Ernston Road RSA

FINAL REPORT

January 2012

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In cooperation with

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Bureau of Transportation Data Development
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Federal Highway Administration

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CAIT's Transportation Safety Resource Center (TSRC) and New Jersey Local Technical Assistance Program (NJLTAP) offer a statewide Road Safety Audit (RSA) service as well as funding sources to New Jersey towns and counties.

A multi disciplinary team offers assessments on roadway issues such as pedestrian and bicycle safety, intersection analyses, rural roads, human factors, speed management, and sign visibility and retroreflectivity standards.

RSAs include data-driven considerations and analysis of crash data. To determine possible safety suggestions, RSA team members perform crash data evaluations on the target area using Plan4Safety, TSRC's award-winning crash database and software.

The RSA team provides a final report that includes long- and short-term countermeasure suggestions that fit within the requestor's budget. Furthermore, RSAs payoff: according to the Federal Highway Administration (FHWA), countermeasures applied after RSAs can reduce crashes by about sixty percent.

For more information, contact Andy Kaplan, Engineering Researcher, at akaplan1@rutgers.edu

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Introduction

In the spring of 2011, a partnership was formed between the Rutgers Transportation Safety Resource Center (TSRC) and Middlesex County, NJ. Planners at Middlesex County were evaluating safe pedestrian access to bus service along the entire Route 9 Corridor through Old Bridge and Sayreville, where multiple pedestrian crash hotspots in close proximity to bus stops were identified using Plan4Safety, a crash data analysis tool. Various crash-prone intersections along Ernston Road, also known as County Route 673 (CR 673), were selected for a closer investigation and with the assistance of Rutgers TSRC, a Road Safety Audit (RSA) was performed. This report documents the findings and suggestions made by the audit team.

Background



Figure 1-Map of Study Area (Google Earth)

The study area along Ernston Road is outlined in red and blue in Figure 1. The red portion of Ernston Road marks the section that is also CR 673, while the blue portion marks the section where the municipality has jurisdiction. The study area of Ernston Road runs about 1.4 miles through Sayreville Borough and Old Bridge Township, Middlesex County, New Jersey.

Ernston Road is classified as an Urban Minor Arterial with 1 lane in each direction west of Villanova Road and 2 lanes in each direction east of said road. A total 17 intersections, 4 of which are signalized, exist along the study area. The speed limit in the study area is 35 miles per hour (mph) west of the US Rt. 9 and 45 mph east of it.

The land use around the study area is predominantly residential with commercial areas around the US Rt. 9 interchanges, specifically the Sayre Woods Shopping Center and Mini Mall. Commercial areas also exist around the intersection with Washington Road.



Figure 2 - Washington Road Schools (Google Earth)

There are three schools that lie within the study area. Two of these schools are located near the Washington Road intersection, as shown in Figure 2. During the 2008-2009 academic year, War Memorial High School has an enrollment of 1,675 students while Sayreville Middle School has 1,359 students. As shown in Figure 3, Samsel Upper Elementary School is located at the corner of the US Rt. 9 South intersection and had an enrollment of 931 students during the 2008-2009 academic year.



Figure 3 - Samsel Upper Elementary School (Google Earth)

Both New Jersey Transit (NJT) and Academy Bus LLC have two bus lines that serve the study area. NJT # 815 runs along Washington Road during the morning and afternoon peak hours. NJT # 131 runs along Washington Road and then continues on Ernston Road throughout the day. Both Academy Bus lines serve the same route as NJT # 131.

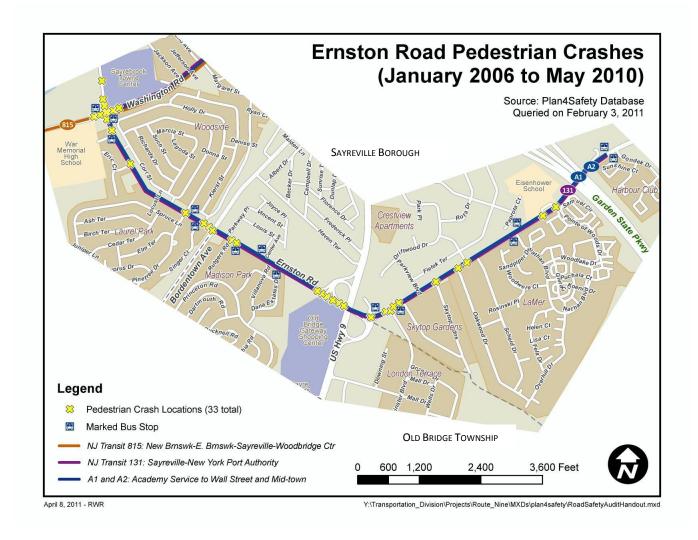


Figure 4 - Pedestrian Crash Locations and Bus Service along Ernston Road (CR 673) (Middlesex County)

Road Safety Audit Process

The Ernston Road RSA followed a process that began with data collection, a crucial task that served as the backbone for recommendations for improvement. Crash data was collected using Plan4Safety, a crash data analysis tool, and consisted of crash types, locations, years, road conditions, and contributing circumstances.



Figure 5 - RSA team conducting site visit

The Road Safety Audit occurred on April 14, 2011. The day began with a Pre-Audit meeting that involved the definition of road safety audit and an overview of the intersections. A presentation showing details of the crash analysis and aerial images of the study area was shown. Following the presentation, a site visit was conducted where all participants were given a chance to inspect the sites and use their various backgrounds to brainstorm suggested improvements. After the field visit, the team was brought back together to discuss the issues observed and to discuss suggestions to remedy the issues.

Information Sources

Several sources of information were used in the RSA process. For example, crash data from 2008–2010 was examined for trends and patterns. Specific resources used in the analysis include:

- NJDOT Crash Database (2008–2010)
- Plan4Safety Crash Data Analysis Tool
- NJDOT Straight Line Diagrams
- National Center for Education Statistics (NCES)
- Google Earth

RSA Team

The RSA team consisted of 17 members including police officers, engineers, and planners from different agencies across the state.

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Crash Data

Crash Data was reviewed for the entire study area for the years 2008-2010. The intersections along Ernston Road with the most crashes were identified for further analyses are as follows:

- Washington Road
- Holly Drive/Pinetree Drive
- Bordentown Avenue
- Parkway Place/Rutgers Road
- Villanova Road
- US Route 9 North Ramps/ Sayre Woods Shopping Center
- US Route 9 South Ramps/Minimall Drive
- Westminster Boulevard

Due to an ongoing project to redesign the intersection at Bordentown Avenue, this intersection and the adjacent intersections at Holly Drive/Pinetree Drive and Parkway Place/Rutgers Road were left out of this Road Safety Audit. This resulted in the five remaining intersections being reviewed in depth as part of the RSA.

Figure 6 illustrates the number of crashes at the audited intersections during the 2008-2010 periods, shaded by crash severity.

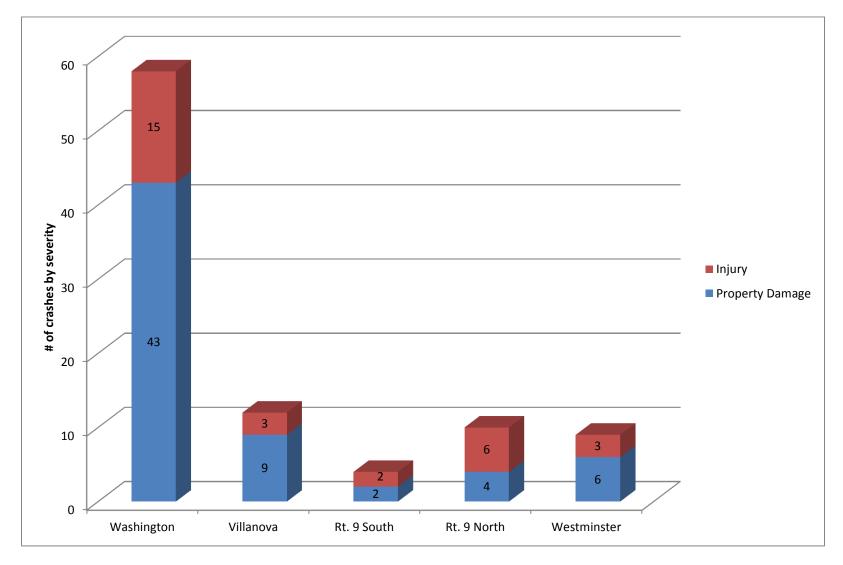


Figure 6 - Number of crashes by severity (2008-2010)

7 Pedestrian crashes were reported at the intersections between 2006 and 2010 and are detailed in Table 3.

INTERSECTION	DATE	TIME	YEAR	ENVIRONMENTAL CONDITION	LIGHT CONDITION	PEDESTRIANS INJURED	SEVERITY	SURFACE CONDITION
Washington	5/24/2006	7:11 PM	2006	Clear	Daylight	1	Injury	Dry
Washington	4/22/2008	8:17 PM	2008	Clear	Dark (Street Lights On/ continuous)	1	Injury	Dry
Washington	4/23/2009	9:18 PM	2009	Clear	Dark (Street Lights Off)	1	Injury	Dry
Rt. 9 NB	4/27/2010	8:07PM	2010	Clear	Dark (Street Lights On/ continuous)	1	Injury	Dry
Westminster	10/16/2009	6:45AM	2009	Rain	Dark (Street Lights On/ Spot)	0	Injury	Wet
Westminster	11/19/2009	5:55PM	2009	Clear	Dark (No Street Lights)	1	Injury	Dry
Westminster	2/17/2010	6:57PM	2010	Clear	Dark (Street Lights On/ continuous)	1	Injury	Wet

Table 1 - Pedestrian Crash Data 2007-2010

3 Bicyclist crashes were reported at the intersections between 2006 and 2010 and are detailed in Table 4.

INTERSECTION	DATE	TIME	YEAR	ENVIRONMENTAL CONDITION	LIGHT CONDITION	SEVERITY	SURFACE CONDITION
Washington	12/09/2010	7:47AM	2010	Clear	Daylight	Injury	Dry
Rt. 9 NB	9/30/2008	5:50PM	2008	Clear	Daylight	Injury	Dry
Rt. 9 NB	10/11/2008	7:13PM	2008	Clear	Dark (Street Lights On/ continuous)	Injury	Dry

RSA Team Findings

RSA Team General Observations

The following is a summary of general corridor observations made by the team.

- 1. Compliance with ADA standards with respect to curb ramps at crosswalks was lacking.
- 2. Bicyclists were observed at most intersections during the audit; however, there was a lack of bicyclist accommodations throughout the corridor.
- 3. Pavement Markings are somewhat faded, and could be refreshed.
- 4. Sidewalks were not present in many segments where worn pedestrian paths existed.
- 5. Guiderail designs did not meet current standards and should be reviewed and designed to be brought up to standards, including proper end treatments.
- 6. Utility poles were located in the clear zone. Utility poles in the clear zone should be protected, if feasible, by guiderail, curbing, a painted shoulder, or otherwise as identified by a formal engineering review.
- 7. A further study should be undertaken to determine if there is a sufficient presence of existing marked crosswalk locations at signalized and unsignalized crossings across and along Ernston Road. The study should aim to identify all cross walk locations where marked pedestrian crosswalks are currently nonexistent but warranted based upon demand. Warranted locations, such as in the vicinity of bus stops, should be appropriately signed, marked and identified.
- 8. Evaluate signal phasing of all signalized intersections for the possible incorporation of a "Leading Pedestrian Interval," providing pedestrians with exclusive use of the crosswalk for a few seconds at the beginning of the pedestrian phase while all conflicting vehicle movements have a red light. The MUTCD recommends the consideration of assessable features to be used in conjunction with Lead Pedestrian Intervals.¹
- Ensure all signal timings in addition to pedestrian crossing timings conform to the standards and best practices as outlined in the most recent edition of the MUTCD as well as accepted Middlesex County practices.

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¹ Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 ed. Section 4E.06.20

RSA Team Specific Findings

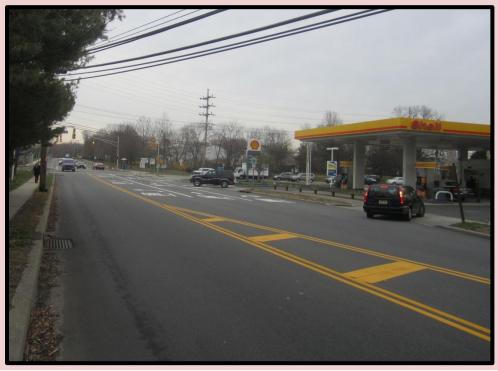
The following represents the specific findings and suggestions made by the RSA team. The **red** shaded areas represent suggestions thought to be low-cost improvements.

All suggestions and designs should be thoroughly evaluated with due diligence, and designed as appropriate, by the roadway owner and/or a professional engineer for conformance to codes, standards and best practices.

Washington Road

Issue: Bicycle Use Observed	Safety Risk		
Description: Bicycle use was observed during the field visit but the intersection lacks bicycle accommodations	e High		
RSA Team's Recommendation	Cost	Potential Safety Benefit	
Install shared lane use signs and pavement markings, as appropriate.	Low	Medium	

Issue: Shell Gas Station Access	Safety Risk
Description: Access from the Shell gas station for	High
motorists making a left onto Washington Rd.	
creates a hazard. Motorists would have to cross	
over 3 lanes and may encounter sight distance	
issues from queuing at the intersection.	



RSA Team's Recommendation	Cost	Potential Safety Benefit
Review access agreement with Shell gas station. If	Low	High
possible, prohibit left turns from the gas station		
onto Washington Rd.		

Issue: Yielding to Pedestrians Safety Risk Description: Vehicles were observed not yielding to pedestrians at the eastbound and westbound channelized right turns.



RSA Team's Recommendation	Cost	Potential Safety Benefit
Consider the installation of high visibility style	Low	High
crosswalks, yield bars and advanced pedestrians		
crossing signage. Consider relocation of yield		
signs to a point before the crosswalk or otherwise		
in line with Middlesex County standards.		

Issue: 8" Signal Heads	Safety Risk
Description: Though 8-inch signal heads are the	High
standard for existing traffic signals, 12-inch	
signals provide greater visibility especially for	
motorists with poor vision.	



RSA Team's Recommendation	Cost	Potential Safety Benefit
Replace 8-inch signal head with 12-inch signal	Low	High
heads.		

Issue: ADA Accessibility	Safety Risk		
Description: It was observed that some curb ramps were not accessible and there were neither countdown signal heads, nor accessible pedestrian signal accommodations.	Medium		
RSA Team's Recommendation	Cost	Potential Safety Benefit	
Reconstruct accessible curb ramps and install pedestrian countdown signal heads and add accessible pedestrian signal accommodations.	Medium	High	

Issue: Lane Use Sign Blocking Pedestrian Signal	Safety Risk
Description: A lane use sign is blocking view of a pedestrian signal for pedestrian crossing Ernston Road in the southwestern island. Blocking of a pedestrian signal may prompt pedestrians to cross at inappropriate times.	High



RSA Team's Recommendation	Cost	Potential Safety Benefit
Relocate lane use sign.	Low	Medium

Issue: Northbound Bus Stop	Safety Risk
Description: Buses stopping on the	Medium
eastbound/westbound bus stop block traffic and	
cause a hazard in the intersection.	



RSA Team's Recommendation	Cost	Potential Safety Benefit
Coordinate with NJ Transit to install a bus pull-off	High	Medium
at the bus stops to allow traffic to flow around a		
stopped bus.		

Issue: "No Standing Any Time" sign	Safety Risk
Description: A "No Standing Any Time" sign in the	Low
southeast corner of the intersection has been	
knocked down.	



RSA Team's Recommendation	Cost	Potential Safety Benefit
Replace "No Standing Any Time" sign.	Low	Low

Issue: Advanced Lane Use Sign	Safety Risk	
Description: A lane use sign exists at the intersection for the westbound approach but is lacking in advance of the intersection to give motorists notice before arriving at the intersection.	Low	
RSA Team's Recommendation	Cost Potential Safety Benefi	
Install lane use sign on westbound approach in advance of the intersection.	Low	Medium

Issue: Worn Dirt Path	Safety Risk
Description: There is a worn dirt path on the east side of the northbound approach to the intersection. This path indicates pedestrian use but lacks a sidewalk to accommodate the pedestrian movement.	Medium
pedestrian movement.	



RSA Team's Recommendation	Cost	Potential Safety Benefit
Install ADA-compliant sidewalk as needed.	Medium/High	High

Issue: No Turn on Red Sign Confusing	Safety Risk
Description: There is a "No Turn on Red" sign on	Medium
the southbound approach with a "When Children	
are Present" plaque underneath. It was observed	
that this sign caused some confusion amongst	
motorists on the road. ²	



RSA Team's Recommendation	Cost	Potential Safety Benefit
Investigate replacement of the "When Children are	Low	Medium
Present" plaque with a plaque that states specific		
times of day where right turns on red are		
prohibited. This may require the modification of		
the official signal plan, TRO or Municipal Ordnance		
establishing the turning prohibition. Additionally,		
add "No Turn on Red" sign and plaque to signal		
pole on southwest island for visibility from the		
stop line.		

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² FHWA Interpretation Letter - http://mutcd.fhwa.dot.gov/resources/interpretations/pdf/2 635.pdf

Issue: Signal Pole Damaged	Safety Risk
Description: Traffic signal pole in southeast corner	Medium
of the intersection appears to have been damaged	
by a truck which may indicate an issue with truck	
turning radii.	



RSA Team's Recommendation	Cost	Potential Safety Benefit
Engage a design engineer to review truck turning	Medium	High
radii and signal pole locations at the intersection.		
Relocate stop bars and signal pole as identified by		
the design engineer.		

Villanova Road

Issue: Missing Crosswalk	Safety Risk
Description: Crosswalk markings are missing to cross Villanova Road. The current curb ramp on the southwest corner of the intersection exposes pedestrians to traffic for a longer period of time.	High



RSA Team's Recommendation	Cost	Potential Safety Benefit
Install an accessible curb ramp a few feet south of	Medium	High
existing ramp to shorten crosswalk length and		
install a high visibility crosswalk.		

Issue: Centerline Missing on Villanova Rd.	Safety Risk	
Description: The yellow centerline on Villanova Road is missing.	Me	edium
RSA Team's Recommendation	Cost	Potential Safety Benefit
Install yellow centerline.	Low	Medium

Issue: Sight Distance	Safety Risk
Description: Motorists exiting Villanova Rd. onto Ernston Rd. have inadequate sight distance to safely make a turning movement. Stop bar on Villanova Rd is set far back.	High



RSA Team's Recommendation	Cost	Potential Safety Benefit
Extend curb, or install painted island immediately	Low (Paint)	Medium
east of the intersection to maintain one eastbound	High (Curb)	
through lane and diverge further east. Pull up stop		
bar.		

Issue: Heavy Left Turns	Safety Risk
Description: Heavy left turns were observed from	Medium
Ernston Rd. onto Villanova Rd. in the vicinity of a	
land drop.	



RSA Team's Recommendation	Cost	Potential Safety Benefit
Relocate the lane drop further east, restripe to	Low	High
provide for a separated westbound left turn bay as		
well as shoulder for bus, extend curb, and restripe		
crosswalk as shown in image below.		



The sketch is a concept which needs to be properly and fully investigated for feasibility, safety and conformance to regulations and standards by a professional engineer.

Issue: Bush Blocking Sidewalk	Safety Risk
Description: There is a bush blocking the sidewalk on	Low
the east side of Villanova Rd.	



RSA Team's Recommendation	Cost	Potential Safety Benefit
Notify property owner of hazard and advise to trim	Low	Medium
back the bush.		

Issue: ADA Accessibility	Safety Risk	
Description: It was observed that some curb ramps were not accessible.	М	edium
RSA Team's Recommendation	Cost	Potential Safety Benefit
Install accessible curb ramps.	Medium/High	Medium

US 9 South/Sayre Woods Shopping Center

Issue: Driveway Egress	Safety Risk
Description: The driveway adjacent to the rear mall entrance has a left turn lane causing drivers to cross 3 lanes of traffic to make a left turn. This left turn could be a hazard during time of heavy traffic on Ernston Rd. There is also no Stop Sign. Both an R1-1 and R3-2 are noted on the NJDOT Signal Plan.	High



RSA Team's Recommendation	Cost	Potential Safety Benefit
Review current NJDOT traffic signal plan and	Low	High
replace missing signage as appropriate.		

Issue: Pedestrian Sight Distance	Safety Risk
Description: The existing grade to the side of the channelized right turn at the Rt. 9 off ramp creates poor pedestrian sight distance for pedestrians crossing.	High



RSA Team's Recommendation	Cost	Potential Safety Benefit
Investigate relocation of crosswalk to provide for	Low	High
better sight distance. Additionally delineate the		
crosswalk with proper signage.		

Issue: Right Turn on Red	Safety Risk	
Description: Currently, right turns on red are allowed out of the mall exit. This maneuver is in conflict with an opposing dual left-turning maneuver, which may cause confusion to right-turning vehicles.	High	
RSA Team's Recommendation	Cost	Potential Safety Benefit
Conduct a formal review of current right turns on red for conflicts and prohibit movement if appropriate.	Low	High

Issue: Lane Line Extensions	Safety Risk	
Description: Lane line extensions can provide guidance for turning vehicles within the intersection and help prevent side swipe crashes.	Medium	
RSA Team's Recommendation	Cost	Potential Safety Benefit
Install lane line extension for dual turning movements within intersection as needed.	Low	High

Issue: Split Phase Left Turns	Safety Risk	
Description: Leading left turns on Ernston Rd. may create conflicts between the turning vehicles.	Medium	
RSA Team's Recommendation	Cost	Potential Safety Benefit
Investigate adding lead left turns or a split phase on Ernston Rd. to provide protection for the left turn movements. In addition, add left turn arrows to the signal.	Low	High

Issue: Advance Guide Signs	Safety Risk	
Description: There is a lack of advance guide signs on the eastbound and westbound approaches to inform motorists of proper lane positioning before reaching the intersection.	L	ow
RSA Team's Recommendation	Cost	Potential Safety Benefit
Install advance guide or trailblazer signs.	Low	High

Issue: Route 9 Sign Blocked	Safety Risk
Description: In the median of the Route 9 ramp, facing the southeast approach is a GSP and Route 9 sign. The GSP sign is knocked down in a way that it blocks the Route 9 sign.	Low



RSA Team's Recommendation	Cost	Potential Safety Benefit
Reinstall GSP sign.	Low	High

Issue: ADA Accessibility	Safety Risk	
Description: It was observed that some curb ramps were not accessible and there were no accessible pedestrian signals.	Medium	
RSA Team's Recommendation	Cost	Potential Safety Benefit
Reconstruct accessible curb ramps and add accessible pedestrian signals.	Low	High

US 9 North/Minimall Drive

Issue: Glare	Safety Risk	
Description: Glare may impair the view of traffic signals during times of sunset and sunrise. The vertical curve at this intersection exacerbates this condition.	High	
RSA Team's Recommendation	Cost	Potential Safety Benefit
Install back plates on all signal faces.	Low	High

Issue: Lane Use Sign	Safety Risk	
Description: Currently, there are no lane use signs at the stop bar on the eastbound and westbound approaches. An advance lane use sign exists for the eastbound approach, located before the channelized right turn. A lane use sign at the stop bar would provide extra emphasis in addition to the pavement markings.	Low	
RSA Team's Recommendation	Cost	Potential Safety Benefit
Install lane use signs on the eastbound and westbound approaches.	Low	Medium

Westminster Boulevard

Issue: Coordination with US 9 NB/Minimall Dr. Signal	Safety Risk	
Description: It was observed that this signal is not optimally coordinated with the signal at US 9 NB/Minimall Drive. Coordinated signals allow for fewer stops and smoother traffic flow.	Low	
RSA Team's Recommendation	Cost	Potential Safety Benefit
Upgrade coordination with US 9NB/Minimall Drive signal to optimize current operations.	Medium	Medium

Issue: Hand on Pedestrian Signal Out	Safety Risk
Description: The hand on the pedestrian signal in the northwest corner facing south is out. Pedestrians may unknowingly cross Ernston Rd. at an inappropriate time.	High



RSA Team's Recommendation	Cost	Potential Safety Benefit
Replace defective pedestrian signal.	Low	High

Issue: Sidewalk Drop-off	Safety Risk		
Description: There is a significant drop-off to the side of the sidewalk on the south side of Ernston	High		
Rd and west of the intersection.			
RSA Team's Recommendation	Cost	Potential Safety Benefit	
Regrade drop-off to eliminate hazard.	Medium	High	

Issue: Pedestrian Push Buttons	Safety Risk		
Description: Pedestrian push button signs at the northwest corner of the intersection are confusing to pedestrians as to which crosswalk they are for.	Medium		
RSA Team's Recommendation	Cost	Potential Safety Benefit	
Reposition pedestrian buttons to meet ADA and MUTCD standards.	Low	High	

Potential Funding Sources

In this economy, budget constraints may hamper the implementation of some of these recommendations. Finding alternative funding sources is critical to ensuring the investment in the safety of the intersection's users.

Local Funding Sources:

Roadway Owner's Maintenance and Operation Budget:

Existing funds from local and county sources, as appropriate, which are allocated for investment in maintenance and operational activity, can be used to implement above suggestions. Many of the above countermeasures may be eligible for the appropriate use of these existing funds. The manager of these funds who understands the full budget picture should be consulted.

State Funding Sources:

Contact:

NJDOT Local Aid District 2 Office 153 Halsey Street - 5th floor Newark, NJ 07102 Phone: 973-877-1500

Fax: 973-877-1556

Municipal Aid/Urban Aid Program (NJDOT Local Aid):

http://www.state.nj.us/transportation/business/localaid/municaid.shtm

This program has been a significant resource for municipalities in funding local transportation projects. All municipalities are eligible. The department continues to encourage municipalities to consider using the Municipal Aid Program to fund projects that support walking and biking in their communities. NJDOT has set a goal to award up to 10 percent of the Municipal Aid Program funds to projects such as pedestrian safety improvements, bikeways, and streetscapes.³

Local Aid Infrastructure Fund (Discretionary Aid):

http://www.state.nj.us/transportation/business/localaid/descrfunding.shtm

Subject to funding appropriation, a discretionary fund is established to address emergencies and regional needs throughout the state. Any county or municipality may apply at any time. These projects are approved at the discretion of the commissioner. Payment of project costs is the same as the Municipal Aid Program. Under this program a county or municipality may also apply for funding for local pedestrian safety and bikeway projects⁴.

http://www.state.nj.us/transportation/business/localaid/documents/2011Letter.pdf

³ Local Aid Letter Dated June 18, 2010, available publicly:

⁴ NJDOT TTF State Aid Handbook available publicly:

Safe Streets to Transit:

http://www.state.nj.us/transportation/business/localaid/safe.shtm

The intent of this program is to encourage counties and municipalities to construct safe and accessible pedestrian linkages to transit facilities in order to promote increased usage of transit by all segments of the population.

NJDOT Centers of Place Program:

http://www.state.nj.us/transportation/business/localaid/safe.shtm

The program provides a funding opportunity to municipalities that have been designated as a Center of Place by the New Jersey Department of Community Affairs to obtain funding for nontraditional transportation improvements that advance municipal smart growth management objectives. Eligible program projects include Pedestrian and Bicycle Facilities, Scenic or Historic Transportation Programs, Parking and Circulation Management, Landscaping/Beautification of Transportation Related Facilities, Rehabilitation of Publicly-Owned Transportation Structures

Contact:

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Email: bableman@dca.state.nj.us

Office of Smart Growth Downtown Business Improvement Zone Loan Fund

http://www.nj.gov/state/planning/docs/techassist071506.pdf

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Email: <u>ljulian@dca.state.nj.us</u>

NJDCA Office of Smart Growth Downtown Business Improvement Zone Loan Fund

http://www.state.nj.us/dca/divisions/dhcr/offices/comact.html

Awards funds to agencies for provision of health, education, employment and housing and other services to low-income population of New Jersey. Ninety percent of the annual allocation must go to designated community action agencies (CAA's).

Federal Funding Sources via NJDOT Office of Local Aid:

Contact:

NJDOT Local Aid District 2 Office 153 Halsey Street - 5th floor Newark, NJ 07102 Phone: 973-877-1500

Fax: 973-877-1556

Safe Routes to Schools (SRTS):

http://www.state.nj.us/transportation/business/localaid/srts.shtm

The federal-aid SRTS program provides federal-aid highway funds to State Departments of Transportation over five fiscal years (FY2005–FY2009). The program targets schools for grades K–8 only. The main objectives of the program are:

- to enable and encourage children, including those with disabilities, to walk and bicycle to school;
- to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and
- to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

Funds are available for a variety of both infrastructure and non-infrastructure projects that benefit elementary and middle school children in grades K–8 in both public and private schools. The infrastructure portion can fund design, construction, and planning of the proposed improvements, while the non-infrastructure portion would fund activities that encourage walking and bicycling to school.

Applicants to this program must submit separate applications for infrastructure and non-infrastructure projects.

Selection of SRTS projects involves the participation of civic, education, and environmental groups, the transportation community, and other government organizations such as the state's Metropolitan Planning Organizations.

<u>Federal Funding Sources via North Jersey Transportation Planning Authority</u> (NJTPA):

Contact:

North Jersey Transportation Planning Authority One Newark Center, 17th Floor Newark, NJ 07102

Phone: 973-639-8400 Fax: 973-639-1953

Local Safety Program:

http://www.njtpa.org/Project/Devel/local_safety/default.aspx

The federally funded Local Safety Program (LSP) is a component of wider safety planning at the NJTPA, supporting construction of quick-fix, high-impact safety improvements on county and local roadway facilities in the NJTPA region. Projects supported by this program have included new and upgraded traffic signals, signage, pedestrian indications, crosswalks, curb ramps, pavement markings, and other improvements to increase the safety of drivers, bicyclists, and pedestrians.

The Local Safety Program:

- typically addresses NJTPA and/or NJDOT derived high priority crash locations on county or local roadways,
- supports quick-fix projects, backed with detailed crash data, with minimal or no environmental or cultural resource impacts (eligible for programmatic categorical exclusion from FHWA), and
- funds the construction phase of work only— planning, design, and right-of-way acquisition are the responsibility of the sponsor.

Local CMAQ Mobility Initiatives:

http://www.njtpa.org/Project/Mobility/CMAQ/CMAQMobility.aspx

The federal Congestion Mitigation and Air Quality (CMAQ) program provides funds to reduce roadway congestion and reduce single occupancy auto usage in order to lessen the level of pollutants and greenhouse gases generated through the use of fossil fuels. The NJTPA has established the Local CMAQ Mobility Initiatives program to help meet these goals, including ridesharing, transit usage, travel demand management, and traffic mitigation projects. Proposals must implement strategies and policies in the Regional Transportation Plan, Plan 2035.

RSA Team's Conclusion

The RSA Team's recommendations suggested in this report should improve the safety of the intersection. Many of the recommendations can be implemented through routine maintenance, while others will take more time and investment. However, physical improvements alone will not eliminate the safety issues identified.

A combined effort of public education and police enforcement is necessary to make this intersection a safer place for all its users. Education about traffic safety in public schools, such as drivers' education courses in high school, and distributing informational pamphlets to pedestrians are just a sample of the different educational campaigns that can benefit road users. Enforcement, especially in the areas of parking and pedestrian right-of-way, can go a long way in reducing crashes and alerting drivers of the seriousness of being safety conscious. Officers may also hand out pamphlets during routine traffic stops to educate motorists of changes in traffic laws.

Appendix A

Raw Crash Data

Ernston Rd and Washington

ALCOHOL	CELL	CRASH	CRASH		ENVIRONMENTAL	LIGHT	PEDESTRIANS	PEDESTRIANS		SURFACE	TOTAL	TOTAL	TOTAL VEHICLES
INVOLVED	IN USE	DATE	TIME	CRASH TYPE	CONDITION	CONDITION	INJURED	KILLED	SEVERITY	CONDITION	INJURED	KILLED	INVOLVED
No	No	6/12/2008	2:20 PM	Fixed Object	Clear	Daylight Dark	0	0	Property Damage	Dry	0	0	2
Yes	No	6/16/2008	11:28 PM	Same Direction - Rear End	Clear	(Street Lights On/ continuous)	0	0	Property Damage	Dry	0	0	2
No	No	7/25/2008	10:58 AM	Same Direction - Rear End	Clear	Daylight	0	0	Property Damage	Dry	0	0	2
No	No	10/7/2008	8:03 AM	Left Turn / U Turn	Clear	Daylight	0	0	Property Damage	Dry	0	0	2
Yes	No	10/24/2008	9:49 PM	Left Turn / U Turn	Clear	Dark (Street Lights On/ continuous)	0	0	Property Damage	Dry	0	0	2
No	No	11/14/2008	1:43 PM	Right Angle	Overcast	Daylight	0	0	Property Damage	Wet	0	0	2
No	No	11/14/2008	8:31 PM	Left Turn / U Turn	Rain	Dark (Street Lights On/ continuous)	0	0	Injury	Wet	1	0	2
No	No	12/2/2008	6:17 PM	Same Direction - Rear End	Clear	Dark (Street Lights On/ continuous)	0	0	Property Damage	Dry	0	0	2
No	No	12/16/2008	10:02 AM	Same Direction - Rear End	Rain	Daylight	0	0	Property Damage	Wet	0	0	2
No	No	2/21/2008	6:13 PM	Left Turn / U Turn	Clear	Dark (Street Lights On/ continuous)	0	0	Property Damage	Dry	0	0	2
No	No	3/7/2008	5:50 PM	Left Turn / U Turn	Rain	Dark (Street Lights On/ continuous)	0	0	Property Damage	Wet	0	0	2
No	No	10/23/2008	4:40 PM	Same Direction - Rear End	Clear	Daylight	0	0	Property Damage	Dry	0	0	2

No	No	4/22/2008	1:12 PM	Right Angle	Clear	Daylight	0	0	Property Damage	Dry	0	0	2
INU	INU	4/22/2006	8:17	Right Angle	Clear	Daylight Dark (Street Lights On/		U	Damage				
No	No	4/22/2008	PM	Pedestrian	Clear	continuous)	1	0	Injury	Dry	1	0	1
No	No	6/6/2008	10:38 PM	Right Angle	Clear	Dark (Street Lights On/ continuous)	0	0	Injury	Dry	1	0	2
No	No	8/4/2008	6:43 PM	Same Direction - Rear End	Clear	Daylight	0	0	Injury	Dry	1	0	2
No	No	10/21/2008	5:28 PM	Same Direction - Rear End	Clear	Daylight	0	0	Property Damage	Dry	0	0	3
No	No	10/28/2008	4:47 PM	Same Direction - Rear End	Rain	Daylight	0	0	Property Damage	Wet	0	0	2
No	No	11/7/2008	1:00 PM	Same Direction - Rear End	Overcast	Daylight	0	0	Property Damage	Dry	0	0	2
No	No	12/11/2008	6:26 PM	Right Angle	Rain	Dark (Street Lights On/ continuous)	0	0	Property Damage	Wet	0	0	2
No	No	2/3/2009	6:58 PM	Same Direction - Rear End	Snow	Dark (Street Lights On/ spot)	0	0	Property Damage	Snowy	0	0	2
INU	INU	2/3/2009	FIVI	Same	Silow	Spot)		U	Damage	Silowy	U	U	
		0/0/0000	1:58	Direction -		5 " 1.			Property	_			
No No	No No	2/6/2009	5:43 PM	Rear End Right Angle	Clear	Daylight Dark (Street Lights On/ continuous)	0	0	Damage Property Damage	Dry	0	0	2
			12:35	Opposite Direction - Head		Dark (Street Lights On/				-			
No	No	6/21/2009	AM	On/Angular	Rain	continuous)	0	0	Injury	Wet	1	0	2
No	No	1/14/2009	2:07 PM	Same Direction - Rear End	Clear	Daylight	0	0	Injury	Dry	1	0	2
No	No	2/18/2009	7:07 PM	Right Angle	Rain	Dark (Street Lights On/ continuous)	0	0	Property Damage	Wet	0	0	2

			0:40			Dark							
No	No	4/23/2009	9:18 PM	Pedestrian	Clear	(Street Lights Off)	1	0	Injury	Dry	1	0	1
No	No	4/27/2009	4:08 PM	Fixed Object	Clear	Daylight	0	0	Property Damage	Dry	0	0	1
NI-	NI-	4/00/0000	2:18	Daalda a	Cl	Davidant	0	0	la:a.	D		0	
No	No	4/28/2009	PM	Backing Same	Clear	Daylight	0	0	Injury	Dry	2	0	2
No	No	4/30/2009	3:25 PM	Direction - Rear End	Clear	Daylight	0	0	Property Damage	Dry	0	0	2
No	No	7/12/2009	10:38 PM	Left Turn / U Turn	Clear	Daylight	0	0	Property Damage	Dry	0	0	2
INO	INO	7712/2009		Same	Oleai	Dayligitt		U					<u>_</u>
No	No	8/26/2009	1:56 PM	Direction - Rear End	Clear	Daylight	0	0	Property Damage	Dry	0	0	2
			2:58	Same Direction -									
No	No	9/11/2009	PM	Rear End	Rain	Daylight	0	0	Injury	Wet	2	0	3
No	No	10/27/2009	10:41 AM	Backing	Rain	Daylight	0	0	Property Damage	Wet	0	0	2
			11:50	Same Direction -			-		<u> </u>				
No	No	11/3/2009	AM	Rear End	Clear	Daylight	0	0	Injury	Dry	1	0	2
			6:50	Same Direction -					Property				
No	No	12/18/2009	AM	Rear End	Clear	Daylight	0	0	Damage	Dry	0	0	2
No	No	8/21/2009	9:42 AM	Fixed Object	Clear	Daylight	0	0	Property Damage	Dry	0	0	1
			6:05	Same Direction -					Property				
No	No	9/16/2009	PM	Rear End	Clear	Daylight	0	0	Damage	Dry	0	0	2
			9:29	Same Direction -					Property				
No	No	9/19/2009	AM	Rear End Same	Clear	Daylight	0	0	Damage	Dry	0	0	2
Na	N-	0/4/0040	4:01	Direction -	Class	Davdiaht	0	0	Property	D			
No	No	2/1/2010	PM 12:14	Rear End	Clear	Daylight	0	0	Damage Property	Dry	0	0	2
No	No	2/19/2010	PM	Right Angle Same	Clear	Daylight	0	0	Damage	Dry	0	0	2
		= /a /a a · ·	3:54	Direction -				_					_
No	No	7/8/2010	PM	Rear End Same	Clear	Daylight	0	0	Injury	Dry	1	0	2
No	No	2/1/2010	4:50 PM	Direction - Rear End	Clear	Daylight	0	0	Property Damage	Dry	0	0	2
			11:10	Left Turn /					Property				
No	No	2/3/2010	AM	U Turn	Clear	Daylight	0	0	Damage	Dry	0	0	2

No	No	4/15/2010	7:05 PM	Same Direction - Rear End	Clear	Dusk	0	0	Property Damage	Dry	0	0	2
INO	INO	4/13/2010		Same	Oleai	Dusk	U						<u>_</u> _
No	No	1/14/2010	4:12 PM	Direction - Rear End	Clear	Daylight	0	0	Property Damage	Dry	0	0	2
		_ / /	6:05					_	Property			_	
No	No	5/27/2010	PM	Right Angle Opposite	Clear	Daylight	0	0	Damage	Dry	0	0	2
			4:02	Direction - Head									
No	No	6/2/2010	PM	On/Angular	Clear	Daylight	0	0	Injury	Dry	2	0	2
No	No	7/19/2010	4:21 PM	Opposite Direction - Side Swipe	Clear	Daylight	0	0	Property Damage	Dry	0	0	2
		1710,2010		Same			<u> </u>						
No	No	8/4/2010	6:34 PM	Direction - Rear End	Clear	Dusk	0	0	Property Damage	Dry	0	0	2
			10:25	Fixed			_	_	Property	_	_	_	
No	No	8/24/2010	AM	Object	Clear	Daylight Dark	0	0	Damage	Dry	0	0	1
No	No	9/26/2010	10:45 PM	Same Direction - Rear End	Clear	(Street Lights On/ continuous)	0	0	Injury	Dry	1	0	2
INU	INU	9/20/2010	FIVI	Real Lilu	Oleai	Dark	U	<u> </u>	Піјшу	. Diy		U	
No	No	11/10/2010	6:19 PM	Left Turn / U Turn	Clear	(Street Lights On/ continuous)	0	0	Property Damage	Dry	0	0	2
			6:44	Same Direction -					Property				
No	No	12/1/2010	AM	Rear End	Rain	Dawn	0	0	Damage	Wet	0	0	2
			2:43	Same Direction -					Property				
No	No	11/25/2010	PM	Rear End	Rain	Daylight	0	0	Damage	Wet	0	0	2
No	No	12/9/2010	7:47 AM	Pedalcyclist	Clear	Daylight	0	0	Injury	Dry	1	0	1
				Same		Dark (Street							
No	No	12/16/2010	6:07 PM	Direction - Rear End	Clear	Lights On/ continuous)	0	0	Property Damage	Dry	0	0	2
Yes	No	5/24/2006	7:11 PM	Pedestrian	Clear	Daylight	1	0	Injury	Dry	1	0	1

Ernston Rd & Villanova

ALCOH OL													
INVOL VED	CELLPHONE INUSE	CRASHD ATE	CRASHT IME	CRASHT YPE	ENVIRONMENTALC ONDITION	LIGHTCON DITION	PEDESTRIANSI NJURED	PEDESTRIANS KILLED	SEVE RITY	SURFACECON DITION	TOTALINJ URED	TOTALKI LLED	TOTALVEHICLESI NVOLVED
No	No	1/9/200 8	1:27 PM	Fixed Object	Clear	Daylight	0	0	Injury	Dry	1	0	2
No	No	2/19/20 08	9:22 AM	Right Angle	Clear	Daylight	0	0	Prop erty Dam age	Dry	0	0	2
No	No	3/15/20 08	12:02 PM	Same Directio n - Rear End	Clear	Daylight	0	0	Injury	Dry	2	0	2
No	No	2/19/20 08	9:22 AM	Right Angle	Clear	Daylight	0	0	Prop erty Dam age	Dry	0	0	2
No	No	5/9/200	1:03 PM	Right Angle	Clear	Daylight	0	0	Prop erty Dam age	Dry	0	0	2
No	No	12/31/2 009	8:06 AM	Same Directio n - Rear End	Snow	Daylight	0	0	Prop erty Dam age	Snowy	0	0	2
No	No	3/22/20 10	3:45 PM	Opposi te Directio n - Head On/Ang ular	Rain	Daylight	0	0	Prop erty Dam age	Wet	0	0	2
No	No	4/17/20 10	8:38 PM	Right Angle	Clear	Dark (Street Lights On/ spot)	0	0	Prop erty Dam age	Dry	0	0	2
No	No	5/7/201 0	3:58 PM	Opposi te Directio n - Head On/Ang ular	Clear	Daylight	0	0	Prop erty Dam age	Dry	0	0	2

No	No	7/15/20 10	7:33 PM	Same Directio n - Rear End	Clear	Daylight	0	0	Injury	Dry	1	0	3
Yes	No	9/8/201 0	7:08 PM	Opposi te Directio n - Side Swipe	Clear	Daylight	0	0	Prop erty Dam age	Dry	0	0	2
Yes	No	10/7/20 09	3:17 PM	Fixed Object	Clear	Daylight	0	0	Prop erty Dam age	Dry	0	0	2

Ernston & 9N

ALCOHOL INVOLVED	CELL PHONE	CRASH DATE	CRASH TIME	CRASHTYPE	ENVIRONMENTALC ONDITION	LIGHTCONDITION	SEVERITY	SURFACECON DITION	TOTALINJ URED	TOTALKI LLED	TOTAL VEHICLES INVOLVED
No	No	3/14/2 010	11:38 AM	Same Direction - Rear End	Clear	Daylight	Property Damage	Dry	0	0	2
No	No	4/19/2 008	10:10 PM	Right Angle	Clear	Dark (Street Lights On/ continuous)	Property Damage	Dry	0	0	2
No	No	5/19/2 008	10:14 AM	Left Turn / U Turn	Clear	Daylight	Injury	Dry	2	0	2
No	No	5/12/2 009	12:47 PM	Fixed Object	Clear	Daylight	Injury	Dry	1	0	2

Ernston & 9S

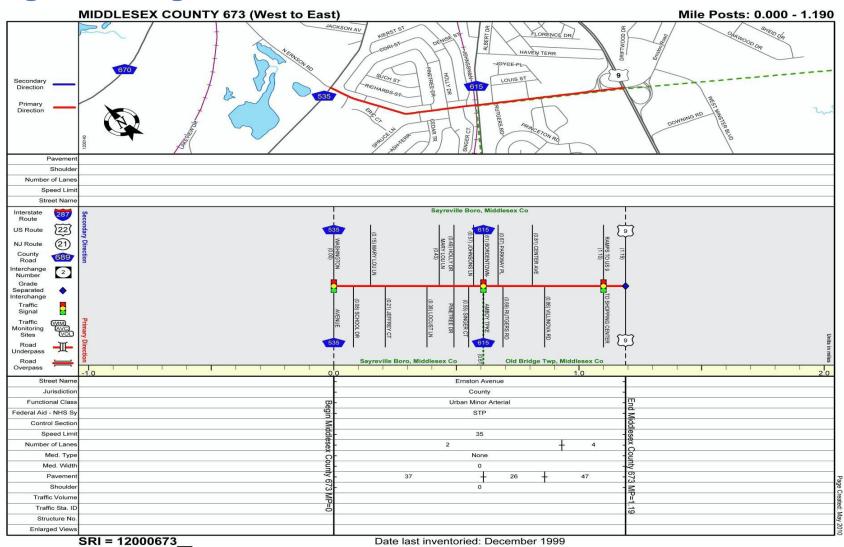
ALCOH							DEDECTRI						
OL INVOL	CELLPHONEI	CRASHD	CRASHT	CRASHTY	ENVIRONMENTALCO	LIGHTCOND	PEDESTRI ANS	PEDESTRIANS	SEVER	SURFACECON	TOTALINJ	TOTALKI	TOTALVEHICLESIN
VED	NUSE	ATE	IME	PE	NDITION	ITION	INJURED	KILLED	ITY	DITION	URED	LLED	VOLVED
		9/30/20	5:50	Pedalcy						_			
No	No	08	PM	clist	Clear	Daylight Dark	0	0	Injury	Dry	1	0	1
No	No	10/11/2 008	7:13 PM	Pedalcy clist	Clear	(Street Lights On/ continuous	0	0	Injury	Dry	1	0	1
		4/27/20	8:07	Pedestri		Dark (Street Lights On/							
No	No	10	PM	an	Clear	spot)	1	0	Injury	Dry	1	0	1
No	No	6/25/20 10	1:30 PM	Opposit e Directio n - Head On/Ang ular	Clear	Daylight	0	0	Prope rty Dama ge	Dry	0	0	2
No	No	4/30/20 10	4:09 PM	Same Directio n - Rear End	Clear	Daylight	0	0	Prope rty Dama ge	Dry	0	0	2
No	No	8/6/201 0	12:10 PM	Same Directio n - Rear End	Unknown	Daylight	0	0	Prope rty Dama ge	Dry	0	0	3
No	No	8/15/20 10	12:17 PM	Same Directio n - Rear End	Overcast	Daylight	0	0	Injury	Dry	1	0	2
No	No	12/29/2 008	5:17 PM	Left Turn / U Turn	Clear	Dark (Street Lights On/ continuous)	0	0	Injury	Dry	2	0	2
No	No	11/25/2 010	2:59 PM	Same Directio n - Rear End	Rain	Daylight	0	0	Injury	Wet	1	0	3
No	No	3/29/20 08	1:32 PM	Same Directio n - Rear End	Clear	Daylight	0	0	Prope rty Dama ge	Dry	0	0	3

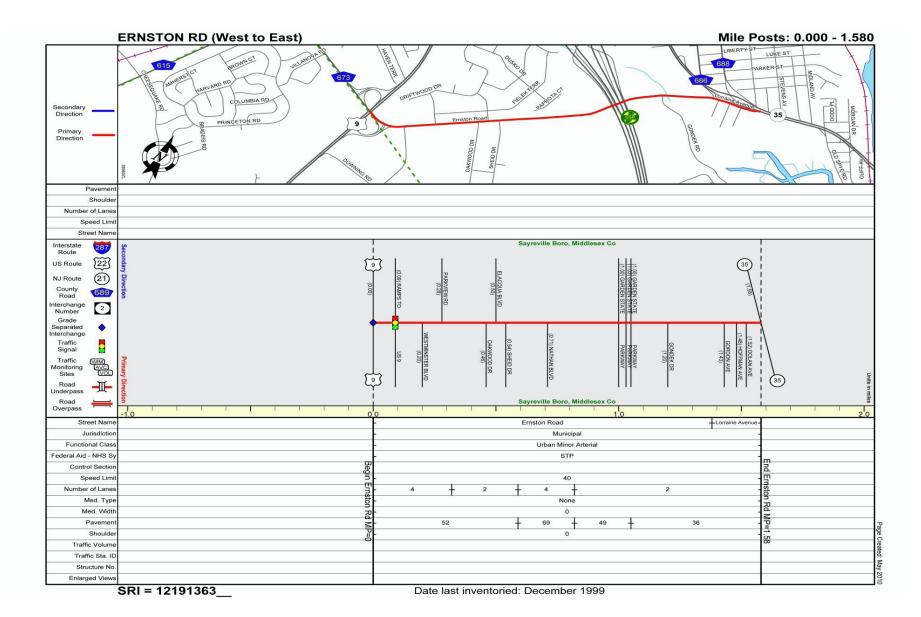
Ernston & Westminster

ALCOH OL INVOLV ED	CELLPHONEI NUSE	CRASHD ATE	CRASHTI ME	CRASH TYPE	ENVIRONME NTAL CONDITION	LIGHTCONDI TION	PEDESTRIANSINJ URED	PEDESTRIANSKI LLED	SEVERI TY	SURFACECONDI TION	TOTALINJU RED	TOTALKIL LED	TOTAL VEHICL ES INVOLV ED
No	No	1/12/200	10:37 AM	Same Directio n - Side Swipe	Clear	Daylight	0	0	Prope rty Dama ge	Dry	0	0	2
No	No	5/8/2008	1:49 PM	Same Directio n - Side Swipe	Clear	Daylight	0	0	Prope rty Dama ge	Dry	0	0	2
No	No	8/30/200 8	1:45 PM	Same Directio n - Side Swipe	Clear	Daylight	0	0	Prope rty Dama ge	Dry	0	0	2
No	No	5/9/2008	10:06 AM	Left Turn / U Turn Same	Rain	Daylight	0	0	Prope rty Dama ge	Wet	0	0	2
No	No	7/3/2008	5:08 PM	Directio n - Side Swipe	Clear	Daylight Street	0	0	Prope rty Dama ge	Dry	0	0	2
No	No	10/16/20 09	6:45 AM	Pedestri an	Rain	Dark (Street Lights On/ spot) Dark (No	0	0	Injury	Wet	1	0	1
No	No	11/19/20 09	5:55 PM	Pedestri an Same	Clear	Street Lights)	1	0	Injury Prope	Dry	1	0	1
No	No	7/24/200 9	11:26 PM	Directio n - Side Swipe	Clear	Dark (Street Lights On/ continuous) Dark (Street	0	0	rty Dama ge	Dry	0	0	2
Yes	No	2/17/201 0	6:57 PM	Pedestri an	Clear	Lights On/ continuous)	1	0	Injury	Wet	1	0	1

Appendix B

Straight Line Diagrams





Appendix C

To East Brunswick/Woodbridge Center

Weekday	S
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		3 - 3			- 7				
NEW BRUNSWICK Somerset St. at George St.	NEW BRUNSWICK Burnet St. at Tunison Rd.	EAST BRUNSWICK Old Bridge Turnpike at Prospect St.	SOUTH RIVER Main at Jackson St.	SAYREVILLE Washington Rd. at Ernston Rd.	SOUTH AMBOY (Rail Station) Broadway at John St.	PERTH AMBOY Rector St. at Washington St.	PERTH AMBOY High St. at Smith St.	WOODBRIDGE Main St. at Amboy Ave.	WOODBRIDGE Woodbridge Center Mall
				MAP REF	ERENCE				- 1
1	3	4	6	7	8	9	10	11	12
-	-	-	523	535	545	-	600	615	620
600	615	625	633	645	655	-	710	725	730
- 600 700	- 615 715 815	625 725 825	633 733 833	745	655 755 855	-	810	825 925	830 930
800	815	825	833	845	855	-	910	925	930
-	-	-	-	-	-	937 - 1037	940	955	1000
900	915	925	933	945	955	-	1010	1025	1030
-	-	-	-	-	-	1037	1040	1055	1100
1000	- 1015 -	925 - 1025	1033	- 1045 -	1055	1137	1110	1125 1155	1130 1200
- 1100	-	-	- 1133	-	-	1137	1140	1155	1200
1100	1115	1125	1133	1145	1155	-	1210	1225	1230
-	-	-	-	-	-	1237	1240	1255	100
1200	1215 -	1225	1233	1245	1255 -	-	110	125	130
-	=	1225 - 125	-	-	-	137	140	155	200 230
1200 - 100	115	125	133	145	155	237	210	155 225 255	230
- 200	- 215	- 225 -	- 233	-	- 255 -	237	240	255	300
200	215	225	233	245	255	-	310	325 355	330
-	-		-		-	337 -	340	355	400
300	322	332	340	352	402	-	417	432 455	437 500
-	-	-	-	-	-	437	440	455	500
400	422	432	440	452	502	- 537	517	532	537
- 500 553	- 522 615	-	-	-	7	537	540	555	600
500	522	532	540	552	602	-	617	632	637
553	615	532 625 725	633	645 745	- 602 655 755	-	710	725	637 730 830
700	715	725 825	733	745	755 855	-	810	825	830
800	815	825	833	845	855	-	910	925	930

NOTE: For additional service between the Mid-State Mall and New Brunswick, please consult NJ TRANSIT's 818 Schedule.

All trips are operated with life-equipped buses. NOTE-when traveling into or out of the Port Authority Bus Terminal or George Washington Bridge Bus Station, please call 1.2732 275-5555 in advance for the location of an accessible boarding gate.

Saturdays

NEW BRUNSWICK Somerset St. at George St.	NEW BRUNSWICK Burnet St. at Tunison Rd.	EAST BRUNSWICK Old Bridge Turnpike at Prospect St.	SOUTH RIVER Main at Jackson St.	SAYREVILLE Washington Rd. at Ernston Rd.	SOUTH AMBOY (Rail Station) Broadway at John St.	PERTH AMBOY High St. at Smith St.	WOODBRIDGE Main St. at Amboy Ave.	WOODBRIDGE Woodbridge Center Mall
			MAP		NCE			
1	3	4	6	7	8	9	11	12
800	815	825	833	845	855	910	925	930
915	930	940	948	1000	1010	1025	1040	1045
1030	1045	1055	1103	1115	1125	1140	1155	1200
1145	1200	1210	1218	1230	1240	1255	110	115
100	115	125	133	145	155	210	225	230
215	230	240	248	300	310	325	340	345
330	345	355	403	415	425	440	455	500
445	500	510	518	530	540	555	610	615
600	615	625	633	645	655	710	725	730
715	730	740	748	800	810	825	840	845
815	830	840	848	900	910	925	940	945

A.M. - Light face type

P.M. - Bold face type

Fare Information

This is an exact fare line. Passengers are required to have exact fare when boarding buses on this line. One dollar bills and most U.S. coins are accepted. Drivers do not carry money and cannot make change.

How to determine your fare

Your fare is based on the number of zones you travel through. Check the map on this schedule to see how many zones you travel. Each time you cross a zone boundary, you must pay for another zone.

Cash Fares

Zone	1	2	3	4	Transfer
Adult	\$1.50	\$2.35	\$2.90	\$3.50	\$0.70
Children & Sr. Citizens	\$0.70	\$1.05	\$1.30	\$1.60	\$0.35

Transfers must be purchased when boarding bus.
For additional information about the NJ TRANSIT bus fares and ticket options, please consult the NJ TRANSIT Bus Rider Guide or our website, www.njtransit.com

Sundays

NEW BRUNSWICK Somerset St. at George St.	NEW BRUNSWICK Burnet St. at Tunison Rd.	EAST BRUNSWICK Old Bridge Turnpike at Prospect St.	SOUTH RIVER Main at Jackson St.	SAYREVILLE Washington Rd. at Ernston Rd.	SOUTH AMBOY (Rail Station) Broadway at John St.	SAYREVILLE - Faith Fellowship Ministries Main St. Ext. at Chevalier Ave.	PERTH AMBOY High St. at Smith St.	WOODBRIDGE Main St. at Amboy Ave.	WOODBRIDGE Woodbridge Center Mall
				MAP REF	ERENCE				1 3
1	3	4	6	7	8	13	9	11	12
848	858	908	916	928	938	946	958	1013	1018
1003	1013	1023	1031	1043	1053	1101	1113	1128	1133
1118	1128	1138	1146	1158	1208	1216	1228	1243	1248
1233	1243	1253	101	113	123	131	143	158	203
148	158	208	216	228	238	246	258	313	318
303	313	323	331	343	353	401	413	428	433
428	438	448	456	508	518	526	538	553	558

Holiday Service Guide

Holiday Schedule in Effect New Year's Day - Jan. 1** Martin Luther King Jr. Day Weekday Presidents' Day Good Friday Weekday Weekday Sunday Easter Memorial Day Sunday Independence Day - July 4** Sunday Sunday Columbus Day Weekday Veterans Day Wednesday Before Thanksgiving Thanksgiving Day Friday After Thanksgiving Regular service See website for details No Service Weekday Christmas Eve See website for details Christmas Day - Dec. 25** No Service New Year's Eve See website for details

***Observed Holidays - When this holiday falls on a weekend, a special schedule will be operated on the observed holiday. Please check our website at www.njtransit.com to confirm the schedule in effect on holidays.







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ew Brunswick ↔ East Brunswick ↔ Woodbridge Ctr.

BUS



Important Changes what's new for riders

New map adjustments made to street names.

Contact Us we're here to help

Customer Service

Commendations/Complaints Schedules, Fares and Lost & Found NJTransit Information

1 (973) 275-555Text Telephone (TT) (800) 772-2287

www.njtransit.com

To New Brunswick

Weekdays

WOODBRIDGE Woodbridge Center Mall	WOODBRIDGE Amboy Ave. at Main St.	PERTH AMBOY Rector St. at Washington St.	PERTH AMBOY Smith St. at High St.	SOUTH AMBOY (Rail Station) Broadway at John St.	SAYREVILLE Washington Rd. at Ernston Rd.	SOUTH RIVER Main St. between Wilcox/Devoe	EAST BRUNSWICK Old Bridge Turnpike at Prospect St.	NEW BRUNSWICK Burnet St. at Tunison Rd.	NEW BRUNSWICK
			M	AP RE	EREN	CE			
12	11	10	9	8	7	5	4	3	2
-		-	545	600	610	623	630	640	65
630	635	-	650	705	715	728	735	745	80
745	750	-	805	820	830	843	850	900	91
845	850	-	905	920	930	943	950	1000	101
915	920	935	-	-	-	-	-	-	-
945	950	-	1005	1020	1030	1043	1050	1100	111
1015	1020	1035	-	-	-	-	-	-	-
1045	1050	-	1105	1120	1130	1143	1150	1200	121
1115	1120	1135	-	-	-	-	-	-	>=
1145	1150	-	1205	1220	1230	1243	1250	100	11!
1215	1220	1235	-	-	-	-	-	-	-
1245	1250	-	105	120	130	143	150	200	21!
115	120	135	-	-	-	-	-	-	-
145	150	-	205	220	230	243	250	300	315
215	220	235	-	-	-	77	-	-	-
245	250	-	305	320	330	343	350	400	41
315	320	335	-	-	=	-	-	-	-
345	350	1-	405	420	430	443	450	500	51
415	420	435	15Th	-	=	©₹:	-	77.	1.75
445	450	-	505	520	530	543	550	600	61
515	520	535	-	-	-	-	-	-	-
545	550	-	605	620	630	643	650	700	71
645	650	-	705	720	730	743	750	800	81
745	750	-	805	820	830	843	850	900	91
845	850	-	905	920	930	943	950	1000	101
1015	1020	-	1035	1050	1100	1113	1120	1130	114

A.M. - Light face type

P.M. - Bold face type

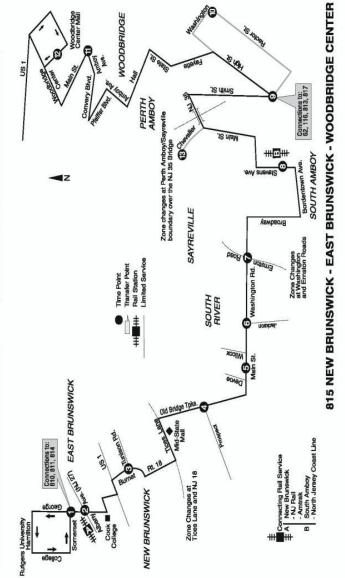
NOTE: For additional service between the Mid-State Mall and New Brunswick, please consult NJ TRANSIT's 818 Schedule.

Saturdays

WOODBRIDGE Woodbridge Center Mall	WOODBRIDGE Amboy Ave. at Main St.	PERTH AMBOY Smith St. at High St.	SOUTH AMBOY (Rail Station) Broadway at John St.	SAYREVILLE Washington Rd. at Ernston Rd.	SOUTH RIVER Main St. between Wilcox/Devoe	EAST BRUNSWICK Old Bridge Turnpike at Prospect St.	NEW BRUNSWICK Burnet St. at Tunison Rd.	NEW BRUNSWICK George St. at Albany St.
			MAP	REFER	ENCE			
12	11	9	8	7	5	4	3	2
955	1000	1015	1030	1040	1053	1100	1110	1125
1110	1115	1130	1145	1155	1208	1215	1225	1240
1225	1230	1245	100	110	123	130	140	155
140	145	200	215	225	238	245	255	310
255	300	315	330	340	353	400	410	425
410	415	430	445	455	508	515	525	540
525	530	545	600	610	623	630	640	655
640	645	700	715	725	738	745	755	810
750	755	810	825	835	848	855	905	920
900	905	920	935	945	958	1005	1015	1030
1010	1015	1030	1045	1055	1108	1115	1125	1140

Sundays

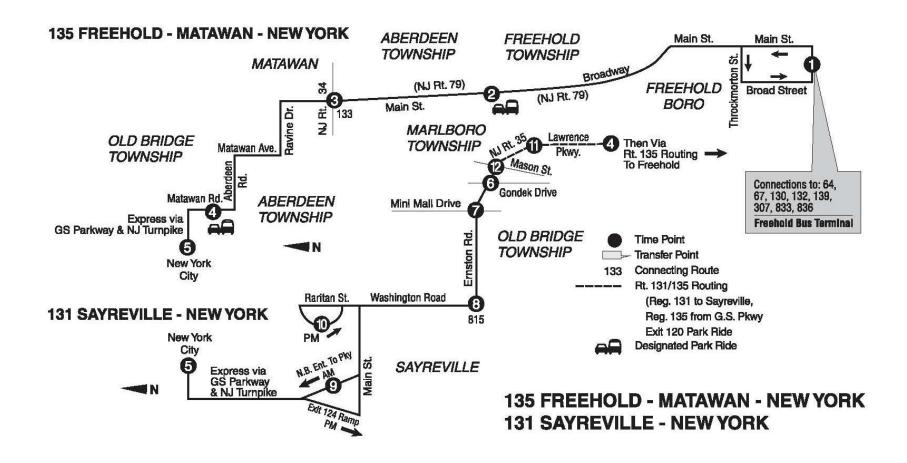
WOODBRIDGE Woodbridge Center Mall	WOODBRIDGE Amboy Ave. at Main St.	PERTH AMBOY Smith St. at High St.	SAYREVILLE - Faith Fellowship Ministrie Main St. Ext. at Chevalier Ave.	SOUTH AMBOY (Rail Station) Broadway at John St.	SAYREVILLE Washington Rd. at Ernston Rd.	SOUTH RIVER Main St. between Wilcox/Devoe	EAST BRUNSWICK Old Bridge Turnpike at Prospect St.	NEW BRUNSWICK Burnet St. at Tunison Rd.	NEW BRUNSWICK George St. at Albany St.
-	00 00		М	AP RE	FEREN	Œ			
12	11	9	13	8	7	5	4	3	2
1048	1053	1108	1120	1128	1138	1151	1158	1208	1218
1203	1208	1223	1235	1243	1253	106	113	123	133
118	123	138	150	158	208	221	228	238	248
233	238	253	305	313	323	336	343	353	403
348	353	408	420	428	438	451	458	508	518
503	508	523	535	543	553	606	613	623	633
628	633	648	700	708	718	731	738	748	758
728	733	748	800	808	818	831	838	848	858



T0815 - 1/11

NJ Transit Bus #131/135

To New York To Sayreville/Freehold 131/135 Weekdays 131 Weekdays 135 Weekdays AYREVILLE rnston Rd. at Washington Rd. NEW YORK CITY Port Authority Bus Terminal SAYREVILLE Ernston Rd. at Mini Mall Dr. SAYREVILLE Ernston Rd. at Gondek Dr. SAYREVILLE Lorraine Ave. at NJ Rt. 35 MARLBORO School Road Park & Ride SAYREVILLE Ernston Rd. at Gondek Dr. AYREVILLE ayreville Park & Ride MATAWAN Main St. at NJ Rt. 34 FREEHOLD BORO Freehold Center Cont A.M. - Light face type P.M. - Bold face type * - Trip operates via combined 131-135 routing and departs from gate 317 Custor F - Trip operates Friday Only M - Trip operates Monday thru Thursday Only Comm



Academy Bus

