



School-Focused Road Safety Assessment

VANDORA SPRINGS ELEMENTARY SCHOOL

Pilot Project Report

November 19, 2021





Wake County Health & Human Services



NC Capital Area Metropolitan Planning Organization

Created through a partnership between the
North Carolina Department of Transportation,
Safe Routes to School Wake County, and the
Capital Area Metropolitan Planning Organization



With special thanks to the Town of Garner

School-Focused Road Safety Assessment
Vandora Springs Elementary School
Pilot Project Report

Road Safety Audit Team & Partners

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4. Carey Johnson, Parent, Vandora Springs Elementary School

School-Focused Road Safety Assessment
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BACKGROUND

In early 2021, CAMPO and SRTS staff began working with staff in NCDOT's Traffic Safety Unit to develop a pilot project that would adapt Road Safety Audit (RSA) techniques for specific application to Safe Routes to School and supporting safe walking and rolling around schools.

GOALS

1. To develop a process for evaluating safety and comfort of infrastructure around prioritized schools, identify solutions that decrease fatalities and serious injuries and increase safety and comfort, and identify funding options.
2. To build relationships and help partner organizations meet annual safety targets.
3. To empower local governments, schools, and neighborhoods to make walking and rolling to school a safer and easier option for more students.

S.T.E.P. TRAINING

On September 29, NCDOT hosted a training on the Federal Highway Administration's Safe Transportation for Every Pedestrian (STEP) Program. RSA team members were invited to participate in this training, which provided information on how and why to conduct RSAs and included field exercises as well as discussion. This training laid the groundwork for the Vandora Springs Elementary School RSA on November 19.

SCHOOL SELECTION

A call for applications was issued in August 2021 to municipal staff in Wake County. The RSA planning team invited each municipality to submit one school for consideration. The team requested that applicants illustrate why municipal staff believe the selected school to be the best candidate for an

RSA, and provide information about the school, including how many students currently walk and bike to school. Five schools were submitted for consideration and the RSA planning team reviewed each submission and conducted additional research to determine crash history, average daily traffic, and other important information.

The RSA planning team chose Vandora Springs Elementary School (VSES), submitted by staff at the Town of Garner, as the site for the RSA pilot project. VSES was chosen due to the strength of the Town of Garner's application, and the fact that the school community has been very vocal about their need for a safe way to walk to their school (latent demand). The RSA workshop with site field review was conducted at Garner Town Hall on November 19, 2021.

RSA SITE PROFILE

About the School



Image from rodgersbuilders.com

“Established in 1959, Vandora Springs is a pillar in the Garner Community. In addition to providing a safe place for generations of children to learn, grow, and play during and after the school day, we also prioritize community and life-long healthy habits. Our school community strongly believes that families who live within walking/biking distance, should be able to safely walk/bike to school on a regular basis. Right now, it simply is not safe for students who live just across the street or in the connecting neighborhoods to walk / bike to school.”

~ Principal Rhonda Curtis

Table 1		
How VSES Students Get to School		
Carpool*	212	39%
School Bus	146	27%
Walker	20	4%
Daycare	39	7%
Vendor	10	2%
YMCA	35	6%
TOTAL	542	---
*The carpool number represents families rather than students and each family may have more than one child. As a result, the numbers here do not add up to 542.		

- School hours are 8:30 AM to 3:00 PM.
- Campus was renovated in 2017 and NCDOT resurfaced Vandora Springs Rd around this time.
- There used to be a crosswalk & crossing guard located at Woodland Dr & Vandora Springs Rd. and the crosswalk was removed by NCDOT in 2017. As a result, the police department removed the crossing guard.
- There is latent demand from families that live on the north side of Vandora Springs Rd. that have expressed to the principal their desire to be able to safely cross Vandora Springs Rd. and walk or bike to and from school.
- Carpool stacking length seems to be sufficient to prevent lines of vehicles from backing up on to the street, which happens rarely. The entrance and exit of carpool lanes are separate. Neither has restrictions on right or left turns at any time.
- Jaycee Park abuts the back side of the school campus on Sycamore Dr., but there is no clear access point between the park and campus. The school has a joint use agreement (JUA) with the Town of Garner for Jaycee Park.
- There are several other programs at the school, including a YMCA after-school program and a summer learning program that serves several elementary schools.

- In 2021, the school launched their first *Girls on the Run* program.
- Members of the community use the school's basketball court and track on a daily basis.

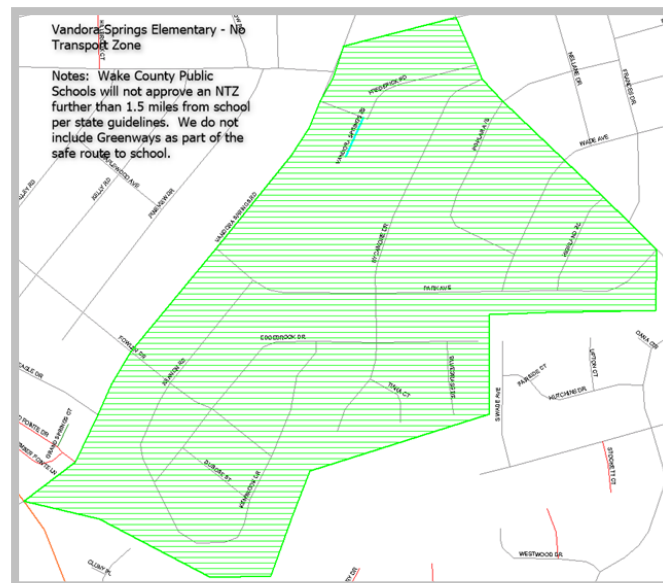
“There are many children around VSE that would love to be able to walk or ride their bikes to school, but because we don’t have a safe route to school, these kids are not able to enjoy that privilege. I’d love for all kids who want to walk to be able to do so safely.”

~ Carey Johnson, VSES Parent

No Transport Zone

NTZ (No Transport Zone) was revised going into the 2021-2022 school year. Neighborhoods on the west side of Vandora Springs Road were removed from the NTZ due to a lack of infrastructure, such as sidewalks, crosswalks, stop lights, and crossing guards. The current boundaries of the NTZ are shown in the image below.

Figure 1: Vandora Springs Elementary School Transport (NTZ)



Map provided by Wake County Public School System

Roadway & Intersection Characteristics

The study corridor was a 0.5 mile section of Vandora Springs Rd. between Vandora Ave. and Fowler Dr. Significant sections and intersections are described in the next column..

Vandora Springs Road

- ⇒ Major Collector/minor arterial classification owned and maintained by NCDOT
- ⇒ Two-lane undivided roadway with sections of center turn lane
- ⇒ Planned cross-section includes 3-lane road with on-road bike lanes (no current timeline or funding)
- ⇒ Includes partial areas of widening with curb and sidewalk, remaining areas have shoulder with ditches

Woodland Road

- ⇒ Major Collector classification, owned and maintained by NCDOT
- ⇒ Two-lane undivided roadway, ditches on both sides
- ⇒ Projected to become a 3- lane road with bike lanes
- ⇒ Carries a lot of traffic from motorists entering or leaving town

Intersections

- ⇒ There are no signalized intersections within the study area; the intersections are stop controlled on the side-streets. Traffic signals are present at Foxwood Dr to the north and Timber Dr to the south.
- ⇒ Vandora Springs Rd at Woodland Drive intersection is a three-way intersection with a stop sign control on Woodland. A church sits on the northwest corner of the intersection.
- ⇒ Vandora Springs Rd. at Park Ave is a three-way intersection with a stop sign control on Park Ave. A crosswalk on Vandora Springs Rd is located on the north side of the intersection. There is sidewalk on the east side of the Vandora Springs Rd. at the intersection.
- ⇒ Vandora Springs Rd at Fowler Drive is a four-way intersection with stop sign control on Fowler Dr. in both directions. Fowler Dr. has no sidewalks and Vandora Springs only has sidewalk on the south side. There are no crosswalks.

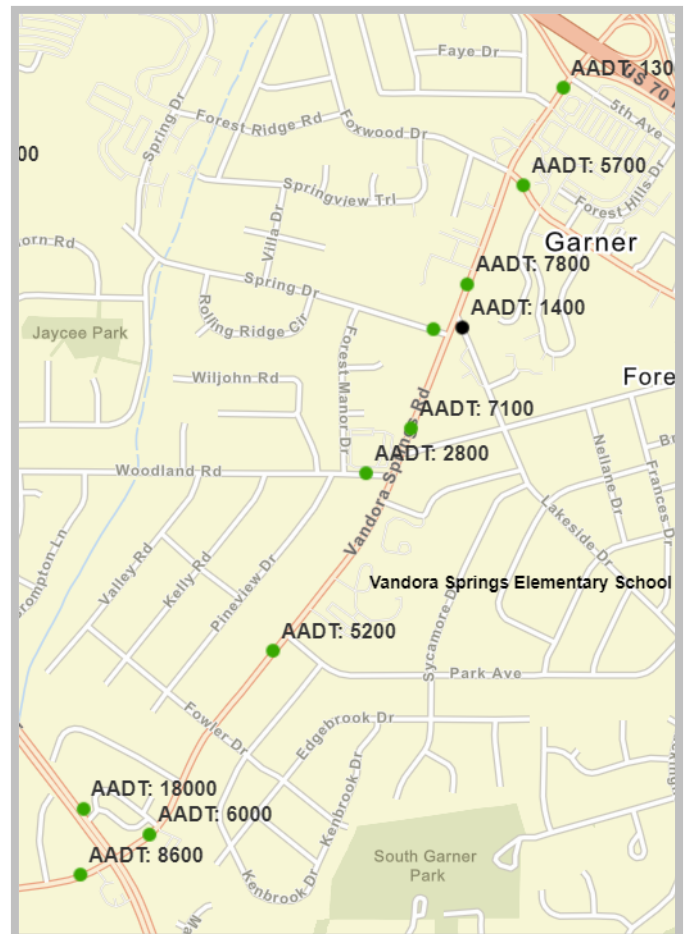
Speed

Posted speed limit on the Vandora Springs corridor is 35 mph. School speed zone posted limit is 25 mph between the hours of 8:00 - 9:00 AM and 2:30 – 3:30 PM with flashing lights. NCDOT reported that average operating speeds on Vandora Springs Road are 28-33 mph.

Traffic Volume

The most current Annual Average Daily Traffic (AADT) volume data from 2019 shows that Vandora Springs Road carries between 5,000 and 7,000 vehicles per day in the section of interest. Woodland Road carries 2,800 vehicles per day near its intersection with Vandora Springs.

Figure 2: Annual Average Daily Traffic (AADT)

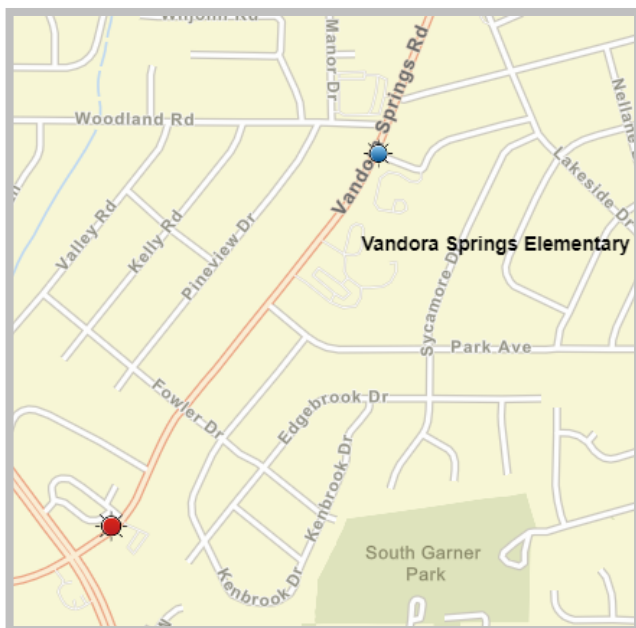


Map provided by NCDOT

Crash History

Pedestrian and bicycle crash data from 2007 to 2020 show that there has been one pedestrian crash and one bicycle crash near the school in that time period. The bicycle crash involved a motorist failing to yield and striking an adult bicyclist at the intersection of Vandora Springs and Frederick. The pedestrian crash was farther south, near the intersection with Timber Drive, and involved a person struck while dealing with a disabled vehicle. A full crash report is included in the appendix of this report.

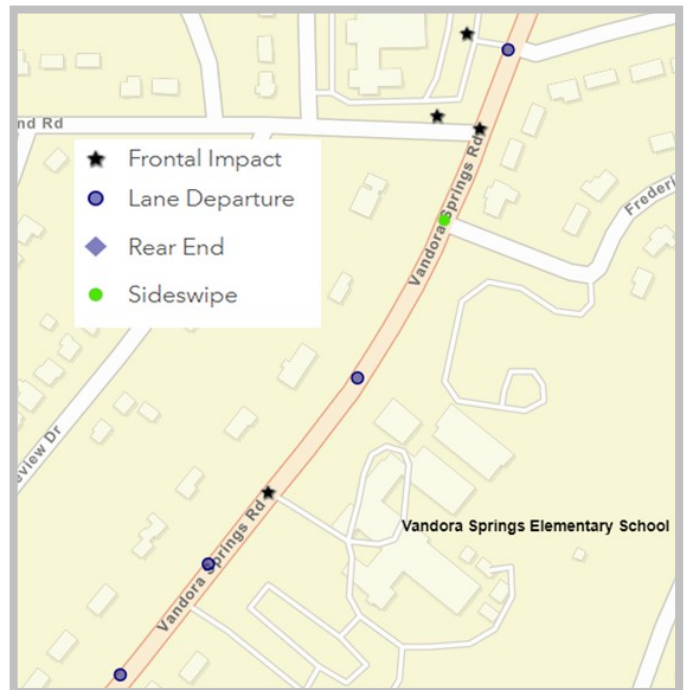
Figure 3: Bicycle Crashes, 2007-2020



Map provided by NCDOT

Total crash data (involving any parties, not just pedestrian or bicyclists) from 2016 to 2020 show that there have been nine crashes near the school as shown in the map in the next column.

Figure 4: Total Crash Data, 2016-2020



Map provided by NCDOT

Transit

Currently, the only transit service near Vandora Springs Elementary School is GoRaleigh Route 20, which runs along Vandora Springs Road from 7th Ave to West Garner Road.

FUTURE PLANS

Core team members reviewed applicable planning documents to identify additional information about the Vandora Springs Road corridor and future planned projects that might affect the study area. These plans included: Garner Forward Comprehensive Plan, Garner Forward Transportation Plan, and CAMPO 2050 Metropolitan Transportation Plan. The Town Planning Department is currently working on a sidewalk inventory and process to prioritize sidewalk construction, and will begin development of a Pedestrian Plan in early 2022.

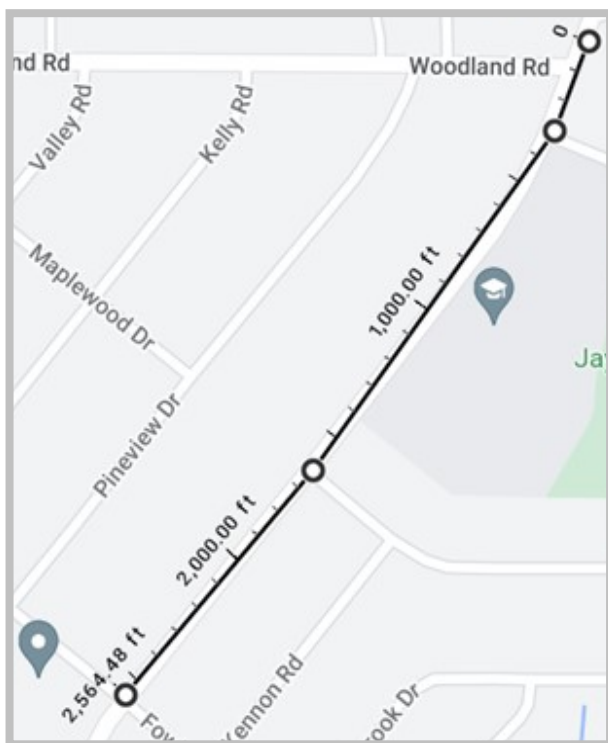
- Sidewalk is programmed for Vandora Springs Rd on West side
- Sidewalk planned for both sides of Woodland Rd, probably will happen in conjunction with future road widening, so timeframe undetermined.
- Specific crossing requirements were not identified through the Town's Transportation Plan, but a safe crossing across Vandora Springs Rd needs to be installed.
- Vandora Springs Rd is a major collector - planned to eventually be a 3 lane road with on-street bike lanes on both sides.

ASSESSMENT FINDINGS

FIELD VISIT OVERVIEW

The RSA team walked from Garner Town Hall down Vandora Springs Rd to Vandora Springs Elementary School at 11am on the day of the RSA workshop. The team focused attention on the intersections immediately adjacent to the school on Vandora Springs Rd, as well as the stretch of Vandora Springs Rd between Woodland Rd and Park Ave.

Figure 5: Map of Field Review Route



Map from Google Maps

POSITIVE FEATURES

Corridor-wide

School zone speed limit is 25mph and there are flashing solar-powered speed signs on each side of the school zone, as well as school zone striping on the pavement. Sight distance is good in all but one direction (looking south from Woodland as the road rises).



Image from Google Maps

Spring Dr to Woodland Rd

n/a

Woodland Rd Intersection

High visibility pedestrian crossing signs have been installed near the intersection of Vandora Springs Road and Woodland Rd.

Woodland Rd to Park Ave..

There is continuous sidewalk on the eastside of Vandora Springs Road which connects to a path on the school campus leading to the front entrance, separate from vehicular traffic.



Photo of stairwell connecting Vandora Springs Rd sidewalk to campus sidewalk taken by Jennifer Delcourt

ISSUES & CONCERNS

Corridor-wide:

- There are no enhanced marked crossings for 1.2 miles across Vandora Springs Rd, including through the study area.
- Some vehicle speeds seemed to be above the posted speed limit of 35 mph.

Spring Dr to Woodland Rd

- A portion of the northbound lane on Vandora Springs Rd is approximately 18' wide with curb and gutter, beginning at Vandora Ave until a striped center lane emerges just before Lakeside Drive. The southbound lane is 9' with shoulder striping and ditch. Several team members have observed vehicles speeding to pass each other in the single northbound lane.
- Sidewalk is present on the east side of the road only.



Screenshot taken from Google maps, showing Vandora Springs Road where northbound lane becomes wider.

Woodland Rd Intersection

- There is no marked crossing of Vandora Springs Rd north of the school. A marked crossing was removed from the intersection of Vandora Springs Rd at Woodland Rd in 2017.
- There are no sidewalks along Woodland Rd; the shoulders are narrow, and worn paths are visible in some places on both sides of the roadway.
- There is poor sight distance at the intersection of Vandora Springs Rd & Woodland Ave looking south due to the crest and curve in the road in front of the school.

- The geometry of the Vandora Springs Road and Woodland Drive intersection is widest at the northwest corner, making it an easy turn that allows vehicles to maintain speed (see photo).
- There is a new high-visibility pedestrian warning sign on the north side of the Vandora Springs & Woodland Drive intersection, but there are no crossing facilities.



Photo of intersection of Woodland Drive and Vandora Springs Road taken by Jennifer Delcourt

Woodland Rd to Park Ave

- There is a crosswalk on Vandora Springs Rd south of the school at Park Ave. It has no curb ramps and connects to sidewalk only on the east side of Vandora Springs Rd. (See photo)

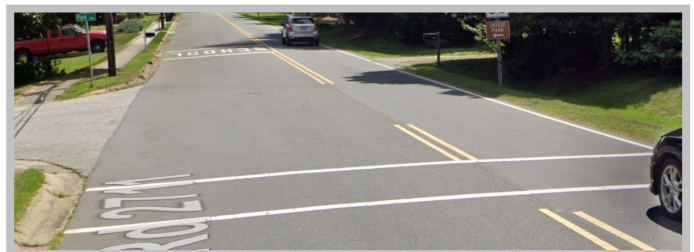


Photo of crosswalk on Vandora Springs Road at Park Ave, screenshot taken from Google Maps

OTHER OBSERVATIONS

- Field visit took place after morning drop-off and before school dismissal, so no children could be observed. However, the participating parent described where students and adults usually cross at Vandora Springs Rd and Woodland Dr.
- Observed one adult pedestrian during the time of the field visit on a chilly day (Friday, Nov 19) around 12pm.
Note: Additional observations concerning other parts of the corridor are included in Appendix 6.

RECOMMENDATIONS

Table 2

Location	Identified Issue	Potential Countermeasures	Priority	Cost	Agency Lead
Corridor-wide	Lack of data on how many people walk & bike	Coordinate bike/ped Counts to support sidewalk and crossing improvement assessments	Near term (less than 2 years)	Low	NCDOT
Corridor-wide	Absence of an enhanced crossing on Vandora Springs Rd	Assess locations for an enhanced crossing to provide access to the school (a proposed crossing diagram is included in Appendix 7)	Mid-term (2-5 years)	Med-high	Town of Garner
Corridor-wide	Travel speeds above posted limits on Vandora Springs Rd	Narrowing of wide northbound lane	Near Term (less than 2 years)	Low	Town of Garner & NCDOT
Spring Dr to Woodland Rd	Vehicle passing in no-passing areas	Reallocation of travel lanes that may include cross-hatching center lanes to reduce lane width, add bike lane, other paint solutions to reduce lane width	Near term (less than 2 years)	Low	Town of Garner & NCDOT
Woodland Rd	Pedestrians walking along shoulder on Woodland Rd	Add sidewalks along Woodland Rd	Mid-term (2-5 years)	TBD	Town of Garner
Vandora Springs Rd to Park Ave	Existing unenhanced crossing	Evaluate crosswalk location at Park Ave to determine if it should be removed, relocated, or enhanced.	Short-term (less than 2 years)	Low	Town of Garner & NCDOT

APPENDIX 1

Road Safety Audit Workshop Agenda

Agenda

Vandora Springs Elementary Road Safety Audit

Garner Town Hall

Friday, November 19, 2021



8:30 am - Introductions

8:45 am - Morning Presentations

- Overview of Safe Routes to School
- RSA Structure, Purpose & Goals
- Data & Map Review

10:00 am – Conduct Field Review at Vandora Springs Elementary School

10:30 am – Meet with Officer Simpson

11:30 am - Meet with Principal Curtis

12:30 pm - LUNCH (La Roma Pizza)

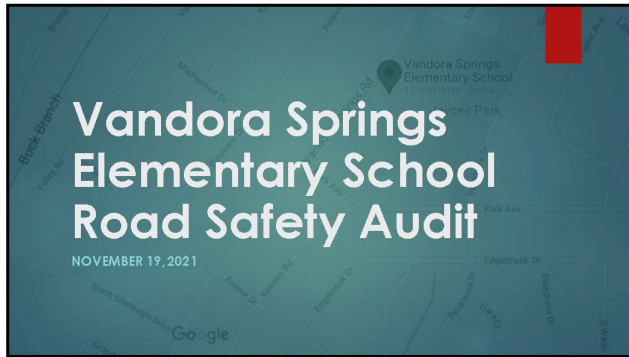
1:30 pm – Afternoon Discussion & Planning

- Review map & record observations
- Discuss possible solutions & countermeasures
- Create draft action plan & identify next steps

3:00 pm - ADJOURN

APPENDIX 2

Workshop PowerPoint Presentation



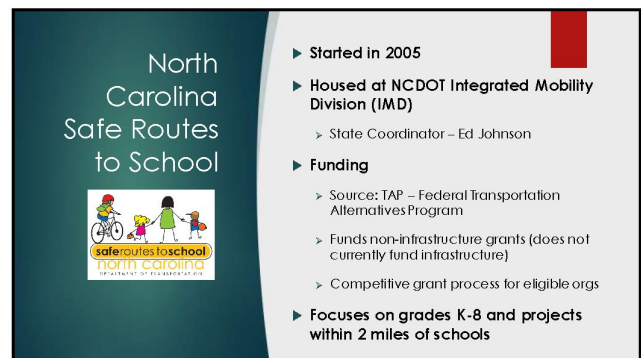
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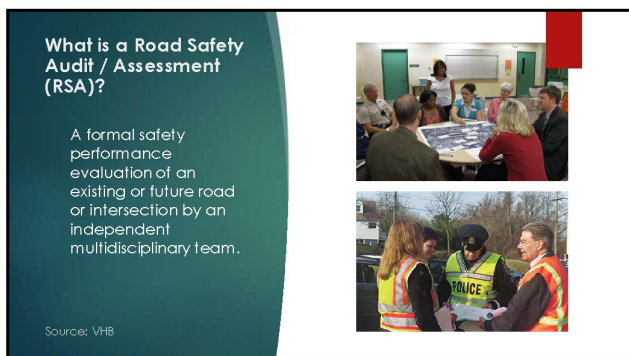
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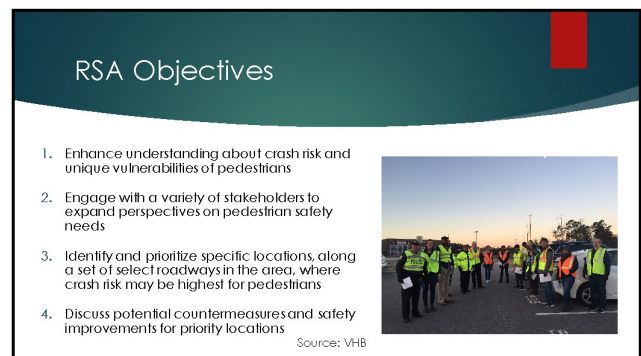
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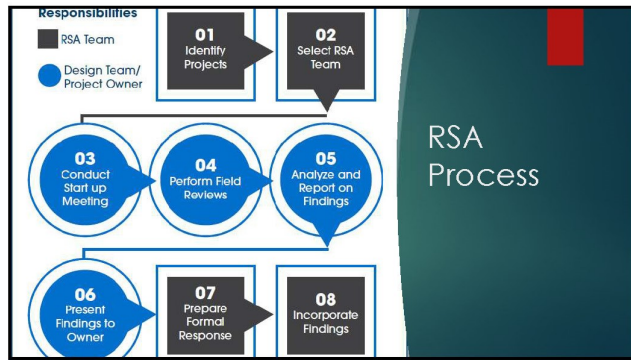
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APPENDIX 2

Workshop PowerPoint Presentation

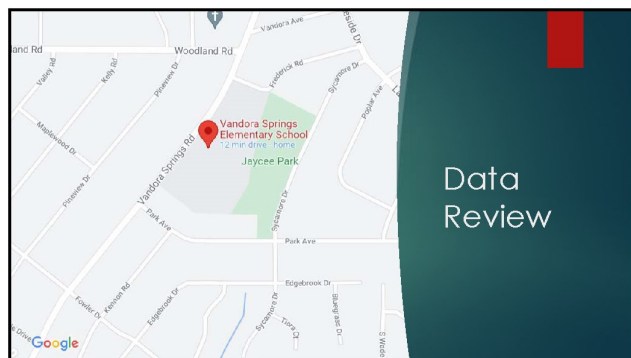


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School RSA Pilot Project Goals

1. To develop a process for evaluating safety and comfort of infrastructure around prioritized schools, identify solutions that decrease fatalities and serious injuries and increase safety and comfort, and identify funding options.
2. To help partner organizations meet annual safety targets.

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About Vandora Springs Elementary School

Total students- 542

- Carpool - 212 families
- Bus - 146
- Walker - 20
- Daycare - 39
- Vendor - 10
- YMCA - 35

- Campus recently renovated
- There was formerly a crosswalk & crossing guard located at Woodland Dr & Vandora Springs Rd
- NTZ (No Transport Zone) was recently revised
- Joyce Park abuts the back side of the school on Sycamore Dr.

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Land Use

- ▶ Commercial and educational to the north
- ▶ Single family residential abuts corridor
- ▶ Schools/churches along route
- ▶ Future land use plans?

Source: VHB

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Roadway Characteristics

- ▶ Two-lane divided roadway with TWLTL in portions
- ▶ Posted 35 mph with 20 mph school zone
- ▶ AADTs range from 5,200 to 13,000
- ▶ Intersecting streets of 5,700 and 1,700
- ▶ Signalized Intersection at Seventh Ave; signal heads, LPIR
- ▶ Stop-controlled side streets
- ▶ Other Intersection projects?

Source: VHB

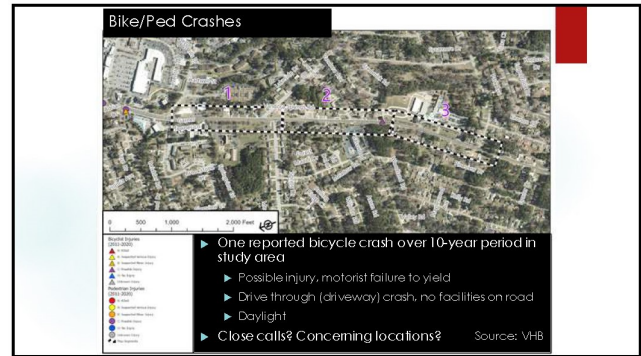
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APPENDIX 2

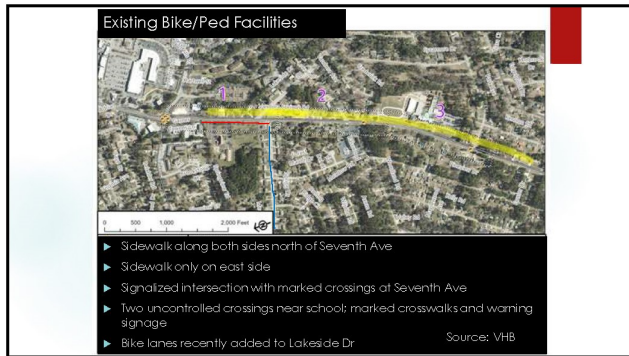
Workshop PowerPoint Presentation



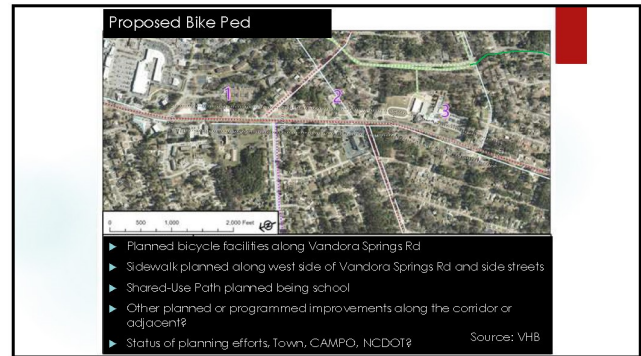
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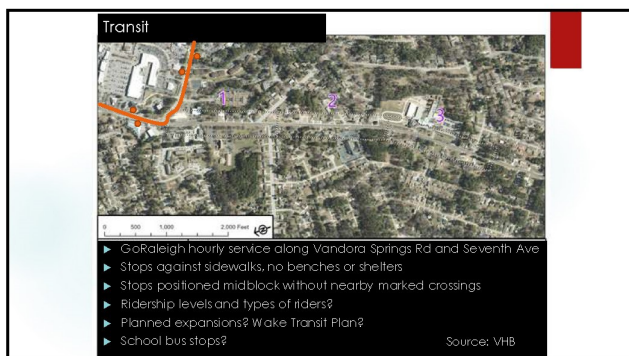
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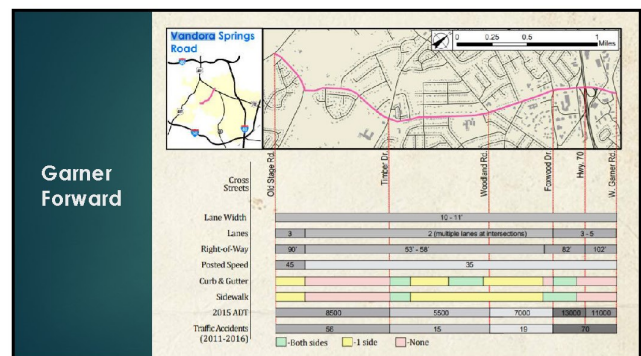
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APPENDIX 2

Workshop PowerPoint Presentation

Gamer Forward

Vandora Springs Road (2.7 miles)
Vandora Springs Road is a two-lane roadway connecting the western end of the town center to Old Stage Rd.

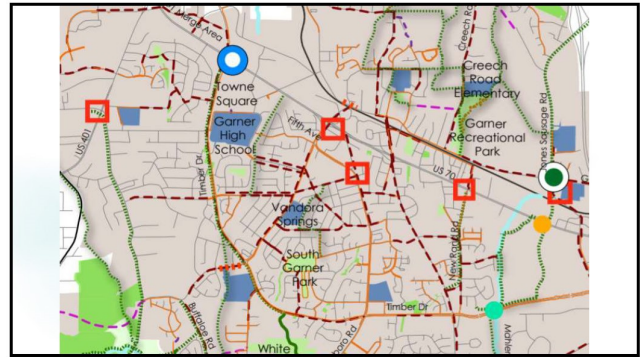
Strengths:

- Connected by detached sidewalks in central residential area of corridor
- Connections to adjacent commercial services
- Adjacent connections to Vandora Springs and Timber Drive elementary schools
- 10' travel lanes
- Fairly low traffic volume in residential areas
- ROW presents opportunities to improve pedestrian and add bicycle connectivity
- Very scenic roadway in certain portions

Areas for Improvement:

- Sidewalk and curb and gutter gaps
- High number of crashes

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About the Field Visit

- Try to see your surroundings through the eyes of a child and people using different modes
- Pay attention to the details
- Take notes!!
- Take photos if you can (and turn on location services)

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Site Observations/Debrief

- What did you see?
- Who was travelling along or crossing the roadway(s)?
- Where were they going?
- Are conditions likely to change along the sites? If so, how?
- What are the better existing design features or design elements for pedestrian/bicycle safety?
- What safety issues did you observe?
- What additional information do we need?

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Spectacular Seven

- Crosswalk Visibility Enhancements
- Raised Crosswalks
- Pedestrian Refuge Island
- RRFB
- PHB
- Road Diets
- LPI

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Draft Recommendations

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APPENDIX 2

Workshop PowerPoint Presentation



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APPENDIX 3

Crash History Map



APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation Traffic Engineering Accident Analysis System Strip Analysis Report

Study Criteria Summary

County: WAKE City: All and Rural
Date: 09/01/2016 to 08/31/2021 Study: 41000065724
Location: SR 2713 (Vandora Springs Road) from SR 2812 (Timber Drive) to SR 2794 (Seventh Avenue)

Report Details

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
1	104839476	0.680	09/01/2016 15:43	ANGLE	\$ 28000	1	0	1	6	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	1	Speed:	45 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:			34		
Unit	2 : 1	Alchl/Drugs:	0	Speed:	45 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	3 : 1	Alchl/Drugs:	0	Speed:	45 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	4 : 1	Alchl/Drugs:	0	Speed:	25 MPH Dir: SW	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	5 : 1	Alchl/Drugs:	0	Speed:	0 MPH Dir: N	Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	6 : 1	Alchl/Drugs:	0	Speed:	0 MPH Dir: N	Veh Mnvr/Ped Actn:				1	Obj Strk:			18		
2	104860272	0.680	09/23/2016 18:08	ANGLE	\$ 23000	0	0	0	2	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed:	15 MPH Dir: SE	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed:	45 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
3	105285511	0.680	11/09/2017 16:16	ANGLE	\$ 15500	0	0	1	0	2	1	3	3	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed:	15 MPH Dir: S	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	45 MPH Dir: N	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	3 : 4	Alchl/Drugs:	7	Speed:	0 MPH Dir: W	Veh Mnvr/Ped Actn:				1	Obj Strk:					
4	105522416	0.680	06/25/2018 15:57	REAR END, SLOW OR STOP	\$ 1600	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 2	Alchl/Drugs:	0	Speed:	15 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drugs:	0	Speed:	0 MPH Dir: W	Veh Mnvr/Ped Actn:				1	Obj Strk:					
5	105564543	0.680	08/07/2018 04:59	ANGLE	\$ 2000	0	0	0	2	1	5	1	3	7	3	2
Unit	1 : 1	Alchl/Drugs:	0	Speed:	20 MPH Dir: N	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	15 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
6	105625361	0.680	09/27/2018 18:56	ANGLE	\$ 8500	0	0	0	0	2	4	3	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed:	20 MPH Dir: N	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	45 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
7	105958027	0.680	08/02/2019 18:35	RIGHT TURN, SAME ROADWAY	\$ 2000	0	0	0	0	2	1	3	1	0	3	1
Unit	1 : 4	Alchl/Drugs:	0	Speed:	25 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:					

10/28/2021

All data presented in this report comes explicitly from the Traffic Engineering Accident Analysis System based upon v: criteria provided by the report's creator. The onus is strictly upon the user of this report to exercise due diligence in in and further representing this data.

-1-

APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation Traffic Engineering Accident Analysis System Strip Analysis Report

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Cl	Dv	Op
Unit	2 : 1	Alchl/Drgs:	0	Speed:	15 MPH Dir: S	Veh Mnvr/Ped Actn:				7	Obj Strk:					
8	105962687	0.680	08/15/2019 17:51	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed:	20 MPH Dir: S	Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed:	0 MPH Dir: S	Veh Mnvr/Ped Actn:				1	Obj Strk:					
9	106056688	0.680	11/07/2019 09:52	REAR END, SLOW OR STOP	\$ 300	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed:	15 MPH Dir: SW	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed:	0 MPH Dir: SW	Veh Mnvr/Ped Actn:				1	Obj Strk:					
10	106300363	0.680	08/08/2020 22:00	ANGLE	\$ 35000	0	0	1	0	1	4	2	2	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed:	0 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed:	45 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
11	106387544	0.680	10/23/2020 20:21	LEFT TURN, SAME ROADWAY	\$ 500	0	0	0	0	1	3	1	1	0	3	2
Unit	1 : 2	Alchl/Drgs:	0	Speed:	45 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed:	45 MPH Dir: NW	Veh Mnvr/Ped Actn:				8	Obj Strk:					
12	105614494	1.130	12/03/2016 03:00	RAN OFF ROAD - RIGHT	\$ 40	0	0	0	0	1	4	1	3	12	13	1
Unit	1 : 32	Alchl/Drgs:	7	Speed:	0 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:					
13	105614737	1.190	11/02/2017 07:43	RAN OFF ROAD - RIGHT	\$ 850	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed:	35 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:					
14	106027721	1.230	10/16/2019 08:25	LEFT TURN, DIFFERENT ROADWAYS	\$ 2000	0	0	0	0	2	1	3	1	0	1	1
Unit	1 : 32	Alchl/Drgs:	7	Speed:	0 MPH Dir: S	Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed:	5 MPH Dir: SW	Veh Mnvr/Ped Actn:				8	Obj Strk:					
15	105656231	1.291	10/29/2018 14:40	RAN OFF ROAD - RIGHT	\$ 18050	0	0	1	0	1	1	1	1	0	0	
Unit	1 : 5	Alchl/Drgs:	5	Speed:	45 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
16	106435648	1.367	12/12/2020 19:13	SIDESWIPE, SAME DIRECTION	\$ 2000	0	0	0	0	1	4	1	1	0	13	1
Unit	1 : 2	Alchl/Drgs:	0	Speed:	35 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	0 MPH Dir: S	Veh Mnvr/Ped Actn:				8	Obj Strk:					

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APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation Traffic Engineering Accident Analysis System Strip Analysis Report

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Cl	Dv	Op
17	105300586	1.409	11/26/2017 10:59	LEFT TURN, DIFFERENT ROADWAYS	\$ 2000	0	0	0	0	1	1	1	1	0	1	1
Unit	1 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn:				4	Obj Strk:					
18	106070563	1.409	11/21/2019 08:19	LEFT TURN, DIFFERENT ROADWAYS	\$ 3800	0	0	0	0	1	1	1	1	0	1	1
Unit	1 : 4	Alchl/Drugs:	0	Speed: 15 MPH Dir: NW		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 5	Alchl/Drugs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				8	Obj Strk:					
19	105581479	1.442	08/26/2018 17:47	RAN OFF ROAD - RIGHT	\$ 2600	0	0	0	0	1	1	1	1	0	1	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn:				4	Obj Strk: 35					
Unit	2 : 2	Alchl/Drugs:	0	Speed: 5 MPH Dir: NW		Veh Mnvr/Ped Actn:				8	Obj Strk:					
20	104995810	1.445	02/03/2017 07:04	LEFT TURN, DIFFERENT ROADWAYS	\$ 1000	0	0	0	0	2	1	2	3	0	1	1
Unit	1 : 2	Alchl/Drugs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drugs:	0	Speed: 25 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
21	105190155	1.572	08/13/2017 10:46	SIDESWIPE, SAME DIRECTION	\$ 6000	0	0	0	0	1	1	2	1	0	0	
Unit	1 : 1	Alchl/Drugs:	7	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				3	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 30 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
22	106190023	1.601	03/21/2020 21:32	ANGLE	\$ 8500	0	0	1	0	2	4	2	1	0	0	
Unit	1 : 4	Alchl/Drugs:	0	Speed: 10 MPH Dir: S		Veh Mnvr/Ped Actn:				9	Obj Strk:					
Unit	2 : 5	Alchl/Drugs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn:				6	Obj Strk:					
23	105205742	1.639	08/29/2017 15:12	RAN OFF ROAD - STRAIGHT	\$ 1400	0	0	0	0	1	4	1	1	0	1	1
Unit	1 : 1	Alchl/Drugs:	7	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
24	105997520	1.770	09/17/2019 13:04	LEFT TURN, DIFFERENT ROADWAYS	\$ 12500	0	0	1	0	1	1	1	1	0	1	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 25 MPH Dir: E		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn:				4	Obj Strk:					
25	105776822	1.848	02/18/2019 06:43	SIDESWIPE, SAME DIRECTION	\$ 600	0	0	0	0	2	4	1	1	0	0	
Unit	1 : 2	Alchl/Drugs:	0	Speed: 15 MPH Dir: NE		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 2	Alchl/Drugs:	0	Speed: 30 MPH Dir: NE		Veh Mnvr/Ped Actn:				4	Obj Strk:					

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APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation Traffic Engineering Accident Analysis System Strip Analysis Report

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
26	106167420	1.853	02/25/2020 16:27	ANGLE	\$ 3500	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed: 5 MPH Dir: N		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	7	Speed: 10 MPH Dir: SE		Veh Mnvr/Ped Actn:				7	Obj Strk:					
27	105529644	1.872	06/30/2018 11:20	REAR END, SLOW OR STOP	\$ 13000	0	0	0	1	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drugs:	7	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn:				1	Obj Strk: 20					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 20 MPH Dir: S		Veh Mnvr/Ped Actn:				4	Obj Strk: 20					
28	105900123	1.872	06/17/2019 21:24	RAN OFF ROAD - LEFT	\$ 11000	0	0	1	0	1	4	1	1	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed: 40 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk: 34					
29	104881420	1.900	10/15/2016 13:15	LEFT TURN, SAME ROADWAY	\$ 1800	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 20 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 15 MPH Dir: S		Veh Mnvr/Ped Actn:				8	Obj Strk:					
30	104921703	1.900	11/21/2016 20:57	ANGLE	\$ 7500	0	0	0	1	1	4	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 20 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
31	105614637	1.900	07/12/2017 15:43	LEFT TURN, DIFFERENT ROADWAYS	\$ 500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 25 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 2	Alchl/Drugs:	0	Speed: 35 MPH Dir: NE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
32	105176411	1.900	07/29/2017 14:34	REAR END, SLOW OR STOP	\$ 6500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
33	105666310	1.900	11/05/2018 17:45	LEFT TURN, SAME ROADWAY	\$ 2500	0	0	0	0	2	4	3	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	7	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				8	Obj Strk:					
34	105671721	1.900	11/08/2018 17:26	ANGLE	\$ 15000	0	0	0	0	1	4	1	1	0	3	1
Unit	1 : 2	Alchl/Drugs:	0	Speed: 30 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drugs:	0	Speed: 10 MPH Dir: SE		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	3 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					

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APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation Traffic Engineering Accident Analysis System Strip Analysis Report

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
35	105948573	1.900	08/02/2019 07:40	ANGLE	\$ 11500	0	0	0	0	1	1	2	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 5	Alchl/Drgs:	0	Speed: 30 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
36	106095102	1.900	12/13/2019 14:03	ANGLE	\$ 4000	0	0	0	0	2	1	3	1	0	3	1
Unit	1 : 10	Alchl/Drgs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 5	Alchl/Drgs:	0	Speed: 30 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
37	106187397	1.900	03/18/2020 14:36	REAR END, SLOW OR STOP	\$ 6500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 15 MPH Dir: N		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn: 11				Obj Strk:						
38	106257029	1.900	06/19/2020 18:41	LEFT TURN, SAME ROADWAY	\$ 7000	0	0	0	0	2	1	3	1	0	3	2
Unit	1 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: NW		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
39	106574714	1.900	05/13/2021 19:08	ANGLE	\$ 6000	0	0	0	0	1	1	1	3	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 40 MPH Dir: N		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						

Legend for Report Details:

Acc No - Accident Number
 Injuries: F - Fatal, A - Class A, B - Class B, C - Class C
 Condition: R - Road Surface, L - Ambient Light, W - Weather
 Rd Ch - Road Character
 Rd Ci - Roadway Contributing Circumstances
 Trfc Ctl - Traffic Control: Dv - Device, Op - Operating
 Alchl/Drgs - Alcohol Drugs Suspected
 Veh Mnvr/Ped Actn - Vehicle Maneuver/Pedestrian Action
 Obj Strk - Object Struck

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APPENDIX 4

Crash History Details Report

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Summary Statistics

High Level Crash Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	39	100.00
Fatal Crashes	1	2.56
Non-Fatal Injury Crashes	10	25.64
Total Injury Crashes	11	28.21
Property Damage Only Crashes	28	71.79
Night Crashes	12	30.77
Wet Crashes	10	25.64
Alcohol/Drugs Involvement Crashes	2	5.13

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	39	100.00
Fatal Crashes	1	2.56
Class A Crashes	0	0.00
Class B Crashes	6	15.38
Class C Crashes	4	10.26
Property Damage Only Crashes	28	71.79

Vehicle Exposure Statistics

Annual ADT = 5800

Total Length = 1.22 (Miles) 1.963 (Kilometers)

Total Vehicle Exposure = 12.92 (MVMT) 20.79 (MVKMT)

Crash Rate	Crashes Per 100 Million Vehicle Miles	Crashes Per 100 Million Vehicle Kilometers
Total Crash Rate	301.84	187.55
Fatal Crash Rate	7.74	4.81
Non Fatal Crash Rate	77.39	48.09
Night Crash Rate	92.87	57.71
Wet Crash Rate	77.39	48.09
EPDO Rate	1461.21	907.96

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APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation Traffic Engineering Accident Analysis System Strip Analysis Report

Miscellaneous Statistics

Severity Index = 4.84
EPDO Crash Index = 188.80
Estimated Property Damage Total = \$ 277040.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	13	33.33
LEFT TURN, DIFFERENT ROADWAYS	6	15.38
LEFT TURN, SAME ROADWAY	4	10.26
RAN OFF ROAD - LEFT	1	2.56
RAN OFF ROAD - RIGHT	4	10.26
RAN OFF ROAD - STRAIGHT	1	2.56
REAR END, SLOW OR STOP	6	15.38
RIGHT TURN, SAME ROADWAY	1	2.56
SIDESWIPE, SAME DIRECTION	3	7.69

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	1	5.00
Class A Injuries	0	0.00
Class B Injuries	7	35.00
Class C Injuries	12	60.00
Total Non-Fatal Injuries	19	95.00
Total Injuries	20	100.00

10/28/2021

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APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	0	0.00
Feb	3	7.69
Mar	2	5.13
Apr	0	0.00
May	1	2.56
Jun	4	10.26
Jul	2	5.13
Aug	8	20.51
Sep	4	10.26
Oct	4	10.26
Nov	8	20.51
Dec	3	7.69

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	6	15.38
Tue	4	10.26
Wed	3	7.69
Thu	9	23.08
Fri	7	17.95
Sat	7	17.95
Sun	3	7.69

10/28/2021

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APPENDIX 4

Crash History Details Report

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

<u>Hourly Summary</u>		
Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	1	2.56
0400-0459	1	2.56
0500-0559	0	0.00
0600-0659	1	2.56
0700-0759	3	7.69
0800-0859	2	5.13
0900-0959	1	2.56
1000-1059	2	5.13
1100-1159	1	2.56
1200-1259	0	0.00
1300-1359	2	5.13
1400-1459	4	10.26
1500-1559	4	10.26
1600-1659	2	5.13
1700-1759	4	10.26
1800-1859	4	10.26
1900-1959	2	5.13
2000-2059	2	5.13
2100-2159	2	5.13
2200-2259	1	2.56
2300-2359	0	0.00

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APPENDIX 4

Crash History Details Report

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	20	6	0	26
Dark	8	4	0	12
Other	1	0	0	1
Total	29	10	0	39

Object Struck Summary

Object Type	Times Struck	Percent of Total
LUMINAIRE POLE NON-BREAKAWAY	1	10.00
MAILBOX	1	10.00
MOVABLE OBJECT	1	10.00
PARKED MOTOR VEHICLE	2	20.00
TRAFFIC ISLAND CURB OR MEDIAN	1	10.00
UTILITY POLE	4	40.00

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
PASSENGER CAR	39	49.37
PICKUP	13	16.46
SINGLE UNIT TRUCK (2-AXLE, 6-TIRE)	1	1.27
SPORT UTILITY	15	18.99
UNKNOWN	2	2.53
VAN	9	11.39

10/28/2021

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APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2016	5	1	2	2
2017	8	0	1	7
2018	8	0	3	5
2019	10	0	2	8
2020	7	0	2	5
2021	1	0	0	1
Total	39	1	10	28

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2016	1	10
2017	0	1
2018	0	4
2019	0	2
2020	0	2
2021	0	0
Total	1	19

Miscellaneous Totals

Year	Property Damage	EPDO Index
2016	\$ 60340	95.60
2017	\$ 33750	15.40
2018	\$ 63250	30.20
2019	\$ 50700	24.80
2020	\$ 63000	21.80
2021	\$ 6000	1.00
Total	\$ 277040	188.80

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2016	1	0	0	1	3	0	0
2017	3	0	1	2	1	1	0

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APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Year	Left Turn	Right Turn	Rear End	Run Off Road &		Angle	Side Swipe	Other
				Fixed Object				
2018	1	0	2	2		3	0	0
2019	3	1	2	1		2	1	0
2020	2	0	1	0		3	1	0
2021	0	0	0	0		1	0	0
Total	10	1	6	6		13	3	0

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APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Strip Diagram								
Features				Milepost	Crash IDs			
SR 2712 SR 2812 THOMPSON TIMBER				0.68	104839476	104860272	105285511	105522416
					105564543	105625361	105958027	105962687
					106056688	106300363	106387544	
SR 2812 SB COUPLET				0.69				
				0.70				
				0.71				
				0.72				
				0.73				
				0.74				
				0.75				
				0.76				
GRAND POINTE				0.77				
				0.78				
				0.79				
				0.80				
				0.81				
				0.82				
				0.83				
				0.84				
GLEN EAGLE				0.85				
				0.86				
				0.87				
				0.88				
				0.89				
				0.90				
				0.91				
				0.92				
FOWLER				0.93				
				0.94				
				0.95				
				0.96				
				0.97				
				0.98				
				0.99				
				1.00				
				1.01				
				1.02				
				1.03				
				1.04				
				1.05				
				1.06				
				1.07				
				1.08				

10/28/2021

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APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation Traffic Engineering Accident Analysis System Strip Analysis Report		
Features	Milepost	Crash IDs
PARK	1.09	
	1.10	
	1.11	
	1.12	
	1.13	105614494
	1.14	
	1.15	
	1.16	
	1.17	
	1.18	
	1.19	105614737
	1.20	
	1.21	
	1.22	
	1.23	106027721
	1.24	
	1.25	
	1.26	
	1.27	
	1.28	
FREDERICK	1.29	105656231
	1.30	
	1.31	
	1.32	
	1.33	
SR 2715 WOODLAND	1.34	
	1.35	
	1.36	
	1.37	106435648
	1.38	
VANDORA	1.39	
	1.40	
	1.41	105300586 106070563
	1.42	
	1.43	
	1.44	105581479
	1.45	104995810
	1.46	
	1.47	
	1.48	
	1.49	
	1.50	
	1.51	
	1.52	
	1.53	

10/28/2021

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APPENDIX 4

Crash History Details Report

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Features	Milepost	Crash IDs
SR 2825 SPRING	1.54	
	1.55	
	1.56	
	1.57	105190155
	1.58	
	1.59	
	1.60	106190023
	1.61	
	1.62	
	1.63	
LAKESIDE	1.64	105205742
	1.65	
	1.66	
	1.67	
	1.68	
	1.69	
	1.70	
	1.71	
	1.72	
	1.73	
	1.74	
	1.75	
	1.76	
	1.77	105997520
	1.78	
	1.79	
	1.80	
	1.81	
	1.82	
	1.83	
SR 2794 FOXWOOD SEVENTH	1.84	
	1.85	105776822 106167420
	1.86	
	1.87	105529644 105900123
	1.88	
	1.89	
	1.90	104881420 104921703 105614637 105176411
		105666310 105671721 105948573 106095102
		106187397 106257029 106574714

10/28/2021

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APPENDIX 4

Crash History Details Report

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000065724				76.8	8.4	5800	

Request Date	Courier Service	Phone No.	Ext.	Fax No.
--------------	-----------------	-----------	------	---------

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
WAKE	92	5	All and Rural		0	09/01/2016	08/31/2021	5.00

Location Text	Requestor
SR 2713 (Vandora Springs Road) from SR 2812 (Timber Drive) to SR 2794 (Seventh Avenue)	

Included Accidents	Old MP	New MP	Type
105614737		1.19	I
105614494		1.13	I
105997520		1.77	I
106027721		1.23	I

Excluded Accidents
104930731
104930733
105100265
105143607
105763273
105886913
106422146

Fiche Roads

Name	Code
SR 2713	40002713
SPRING	50028855
VANDORA SPRINGS	50031548

Strip Road

Name	Code	Begin MP	End MP	Miles	Kilometers
SR 2713	40002713	0.680	1.900	1.220	1.963

10/28/2021

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APPENDIX 5

Site Field Review Prompt List

Site Field Review Prompt List

SIDEWALKS - Are there sidewalks on one or both sides of the roads? Do they create a network or are there dead ends?	SIDEWALKS – Are sidewalks in good condition? Do they have curb ramps? How close are they to motor vehicle traffic?
CROSSINGS – Where are crossings located? Where are they missing?	CROSSINGS – What traffic control devices are used? Traffic lights, stop signs, pedestrian signals, etc.?
SIGNS – What signs and road markings do you see?	SCHOOL ZONE – How was the school zone delineated?
TRANSIT – Did you see any bus stops? Where were they located?	DESTINATIONS – What sorts of places and types of land use did you see? Are any of these places where many people might want to go (parks, churches, businesses, etc.)?

APPENDIX 5

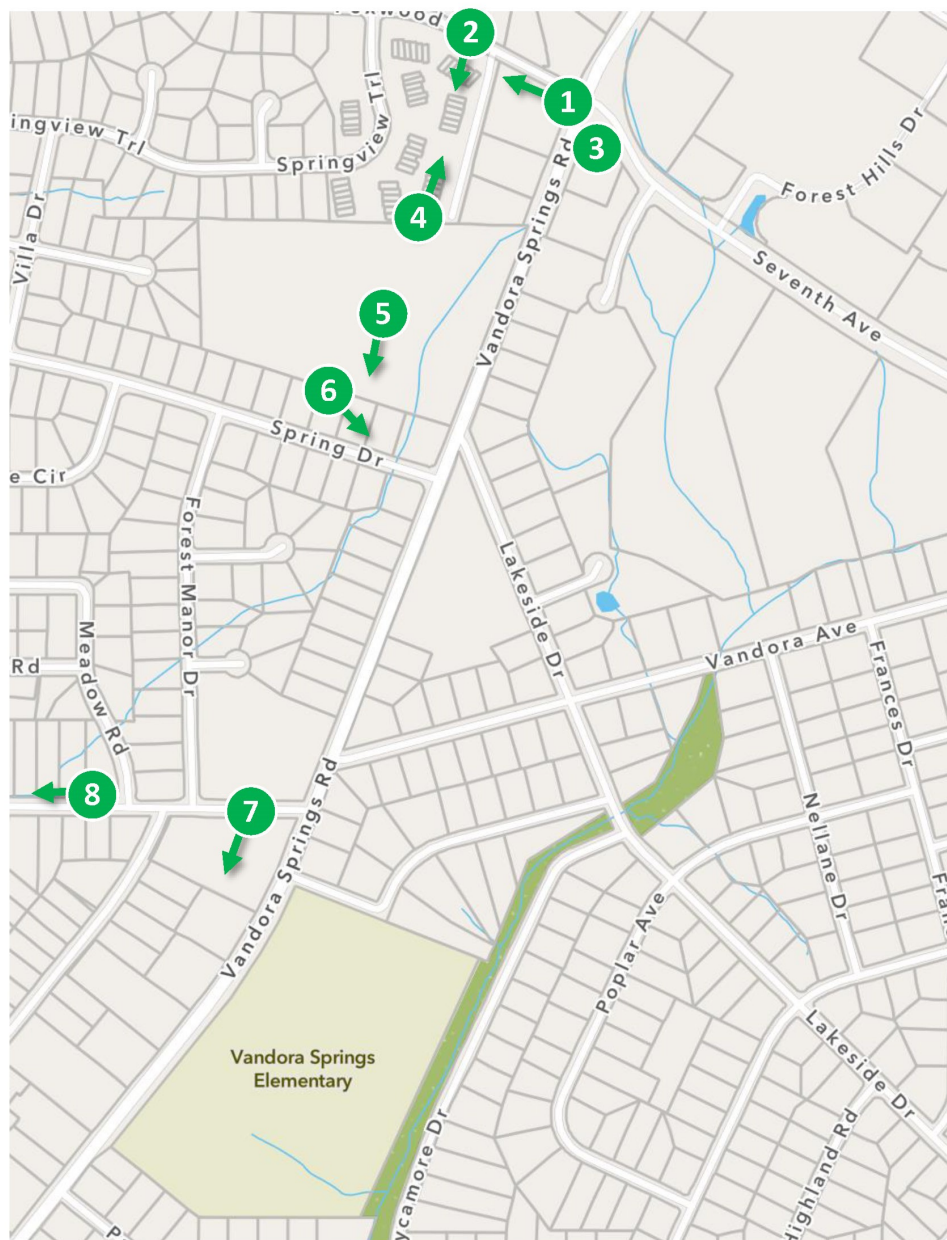
Site Field Review Prompt List

MOTOR VEHICLE TRAFFIC – Was there a lot of motor vehicle traffic? How did drivers behave? Did you observe any issues with following traffic rules or devices?	PEOPLE WALKING & BIKING – Did you see any? If so, where were they traveling?
GENERAL – Did you see anything that was confusing or surprising to you?	COMFORT – Would you feel comfortable walking with children along these roads? Why or why not?
Additional Observations:	

APPENDIX 6

Site Visit Photos

Locator Map



Images in this section provided by Gaby Lontos-Lawlor

APPENDIX 6

Site Visit Photos

1 - Vandora Springs Rd at 7th Ave/Foxwood Dr., facing west



Observations

- Standard crosswalk striping, beginning to fade
- Curb ramps with truncated dome, but only one truncated dome to cross west; missing one facing crosswalk to go south
- Pedestrian crossing signal

APPENDIX 6

Site Visit Photos

2 - Vandora Springs Rd at 7th Ave/Foxwood Dr., facing south



Observations

- Standard striping crosswalk present
- Pedestrian operated crossing signal
- Curb ramp missing truncated dome and in need of maintenance to repair cracked pavement

APPENDIX 6

Site Visit Photos

3 – Vandora Springs Rd at 7th Ave/Foxwood Dr.



Observations

- Good example of a pedestrian push-button
- Pedestrian push-button is installed at appropriate height and spot for someone in wheelchair

APPENDIX 6

Site Visit Photos

4 – Vandora Springs Rd at Business Driveway, facing north



Observations

- Cracked sidewalk
- Car blocking pedestrian crossing
- Grass strip provides good buffer between pedestrians and vehicular traffic

APPENDIX 6

Site Visit Photos

5 – Vandora Spring Rd, facing south



Observations

- Sidewalk path diverts around utility pole

APPENDIX 6

Site Visit Photos

6 –Vandora Springs Rd at Lakeside Dr, facing east



Observations

- Standard crosswalk striping along Vandora Springs Rd, to cross Lakeside Dr
- Curb ramp missing truncated domes and does not line up with the crosswalk
- Image to the right shows ADA-accessible curb ramp, the crossing is not appropriately marked for pedestrians to walk across Vandora



but

Springs Rd

APPENDIX 6

Site Visit Photos

7 – Vandora Springs Rd, facing south



Observations

- On this section of Vandora Springs sidewalk is not installed on east side, it is only available on the west
- Sidewalk pavement in need of repair

APPENDIX 6

Site Visit Photos

8 – Woodland Rd at Meadow Rd, facing west



Observations

- No sidewalk or shoulder along Woodland Rd
- Road is hilly which creates visibility challenges in certain areas

APPENDIX 7

Vandora Springs Alternative B Ped Crossing at north end of campus

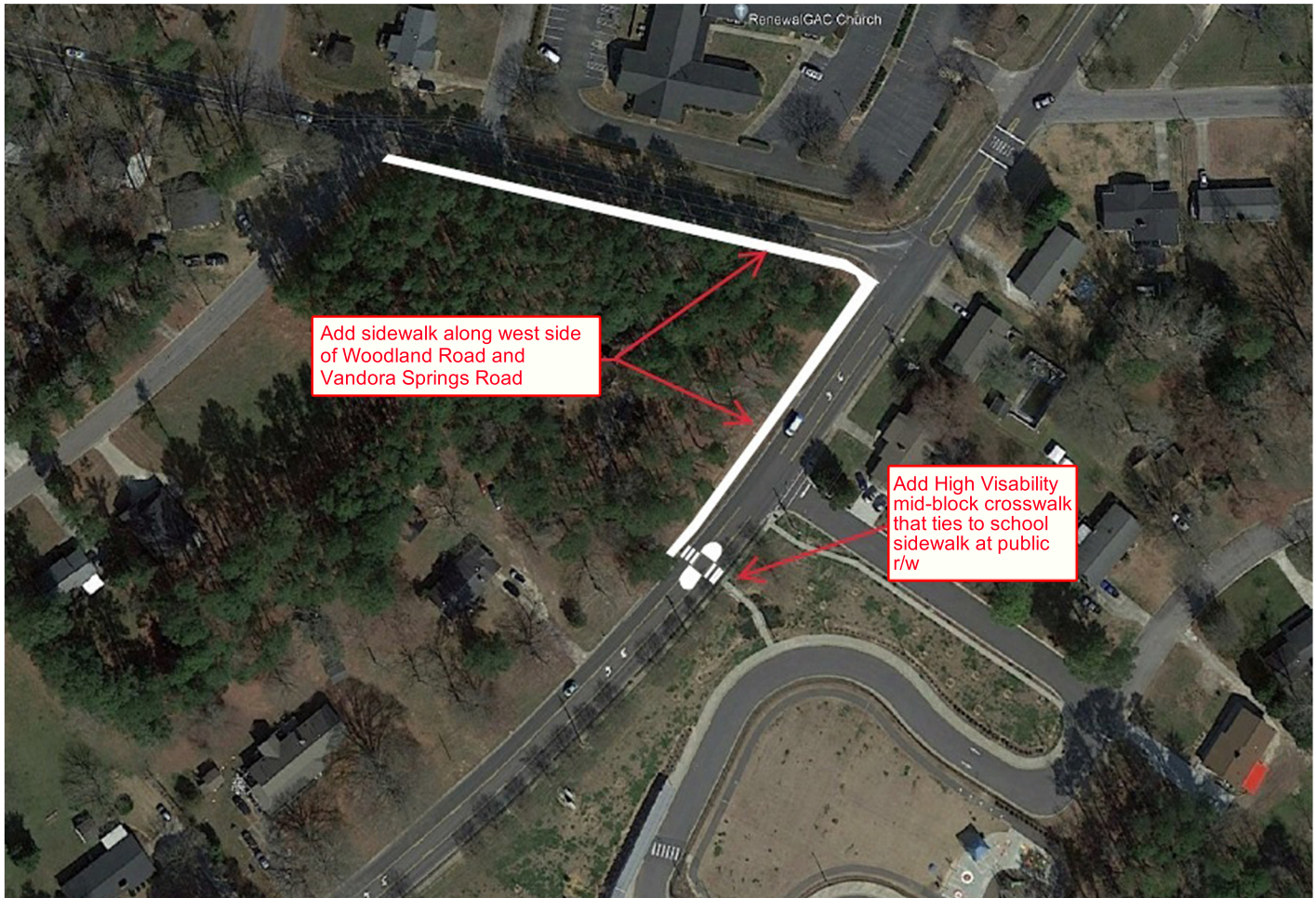


Image from Google Maps