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ROAD SAFETY ASSESSMENT

STONY LANE AT OLD BAPTIST ROAD
NORTH KINGSTOWN, RI

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Prepared for
North Kingstown, RI

In partnership with



RHODE ISLAND PUBLIC TRANSIT AUTHORITY

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Background

The Federal Highway Administration (FHWA) defines a Road Safety Assessment (RSA) – also known as a Road Safety Audit – as the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. The purpose of an RSA is to identify potential safety issues and possible opportunities for safety improvements considering all roadway users.

This RSA evaluates the intersection of Stony Lane and Old Baptist Road in North Kingstown, Rhode Island, as shown in **Figure 1**. The Town's Safe Streets and Roads for All (SS4A) Safety Action Plan (SAP) included this intersection as a targeted location for safety improvements. Safety concerns within the study area have been documented by Town of North Kingstown Staff and requested that the location be studied for potential improvements. A key objective of the RSA is to identify short-term, mid-term, and long-term safety improvements that can be made in the study area and incorporated in potential projects.

Figure 1: Study Area Map



RSA Process

The RSA occurred on Thursday, August 14, 2025, with pre-assessment and post-assessment meetings held at North Kingstown Town Hall. See Appendix A for the RSA agenda. As shown in **Table 1**, the assessment team consisted of members from multiple disciplines, providing expertise in engineering, planning, school transportation operations, transit, maintenance, and emergency response.

Table 1. Participating Assessment Team Members

Assessment Team Member	Agency/Affiliation
Nicole LaFontaine	Town of North Kingstown, Planning and Development Department
Elle Moore	Town of North Kingstown, Planning and Development Department
Aly Sparks	Town of North Kingstown, Department of Public Works
Nicolas Salois	Town of North Kingstown, Police Department
Donald Barrington	Town of North Kingstown, Police Department
Michelle Hulme	Town of North Kingstown, School Department
Julia Evelyn	RIPTA
Harry Vemmer	RIPTA
Megan Fay	RIPTA
Edward Kalunian	RIDOT
Eric Weis	Bowman
Tony Collins	Bowman
Dara Clough	Bowman
Dan Lamere	Bowman

Team members received background materials on August 12, 2025, including the RSA agenda, an RSA study area map, crash diagrams for the study area, a crash summary including figures, and FHWA RSA prompt lists. These materials were reviewed as a group prior to the field visit during a pre-assessment meeting. The pre-assessment meeting included a brief presentation explaining the RSA process and summarizing the crash data. Following this brief presentation, members of the assessment team were asked to discuss the existing issues that may affect safety within the study area. The assessment team then visited the study area as a group, at which time observations of various safety concerns and deficiencies were identified and documented. Upon completion of the field review, participants returned to the meeting space and a post-assessment meeting was held to discuss possible solutions to address the concerns observed during the RSA.

Existing Conditions Summary

The following sections describe the existing roadway and intersection characteristics, traffic control devices, crash data, and speed data within the study area.

Study Area Roadways

Stony Lane

Stony Lane is classified as a major collector running east-west from North Kingstown's border with Exeter to Huling Road (adjacent to Post Road), with one travel lane in each direction. The Stony Lane approaches to Old Baptist Road consist of one general purpose lane. The posted speed limit is a school zone 20 miles per hour (mph) on the eastern side of the intersection and 25 mph west of the intersection. There are no sidewalks along the road and minimal shoulders on either side. The road is striped with double yellow center lines and white edge lines (fog lines). Stony Lane Elementary School is approximately two tenths of a mile east of the intersection. The land use is residential along the corridor.



Stony Lane looking east through the intersection with Old Baptist Road.

Old Baptist Road

Old Baptist Road is classified as a local road that runs north-south from Davisville Road to Ten Rod Road (Route 102), with one travel lane in each direction. The Old Baptist Road approaches to Stony Lane intersection consist of one general purpose lane. The posted speed limit is 25 mph. There are no sidewalks along the road and minimal shoulder on either side. The road is striped with double yellow center lines and white edge lines (fog lines). The Stony Lane Church is approximately one tenth of a mile south of the intersection. The land use is residential along the corridor.



Old Baptist Road looking north through the intersection with Stony Lane.

Study Area Intersections

Stony Lane at Old Baptist Road

The all-way stop-controlled intersection of Stony Lane and Old Baptist Road is under Town of North Kingstown jurisdiction. There are no sidewalks, crosswalks, or curbing at the intersection. The intersection is utilized primarily by people making local trips, taking alternative routes between Ten Rod Road (Route 102) and Frenchtown Road (Route 402), and entering North Kingstown from South County Trail (Route 2). Although traffic volume data were not collected as part of this assessment, the RSA team observed constant vehicular traffic through the intersection. The intersection geometry is skewed so that the four legs of the intersection do not line up as in a traditional four-way intersection. The two approaches of Stony Lane are laterally offset, requiring vehicles traveling through the intersection to execute a reverse curve (S-shaped alignment) to proceed straight. Stop bars and stop signs are present on all four approaches. On the Old Baptist Road southbound approach and the Stony Lane eastbound approach, the stop bars are positioned further back from the intersection than on the remaining two approaches. This may be to accommodate large truck turns.



Aerial view of the Stony Lane at Old Baptist Road Intersection

Crash Data

The Town of North Kingstown Police Department provided crash data for the study area. A total of 13 crashes were reported at the study area intersection between 2019 and 2023. **Figure 2** summarizes crash severity. A total of 3 crashes (23%) resulted in personal injury, while the remaining 10 crashes (77%) had no reported injuries. **Figure 3** shows the various crash types. Angle collisions (12 crashes) were the most common crash type. The other crash was a rear-end collision that occurred on the Stony Lane eastbound approach to Old Baptist Road. All of the crashes that resulted in injuries were angle collisions, with two involving vehicles traveling eastbound on Stony Lane and southbound on Old Baptist Road, and the other angle crash location unknown.

Figure 2: Crash Severity Summary for Study Area Intersections

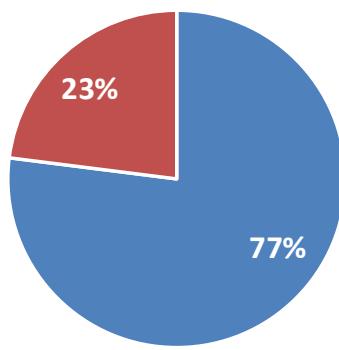
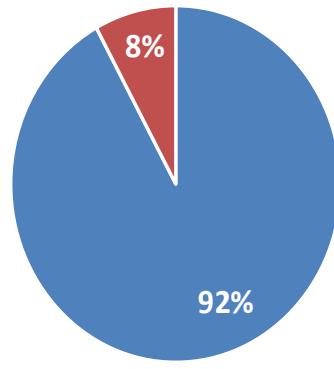


Figure 3: Crash Type Summary for Study Area



Additional crash characteristics at the intersection are as follows:

- 57% of the crashes at the intersection occurred outside of the 9:00 AM to 4:00 PM window of typical roadway peak hours
- 69% of crashes occurred under clear weather, 23% during rain, and 8% in cloudy conditions
- 62% of crashes occurred during the 9:00 AM to 4:00 PM period, while 38% occurred outside of typical daytime hours
- 38% of crashes (5 of 13) involved drivers aged 65 or older
- 23% of crashes (3 of 13) occurred on a wet roadway surface
- 15% of crashes (2 of 13) occurred during dark conditions

A more detailed crash diagram for each of the study area intersections is provided in **Appendix B**.

Observations and Potential Safety Enhancements

Throughout the RSA process, the team discussed and observed several safety concerns for people walking, biking, and driving within the study area. These safety findings, along with potential safety enhancements, are summarized in **Table 2**.



Members of the assessment team discussing observations at the Stony Lane and Old Baptist Road intersection.

Table 2. Summary of Observations and Improvement Options

OBSERVATION	SHORT-TERM IMPROVEMENTS Under 6 months	MID-TERM IMPROVEMENTS Under 2 years	LONG-TERM IMPROVEMENTS Over 2 years
<p>Pedestrian Facilities and Accommodations</p> <p>There are no sidewalks or crosswalks at the intersection. RSA Team members stated that not many people walk in the area, although this could be due to the lack of safe facilities for walking.</p>  <p>Existing intersection geometry makes it difficult to navigate the intersection, especially for people outside of vehicles.</p>	<ul style="list-style-type: none"> Evaluate the feasibility of installing sidewalks along the northern side of Stony Lane from Old Baptist Road to Stony Lane Elementary School. Assess school drop-off and pick-up routines to determine if students and families walk to school. 	<ul style="list-style-type: none"> Install marked crosswalks along all approaches to the intersection, with curb ramps compliant with the Americans with Disabilities Act (ADA) guidelines on both sides of the crosswalks. 	<ul style="list-style-type: none"> Install sidewalks along the northern side of Stony Lane from Old Baptist Road to Stony Lane Elementary School.
<p>Bicycle Facilities and Accommodations</p> <p>There are no dedicated bicycle facilities or accommodations within the study area.</p>	<ul style="list-style-type: none"> Evaluate the feasibility of adding dedicated bicycle facilities along Stony Lane in the vicinity of Stony Lane Elementary School. Assess school drop-off and pick-up routines to determine if students and families currently bike to school or if there is a desire to bike to school. 	N/A	N/A

OBSERVATION	SHORT-TERM IMPROVEMENTS Under 6 months	MID-TERM IMPROVEMENTS Under 2 years	LONG-TERM IMPROVEMENTS Over 2 years
<p>Intersection/Roadway Geometry</p> <p>The intersection geometry limits sight distance along each approach, especially for people traveling along Stony Lane eastbound and Old Baptist Road southbound. This may have been a contributing factor in the angled crashes that occurred (crashes #4, #7, #9, #10, #12, and #13).</p>  <p>Sight lines are limited along the eastbound approach of Stony Lane, especially when looking for vehicles traveling southbound on Old Baptist Road.</p> <p>There are wide turning radii on the eastern Stony Lane leg of the intersection.</p> <p>Motorists often roll through the intersection in lieu of making a complete stop, especially when taking right turns from Old Baptist Road onto Stony Lane heading eastbound.</p>	<ul style="list-style-type: none">Evaluate curb-line modifications to reduce excessively wide turning radii and enhance sight distance on all approaches.Evaluate the types of heavy vehicles utilizing the intersection and ensure the curb-line modifications can accommodate the design vehicle.	<ul style="list-style-type: none">Implement a temporary pilot using water-based pavement markings and flexible delineator posts to simulate tighter intersection geometry. Coordinate with the Fire Department (for fire apparatus) and the School Department (for school bus movements) to test and confirm turning feasibility.	<ul style="list-style-type: none">If feasible based on Mid-term evaluation and pilot project, implement tighter intersection design with hardscape materials.

OBSERVATION	SHORT-TERM IMPROVEMENTS Under 6 months	MID-TERM IMPROVEMENTS Under 2 years	LONG-TERM IMPROVEMENTS Over 2 years
<p>Signage and Striping</p> <p>The stop bars on the eastbound Stony Lane approach and the southbound Old Baptist Road approach are recessed, which restricts the sight distance of people driving to opposing and crossing traffic.</p> <p>RSA team members observed noncompliance with the established right-of-way, with drivers proceeding through the intersection out of turn.</p>	<ul style="list-style-type: none">Install "all-way" plaques compliant with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) underneath the existing stop signs on all four approaches.Install pavement markings to better establish stop positioning. The locations of the stop bars should be determined based on the turning movement paths required for heavy vehicles.		

Summary of Road Safety Assessment

Each potential recommendation was assigned a cost (low, medium, or high) based on the costs shown in **Table 3** below.

Table 3. Cost Categorization

Low	<\$10,000
Medium	\$10,001-\$50,000
High	>\$50,000

A summary of the potential recommendations discussed by the RSA team is provided in **Table 4**. The recommendations are summarized based on the potential time frame, safety payoff, approximate cost, and responsible agency. It should be noted that the safety payoff is a subjective judgment of the potential effectiveness of the safety recommendations listed below.

Table 4. Summary of Potential Safety Enhancements

Safety Issue	Potential Safety Enhancement	Time Frame	Safety Payoff	Cost	Responsible Party
Pedestrian Facilities and Accommodations	Evaluate the feasibility of installing sidewalks along the northern side of Stony Lane from Old Baptist Road to Stony Lane Elementary School.	Short-Term	Low	Medium	Town
	Assess school drop-off and pick-up routines to determine if students and families walk to school.	Short-Term	Low	Low	Town
	Install marked crosswalks along all approaches to the intersection, with curb ramps compliant with the Americans with Disabilities Act (ADA) guidelines on both sides of the crosswalks.	Mid-Term	High	Medium	Town
	Install sidewalks along the northern side of Stony Lane from Old Baptist Road to Stony Lane Elementary School.	Long-Term	High	High	Town
Bicycle Facilities and Accommodations	Evaluate the feasibility of adding dedicated bicycle facilities along Stony Lane in the vicinity of Stony Lane Elementary School.	Short-Term	Low	Low	Town
	Assess drop-off and pick-up routines to determine if students and families currently bike to school or if there is a desire to bike to school.	Short-Term	Low	Low	Town
Intersection/Roadway Geometry	Evaluate curb-line modifications to reduce excessively wide turning radii and enhance sight distance on all approaches.	Short-Term	Low	Low	Town
	Evaluate the types of heavy vehicles utilizing the intersection and ensure the curb-line modifications can accommodate the design vehicle.	Short-Term	Low	Low	Town
	Implement a temporary pilot using water-based pavement markings and flexible delineator posts to simulate tighter intersection geometry. Coordinate with the Fire Department (for fire apparatus) and the School Department (for school bus movements) to test and confirm turning feasibility.	Mid-Term	High	Low	Town
	If feasible based on Mid-term evaluation and pilot project, implement tighter intersection design with hardscape materials.	Long-Term	High	High	Town

Signage and Striping	Install "all-way" plaques compliant with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) underneath the existing stop signs on all four approaches.	Short-Term	Low	Low	Town
	Install pavement markings to better establish stop positioning. The locations of the stop bars should be determined based on the turning movement paths required for heavy vehicles.	Short-Term	Med	Low	Town

Appendix A: RSA Meeting Agenda

North Kingstown, RI - Road Safety Assessment (RSA) Agenda

Meeting Location: 100 Fairway Drive, North Kingstown, RI

Field Visit Locations:

1. Annaquaticket Road
2. Old Baptist @ Stony Lane

AUGUST 14, 2025

PRE-FIELD VISIT MEETING

12:00 PM TO 1:00 PM

- Brief Introductions and discussion of RSA process
- Introduction to study area
- Review of crash data
- Discussion of known issues

FIELD VISIT

1:00 PM TO 2:30 PM

- Drive to High School Parking Lot, walk entrance to High School and sidewalk leading to High School. Drive to Route 1/Annaquaticket Road intersection.
- Observe road user behavior and traffic operations
- Take notes and photos
- Drive to Stony Lane/Old Baptist Road Intersection
- Observe road user behavior and traffic operations
- Take notes and photos
- Drive back to Town Hall Annex

POST-FIELD VISIT MEETING

2:30 PM TO 3:30 PM

- Discussion of observations
- List safety issues and develop potential solutions
- Timeline for drafting and finalizing RSA report

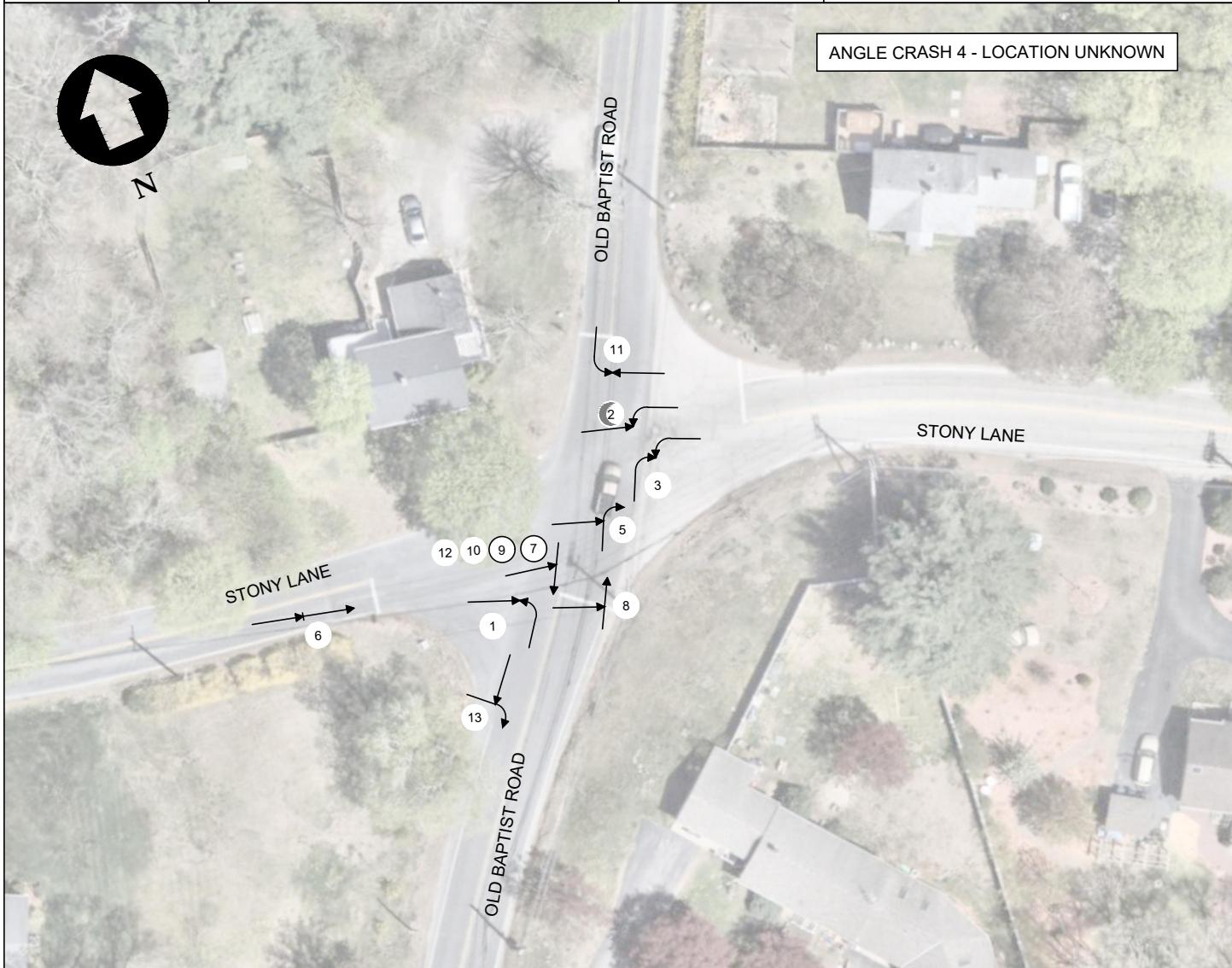
Appendix B: Detailed Crash Data



Figure 1
Study Area
Old Baptist Road at Stony Lane
Road Safety Audit
North Kingstown, RI

COLLISION DIAGRAM

LOCATION	OLD BAPTIST ROAD AT STONY LANE		
	NORTH KINGSTOWN	STATE	RHODE ISLAND
START SEGMENT	N/A	END SEGMENT	N/A



CRASH SUMMARY (5 YEAR TOTALS)

PDO	INJURY CRASHES	FATAL CRASHES	TOTAL	NIGHT CRASHES	WET CRASHES
10	3	0	13	1	5
SYMBOLS			TYPE OF CRASH		SEVERITY
→ MOVING VEHICLE		↔ HEAD ON		#	
←→ BACKING VEHICLE		→→ REAR END		#	
→→→ NON-INVOLVED VEHICLE		↓↓→ ANGLE		#	
INVOLVED		NOT INVOLVED		#	
PEDESTRIAN				TURNING MOVEMENT	FATAL
BICYCLE				SIDESWIPE	#
ANIMAL				OUT OF CONTROL	PROPERTY DAMAGE ONLY
PARKED VEHICLE				NIGHT TIME CRASH	
FIXED OBJECT	□	□			

COLLISION DIAGRAM (2019-2023) ROAD SAFETY ASSESSMENT

OLD BAPTIST ROAD AT
STONY LANE
NORTH KINGSTOWN, RI

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Crash Number	Intersection	Report Number	Crash Date	Crash Time	Severity	Number of vehicles/ pedestrians involved	Age of	Age of	Veh 1	Veh 2	Road Surface Condition	Light Condition	Weather Condition	Manner of Collision	Notes
							Driver 1	Driver 2	Direction	Direction					
1	Old Baptist Road/Stony Lane	19-171-AC	3/9/2019	10:35 AM	No Injury	2	27	17	NB	EB	Dry	Daylight	Clear	Angle	V1 was stopped behind a vehicle but attempted to turn left without stopping at the Stop sign and collided with V2 who had the right of way.
2	Old Baptist Road/Stony Lane	19-255-AC	4/20/2019	10:19 PM	No Injury	2	62	49	EB	WB	Wet	Dark - Not Lighted	Rain	Angle	V1 and V2 both stopped at a Stop sign. V2 assumed V1 had given way to turn left but both vehicles collided at the intersection.
3	Old Baptist Road/Stony Lane	19-515-AC	7/31/2019	3:03 PM	No Injury	2	25	17	WB	NB	Dry	Daylight	Clear	Angle	V1 attempted to turn left onto Old Baptist Road and collided with V2 who attempted to turn right onto Stony Lane.
4	Old Baptist Road/Stony Lane	19-610-AC	9/8/2019	4:37 PM	Personal Injury	2	55	58	EB	SB	Dry	Daylight	Clear	Angle	Narrative Not Provided.
5	Old Baptist Road/Stony Lane	19-805-AC	11/17/2019	1:09 PM	No Injury	2	31	72	NB	EB	Dry	Daylight	Clear	Angle	V2 traveling straight collided with V1 who took a right turn onto Stony Lane.
6	Old Baptist Road/Stony Lane	20-143-AC	3/12/2020	8:22 AM	No Injury	2	17	42	EB	EB	Dry	Daylight	Clear	Rear End	V2 came to stop behind another vehicle for an animal crossing the road when struck from behind by V1.
7	Old Baptist Road/Stony Lane	21-382-AC	7/3/2021	1:02 PM	Personal Injury	2	44	65	SB	EB	Wet	Daylight	Rain	Angle	V2 entered the intersection after stopping at the stop sign and collided with V1.
8	Old Baptist Road/Stony Lane	22-366-AC	6/27/2022	6:07 PM	No Injury	2	65	16	EB	NB	Wet	Daylight	Rain	Angle	V2 was traveling straight after stopping at a Stop sign when struck by V1.
9	Old Baptist Road/Stony Lane	22-371-AC	6/28/2022	4:37 PM	Personal Injury	2	65	80	EB	SB	Dry	Daylight	Clear	Angle	V1 and V2 both stopped at a Stop sign. V1 struck V2 when continuing through the intersection.
10	Old Baptist Road/Stony Lane	22-623-AC	10/14/2022	11:33 AM	No Injury	2	23	74	EB	SB	Wet	Daylight	Clear	Angle	V1 and V2 both stated they stopped at the intersection before proceeding straight. Both vehicles indicated the other ran the stop sign.
11	Old Baptist Road/Stony Lane	22-691-AC	11/3/2022	3:59 PM	No Injury	2	27	89	SB	WB	Dry	Daylight	Clear	Angle	V1 (emergency vehicle) had lights and siren on and stopped at the stop sign. V1 proceeded to turn left onto Stony Lane when struck by V2 who failed to pull over to the side of the roadway.
12	Old Baptist Road/Stony Lane	23-275-AC	5/10/2023	3:35 PM	No Injury	2	71	19	SB	EB	Dry	Daylight	Clear	Angle	V1 moving straight ahead after a stop collided with V2 who was also traveling straight.
13	Old Baptist Road/Stony Lane	23-677-AC	10/18/2023	3:20 PM	No Injury	2	44	75	EB	SB	Wet	Daylight	Cloudy	Angle	V1 attempted to turn right onto Old Baptist Road collided with V2 who was traveling straight.

CRASH ANALYSIS

North Kingstown RSA

North Kingstown, RI

Old Baptist Road/ Stony Lane		
Year		
2019	5	5
2020	1	1
2021	1	1
2022	4	4
2023	2	2
Total	13	
Totals		
Type		
Angle	12	12
Rear-end	1	1
Sideswipe	0	0
Head-on	0	0
Pedestrian	0	0
Bicycle	0	0
Single Vehicle	0	0
Unknown	0	0
Total	13	
Totals		
Severity		
No Injury	10	10
Property Damage	0	0
Personal Injury	3	3
Fatality	0	0
Total	13	
Totals		
Weather		
Clear	9	
Cloudy	1	
Rain	3	
Total	13	
Totals		
Time		
7:00 AM to 9:00 AM	1	
9:00 AM to 4:00 PM	8	
4:00 PM to 6:00 PM	2	
6:00 PM to 7:00 AM	2	
Total	13	

