	14	45	32	9	52	23	8	31			
Ped crashes (inc above)			2	3	23	28			2			2	1		2		1	2			3	1	1				5			3			3		1	1			

One on ATK, none on short lines

Instructions for Reporting School Bus Use of Highway-Railroad Crossings in Georgia

Prepared by the Georgia Department of Transportation Office of Utilities for the Georgia Department of Education

Purpose. State law requires that school districts report school bus use of highway-railroad grade crossings not equipped with active warning devices (flashing lights, or flashing lights and gates) to the Georgia Department of Transportation (GDOT) no later than September 1 of each year. GDOT and the Federal Railroad Administration (FRA) desire information on school bus use of crossings equipped with active warning devices as well. GDOT requests that school district report school bus use of crossings equipped with active warning devices every five years in years ending in zero and five, i.e. 2015, 2020, 2025 etc. (GDOT reports school use of crossings to FRA.) This document has been prepared to provide for uniform reporting of school bus use of crossings by school districts. This document applies to 2011 year and subsequent reporting.

The reporting of school bus use of crossings applies only to established school bus routes. Established school bus routes for the purpose of reporting bus use of crossings are bus routes that transport pupils between residences and schools in the morning, midday in the case of regular one-half day schooling, or afternoon. Established school bus routes include routes that regularly transport pupils between schools, or regularly transport pupils between schools and other venues, such as vocational or special education bus routes. Established school bus routes include routes that transport pre-school pupils if such routes are operated by school districts. Infrequent, impromptu, or ad hoc school bus use of crossings, such as pupil transportation in connection with field trips, athletic events, or extracurricular activities, should not be reported.

Quantified School Bus Use of Crossings. Each operation of a school bus over a crossing shall be counted as one school bus use of the crossing. A bus route that crosses in only one direction one time per day shall be counted as one school bus use of the crossing. A bus route that crosses once in the morning and once again in the afternoon shall be counted as two school bus uses of the crossing. A bus route that crosses over and back in the morning, and over and back in the afternoon, shall be counted as four school bus uses of the crossing. The total number of school buses using a crossing is the sum of the numbers of crossing uses of each of the bus routes using the crossing. The total number of school buses using the crossing for the three routes described above is 7 (one for the first route, plus two for the second route, plus four for the third route).

School bus use of crossings shall be reported as the average number of buses using a crossing on a typical school day rounded up to the nearest whole number if applicable. A vocational bus route transporting pupils between schools that operates once in the morning and back in the afternoon three days per week would equal 1.2 daily school buses uses of the crossing (2 operations times 3 days per week divided by 5 days per school week = 1.2). A vocational bus route that operates once in the morning and back in the afternoon once a week equals 0.4 school bus uses of the crossing. The total number of school buses using the crossing for the two vocational routes described above is two. (1.2 for the first route, plus 0.4 for the second route =1.6, rounded up to two. Round up the sum of the fractional uses, do not round up each fraction and then sum.)

Reporting. School districts are required to report the name of the road, USDOT crossing identification number (Appendix A), and the number of buses using grade crossings. Note that school districts shall report use of crossings in another county or state if applicable.

GDOT requests that the districts report the highway route number and railroad if known, and the type of crossing warning devices, to insure the crossing is correctly identified. GDOT also requests that districts distinguish between buses with pupils and empty buses (no pupils on board) using crossings. In the case of crossings not equipped with active warning devices, GDOT requests the district report the number of additional buses carrying pupils that would use a crossing if it were equipped with active warning devices. This last request recognizes that State law requires school districts to use best efforts to minimize the number of school buses using grade crossings not equipped with active warning devices. (Do not include the number of buses currently using the crossing, and do not include additional buses that would use the crossing but not in the transportation of pupils, in reporting that latter number.)

GDOT will be providing the Georgia Department of Education an initial list of crossings by county, with the crossings listed in order along rail lines within the county, to assist in the reporting of school bus information. A sample of the initial list of crossings is included in these instructions. Alternately the blank form that follows the sample form may be used.

Mail completed tables to Mr. Jeff Baker at the address shown on the tables. Contact Key Phillips by telephone at 404-631-1376, or by e-mail at kphillips@dot.ga.gov with any questions.

CSX Transportation (CSXT) – Crossings listed from Fulton County south to Meriwether County (1 of 2)

City *(Locale)*	Road Name [1]	Route	USDOT ID	RR Mile-post (ANB) [2]	Warning Devices [3]	School bus use [4]		
						Buses with pupils on board	Empty buses (no pupils on board)	If equipped with active warning devices [5]
	(Bethany) Milam Road	CR59	639501Y	840.33	Gates			
	Coast Line Road	CR61	639500S	839.78	Underpass			
	Estate Farm	Private	639499A	839.06				
	Sandy Creek Road	CR365	639498T	838.35	Cant Gates			
	Jenkins Road	CR75	639497L	837.90	Overpass			
Hanson Materials Branch *– east side of main track*								
Tyrone	*Joel Cowen Parkway*	SR74	640192K	*836.95*	*Cant gates*			
Tyrone	*Hanson Materials*	Private	926196G	*836.95*				
Tyrone	Swanson Road	CR72	639495X	837.69	Gates			
Tyrone	Handley Road	*CS557*	639494R	836.50	Gates			
Tyrone	Joel Cowen Parkway	SR74	643042M	836.34	Overpass			
Tyrone	Tyrone Road	CR358	639493J	836.08	Gates			
Tyrone	Valleywood Road	CS556	639492C	835.30	Crossbucks			
Tyrone	East Crestwood Road	CS551	639491V	834.94	Gates			
Tyrone	Senoia Rd (Old SR74)	*CR480*	639489U	834.13	Gates			
Tyrone	Farm / Sgl Family Res	Private	639488M	833.79				
Tyrone	Property Access	Private	639487F	833.54				
Rock Spur*– west side of main track*								
Tyrone	*Shamrock Industrial Blvd*	*CS639*	*926199C*	*833.13*	*Crossbucks*			
Tyrone	*Georgia Masonry Supply*	*Private*	*926198V*	*833.13*				
Tyrone	*Rockwood Road*	*CR87*	*926200U*	*832.83*				
			x					
Tyrone	Rockwood Road	CR87	639482W	833.10	Gates			
Peachtree City	Wilk Grove Baptist Ch.	Private	639481P	832.21				
Peachtree City	Property Access	Private	639480H	832.00				

See next page for table notes.

CSX Transportation (CSXT) – Crossings listed from Fulton County south to Meriwether County (Continued)

City *(Locale)*	Road Name [1]	Route	USDOT ID	RR Mile-post (ANB) [2]	Warning Devices [3]	School bus use [4]		
						Buses with pupils on board	Empty buses (no pupils on board)	If equipped with active warning devices [5]
Peachtree City	Comcast and access	Private	639479N	831.54				
Peachtree City	Floy Farr Parkway	SR54	639471J	829.84	Overpass			
Paschall Lead Track *– west side of main track*								
Peachtree City	*Huddleston Road*	*CS327*	*640075P*	*829.25*	*Crossbucks*			
Peachtree City	*Paschall Company*	*Private*	*640076W*	*829.25*				
Peachtree City	Paschall Road	CS320	639470C	829.13	Gates			
Peachtree City	Kelly Drive	CS490	639469H	828.43	Gates			
Peachtree City	TDK Boulevard	CS597	643041F	827.43	Overpass			
Peachtree City	Peachtree City W&S	Private	639468B	827.14				
Peachtree City	Dividend Drive	CS322	639467U	826.72	Gates			
Write in below any public crossings along the railroad line that are not included above, and/or any grade crossings along the line that are located in adjacent Fulton or Meriwether Counties, that are used by school buses. Please strike through any crossings above that have been closed.								

1 Private crossings are highlighted gray. Spur track or branch line crossings are in *italic font*, and branch lines or spur tracks with multiple crossings are identified and enclosed by colored rows.
2 Milepost suffix letter.
3 Crossbucks = no active warning devices. Flashers = flashing lights. Gates = flashing lights and gates. Cant flashers = cantilevered (over road) flashing lights. Cant gates = Cantilevered flashing lights and gates. It is requested that bus use of crossings equipped with active warning devices be reported in years ending in zero and five.
4 Indicate "Ø" if crossing is not used by school buses.
5 Indicate the estimated number of additional buses with pupils on board that would use crossing if the crossing were equipped with active warning devices (i.e. flashing lights or flashing lights and gates). Do not include additional empty buses, or any school buses with pupils on board currently using the crossing.

Submitted by: _____ (signature)
_____ (print name)
_____ (title)
Phone number: _____

Questions: Key Phillips, 404-631-1376, kphillips@dot.ga.gov

Mail to: Mr. Jeff Baker, P.E.
GDOT State Utilities Engineer
600 W. Peachtree Street, 10th floor
Atlanta, GA 30308

School Bus Use of Highway-Railroad Crossings in Georgia - O.C.G.A.§ 32-6-200 (d) (2)

School District: _____ **Date:** _____ **Page 1 of** _____

Street, Road or Highway Name	Road No. [1]	USDOT ID [2]	Railroad	Warning Devices [3]	School bus use [4]		
					Buses with pupils on board	**Empty buses** (no pupils on board)	**If equipped with active warning devices** [6] (optional)

1 Abbreviations: CS = City Street, CR = County Road, SR = State Route, US = United States Route. Examples: CS867, CR15, SR120, US82.

2 See Appendix A for information about crossing USDOT IDs.

3 Most sophisticated types of warning device: gates, flashing lights and signs = gates, flashing lights and signs = flashers, signs (crossbucks, and/or stop or yield signs only) = Signs, or "none" if no warning devices are present. (Gates are the most sophisticated type of warning device, flashing lights are less sophisticated, and signs are the least sophisticated type of device. A crossing equipped with gates, flashing lights, and signs shall be reported as "gates". A crossing equipped with flashing lights and signs shall be reported as "flashers". A crossing not equipped with active warning devices shall be reported as "signs", or if warning signs are not present, "none". It is requested that bus use of crossings equipped with active warning devices be reported in years ending in zero and five.

4 Indicate the estimated number of additional buses with pupils on board that would use crossing if the crossing were equipped with active warning devices (i.e. flashing lights or flashing lights and gates). Do not include additional empty buses, or any school buses with pupils on board currently using the crossing.

Submitted by: _____ (signature)

_____ (print name)

_____ (title)

Phone number: _____

Mail to: Mr. Jeff Baker, P.E.
GDOT State Utilities Engineer
600 W. Peachtree Street, 10th floor
Atlanta, GA 30308

Questions: Key Phillips, 404-631-1376, kphillips@dot.ga.gov

School District: _____ Date: _____ Page ____ of _____

Street, Road or Highway Name	Road No. [1]	USDOT ID [2]	Railroad [3]	Warning Devices [4]	School bus use [5]		
					Buses with pupils on board	**Empty buses** (no pupils on board)	**If equipped with active warning devices** [6] (optional)

See Page 1 for table notes.

It is not necessary to submit a second page if all crossings used by school buses may be identified on one page. Print and include additional pages as necessary.

APPENDIX A - Crossing Identification

There are approximately 5,300 public highway-railroad grade crossings in Georgia. Norfolk Southern (NS) with approximately 2,400 Georgia public grade crossings, and CSX Transportation (CSXT) with approximately 1,500 crossings, are the two principal railroads in Georgia. Various short line railroads account for the remaining approximately 1,400 public grade crossings. All crossings, including private road crossings and railroad overpasses or underpasses, are identified by a unique six digit-one letter USDOT identification number (USDOT ID). 638212U, 729388G, 638228R and 279604D (see below) are examples of USDOT IDs. The number portions of USDOT IDs are generally sequential along a railroad line. There may be abrupt changes in numerical sequence, or USDOT IDs that are out of numerical sequence however.

Grade crossings are required to have an Emergency Notification Sign (ENS) posted at the crossing. The ENS identifies the crossing, and provides an emergency notification telephone number. ENS at Georgia crossings are typically a fiberglass material sign that is attached to a crossbuck signpost, or a flashing light or flashing light and gate signal mast or signal post. (Crossbuck is the name commonly applied to the X-shaped sign that has the legend "RAILROAD CROSSING" in black letters on a white background, that is displayed at crossings.) A generic ENS is shown at upper left.

When there is no ENS, the USDOT ID may sometimes be determined from a metal plate attached to a crossbuck signpost, or a flashing light or flashing light and gate signal mast or post. The USDOT ID may also sometimes be found on a railroad signal equipment case or housing at the crossing.

Note that the USDOT ID metal plates are not updated when there is a change in railroad ownership, and thus may indicate a predecessor railroad (for example "SCL" for Seaboard Coast Line, a CSXT predecessor, see plate below). ENS however are supposed to be changed to reflect the current railroad operator (note ENS may not be current if the railroad operator has recently changed). Photographs of the ENS commonly used at NS and CSXT crossings, a USDOT ID plate, and USDOT ID as identified on a railroad equipment housing, are shown below.

Older version CSXT Emergency Notification Sign (ENS)

Older version NS Emergency Notification Sign

USDOT Crossing Identification Plate
(former Seaboard Coast Line - SCL)

USDOT ID (279604D) on signal equipment enclosure

APPENDIX B – Additional Information and Explanation

The reporting of school bus use of highway-railroad grade crossings by school districts to GDOT is required per Official Code of Georgia Annotated (O.C.G.A.) § 32-6-200 (d) (2) [per HB426 signed by Governor Perdue May 5, 2008, and effective January 1, 2009], and indirectly by the federal Rail Safety Improvement Act of 2008 (Public Law 110-432, H.R.2095 / S.1889).

O.C.G.A. § 32-6-200 (d) (2) states: "Each local school district in this state shall survey its established school bus routes annually and submit to the Department of Transportation a list identifying each rail crossing that does not have active warning devices on an established bus route. Each local school district shall be required to submit this information to the department each year by no later than September 1."

Active warning devices, as mentioned parenthetically in the forgoing instructions, are crossings equipped with automatic flashing lights, or automatic flashing lights and gates and usually are equipped with a bell or bells.

The Rail Safety Improvement Act of 2008 requires that GDOT periodically update the USDOT National Crossing Inventory database. The USDOT National Crossing Inventory database includes the number of school buses using public grade crossings, including crossings equipped with active warning devices. It is therefore necessary that school districts provide information concerning the numbers of buses using all grade crossings, and not simply identify crossings that are not equipped with active warning devices that are used by school buses as required by O.C.G.A. § 32-6-200 (d) (2).

O.C.G.A. § 32-6-200 (d) (4) states: "The department [GDOT] shall use the information about school bus routes as an important factor in selecting rail crossings to upgrade with active warning devices."

School bus use of crossings is a very important, and often the single most important factor used by GDOT when prioritizing installation of active warning devices, or active warning device improvements. Other important criteria used by GDOT for prioritizing installation of active warning device improvements are crossing crash history, and train and highway traffic volume and speed, and sight distance from the highway along the railroad. An order of magnitude cost for installation of flashing lights and gates is $250,000, though installation costs may vary widely with specific circumstances.

O.C.G.A. § 32-6-200 (d) (3) states: "Each local school district shall exercise best efforts to minimize the number of established school bus routes that cross rail crossings that do not have active warning devices."

The presumption is that school districts establish bus routes that avoid crossings that are not equipped with active warning devices, or establish routes that use such crossings less than would be the case than if the crossings were equipped with active warning devices. GDOT thus requests information about potential school bus use of crossings if active warning devices were to be installed at crossings that are note currently equipped with active warning devices. The potential use of crossing information allows GDOT to consider reductions in pupil transportation expenses for school districts and reductions in pupil time-in-transit when prioritizing crossings for active warning device installation.

APPENDIX C – Attendance Zones Changes

Changes in school attendance zones, whether or not the changes involve new schools, may significantly alter school bus routes and hence the number of school buses using crossings. The process of examining crossings for active warning device improvements or installation of active warning devices through analysis, design and installation of the new or improved warning devices typically requires approximately one year.

The September 1 school bus use of crossing reporting date requirement typically occurs shortly before or just after new attendance zones and hence bus route changes have been implemented. Considering the one year active warning device construction process, **GDOT requests that school districts inform GDOT well in advance of tentative and significant school bus use of crossings that are not currently used by school buses, or significant increases in school bus use of crossings, for those crossings that are not currently equipped with active warning devices, or are equipped with only flashing lights and not flashing lights and gates.** Advance notice of one year, or preferably 18 months, to GDOT enables GDOT to examine the crossings and if necessary program installation of active warning device improvements so that the installation would be complete prior to the beginning of new or increased school bus use of crossings.

GDOT understands that precise numbers of buses using a non-active warning device crossing may not be available until a few months before the attendance zone change becomes effective. An order of magnitude estimate of school bus use of non-active warning device crossings by the school district is sufficient for GDOT to analyze crossings.

Key Phillips
Railroad Crossing Program Manager
404-631-1376
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is the GDOT contact person to report such information, and is the contact person concerning the railroad crossing safety program in general.

Appendix E – Public Comment

A GDOT webpage (http://www.dot.ga.gov/doingbusiness/utilities/Pages/HwyRailPlan.aspx) will include a link to this draft Plan being submitted 24 June 2011 to FRA for initative formal review. The draft webpage is tentatively expected to be available on-line on June 27, 2011. The tentative text of the webpage is shown below.

Draft State Highway-Rail Grade Crossing Action Plan

(clicking the heading above will link to the draft Plan document)
(clicking the e-mail address below hyperlinks to an e-mail application)

Section 202 of the Rail Safety Improvement Act of 2008 (RSIA08) required Georgia and nine other states to develop State highway-rail grade crossing action plans. The plans must identify specific solutions for improving safety at public crossings, including grade crossing closures or grade separations (underpasses or overpasses of the railroad), and must focus on crossings that have experienced multiple collisions, or are at high risk for such collisions.

A draft Plan has been submitted for Federal Railroad Administration (FRA) review and comment. GDOT is accepting public comments on the draft Plan through August 01, 2011. The Plan will be revised as necessary based on FRA and public comments, and is expected to be approved in September 2011.

Comments may be e-mailed to Hwy-RailCrossingPlan@dot.ga.gov, or mailed to:

GDOT Office of Utilities, Railroad Crossing Program
One Georgia Center, 10th Floor
600 West Peachtree Street
Atlanta, GA 30308
Attn: Key Phillips