Kannapolis Safety Action Plan

CITY OF KANNAPOLIS, NORTH CAROLINA

DECEMBER 2025

KANNAPOLIS

Kannapolis Safety Action Plan

EXECUTIVE SUMMARY

The Kannapolis Safety Action Plan is the result of a collaborative effort by transportation professionals, law enforcement, emergency responders, and the public to reduce and prevent fatalities and serious injuries on streets and roadways within the City of Kannapolis.

A stakeholder committee was formed to provide input on the plan's vision, mission, and goals, detailed study areas, safety improvement prioritization, countermeasure identification, and improvement concepts. The stakeholder committee met four times during development of the plan.

A multi-step process was followed to develop the Kannapolis Safety Action Plan. These steps included:

- Preliminary Analysis
- Detailed Analysis
- Safety Improvement Prioritization
- Identification of Countermeasures
- Concept Development/Cost Estimates
- Stakeholder/Public Involvement
- Safety Action Plan Preparation

Planning level crash data provided by NCDOT and the Kannapolis Police Department was used, along with the results of a public survey, to develop a list of the 20 roadway segments or intersections to study in detail. Detailed crash data was provided by NCDOT for the 20 locations. This data was used to determine the four roadway segments and four intersections with the highest fatal and serious injury crash or total crash rates. Countermeasures were developed for three roadway segments and four intersections. The roadway segments recommended for countermeasures are presented on Table S1 and shown on Figure 4.

Table S1-Roadway Segments Recommended for Countermeasures

ROADWAY	FROM	TO	LENGTH
NC 3 (Dale Earnhardt Blvd.)	NC 3 (Mooresville Rd.)/Watson Crick Dr.	SR 1766 (Rogers Lake Rd. E)	2.1 mi.
SR 1643 (Rainbow Dr./Bethpage Rd.)	NC 3 (Mooresville Rd.)	SR 1008 (S. Main St.)	1 mi.
SR 1124 (West C St.)	SR 1129 (Nathan Ave.)	Glenn Ave.	0.7 mi.

Shaded roadway segments are within a persistent poverty or disadvantaged census tract.

Intersections recommended for countermeasures are presented on Table S2 and shown on Figure 4.

Table S2-Intersections Recommended for Countermeasures

INTERSECTION
NC 73/SR 1622 (Trinity Church Rd.)
US 29 (N. Cannon Blvd.)/SR 1254 (E. 22nd St.)
North Loop Rd./SR 1680 (West C St.)
US 29 (N. Cannon Blvd.)/SR 1267 (Ebenezer Rd.)

Shaded intersections are within a persistent poverty or disadvantaged census tract.

Recommended improvements for these locations are discussed in Section VIII.

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I. INTRODUCTION

The safety of its citizens has always been a priority for the City of Kannapolis. Between the years 2016 and 2022, an average of four fatal crashes a year occurred within Kannapolis. This is a higher average than neighboring jurisdictions. In response to these statistics, the City of Kannapolis applied for and was awarded grant funding from the US Department of Transportation to conduct a comprehensive safety study to analyze and identify safety improvements to reduce the number of fatal and serious injury crashes within the City.

The kickoff meeting for the Kannapolis Safety Action Plan was held in May 2024. This report documents the results of the study initiated at that meeting. The study utilized crash data from NCDOT and the Kannapolis Police Department to identify locations with the highest fatal and serious injury crash rates and developed recommendations for safety improvements to address these crashes. Design concepts and cost estimates were also prepared for these recommendations and these improvements were prioritized.

It is the hope of the City of Kannapolis and the Kannapolis Safety Action Plan Stakeholder Committee that the implementation of this plan will improve safety for all roadway users and move Kannapolis towards the goal of zero deaths or serious injuries on the streets and highways of the City.

Figure I-1: NC 3 (Dale Earnhardt Boulevard) at Old Centergrove Road

II. VISION, MISSION, & GOALS

A. Vision

The Kannapolis Safety Action Plan envisions:

No transportation-related fatalities or serious injuries on streets and roadways within the City of Kannapolis by the year 2050 **(January).**

B. Mission

The mission of the Kannapolis Safety Action Plan is to:

Implement a collaborative data-driven approach to reduce and prevent fatalities and serious injuries on all streets and roadways within the City of Kannapolis by teaming with transportation professionals, law enforcement, emergency responders, and the public.

C. Goals

Three measurable goals have been identified for the Kannapolis Safety Action Plan:

- Identify the five intersections or roadway segments within the City of Kannapolis with the highest fatal or serious injury crashes.
- Develop countermeasures, conceptual designs, and cost estimates for projects to eliminate fatal and serious injuries at the identified locations.
- Obtain funding for these projects.

Figure II-1: US 29 (North Cannon Boulevard) near East 22nd Street

III. SAFETY PARTNERS AND STAKEHOLDERS

A stakeholder committee was formed to provide input on the plan's vision and goals, detailed study areas, safety improvement prioritization, countermeasure identification, and improvement concepts. Representatives of the following agencies/organizations were a part of the stakeholder committee:

- City of Kannapolis Administration
- City of Kannapolis Engineering Division
- City of Kannapolis Fire Department
- City of Kannapolis Planning Department
- City of Kannapolis Police Department
- City of Kannapolis Transportation and Environmental Services Department
- Kannapolis City Schools
- Cabarrus County Schools
- Cabarrus-Rowan Metropolitan Planning Organization
- NCDOT Traffic Safety Unit
- NCDOT Division 9
- NCDOT Division 10
- DRMP, Inc.

The stakeholder committee met four times during the development of the Kannapolis Safety Action Plan. The meeting dates and topics of discussion are presented below:

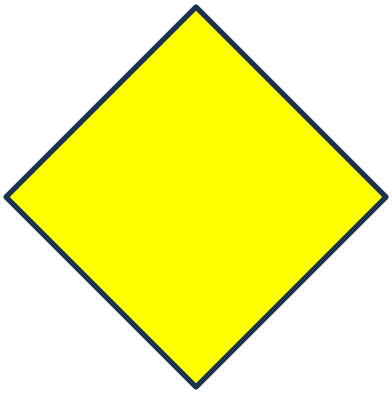
- Stakeholder Committee Meeting#1-July 17, 2024-Vision, Mission, and Goals.
- Stakeholder Committee Meeting#2-September 18, 2024-Roadway/Intersections for Detailed Study
- Stakeholder Committee Meeting#3-March 19, 2025-Roadway/Intersections for Safety Improvement
- Stakeholder Committee Meeting#4-August 13, 2025-Identified Countermeasures

Minutes from the committee meetings are included in Appendix A of this report.

IV. PLAN DEVELOPMENT PROCESS

A multi-step process was followed to develop the Kannapolis Safety Action Plan. These steps included:

- Preliminary Analysis
- Detailed Analysis
- Safety Improvement Prioritization
- Identification of Countermeasures
- Concept Development/Cost Estimates
- Stakeholder/Public Involvement
- Safety Action Plan Preparation



The steps are discussed in detail below.

A. Preliminary Analysis

A preliminary safety analysis was conducted within the municipal boundaries of Kannapolis. This preliminary analysis used planning level safety data from NCDOT and crash data from the Kannapolis Police Department to identify areas where fatal or serious injury crashes have occurred and determine which of these areas should be studied in detail.

1. Preliminary Data Collection

The Kannapolis Safety Action Plan study area is the Kannapolis City Limits. Mapping data was obtained for the study area, including GIS data for the complete roadway network within Kannapolis, aerial photography, and census data. Sources for this data included NCDOT, NC OneMap, and the US Census Bureau.

Planning level traffic safety data was obtained from NCDOT. Safety data obtained from the NCDOT Traffic Safety Unit included the following:

- 2019-2023 planning level safety scoring data
- Fatal and serious injury crash locations
- Bicycle and pedestrian crash locations
- Total crash frequency by intersection data

The Kannapolis Police Department provided information regarding non-reportable crashes (no injuries and less than $1,000 in damages). The Police Department also provided a list of the three intersections with the most reported crashes per year for the years 2016 to 2023.

A survey was posted to the City of Kannapolis' website from October 3, 2024 to October 31, 2024. The survey asked for the public's opinion regarding safety concerns and locations with safety issues within the City of Kannapolis. One hundred fifty responses to the survey were received.

2. Preliminary Data Analysis

For Roadway Sections

Planning level section safety scoring data provided by the NCDOT Traffic Safety Unit was primarily used to determine the roadway sections to be studied in detail. This dataset consists of crash data grouped by half-mile roadway segments on state-maintained roadways. These roadway segments are given scores based on three components: the class density ratio (crash density of the segment versus the average crash density of similar facilities), severity index, and critical crash rate ratio (actual crash rate for segment versus the critical crash rate). The points from the three components are added and the sum is divided by three to provide a combined safety score. The roadway segments with higher scores are considered to have poorer safety performance. The roadway segments for detailed study were determined by:

- Roadway sections from the planning level safety scoring data were ranked by combined safety score, number of serious crashes, number of injury crashes, and total number of crashes.
- The top 30 sections in each category were compared, sections within the top 30 for three or four of the categories were added to a preliminary list.
- The sections from the preliminary list were reviewed in GIS and compared with fatal and serious crash location data, intersection crash data, pedestrian crash data, bicycle crash data, and disadvantaged census tracts.
- Adjacent roadway sections on the list were combined into one section. Nearby roadway sections not on the top 30 list, but with a high planning level safety score or with several serious crashes were combined with sections from the list.
- Thirteen roadway segments remained on the list after adjacent sections were combined.
- The segment of SR 2180 (Lane Street) between US 29 (Cannon Boulevard) and Wright Avenue was removed from the list because a safety project was recently completed along Lane Street.
- A thirteenth roadway segment along SR 1706 (East 1st Street) was added to the list due to a concentration of pedestrian and bicycle crashes along this segment of roadway.

For Intersections

Total crash frequency by intersection data provided by the NCDOT Traffic Safety Unit and crash data provided by the Kannapolis Police Department were used to develop the list of intersections to be studied in detail. The intersections for detailed study were determined by:

- A list was compiled of intersections from the NCDOT Traffic Safety Unit's total crash frequency by intersection data with at least one serious injury crash (fatal or Class A) and ten or more total crashes, intersections with 50 or more total crashes, the five intersections with the most reported crashes according to data provided by the Kannapolis Police Department, and the intersections with the most safety concerns based on responses from the safety survey posted on the City's website.
- This list was compared with the roadway section list, and intersections within a selected roadway segment were removed from the intersection list.

- The intersections of SR 1238 (China Grove Road) and Early Street with SR 2180 (Lane Street) were removed from the list because a safety project was recently completed along Lane Street.
- Seven intersections remained on the list after the intersections on a selected roadway segment or recently improved by a safety project were removed.

The selected roadway segments and intersections were compared to persistent poverty and disadvantaged census tracts. The majority of the roadway segments identified are at least partially within disadvantaged census tracts.

The compiled list of roadway sections and intersections were also compared to projects included in the 2024-2033 North Carolina State Transportation Improvement Program (STIP).

A draft list of roadway segments and intersections was presented to the Kannapolis Safety Action Plan Stakeholder Committee at a meeting held on September 18, 2024.

Comments from the stakeholder committee meeting and the public survey results were taken into consideration in the development of the final list of roadway segments and intersections to be studied in detail.

3. Detailed Data Analysis

Thirteen roadway segments and seven intersections were identified for detailed safety analysis. Detailed crash data was requested from NCDOT for these segments and intersections. This data was used to identify roadway segments for safety improvements.

For Roadway Segments

The steps listed below were followed to identify roadway segments for safety improvements:

- NCDOT provided planning level crash data for the time period between January 1, 2020 and December 31, 2025 for the identified roadway segments. This data included the total number of crashes and the number of fatal, Class A (serious), Class B, and Class C injury crashes.
- Total crash rates, fatal crash rates, and serious crash rates (fatal and Class A combined) were calculated for each roadway segment.
- The four roadway segments with the highest serious crash rates were identified.

For Intersections

The steps listed below were followed to identify the intersections for safety improvements:

- NCDOT provided crash data for the intersections for the time period between January 1, 2020 and December 31, 2024. This data listed crashes at each intersection, with detailed crash numbers, types, and crash rates.
- The crash data was analyzed to identify predominant crash types and detect patterns.

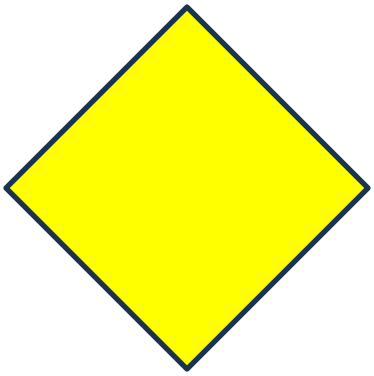
- The crash rates for Class A injury crashes and fatal crashes were combined to determine a total serious crash rate for each segment.
- The four intersections with the highest serious or total crash rates were identified.

A draft list of roadway segments and intersections for safety improvements was presented to the Kannapolis Safety Action Plan Stakeholder Committee at a meeting held on March 19, 2025.

Comments from the stakeholder committee meeting were taken into consideration in the development of the final list of roadway segments and intersections for safety improvements.

B. Countermeasure Identification

Identification of countermeasures for the selected roadway segments and intersections involved the following steps:



- The predominant crash type and locations were listed.
- Each roadway segment and intersection identified for safety improvements was visited in the field and any issues noted.
- NCDOT Crash Reduction Factor information was reviewed for potential countermeasures based on crash types.
- Documentation for potential countermeasures was prepared.

Potential countermeasures were presented to the Kannapolis Safety Action Plan Stakeholder Committee at a meeting held on August 13, 2025. Comments from the meeting were taken into consideration in the development of the final list of roadway segments and intersections and the recommended countermeasures for those locations.

C. Concept Development/Cost Estimates

Conceptual designs and cost estimates were prepared for the countermeasures identified for the intersections and roadway segments.

These conceptual designs were prepared in accordance with NCDOT, AASHTO, and City standards and guidelines. These concepts were developed attempting to avoid and minimize impacts to homes and businesses and known environmental resources.

D. Stakeholder/Public Involvement

A study webpage was included on the City of Kannapolis' website (https://www.kannapolisnc.gov/safestreets). This webpage includes information regarding the USDOT Safe Streets Initiative, Safe Streets for All, and the Kannapolis Safety Action Plan. The Safe Streets survey mentioned previously was open on the study webpage between October 3, 2024 and October 31, 2024. One hundred and fifty responses were received to the survey. The survey included the following questions:

1. Are you a resident of Kannapolis?
2. Do you work in Kannapolis?
3. How do you typically travel around Kannapolis?
4. Select the top five transportation safety issues in Kannapolis from the list below:
5. List the three intersections or roadway segments in Kannapolis with the most safety concerns.
6. What is your age? (optional question)
7. How would you classify your race? (optional question)
8. What was your household income last year? (optional question)

A summary of the survey responses is included in Appendix B.

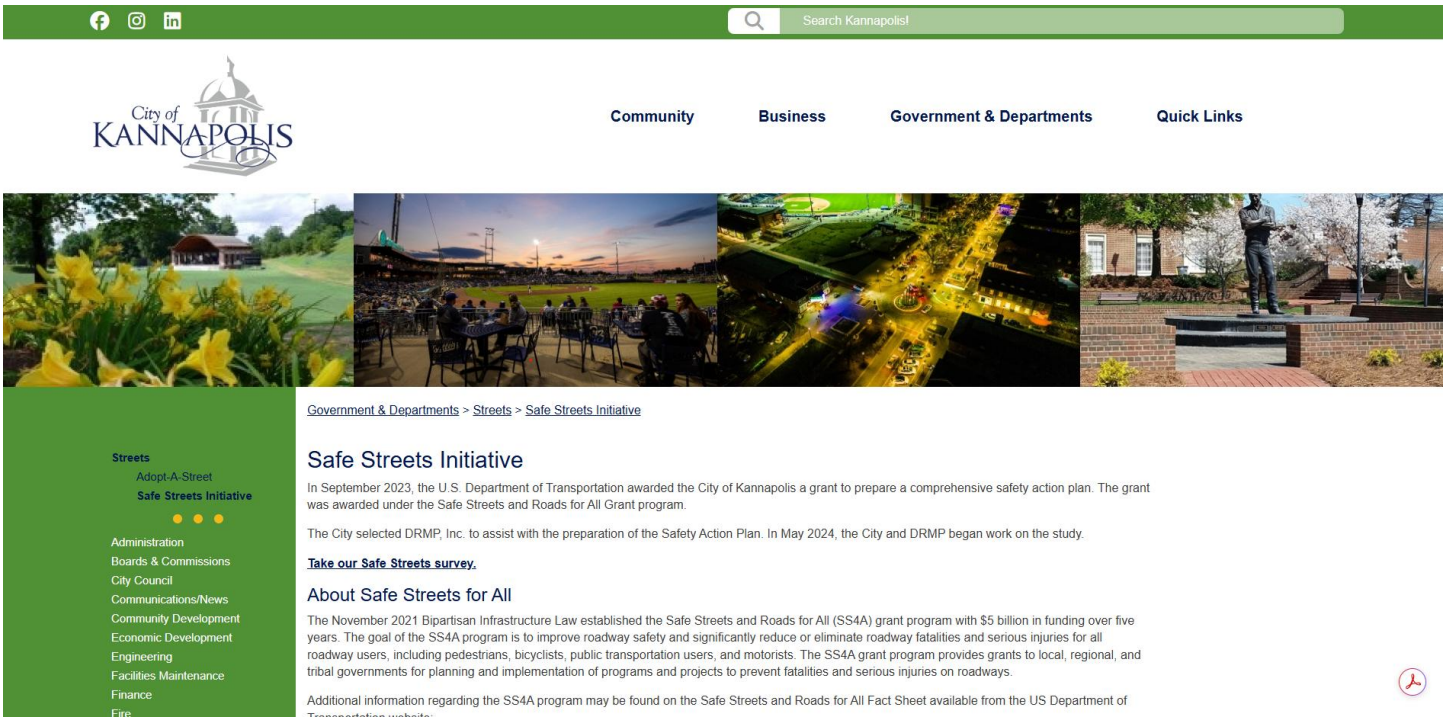


Figure IV-1: Screenshot of Kannapolis' Safe Streets Initiative Webpage

The Kannapolis City Council held a public hearing for the Kannapolis Safety Action Plan on November 24, 2025. Updates to the plan will be available at the City's website to track the progress of these initiatives and countermeasures suggested. Any projects implemented will be noted on the City's Safe Streets for All website.

V. EXISTING EFFORTS

Existing safety improvement efforts within Kannapolis include completed planning study reports and ongoing transportation projects. The City and NCDOT are both leading in these efforts.

A. Planning Studies

Safety is a consideration in a number of plans developed by the City of Kannapolis. These plans include the following:

- Kannapolis Bicycle Plan-August 2014
- Kannapolis Walkable Community Plan-February 2007
- Move Kannapolis Forward-2030 Comprehensive Plan-March 2018

The Kannapolis Bicycle Plan includes several safety-related recommendations, including designing streets to maximize bicycle safety, implementing road diets where appropriate, and incorporating bicycle safety and awareness into driver's education courses.

The Kannapolis Walkable Community Plan includes the following safety goals:

- Provide a diverse and safe environment for pedestrians.
- Existing pedestrian facilities (street crossings, sidewalks, etc.) shall be safe and meet all ADA standards.
- Incorporate safe pedestrian facilities in coordination with all street programs.
- Provide safe crossing opportunities of major barriers and streets.
- Adopt traffic calming measures in high speed traffic areas.
- Enhance vehicle and pedestrian separation through planting strips and designated crosswalks.

An expected outcome of the Move Kannapolis Forward-2030 Comprehensive Plan is that "pedestrian, bicycle, and vehicle crashes [will be] reduced." The plan includes the statement that "safety will be the City's highest priority for its streets, and they will be designed to minimize vehicle crashes and potential conflict points." The plan also recommends the following safety-related policies and actions:

- Implement policy to set street improvement priorities based on traffic safety.
- Update the current traffic calming policy.
- Establish a process for evaluating traffic safety concerns.
- Conduct and implement corridor studies.
- Increase enforcement of traffic safety laws.

B. Programmed Transportation Projects

The following projects included in the 2026-2035 North Carolina State Transportation Improvement Program (STIP) will improve safety for transportation users:

- STIP Project EB-5844 involves adding curb and gutter and a sidewalk to the portion of SR 2154 (Little Texas Road) between SR 2126 (Dale Earnhardt Boulevard) and SR 2180 (Lane Street). Right of way acquisition for this project is in progress and construction is scheduled for fiscal year 2025 in the 2026-2035 STIP.
- STIP Project EB-5921 involves constructing a sidewalk on SR 2739 (North Main Street) from 12th Street to 22nd Street. Right of way acquisition and construction for this project are scheduled in the 2026 2035 STIP for fiscal years 2030 and 2033, respectively.
- STIP Project U-3440 involves widening NC 3 (Mooresville Road) to four lanes with a median between the proposed West Side Bypass (STIP Project U-2009) to SR 1691 (Loop Road) in Kannapolis. This project is under construction.
- STIP Project U-5761 involves constructing improvements to the intersection of US 29-601 (Cannon Boulevard) and NC 3 (Dale Earnhardt Boulevard). Right of way acquisition for this project is in progress and construction is scheduled for fiscal year 2027 in the 2026-2035 STIP.
- STIP Project U-6062 involves upgrading SR 2739 (South/North Main Street) from SR 2000 (Jackson Park Road/North Loop Road) in Kannapolis to SR 1211 (Kimball Road) in China Grove and will include the incorporation of bicycle lanes and sidewalks. This project is funded in the 2026-2035 STIP for preliminary engineering only. Right of way acquisition and construction are not currently funded.
- STIP Project Y-4810K involves constructing a grade separation at a railroad crossing on SR 1766 (Rogers Lake Road). This project is currently under construction.

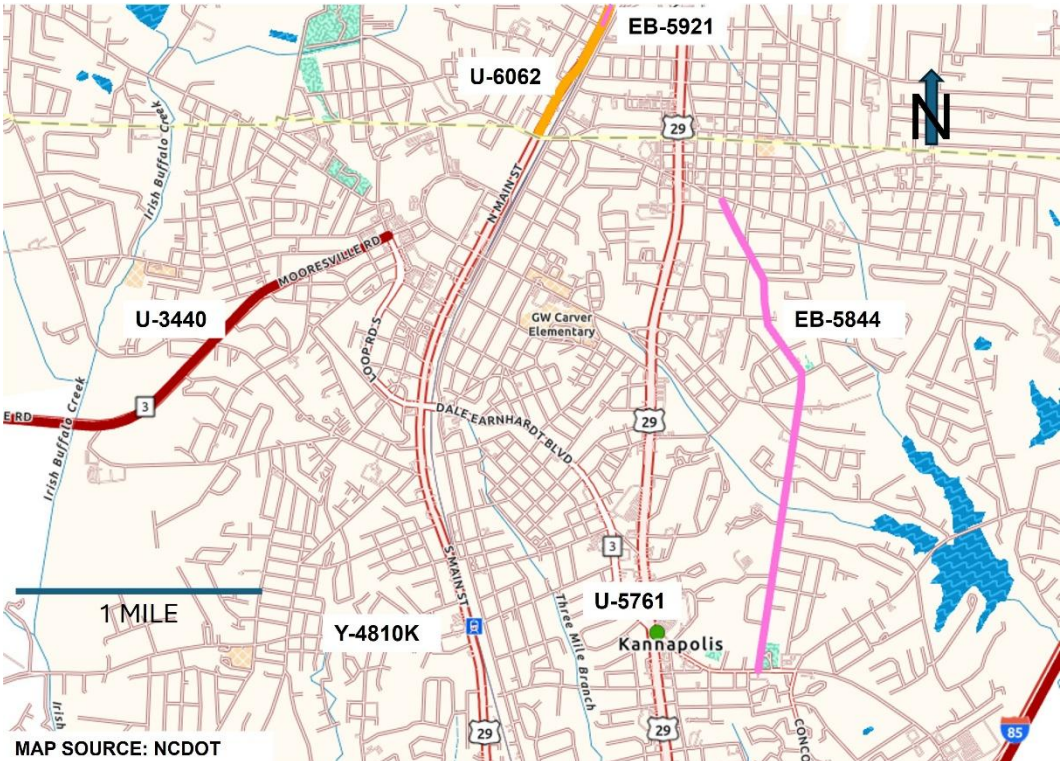


Figure V-1: STIP Projects in Kannapolis

VI. DATA ANALYSIS and SUMMARY

A. Preliminary Analysis

As discussed previously, planning level section safety scoring data provided by the NCDOT Traffic Safety Unit was primarily used to determine the roadway sections to be studied in detail. Total crash frequency by intersection data provided by the NCDOT Traffic Safety Unit and crash data provided by the Kannapolis Police Department were used to develop the list of intersections to be studied in detail.

The compiled list of roadway sections and intersections were also compared to projects included in the 2024-2033 North Carolina State Transportation Improvement Program (STIP). None of the identified roadway segments or intersections are within the limits of an ongoing STIP roadway project, but two segments overlap with pedestrian/bicycle projects.

A draft list of roadway segments and intersections was presented to the Kannapolis Safety Action Plan Stakeholder Committee at a meeting held on September 18, 2024. The draft list included the following roadway segments and intersections:

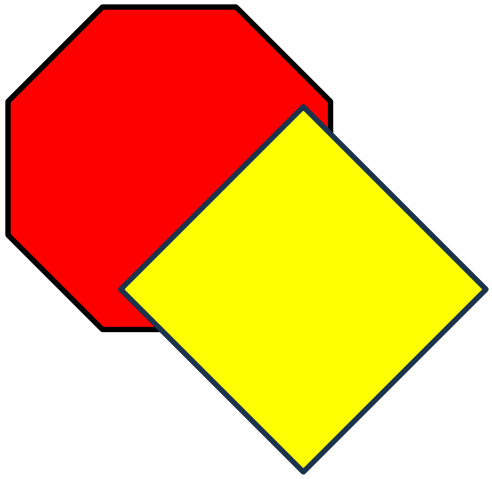
Roadway Segments:

- SR 1430 (Kannapolis Parkway) from I-85 to SR 1622 (Trinity Church Road)
- NC 3 (Dale Earnhardt Boulevard), from Watson Crick Drive to SR 1766 (Rogers Lake Road)
- SR 1643 (Rainbow Drive/Bethpage Road), NC 3 (Mooresville Road) to SR 1008 (South Main Street)
- US 29 (Cannon Boulevard), I-85 to Wilson Street
- NC 3 (Concord Lake Road), Cloverleaf Parkway/Executive Park Drive NE to SR 2126 (Dale Earnhardt Boulevard)
- SR 2126 (Dale Earnhardt Boulevard), Old Earnhardt Road to I-85
- SR 1008 (South Main Street), Fredrick Avenue to Walker Street
- SR 1625/SR 1766 (Rogers Lake Road), Sherwood Drive to NC 3 (Dale Earnhardt Boulevard)
- SR 2180 (Lane Street), US 29 (Cannon Boulevard) to Wright Avenue
- SR 2154 (Little Texas Road), NC 3 (Dale Earnhardt Boulevard) to Chipola Street
- SR 1124 (West C Street), SR 1129 (Nathan Avenue) to Glenn Avenue
- NC 3 (Mooresville Road), Bethpage Road to Cypress Avenue
- SR 1008 (South Main Street), SR 1790 (Winecoff School Road) to Easy Street

Intersections:

- SR 1430 (Kannapolis Parkway)/Rogers Lake Road
- NC 73/SR 1622 (Trinity Church Road)
- US 29 (North Cannon Boulevard)/SR 1254 (East 22nd Street)
- SR 2180 (Lane Street)/Earley Street
- SR 2180 (Lane Street)/SR 2202 (China Grove Road)
- SR 1238 (China Grove Road)/SR 1308 (Moose Road)
- NC 73/SR 1602 (Jim Johnson Road)

At that meeting, the committee recommended removing the intersection of NC 73 at SR 1602 (Jim Johnson Road) from the list of intersections to be studied in detail because this section of NC 73 is outside of the Kannapolis City Limits. The minutes of the Stakeholder Committee Meeting are included in Appendix A of this report.



Following the meeting, the segment of SR 1706 (East 1st Street) between North Main Street and North Harding Avenue was added to the list of roadway segments to be studied in detail. Also, the results of the public survey became available after the meeting, and intersections identified in the survey were taken into consideration. The intersections of West A Street and West C Street with North Loop Road were added to the list of intersections to be studied in detail based on the survey results. The roadway segment on Lane Street and the intersections of Earley Street and China Grove Road with Lane Street were removed from the detailed study list because a safety project was recently completed along Lane Street.

Table 1 below lists the roadway segments selected for detailed study. These segments are shown on Figure 3 and additional data for these roadway segments are presented in Appendix C.

Table 1-Roadway Segments for Detailed Study

ROADWAY	FROM	TO	LENGTH
SR 1430 (Kannapolis Pkwy.)	I-85	SR 1622 (Trinity Church Rd.)	2.5 mi.
NC 3 (Dale Earnhardt Blvd.)	Watson Crick Dr.	SR 1766 (Rogers Lake Rd. E)	2.1 mi.
SR 1643 (Rainbow Dr./Bethpage Rd.)	NC 3 (Mooresville Rd.)	SR 1008 (S. Main St.)	1 mi.
US 29 (Cannon Blvd.)	I-85	Wilson St.	3 mi.
NC 3 (Concord Lake Rd.)	Cloverleaf Pkwy/Executive Park Dr. NE	SR 2126 (Dale Earnhardt Blvd.)	1.7 mi.
SR 2126 (Dale Earnhardt Blvd.)	Old Earnhardt Rd.	I-85	0.3 mi.
SR 1008 (S. Main St.)	Fredrick Ave.	Walker St.	0.7 mi.
SR 1625/SR 1766 (Rogers Lake Rd.)	Sherwood Dr.	NC 3 (Dale Earnhardt Blvd.)	1.5 mi.
SR 2154 (Little Texas Rd.)	NC 3 (Dale Earnhardt Blvd.)	Chipola St.	1.5 mi.
SR 1124 (West C St.)	SR 1129 (Nathan Ave.)	Glenn Ave.	0.7 mi.
NC 3 (Mooresville Rd.)	Bethpage Rd.	Cypress Ave.	1 mi.
SR 1008 (S. Main St.)	SR 1790 (Winecoff School Rd.)	Easy St.	0.5 mi.
SR 1706 (E. 1st St.)	N. Main St.	N. Harding Ave.	0.6 mi.

Shaded roadway segments are within a persistent poverty or disadvantaged census tract.

Table 2 below lists the intersections selected for detailed study. These intersections are shown on Figure 3 and additional data for these intersections are presented in Appendix C.

Table 2-Intersections for Detailed Study

INTERSECTION
SR 1430 (Kannapolis Pkwy.)/Rogers Lake Rd.
NC 73/SR 1622 (Trinity Church Rd.)
US 29 (N. Cannon Blvd.)/SR 1254 (E. 22nd St.)
North Loop Rd./SR 1680 (West C St.)
North Loop Rd./SR 1913 (West A St.)
US 29 (N. Cannon Blvd.)/SR 1267 (Ebenezer Rd.)
SR 1238 (China Grove Rd.)/SR 1308 (Moose Rd.)

Shaded intersections are within a persistent poverty or disadvantaged census tract.

B. Detailed Analysis

Detailed crash data was obtained from NCDOT for the thirteen roadway segments and seven intersections identified for detailed study. This data was used to identify roadway segments for safety improvements. Tables 3 and 4 summarize crash data for these roadway segments and intersections.

Table 3-Crash Rates for Roadway Segments Studied in Detail

ROUTE	FROM	TO	NO. OF FATAL INJURY CRASHES	NO. OF SERIOUS INJURY CRASHES (FATAL & A)	FATAL CRASH RATE*	SERIOUS INJURY CRASH RATE (FATAL & A)*	TOTAL CRASH RATE*
SR 1430 (Kannapolis Pkwy.)	I-85	SR 1622 (Trinity Church Rd.)	2	6	1.61	4.84	428.45
NC 3 (Dale Earnhardt Blvd.)	Watson Crick Dr.	SR 1766 (Rogers Lake Rd. E)	2	6	3.82	11.46	805.71
SR 1643 (Rainbow Dr./Bethpage Rd.)	NC 3 (Mooresville Rd.)	SR 1008 (S. Main St.)	1	2	16.96	33.92	864.92
US 29 (Cannon Blvd.)	I-85	Wilson St.	3	1	2.28	0.76	536.27
NC 3 (Concord Lake Rd.)	I-85	SR 2126 (Dale Earnhardt Blvd.)	0	2	0.00	4.56	526.93
SR 2126 (Dale Earnhardt Blvd.)	Old Earnhardt Rd.	I-85	0	1	0.00	7.06	1,009.06
SR 1008 (S. Main St.)	Fredrick Ave.	Walker St.	0	0	0.00	0.00	431.23
SR 1625/SR 1766 (Rogers Lake Rd.)	Sherwood Dr.	NC 3 (Dale Earnhardt Blvd.)	0	1	0.00	4.83	825.59
SR 2154 (Little Texas Rd.)	NC 3 (Dale Earnhardt Blvd.)	Chipola St.	2	2	9.65	9.65	342.61
SR 1124 (West C St.)	SR 1129 (Nathan Ave.)	Glenn Ave.	0	2	0.00	21.14	433.38
NC 3 (Mooresville Rd.)	Bethpage Rd.	Cypress Ave.	0	0	0.00	0.00	243.78
SR 1008 (S. Main St.)	SR 1790 (Winecoff School Rd.)	Easy St.	0	0	0.00	0.00	552.32
SR 1706 (E. 1st St.)	N. Main St.	N. Harding Ave.	0	0	0.00	0.00	344.62

*-Crash rate per 100 million vehicle miles traveled.
Shaded roadway segments are within a persistent poverty or disadvantaged census tract.

Table 4-Crash Rates for Intersections Studied in Detail

INTERSECTION	NO. OF FATAL INJURY CRASHES	NO. OF SERIOUS INJURY CRASHES (FATAL & A)	FATAL CRASH RATE*	SERIOUS INJURY CRASH RATE (FATAL & A)*	B OR C INJURY CRASH RATE*	TOTAL CRASH RATE*
SR 1430 (Kannapolis Pkwy)/Rogers Lake Rd	0	0	0.00	0.00	25.17	44.04
NC 73/SR 1622 (Trinity Church Rd)	0	0	0.00	0.00	18.88	96.47
US 29 (N. Cannon Blvd.)/SR 1254 (E. 22nd St.)	1	1	3.16	3.16	22.15	91.75
North Loop Rd./SR 1680 (West C St.)	0	0	0.00	0.00	18.66	96.41
North Loop Rd./SR 1913 (West A St.)	0	0	0.00	0.00	23.80	57.11
US 29 (N. Cannon Blvd.)/SR 1267 (Ebenezer Rd.)	0	0	0.00	0.00	12.80	48.01
SR 1238 (China Grove Rd.)/SR 1308 (Moose Rd.)	0	1	0.00	13.35	53.40	186.9

*-Crash rate per 100 million vehicle miles traveled.
Shaded intersections are within a persistent poverty or disadvantaged census tract.

C. Locations Recommended for Countermeasures

The four roadway segments with the highest serious crash rates and the four intersections with the highest total or serious injury crash rates include:

Roadway Segments

- NC 3 (Dale Earnhardt Boulevard), from Watson Crick Drive to SR 1766 (Rogers Lake Road)
- SR 1643 (Rainbow Drive/Bethpage Road), from NC 3 (Mooresville Road) to SR 1008 (South Main Street)
- SR 2154 (Little Texas Road), from NC 3 (Dale Earnhardt Boulevard) to Chipola Street
- SR 1124 (West C Street), from Nathan Avenue to Glenn Avenue

Intersections

- NC 73/SR 1622 (Trinity Church Road)
- US 29 (North Cannon Boulevard)/SR 1254 (East 22nd Street)
- SR 1680 (West C Street)/North Loop Road
- US 29 (Cannon Boulevard)/SR 1267 (Ebenezer Road)

These locations were presented to the Stakeholder Committee at an August 13, 2025 meeting. At the meeting, it was discussed that a sidewalk project is under development along Little Texas Road. STIP Project EB-5844 will

add curb and gutter and sidewalks to Little Texas Road from Dale Earnhardt Boulevard to Lane Street. Right of way is currently being acquired for the project and construction is scheduled for fiscal year 2025 in the current State Transportation Improvement Program. Given that there is an ongoing project on this section of roadway, it was removed from consideration for countermeasures.

Roadway segments recommended for countermeasures are presented on Table 5. These locations are shown on Figure 4.

Table 5-Roadway Segments Recommended for Countermeasures

ROADWAY	FROM	TO	LENGTH
NC 3 (Dale Earnhardt Blvd.)	NC 3 (Mooresville Rd.)/Watson Crick Dr.	SR 1766 (Rogers Lake Rd. E)	2.1 mi.
SR 1643 (Rainbow Dr./Bethpage Rd.)	NC 3 (Mooresville Rd.)	SR 1008 (S. Main St.)	1 mi.
SR 1124 (West C St.)	SR 1129 (Nathan Ave.)	Glenn Ave.	0.7 mi.

Shaded roadway segments are within a persistent poverty or disadvantaged census tract.

Intersections recommended for countermeasures are presented on Table 6. These locations are shown on Figure 4.

Table 6-Intersections Recommended for Countermeasures

INTERSECTION
NC 73/SR 1622 (Trinity Church Rd.)
US 29 (N. Cannon Blvd.)/SR 1254 (E. 22nd St.)
North Loop Rd./SR 1680 (West C St.)
US 29 (N. Cannon Blvd.)/SR 1267 (Ebenezer Rd.)

Shaded intersections are within a persistent poverty or disadvantaged census tract.

VII. EMPHASIS AREAS and COUNTERMEASURES

During the detailed analysis, it was observed that sight distance is limited at several locations in Kannapolis. It was also found that left turn crashes make up a high percentage of the serious injury crashes while rear end crashes make up a high percentage of the total crashes for the locations recommended for countermeasures.

A. Emphasis Area 1: Sight Distance

Description: During the study, it was observed there are several intersections within Kannapolis with limited sight distance.

Goal: Improve sight distance at intersections.

Strategies for Emphasis Area 1:

- Reduce speed limit on major street
- Restrict turns out of streets with insufficient sight distance
- Clear trees and shrubs within the right of way or obtain additional right of way and clear to maintain a sight distance triangle

B. Emphasis Area 2: Left Turn Crashes

Description: Left turn crashes make up the highest percentage of the fatal and serious injury crashes occurring at the locations studied in detail.

Goal: Reduce left turn crashes

Strategies for Emphasis Area 2:

- Provide protected left turn phasing at signalized intersections
- Prohibit left turns

C. Emphasis Area 3: Rear End Collisions

Description: Rear end collisions make up the highest percentage of the crashes occurring at the locations studied in detail.

Goal: Reduce rear end collisions.

Strategies for Emphasis Area 3:

- Add turn lanes at intersections
- Add advance warning signs prior to signalized intersections
- Add flashing when red warning signs prior to signalized intersections
- Review and adjust signal timings

VIII. LIST OF PROJECTS AND STRATEGIES

Recommended improvements to address safety issues at the three roadway sections and four intersections identified for countermeasures are presented below. A total cost for the recommended improvements is presented as well. Detailed cost estimates and conceptual designs for the recommended countermeasures are presented in Appendix D.

NC 3 (Dale Earnhardt Boulevard) from NC 3 (Mooresville Rd)/Watson Crick Drive to SR 1766 (Rogers Lake Road)

Issues:

- Insufficient sight distance at West Avenue, Spring Street, McClain Street, and Rogers Lake Road.
- Fifteen crashes occurred at the Ridge Avenue intersection. The majority of rear-end crashes occurred on the eastbound approach of this intersection. Many sideswipes approaching the intersection going eastbound occurred as well.
- The majority of the crashes at Fairview Street involve westbound traffic.

Recommended Countermeasures:

- Lower the speed limit to 35 MPH on sections with a current speed limit of 45 MPH.
- Signalize Rogers Lake Road intersection or prohibit left turns from Rogers Lake Road onto Dale Earnhardt Boulevard.
- Prohibit left turns onto Dale Earnhardt Boulevard from McLain Road, Cook Street, and Old Centergrove Road (southern intersection).
- Convert the two-way left turn lane to a median between South Main Street and Vance Street.
- Prohibit left turns from West G Street and Leonard Avenue.
- Prohibit all turns out of Spring Street onto Dale Earnhardt Boulevard.

Total Estimated Cost: $1,339,178-$1,766,883

NC 3 (Dale Earnhardt Boulevard) at the Rogers Lake Road Intersection

SR 1643 (Rainbow Drive/Bethpage Road) from NC 3 (Mooresville Road) to SR 1008 (South Main Street)

Issues:

- Several crashes at Leisure Park intersection. This is possibly a result of a crest vertical curve that is limiting sight distance for drivers at the northern intersection.
- Bethpage Road and Rainbow Drive is an irregular intersection and has had multiple turn and angle crashes.
- Many left turn crashes have occurred at the Leonard Avenue Intersection. This intersection also had the highest number of crashes on this road segment.
- Fatal crash at South Main Street. There is no channelization for the parking lot on the east side of South Main Street.

Recommended Countermeasures:

- Construct a roundabout at the Bethpage Road/Rainbow Drive intersection. All-way stop could be installed as an interim improvement.
- Construct a roundabout at the Bethpage Road/Leonard Avenue intersection. All-way stop could be installed as an interim improvement.
- Construct a roundabout at the Bethpage Road/Richard Avenue intersection. All-way stop could be installed as an interim improvement.
- Add curb on the east side of South Main Street to channelize the driveway for the business on the east side of South Main Street.
- Make Pacific Drive (private street) one way, enter at northern intersection and exit at southern intersection.
- Obtain right of way to clear the obstructions at the Aiken Street intersection to improve sight distance.

Total Estimated Cost: $5,157,590

Looking Towards the Bethpage Road/Leonard Avenue Intersection from the Bethpage Road/Barlow Avenue Intersection

SR 1124 (West C Street) from SR 1129 (Nathan Avenue) to Glenn Avenue

Issues:

- Many rear-end and sideswipe crashes at the Pump Station Road intersection. The intersection is located at the bottom of a hill.
- Limited sight distance for left turns at Franklin Avenue due to the vertical curve east of the intersection.
- Conflicting left turns at Echo Avenue and Glenn Avenue.
- 38% of the crashes along this roadway segment are rear-end.

Recommended Countermeasures:

- Add left and right turn lanes on West C Street at Pump Station Road.
- Conduct signal warrant analysis for West C Street/Pump Station Road intersection.
- Move the start of the 35 MPH zone to west of Nathan Avenue.
- Add an island to restrict left turns onto Echo Avenue.
- Add a left turn lane on West C Street at Glenn Avenue.

Total Estimated Cost: $1,683,863

Looking Eastbound at West C Street Just West of Bridge West of Pump Station Road

NC 73 (Davidson Highway)/SR 1622 (Trinity Church Road)

Issues:

- 69% of the rear-end crashes occurred on the southbound approach.
- Vehicles are unable to see the signal until around the curve.
- The 35 MPH speed limit is only posted near the intersection.
- Placing a signal ahead warning sign could be problematic.

Recommended Countermeasures:

- Prohibit right turns on red on southbound SR 1622.
- Provide queue detection with an optional flashing warning sign if a queue is present.
- Install a flashing warning sign when the signal is red.
- Add reflective high visibility backplates to the traffic signal heads.

Total Estimated Cost: $14,450

Looking Southbound on Trinity Church Road Approaching the NC 73 Intersection (Photo: Google Maps)

SR 1600 (West C Street)/South Walnut Street at North Loop Road/Dale Earnhardt Boulevard

Issues:

- Angle and left turn crashes occurred at this intersection, most of which involved the northbound approach.
- The roadway curvature on North Loop Road may cause sight problems for northbound left turns when a queue is present in the southbound left lane causing the northbound vehicles to be unable to see the southbound through traffic.
- Heavy pedestrian traffic crosses this intersection entering or leaving concerts at a nearby venue. This often occurs at night.

Recommended Countermeasures:

- Review the left turn phasing, allow only protected left turns from northbound Dale Earnhardt Boulevard.
- Add reflective high visibility backplates to the traffic signal heads.
- Move the advanced signal warning sign on northbound Dale Earnhardt Boulevard south of the intersection to south of the trees on the east side of Dale Earhardt Boulevard for better visibility.
- Add a near side signal head for northbound Dale Earnhardt Boulevard.
- Add streetlights at the intersection.

Total Estimated Cost: $82,145

Looking Northbound at West C Street/South Walnut Street Intersection with Dale Earnhardt Boulevard/North Loop Road

US 29 (North Cannon Boulevard)/SR 1254 (East 22nd Street)

Issues:

- A pedestrian fatality occurred at this intersection.
- Fourteen rear-end crashes, the majority of which involved southbound traffic, occurred at this intersection.
- This intersection is the first signal in over 1.2 miles for southbound traffic.
- Twelve angle/left turn crashes occurred at this intersection.

Recommended Countermeasures:

- Add high visibility cross walks, curb ramps, and landing pads in all quadrants.
- Add sidewalks along 22nd Street to next intersection on either side of US 29.
- Widen the islands on US 29 to provide pedestrian refuge.
- Upgrade the signal to include pedestrian actuation.
- Review the left turn signal phasing.
- Conduct traffic counts to determine the need for a southbound right turn lane.
- Add reflective high visibility backplates to traffic signal heads.
- Examine signal coordination and timing.
- Add flashing "Prepare to Stop when Flashing" sign on southbound US 29 north of the intersection.

Total Estimated Cost: $1,033,785

Looking Southbound at US 29 (North Cannon Boulevard)/SR 1254 (East 22nd Street) Intersection

US 29 (North Cannon Boulevard)/SR 1267 (Ebenezer Road)

Issues:

- 67% of the rear-end crashes that occurred at this intersection occurred on the southbound approach.
- The trees in the median north of the intersection block the view of signal heads for southbound traffic.

Recommended Countermeasures:

- Add reflective high visibility backplates to the traffic signal heads.
- Replace the trees in the median with lower growing landscaping within the curves north and south of the intersection to improve the sight distance.
- Add mini-skip pavement markings to direct traffic on Ebenezer Road across US 29.
- Examine signal coordination and timing.

Total Estimated Cost: $12,450

Looking Eastbound at US 29 (North Cannon Boulevard)/SR 1267 (Ebenezer Road) Intersection

IX. IMPLEMENTATION & EVALUATION

A. Implementation

The next step in implementation of the Kannapolis Safety Action Plan is to obtain funding for the recommended improvements. Potential funding sources for this work could include another USDOT Safe Streets for All grant, NCDOT, MPO, or City funding.

Several of the recommended improvements are relatively inexpensive, and could potentially be funded through maintenance funds or included in larger maintenance projects.

B. Prioritization

1. Phase 1 (Within One Year)

Fifteen recommended countermeasures have been identified that could be implemented within a year of approval of this safety action plan. These recommendations are either low-cost, easily implemented improvements or studies (such as examining signal coordination) that would need to be completed before other improvements could be made. The total estimated cost of these improvements is less than $50,000. These improvements are listed on Table 7.

Table 7-Phase 1 Safety Improvement Recommendations

Roadway/Intersection	Recommendation	Cost
NC 3 (Dale Earnhardt Blvd)	Lower Speed Limit	$2,200
SR 1643 (Rainbow Dr)/(Bethpage Rd)	Bethpage Rd/Rainbow Dr All-Way Stop	$1,550
	Bethpage Rd/Leonard Ave All-Way Stop	$1,550
	Bethpage Rd/Richard Ave All-Way Stop	$1,550
	Curb on East Side of South Main St	$7,590
SR 1124 (West C Street)	Lower Speed Limit	$2,000
SR 1124 (West C Street)/Pump Station Road Intersection	Conduct Traffic Signal Warrant Analysis	
NC 73/SR 1622 (Trinity Ch Rd) Intersection	Prohibit Right Turns on Red	$2,000
West C Street/North Loop Rd Intersection	Review Left Turn Signal Phases/Allow only Protected Left Turns	$7,500
	Move Signal Ahead Advance Warning Sign	$695
US 29 (North Cannon Blvd)/SR 1254 (East 22nd St) Intersection	Review Left Turn Signal Phasing	$4,500
	Traffic Counts to Determine Need for Right Turn Lane	$1,000
	Examine Signal Coordination and Timing	$3,000
US 29 (North Cannon Blvd)/SR 1267 (Ebenezer Rd) Intersection	Replace Trees in Median	$3,000
	Examine Signal Coordination and Timing	$10,000
Phase 1 Total Cost		$48,135

2. Phase 2 (1-2 Years)

Eleven recommended countermeasures have been identified that could be implemented within one to two years of approval of this safety action plan. These improvements are generally a little more expensive than the improvements in Phase 1. Some of the less expensive items, such as the traffic signal backplates, have been included in Phase 2 instead of Phase 1 because there are other more expensive signal items recommended in Phase 2 for the same location that can be addressed at the same time. Improvements recommended to be implemented in Phase 2 are shown on Table 8.

Table 8-Phase 2 Safety Improvement Recommendations

Roadway/Intersection	Recommendation	Cost
NC 3 (Dale Earnhardt Blvd)	Prohibit all turns from Spring St (Island)*	$24,035*
	Prohibit all turns from Spring St (curb and gutter)*	$77,800*
SR 1643 (Rainbow Dr)/(Bethpage Rd)	Sight Distance Clearing at Aiken St	Medium
NC 73/SR 1622 (Trinity Ch Rd) Intersection	Queue Detection/Flashing Warning Sign	$11,250
	Traffic Signal Backplates	$1,200
West C Street/North Loop Rd Intersection	Traffic Signal Backplates	$2,200
	Near Side Signal Head	$1,750
	Street Lights	$70,000
US 29 (North Cannon Blvd)/SR 1254 (East 22nd St) Intersection	Traffic Signal Backplates	$2,000
US 29 (North Cannon Blvd)/SR 1267 (Ebenezer Rd) Intersection	Traffic Signal Backplates	$2,200
	Add Mini-skip Pavement Markings	$250
Phase 2 Total Cost		$114,885 Or $168,650

*-Two alternatives are presented for prohibiting all turns from Spring Street. The less expensive option would be to add an island to reduce Spring Street to one lane at the intersection. Another option would be to remove the existing pavement from one lane of Spring Street and extend curb and gutter to reduce Spring Street to one lane at the intersection

3. Phase 3 (2-5 Years)

Ten recommended countermeasures have been identified that could be implemented within two to five years of approval of this safety action plan. These Improvements range in cost from a little more than $11,000 to a little less than $1,000,000. Improvements recommended to be implemented in Phase 3 are shown on Table 9.

Table 9-Phase 3 Safety Improvement Recommendations

Roadway/Intersection	Recommendation	Cost
NC 3 (Dale Earnhardt Blvd)	Signalize Rogers Lake Rd Intersection*	$400,000*
	Prohibit Left Turns from Rogers Lake Rd*	$26,060*
	Prohibit Left Turns from McLain Rd and Cook St	$92,948
	Prohibit Left Turns from Old Centergrove Rd	$25,430
	Prohibit Left Turns from Leonard Ave	$23,280
	Prohibit Left Turns from West G St	$21,255
SR 1124 (West C Street)	Glenn Ave Turn Lane/Echo Ave Left Turn Restriction	$302,600
US 29 (North Cannon Blvd)/SR 1254 (East 22nd St) Intersection	High Visibility Cross Walks, Curb Ramps, and Landing Pads, Add Sidewalks Along East 22nd St, Widen Islands on US 29	$953,495
	Add Pedestrian Actuation to Traffic Signal	$58,540
	Flashing "Prepare to Stop" Sign	$11,250
Phase 3 Total Cost		$1,514,858 Or $1,888,798

*-Two alternatives are presented for improving safety for traffic turning left onto Dale Earnhardt Boulevard from Rogers Lake Road. One alternative would signalize the intersection, while the second would add channelization to prohibit left turns from Rogers Lake Road onto Dale Earnhardt Boulevard without signalization.

4. Phase 4 (5-10 Years)

Five recommended countermeasures have been identified that could be implemented within five to ten years of approval of this safety action plan. These are the most expensive recommendations, with estimated construction costs of over one million dollars. Each will require a more involved project development process than the recommendations in the earlier phases. Improvements recommended to be implemented in Phase 4 are shown on Table 10.

Table 10-Phase 4 Safety Improvement Recommendations

Roadway/Intersection	Recommendation	Cost
NC 3 (Dale Earnhardt Blvd)	Convert Two-Way Left Turn Lane to a Median	$1,126,170
SR 1643 (Rainbow Dr)/(Bethpage Rd)	Bethpage Rd/Rainbow Dr Roundabout	$1,850,000
	Bethpage Rd/Leonard Ave Roundabout	$1,750,000
	Bethpage Rd/Richard Ave Roundabout4	$1,550,000
SR 1124 (West C Street)	Left and Right Turn Lanes at Pump Station Rd	$1,382,000
Phase 4 Total Cost		$7,658,170

C. Evaluation

The City will post this Safety Action Plan on the City's website. The City could review progress towards implementation of the recommendations in this plan on a yearly basis.

DRMP

IREDELL COUNTY

ROWAN COUNTY

CABARRUS COUNTY

KANNAPOLIS

KANNAPOLIS MUNICIPAL LIMITS

KANNAPOLIS DISADVANTAGED CENSUS

N

0 0.5 1 Miles

KANNAPOLIS SAFETY ACTION PLAN STUDY AREA

KANNAPOLIS

CITY OF KANNAPOLIS

SAFETY ACTION PLAN

FIGURE 1

DRMP

IREDELL COUNTY

ROWAN COUNTY

CABARRUS COUNTY

KANNAPOLIS

KANNAPOLIS MUNICIPAL LIMITS

KANNAPOLIS DISADVANTAGED CENSUS TRACTS

FATAL OR SERIOUS INJURY CRASHES

INTERSECTION WITH SERIOUS CRASHES

TOTAL INTERSECTION CRASHES (2019-2023)

- 5 TO 9
- 10 TO 19
- 20 TO 29
- 30 TO 39
- 40 TO 49
- 50 AND ABOVE

PEDESTRIAN CRASHES

BIKE CRASHES

HIGHWAY SAFETY SCORES (2019-2023)

- 0 TO 33
- 33 TO 66
- 66 TO 100
- NO SAFETY SCORE AVAILABLE

INTERSECTIONS WITH SAFETY CONCERNS ACCORDING TO PUBLIC SURVEY

IDENTIFIED INTERSECTION

DATA SOURCE: NCDOT TRAFFIC SAFETY UNIT

N

0 0.5 1 Miles

PRELIMINARY SAFETY DATA

KANNAPOLIS

CITY OF KANNAPOLIS

SAFETY ACTION PLAN

FIGURE 2

DRMP

IREDELL COUNTY

ROWAN COUNTY

CABARRUS COUNTY

KANNAPOLIS

INTERSECTIONS SELECTED

ROADWAY SECTIONS SELECTED

KANNAPOLIS MUNICIPAL LIMITS

KANNAPOLIS DISADVANTAGED CENSUS TRACTS

N

0 0.5 1 Miles

DETAILED STUDY LOCATIONS

KANNAPOLIS

CITY OF KANNAPOLIS

SAFETY ACTION PLAN

FIGURE 3

DRMP

IREDELL COUNTY

ROWAN COUNTY

CABARRUS COUNTY

KANNAPOLIS

INTERSECTIONS SELECTED

ROADWAY SECTIONS SELECTED

KANNAPOLIS MUNICIPAL LIMITS

KANNAPOLIS DISADVANTAGED CENSUS TRACTS

N

0 0.5 1 Miles

LOCATIONS RECOMMENDEDED FOR COUNTERMEASURES

KANNAPOLIS

CITY OF KANNAPOLIS

SAFETY ACTION PLAN

FIGURE 4

Appendix A

Stakeholder Committee Meeting Minutes

DRMP

5808 Faringdon Place, Suite 100, Raleigh, North Carolina 27609
Phone: 919.872.5115 | 1.833.811.3767
www.DRMP.com

Memorandum

DRMP Job #: 301.2400489.000 Date: July 18, 2024

To: FILE

From: Jay McInnis, PE
DRMP

Subject: Kannapolis Safety Action Plan Stakeholder Committee Meeting #1-July 17, 2024

A meeting was held on July 17, 2024, at Kannapolis City Hall to introduce the Kannapolis Safety Action Plan to the Stakeholder Committee and discuss the vision, mission, and goals for the Plan. The following persons were in attendance:

Beth Hassenfritz	City of Kannapolis	Marc Morgan	NCDOT
Betsy Barnette	City of Kannapolis	Jay McInnis	DRMP
Kristin Jones	City of Kannapolis	Theo Ghitea	NCDOT
Michael Rattler	City of Kannapolis		
Richard Smith	City of Kannapolis	**Joined via Teams:**	
Kirk Beard	Kannapolis Fire Department	Phil Conrad	RLC Associates (MPO)
Brent Rowland	Kannapolis Police Department	Scott Rodgers	Kannapolis City Schools
Jeff Mitchell	Cabarrus County Schools	Steve Belk	Kannapolis City Schools
Brian Murphy	NCDOT Traffic Safety	Tanya Thompson	DRMP
Kelly Seitz	NCDOT Div 9 District 1		

Safety Action Plan

Mr. McInnis gave a brief overview of the Kannapolis Safety Action Plan. He explained that the plan is funded through a USDOT Safe Streets and Roads for All Grant (SS4A). The plan will identify the five intersections or roadway segments within Kannapolis with the worst fatal or serious injury crash history and provide recommendations and conceptual designs for improving safety at the five locations.

Stakeholder Committee

Mr. McInnis noted there will be five stakeholder committee meetings for this study. The next three meetings will be virtual, and the final meeting will be held in person. The second meeting is expected to be held in September and DRMP will present the 20 recommended intersection or roadway segments for detailed study. DRMP will document the recommendations in technical memorandums. The third meeting is scheduled for February 2025 and will focus on selecting the five sites to develop countermeasures and conceptual designs to improve safety. The fourth meeting is scheduled for April 2025 and will focus on identifying countermeasures for the five selected sites. The final, in-person meeting will be held in July 2025 and will focus on the conceptual designs for each of the five sites.

Mr. McInnis explained the purpose of the stakeholder committee is to provide input on the plan's vision and goals, detailed study areas, safety improvement prioritization, countermeasure identification, and improvement concepts.

Study Schedule

Mr. McInnis presented the estimated schedule, noting preliminary data collection began in June 2024. A webpage for the study will be developed in July/August 2024, serving as a public outreach platform. Project information, such as the memorandum identifying the 20 initial sites, will be posted on the webpage throughout the duration of the study. He suggested adding mapping and a survey to gather public input. The webpage will be hosted on the City of Kannapolis website.

Mr. McInnis noted that the identification of detailed study areas is underway and should be completed by August. This involves identifying 20 intersections or roadway segments for improvement, focusing on fatal and serious injury crashes. DRMP plans to send out this memorandum to the committee prior to the second Stakeholder Committee Meeting, anticipated in September. Further detailed data collection will occur between October and December 2024. Safety improvement prioritization, selecting the five worst intersections or roadway segments, will occur between December 2024 and January 2025. The third Stakeholder Committee Meeting will be in February 2025. Identification of countermeasures will occur between February and March 2025. The fourth Stakeholder Committee Meeting will be held in April 2025. Concept designs and cost estimates for the five sites will be determined between May and July 2025. The final Stakeholder Committee Meeting will be held in July 2025.

The Safety Action Plan will be prepared between September and October 2025 and presented to the City Council and the public at a public hearing before finalizing. Additional ideas for raising awareness of the plan include presenting information at other public events or including information in mailed utility bills. It was clarified that the SS4A website lays out the public engagement required, including that the plan should be placed on the project webpage.

Study Scope Discussion

Mr. Morgan noted two serious injuries along the railroad tracks and suggested including a rail component to the study, citing safety issues around the rail and the city's efforts to reduce at-grade crossings. Mr. McInnis clarified that while the study can include rail crossings, it cannot address trespassing as it would not fit the scope of the grant. He added that if a rail crossing is among the top five projects, it might be worth starting coordination with the Rail Division when applying for an implementation grant.

Vision, Mission, and Goals

Mr. McInnis stated that one purpose of the meeting is to identify the vision, mission, and goals of the study. He noted these will be included on the project webpage for public viewing. He explained that the vision statement should be an idealized description of the future and provided an example: "No fatal or serious injury crashes on streets or roadways within the City of Kannapolis." He noted the example is similar to vision statements in other studies. Mr. Murphy suggested the vision statement indicate the city is moving towards zero and recommended including a broad timeline. Ms. Hassenfritz suggested broadening the statement to include pedestrians. The group agreed to include a year in the vision statement and eliminate the word "crashes."

The final vision statement is:

"No transportation-related fatalities or serious injuries on streets and roadways within the City of Kannapolis by the Year 2050."

Mr. McInnis explained a mission statement describes what will be done to achieve the vision. He provided the following example: "Eliminate fatal and serious injury crashes on streets and roadways within the City of Kannapolis." The group agreed that the statement should be more specific about the actions taken.

The updated mission statement is:

"Implement a collaborative data-driven approach to reduce and prevent fatalities and serious injuries on all streets and roadways within the City of Kannapolis by teaming with transportation professionals, law enforcement, emergency responders, and the public."

Mr. McInnis explained a goal is a measurable step to achieve the vision and provided two examples:

- "Identify the five intersections or roadway segments within the City of Kannapolis with the highest fatal or serious injury crashes."
- "Reduce fatalities and serious injuries at the identified locations to zero following the implementation of the plan."

The group agreed to keep the first example as a goal. Mr. Murphy suggested the second goal focus more on identifying countermeasures for the five sites. It was noted that fatal accidents are somewhat random and not

necessarily at the locations with the most frequent crashes. Mr. McInnis noted the study will look for patterns where crashes are occurring, and the sites that have some fatal and serious injuries will move to the top.

The second goal was updated to: “Develop countermeasures, conceptual designs, and cost estimates for projects to eliminate fatal and serious injuries at the identified locations.” A third goal was added: “Obtain funding for these projects.”

The goals identified by the group are:

- Identify the five intersections or roadway segments within the City of Kannapolis with the highest fatal or serious injury crashes.
- Develop countermeasures, conceptual designs, and cost estimates for projects to eliminate fatal and serious injuries at the identified locations.
- Obtain funding for these projects.

Next Steps

Mr. McInnis clarified that the next steps for this plan are setting up the project webpage and identifying the 20 intersections or roadway segments for detailed study. The next meeting will be in September. It was agreed that Wednesdays at 10 AM work best for everyone. It was suggested that information be shared with everyone using either Teams or OneDrive.

Action Items:

- DRMP will send language to place on the project webpage.
- DRMP will draft a survey for the project webpage.
- DRMP will schedule the second Stakeholder Committee meeting for a Wednesday in September (possibly the second or third Wednesday).
- DRMP will prepare a memorandum identifying the 20 intersection or roadway segments recommended for improvements.

5808 Faringdon Place, Suite 100, Raleigh, North Carolina 27609
Phone: 919.872.5115 | 1.833.811.3767
www.DRMP.com

Memorandum

DRMP Job #: 301.2400489.000 Date: September 25, 2024

To: FILE

From: Jay McInnis, PE
DRMP

Subject: Minutes for Kannapolis Safety Action Plan Stakeholder Committee Meeting #2-September 18, 2024

A meeting was held on September 18, 2024, via Microsoft Teams, to review the intersections and roadway sections to be studied in detail for the Kannapolis Safety Action Plan with the Stakeholder Committee. The following persons were in attendance:

Beth Hassenfritz	City of Kannapolis	Jeff Mitchell	Cabarrus County Schools
Kristin Jones	City of Kannapolis	Steve Belk	Kannapolis City Schools
Richard Smith	City of Kannapolis	Marc Morgan	NCDOT
Albaro Reyes-Martinez	City of Kannapolis	Theo Ghitea	NCDOT
Annette Privette-Keller	City of Kannapolis	Kelly Seitz	NCDOT
Kirk Beard	Kannapolis Fire Department	Jay McInnis	DRMP
Brent Rowland	Kannapolis Police Department	Andrew Eagle	DRMP
Phil Conrad	Cabarrus-Rowan MPO	Reya Jamison	DRMP

Safety Action Plan Vision, Mission, and Goals

Jay McInnis reviewed the vision statement, mission statement, and goals for the Kannapolis Safety Action Plan.

Vision: No transportation-related fatalities or serious injuries on streets and roadways within the City of Kannapolis by the Year 2050.

Mission: Implement a collaborative data-driven approach to reduce and prevent fatalities and serious injuries on all streets and roadways within the City of Kannapolis by teaming with transportation professionals, law enforcement, emergency responders, and the public.

Goals:

- Identify the five intersections or roadway segments within the City of Kannapolis with the highest fatal or serious injury crashes.
- Develop countermeasures, conceptual designs, and cost estimates for projects to eliminate fatal and serious injuries at the identified locations.
- Obtain funding for these projects.

Status Update

Mr. McInnis explained the status of the plan study. The first stakeholder meeting was held on July 17th, the text for the website and survey was provided to the city on August 15th, and the draft list of roadway segments and intersections to be studied in detail has been developed and will be reviewed during the meeting. He asked Ms. Privette-Keller and Ms. Jones about the status of the web page for the study. Ms. Privette-Keller stated the webpage hosted by the City of Kannapolis is finished and accessible to the public, and the survey is ready to launch. Both Mr. McInnis and Ms. Jones agreed that the survey can be launched, and Ms. Privette-Keller will make the link to the latest survey live.

Data Collection

Mr. McInnis explained that DRMP has gathered data available online from the NCDOT Traffic Safety Unit and put this data into a GIS map and spreadsheets for further analysis. The top three intersections with the most crashes per year between 2016 and 2020, as provided by the Kannapolis Police Department, were also included with this data. He clarified that the NCDOT 2019-2023 safety scoring data is made up of half-mile sections based on fatal crash and critical crash rates, and that sections with higher scores have more issues. The GIS map and spreadsheet also include locations of serious and fatal injury crashes as well as the total number of crashes for intersections.

Data Analysis

Mr. McInnis explained that the top 30 roadway sections with the highest combined safety scores were selected for the preliminary list and compared with injury, pedestrian, and bike crash data and disadvantaged census tracts. If two sections adjacent to each other were selected, the sections were combined, sections were also combined with nearby segments with high safety scores that did not qualify for the top 30 preliminary list. He explained that intersections for detailed study were selected from a list of intersections with either at least one serious injury crash and ten or more total crashes, fifty or more total crashes, or the most reported crashes according to the Kannapolis Police Department. The list of intersections and roadway segments were compared, and intersections within a listed roadway segment were removed from the intersections list.

Detailed Study

Mr. McInnis displayed a map of the roadway segments and intersections for detailed study and gave a brief explanation for each. Listed below are the roadway segments and intersections selected:

Roadway Segments:

- SR 1430 (Kannapolis Pkwy.) from I-85 to SR 1622 (Trinity Church Rd.)
- NC 3 (Dale Earnhardt Blvd.) from Watson Crick Dr. to SR 1766 (Rogers Lake Rd. E)
- SR 1643 (Rainbow Dr./Bethpage Rd.) from NC 3 (Mooresville Rd.) to SR 1008 (S. Main St.)
- US 29 (Cannon Blvd.) from I-85 to Wilson St.
- NC 3 (Concord Lake Rd.) from Cloverleaf Pkwy/Executive Park Dr. NE to SR 2126 (Dale Earnhardt Blvd.)
- SR 2126 (Dale Earnhardt Blvd.) from Old Earnhardt Rd. to I-85
- SR 1008 (S. Main St.) from Fredrick Ave. to Walker St.
- SR 1625/SR 1766 (Rogers Lake Rd.) from Sherwood Dr. to NC 3 (Dale Earnhardt Blvd.)
- SR 2154 (Little Texas Rd.) from NC 3 (Dale Earnhardt Blvd.) to Chipola St.
- SR 2180 (Lane St.) from US 29 (Cannon Blvd.) to Wright Ave.
- SR 1124 (West C St.) from SR 1129 (Nathan Ave.) to Glenn Ave.
- NC 3 (Mooresville Rd.) from Bethpage Rd. to Cypress Ave.
- SR 1008 (S. Main St.) from SR 1790 (Winecoff School Rd.) to Easy St.

Intersections:

- SR 1430 (Kannapolis Pkwy.)/Rogers Lake Rd.
- NC 73/SR 1622 (Trinity Church Rd.)
- US 29/E. 22nd St.
- SR 2180 (Lane St.)/Earley St.
- SR 2180 (Lane St.)/SR 2202 (China Grove Rd.)
- SR 1238 (China Grove Rd.)/SR 1308 (Moose Rd.)
- NC 73/SR 1602 (Jim Johnson Rd.)

Of the roadway segments and intersections selected, nine of thirteen segments and two of seven intersections are within or adjacent to a persistent poverty or disadvantaged census tract.

Brent Rowland commented that part of the intersection of NC 73 and Jim Johnson Rd. is outside of the Kannapolis City limits. Richard Smith said he thought they should take this intersection off the list since the north

end of the intersection is inside the City and the south end is outside of city limits. The rest of the attendees agreed.

Mr. McInnis asked if there were any intersections of concern that were not included in the list. Kirk Beard commented that Cannon Boulevard from I-85 to Wilson Street should be looked at as a possibility for the list. Captain Rowland said that the scores for Mooresville Road and Lane Street may have improved since construction on both roads was finished very recently. Mr. McInnis said they would keep Lane Street on the list for now and acquire updated data but may take NC 3 off the list as its construction was just finished and the data is not reflective of current conditions. After some discussion, the decision was made to leave both Lane Street and NC 3 on the list. Mr. Beard stated the Cannon Boulevard and Dale Earnhardt Boulevard corridors would be the ones he would focus on.

Study Schedule

Mr. McInnis presented the study schedule and stated that currently, the plan is in line with the schedule. The next stakeholder meeting will be held in March 2025.

Next Steps

Mr. McInnis explained that DRMP will request detailed crash data for each roadway segment and intersection from NCDOT and will schedule the next stakeholder meeting soon so it will be on everyone's calendars. Ms. Privette-Keller asked if the City should put a map of the detailed study area on the website page when the survey goes live. Mr. McInnis said that they should, and he will send a map of the detailed study area with roadways shown. Ms. Privette-Keller commented they usually put surveys out for two weeks but could add a week for this survey. Mr. McInnis said that a longer time might be better, and Mr. Smith also said that he thinks the survey should be out for three weeks. Mr. McInnis asked if everyone was able to access the Microsoft group for the plan and will resend the link to join if necessary. The PowerPoint presentation for the meeting will be uploaded to the Microsoft Teams channel.

Action Items:

- Jay McInnis will provide a map of the study area to Ms. Privette-Keller for the City's website (Maps provided by email 9/18/24).
- DRMP will request detailed crash data for intersections from NCDOT.
- The City of Kannapolis will make the survey live to the public.
- The next stakeholder committee meeting will be scheduled for March 2025.

5808 Faringdon Place, Suite 100, Raleigh, North Carolina 27609
Phone: 919.872.5115 | 1.833.811.3767
www.DRMP.com

Memorandum

DRMP Job #: 301.2400489.000 Date: March 19, 2025

To: FILE

From: Tanya Thompson, AICP
DRMP

Subject: Minutes for Kannapolis Safety Action Plan Stakeholder Committee Meeting #3-March 19, 2025

A meeting was held on March 19, 2025, via Microsoft Teams, to review the intersections and roadway sections identified for countermeasures, concept designs, and cost estimates for the Kannapolis Safety Action Plan with the Stakeholder Committee. The following persons were in attendance:

Beth Hassenfritz	City of Kannapolis	Steve Belk	Kannapolis City Schools
Brian Roberts	City of Kannapolis	Brian Murphy	NCDOT
Kristin Jones	City of Kannapolis	Scott Miller	NCDOT
Richard Smith	City of Kannapolis	Jay McInnis	DRMP
Kirk Beard	Kannapolis Fire Department	Andrew Eagle	DRMP
Brent Rowland	Kannapolis Police Department	Tanya Thompson	DRMP
Jeff Mitchell	Cabarrus County Schools		

Safety Action Plan Vision, Mission, and Goals

Jay McInnis reviewed the vision statement, mission statement, and goals for the Kannapolis Safety Action Plan.

Vision: No transportation-related fatalities or serious injuries on streets and roadways within the City of Kannapolis by the Year 2050.

Mission: Implement a collaborative data-driven approach to reduce and prevent fatalities and serious injuries on all streets and roadways within the City of Kannapolis by teaming with transportation professionals, law enforcement, emergency responders, and the public.

Goals:

- Identify the five intersections or roadway segments within the City of Kannapolis with the highest fatal or serious injury crashes.
- Develop countermeasures, conceptual designs, and cost estimates for projects to eliminate fatal and serious injuries at the identified locations.
- Obtain funding for these projects.

The meeting focused on the first goal: Identifying the five intersections or roadway segments within the City of Kannapolis with the highest fatal or serious injury crashes. Mr. McInnis presented the list of the study locations from the previous meeting and explained that DRMP requested crash data from NCDOT, which confirmed crash sites and calculated crash rates.

Status Update

Mr. McInnis explained the status of the plan study. The roadway segments and intersections have been narrowed down to identify those with the highest fatal and/or serious injury crash rates, as well as potential for crash countermeasures at these locations.

Data Analysis

Mr. Eagle presented NCDOT data on the roadway segments, including segment length and crash totals by injury type. The categories included fatal crashes, “A” injury crashes (serious injuries preventing normal activity for at least a day, such as broken bones or significant blood loss), “B” injury crashes (non-disabling but visible injuries like bruises or swelling), “C” injury crashes (no visible injuries but complains of pain or brief unconsciousness), and Property Damage Only (PDO) crashes.

Detailed Study

DRMP analyzed the roadway segments, calculated crash rates, and focused on fatal and type “A” injury crashes. Mr. Eagle identified the five segments with the highest crash rates:

- NC 3 (Dale Earnhardt Blvd.) from Watson Crick Dr. to SR 1766 (Rogers Lake Rd. E)
- SR 1643 (Rainbow Dr./Bethpage Rd.) from NC 3 (Mooresville Rd.) to SR 1008 (S. Main St.)
- US 29 (Cannon Blvd.) from I-85 to Wilson St.
- SR 2154 (Little Texas Rd.) from NC 3 (Dale Earnhardt Blvd.) to Chipola St.
- SR 1124 (West C St.) from SR 1129 (Nathan Ave.) to Glenn Ave.

The crash rates for type “A” injury crashes and fatal crashes were then combined to determine a total crash rate for each segment and the top four were identified:

- NC 3 (Dale Earnhardt Blvd.) from Watson Crick Dr. to SR 1766 (Rogers Lake Rd. E)
- SR 1643 (Rainbow Dr./Bethpage Rd.) from NC 3 (Mooresville Rd.) to SR 1008 (S. Main St.)
- SR 2154 (Little Texas Rd.) from NC 3 (Dale Earnhardt Blvd.) to Chipola St.
- SR 1124 (West C St.) from SR 1129 (Nathan Ave.) to Glenn Ave.

NCDOT provided crash data for the intersections, listing crashes at each intersection, with detailed crash numbers, types, and related characteristics from January 1, 2020 to December 31, 2024. DRMP analyzed crash rates to identify predominant crash types and detect patterns. Mr. Eagle presented the findings, noting that Kannapolis Pkwy. and Rogers Lake Rd., Loop Rd. and West A St., and China Grove Rd. and Moose Rd. are not recommended for countermeasures. The first two had no fatal or serious injury crashes and no clear pattern, while the last had only one serious injury crash and was recently converted from a two-way stop to a four-way stop. It was clarified that DRMP could take a further look at crash reports at Kannapolis Pkwy. And Rogers Lake Rd., but the team and stakeholders agreed it is not a concern at this point.

Mr. Eagle noted four intersections where simple countermeasures could be effective and suggested grouping them as one of the five priority safety project. The first is NC 73/SR 1622 (Trinity Church Rd.), where frequent rear-end crashes occur on Trinity Church Road approaching the light. Next is US 29 (Cannon Blvd.)/E. 22nd St., where a fatal pedestrian crash occurred, and no sidewalks or pedestrian signals are present. Loop Road/West C St. has conflicts between left-turn movements and opposing through traffic. Lastly, US 29 (Cannon Blvd.)/Ebenezer Rd. experiences recurring rear-end crashes, making it another candidate for countermeasures.

Ms. Hassenfritz noted ongoing projects on two of the identified roadway segments. Mr. Smith mentioned a new apartment complex behind the City Hall that will impact NC 3 (Dale Earnhardt Blvd.) and SR 1124 (West C St.). SR 1643 (Rainbow Dr.) has two major projects, including townhomes and detached single-family homes. Additionally, a 230-townhomes development on C Street and Glenn Avenue is set to break ground later this year.

DRMP clarified that while defining study areas, closely located roadway segments were combined into larger sections. The team will analyze these extended segments and collaborate with NCDOT to pinpoint specific crash locations and identify the best countermeasures.

Mr. McInnis asked if there were any roadways segments or intersection that should be revisited. Mr. Bears pointed out frequent crashes at Mount Olivet Road and Cannon Boulevard, while Mr. Rowland noted most involve vehicles turning from Cannon Boulevard onto Mount Olivet Road. He highlighted a sight distance issue where drivers struggle to see beyond the hilltop.

Study Schedule

Mr. McInnis presented the study schedule. The next stakeholder meeting will be held in May 2025, where the discussed roadway segments and intersections will be presented along with potential countermeasures. The Countermeasures Technical Memorandum will be submitted in June. Concepts will be developed and presented to stakeholders in September. A public meeting is scheduled for October. However, the group previously discussed that a presentation to City Council will suffice for public involvement. No public meeting will be held for the study. The Safety Action Plan is expected to be approved in December.

Action Items:

- DRMP will request fatal and serious injury crash data for selected roadway segments.
- DRMP will provide technical memorandum to the stakeholder committee for review. The memo will identify specific countermeasures.
- DRMP will schedule the next stakeholder meeting.
- Jay will send out the presentation and meeting minutes. He noted the presentation is on the Teams channel.

DRMP
5808 Faringdon Place, Suite 100, Raleigh, North Carolina 27609
Phone: 919.872.5115 | 1.833.811.3767
www.DRMP.com

Memorandum

DRMP Job #: 301.2400489.000 Date: August 18, 2025

To: FILE

From: Jay McInnis, PE
DRMP

Subject: Minutes for Kannapolis Safety Action Plan Stakeholder Committee Meeting #4-August 13, 2025

A meeting was held on August 13, 2025, via Microsoft Teams, to review the recommended countermeasures for identified roadway segments and intersections for the Kannapolis Safety Action Plan with the Stakeholder Committee. The following persons were in attendance:

Kirk Beard	Kannapolis Fire Department	Brian Murphy	NCDOT
Brent Rowland	Kannapolis Police Department	Kelly Seitz	NCDOT
Phil Conrad	Cabarrus-Rowan MPO	Tanya Thomson	DRMP
Theo Ghitea	NCDOT	Isabella Nieri	DRMP
Jerome Miller	NCDOT	Jay McInnis	DRMP

Safety Action Plan Vision, Mission, and Goals

Jay McInnis reviewed the vision statement, mission statement, and goals for the Kannapolis Safety Action Plan.

Vision: No transportation-related fatalities or serious injuries on streets and roadways within the City of Kannapolis by the Year 2050.

Mission: Implement a collaborative data-driven approach to reduce and prevent fatalities and serious injuries on all streets and roadways within the City of Kannapolis by teaming with transportation professionals, law enforcement, emergency responders, and the public.

Goals:

- Identify the five intersections or roadway segments within the City of Kannapolis with the highest fatal or serious injury crashes.
- Develop countermeasures, conceptual designs, and cost estimates for projects to eliminate fatal and serious injuries at the identified locations.
- Obtain funding for these projects

Previous Stakeholder Committee Meeting

Mr. McInnis reviewed the detailed study locations that were recommended for safety countermeasures in the previous stakeholder committee meeting. Four roadway segments and four intersections were recommended for countermeasures based on detailed crash data.

Roadway Segments:

- NC 3 (Dale Earnhardt Boulevard) from Watson Crick Drive to SR 1766 (Rogers Lake Road)
- SR 1643 (Rainbow Drive/Bethpage Road) from NC 3 (Mooresville Road) to SR 1008 (South Main Street)
- SR 2154 (Little Texas Road) from NC 3 (Dale Earnhardt Boulevard) to Chipola Street
- SR 1124 (West C Street) from SR 1129 (Nathan Avenue) to Glenn Avenue

Intersections:

- NC 73/SR 1622 (Trinity Church Road)
- US 29/SR 1254 (E. 22nd Street)
- Loop Road/SR 1680 (West C St)
- US 29 (Cannon Boulevard)/SR 1267 (Ebenezer Road)

Status Update

Mr. McInnis explained the status of the plan study. Since the previous stakeholder committee meeting held on March 19, 2025, DRMP has obtained crash rates and crash history reports for the study area and developed countermeasures for the roadway segments/intersections identified in the previous stakeholder committee meeting.

Recommended Countermeasures

Mr. McInnis displayed a map of the roadway segments and intersections recommended for countermeasures. He then provided detailed explanations of the safety issues at each roadway segment and intersection and the countermeasures recommended to address the issues. Listed below are the safety issues, recommended countermeasures, and the comments from stakeholders for each roadway segment and intersection:

NC 3 (Dale Earnhardt Boulevard) from Watson Crick Drive to SR 1766 (Rogers Lake Road)

Issues:

- Insufficient sight distance at West Avenue, Spring Street, McClain Street, and Rogers Lake Road.
- 15 crashes occurred at the Ridge Avenue intersection. The majority of rear-end crashes occur on eastbound approach. Many sideswipes approaching the intersection going eastbound.
- The majority of the crashes at Fairview Street involve westbound traffic.

Recommended Countermeasures:

- Lower the speed limit to 35 MPH on sections with current speed limit of 45 MPH.
- Signalize Rogers Lake Road intersection.
- Prohibit left turns onto NC 3 from McLain Road, Cook Street, and Old Centergrove Road.
- Convert the two-way left turn lane to a median between S. Main Street and Vance Street.
- Prohibit left turns from W. G Street and Leonard Avenue.
- Prohibit all turns out of Spring Street onto NC 3.
- The ideal solution is to add median to the section between Rogers Lake Road and Old Centergrove Road as well as restricting left turns to signalized intersections. This would involve widening the road.

Comments:

- Brent Rowland suggested restricting the Rogers Lake Road intersection to right turn only instead of signalizing the intersection since most crashes at this intersection result from left turns. Doing so would also be less expensive than signalizing the intersection.
- Kirk Beard suggested utilizing the same solution at the Fairview Street intersection. Mr. Rowland supports this, he noted there are many rear-end crashes that result from left turns at this intersection.
- Mr. McInnis inquired into how traffic would be redirected if Rogers Lake Road was right turn only.
- Mr. Beard acknowledged that signalizing the intersections discussed would be ideal, but prefers restricting left turns because it is the less expensive solution.

- Mr. Rowland inquired about the status of the NCDOT project at the intersection of Dale Earnhardt Boulevard and US 29. Restricting left turns was included in this plan. Theo Ghitea informed the group that this project (STIP Project U-5761) has a construction let date of Spring 2027.
- Brian Murphy discussed that a concern with Dale Earnhardt Boulevard is the four-lane undivided cross-section. If the traffic volumes are low enough, a road diet could be considered. Mr. McInnis mentioned the volumes on Dale Earnhardt Boulevard are approximately 16,000 vehicles per day. Mr. Murphy confirmed those volumes are probably too high for a road diet.

SR 1643 (Rainbow Drive/Bethpage Road) from NC 3 (Mooresville Road) to SR 1008 (South Main Street)

Issues:

- Several crashes at Leisure Park intersection. This is possibly a result of a crest vertical curve that is limiting sight distance for drivers at the northern intersection.
- Bethpage Road and Rainbow Drive is an irregular intersection and has had multiple turn and angle crashes.
- Many left turn crashes have occurred at the Leonard Avenue Intersection. This intersection also had the highest number of crashes on this road segment.
- Fatal crash at S. Main Street. There is no channelization for the parking lot on the east side of S. Main Street.

Recommended Countermeasures:

- Construct a roundabout at the Bethpage Road and Rainbow Drive intersection.
- Construct a roundabout at the Leonard Avenue and Bethpage Road intersection.
- Add curb on the east side of S. Main Street to channelize the driveway for the business on the east side of S. Main Street.
- Make Pacific Drive one way.
- Obtain right of way to clear the obstructions at the Aiken Street intersection to improve sight distance.
- The ultimate solution is to widen the roadway to three lanes with curb, gutter, and sidewalk.

Comments:

- Mr. McInnis noted that a sidewalk project is already in progress along the south side of Bethpage Road.
- Mr. Rowland agreed with the idea of a roundabout at Leonard Avenue
- Mr. Beard raised concerns about constructing two roundabouts in such a short distance.
- Mr. Rowland suggested the Richard Avenue intersection also be converted to a roundabout. He mentioned it is hard to see to make a turn onto Bethpage Road at that intersection. Mr. Beard mentioned there is a fire station on Richard Avenue and the Bethpage Road intersection is a tight turn for the fire trucks.

SR 2154 (Little Texas Road) from NC 3 (Dale Earnhardt Boulevard) to Chipola Street

Issues:

- Majority of the crashes along this segment are rear-end.
- There were two fatalities along this roadway segment, one at Hyde Street and one at NC 3.
- El Paso Street is within a curve on Little Texas Road, because of this there were multiple rear-end and angle crashes approaching the El Paso Street intersection.
- Multiple rear-end crashes occurred at the First Street intersection.
- The existing crosswalk for the elementary school directs pedestrians into a ditch on the east end of the crossing.

- The crashes at the NC 3 intersection were majority angle and left turn. The left turn phasing at this intersection recently changed.

Recommended Countermeasures:

- Widen the roadway to three lanes and provide curb, gutter, and sidewalk.
- Adjust vertical alignment on Little Texas Road at Old El Paso Street and/or obtain right of way for sight distance and remove obstructions.
- Prohibit left turns onto Little Texas Road from Old El Paso Street.
- Provide pedestrian facilities and warning signs along Little Texas Road and the connecting streets near Forest Park Elementary with the neighborhood to the east.

Comments:

- Mr. Rowland mentioned the fatality at Hyde Street was a result of reckless driving.
- Mr. Beard recalled there is a sidewalk project along Little Texas Road in progress. Mr. Beard and Mr. Rowland recommended gathering further information regarding the project.
- Following the meeting, it was verified there is a project (STIP Project EB-5844) to add curb and gutter and sidewalks to Little Texas Road from Dale Earnhardt Boulevard to Lane Street. Right of way is currently being acquired for the project and construction is scheduled for fiscal year 2025 in the current State Transportation Improvement Program. Given that there is an ongoing project on this section of roadway, it should probably be removed from consideration for countermeasures.

SR 1124 (West C Street) from SR 1129 (Nathan Avenue) to Glenn Avenue

Issues:

- Many rear-end and sideswipe crashes at the Pump Station Road intersection. The intersection is located at the bottom of a hill.
- Limited sight distance for left turns at Franklin Avenue due to the vertical curve east of the intersection.
- Conflicting left turns at Echo Avenue and Glenn Avenue.
- 38% of the crashes along this roadway segment are rear-end.

Recommended Countermeasures:

- Add left and right turn lanes on West C Street at Pump Station Road.
- Move the start of the 35 MPH zone to west of Nathan Avenue.
- Add an island to restrict left turns onto Echo Avenue.
- Add a left turn lane on West C Street at Glenn Avenue.
- The ultimate solution is to widen West C Street to three lanes with curb and gutter and sidewalk.

Comments:

- Mr. Beard noted that there is a large housing project in progress at the Pump Station Road and West C Street intersection. It's possible that development might signalize the intersection.
- Mr. Rowland agreed with the recommendation to lower the speed limit to 35 MPH.
- Mr. Beard noted there may also be another housing development in progress off Glenn Avenue which would increase traffic. (Following the meeting, it was noted the Kannapolis online Development Map shows a 203-unit townhouse development in progress with road frontages on both West C Street and Glenn Avenue).

NC 73/SR 1622 (Trinity Church Road)

Issues:

- 69% of the rear-end crashes occurred on the southbound approach.
- Vehicles are unable to see the signal until around the curve.
- The speed limit posting of 35 MPH is only posted near the intersection.
- Placing a signal ahead warning sign could be problematic.

Recommended Countermeasures:

- Prohibit right turns on red on southbound SR 1622.
- Provide queue detection with an optional flashing warning sign if a queue is present.
- Install a flashing warning sign when the signal is red.
- Add reflective high visibility backplates to the traffic signal heads.

Comments:

- Mr. Rowland expressed preference for making it a signalized right turn only intersection.

US 29/SR 1254 (East 22nd Street)

Issues:

- A pedestrian fatality occurred at this intersection.
- 14 rear-end crashes, the majority of which involved southbound traffic, occurred at this intersection.
- This intersection is the first signal in over 1.2 miles for the southbound traffic.
- 12 angle/left turn crashes occurred at this intersection.

Recommended Countermeasures:

- Add high visibility cross walks, curb ramps, and landing pads in all quadrants.
- Widen the islands on US 29 provide pedestrian refuge.
- Upgrade the signal to include pedestrian actuation.
- Review the left turn signal phasing.
- Conduct traffic counts to determine the need for a southbound right turn lane.
- Add reflective high visibility backplates to traffic signal heads.
- Examine signal coordination and timing.
- Add flashing “Prepare to Stop when Flashing” sign on southbound US 29 north of the intersection.

Comments:

- Mr. Murphy stated the pedestrian improvements are good at the intersection, but noted there is not a pedestrian network to connect the improvements to. He stated it’s good to pair the pedestrian improvements at the intersection with pedestrian network improvements.
- Mr. Rowland and Mr. Beard mentioned there are issues with intoxicated individuals walking in this area.
- Mr. McInnis asked Mr. Murphy if he recommends adding crosswalks if there are no plans to also construct sidewalk.
- Mr. Murphy responded that several improvements can still be made, however crosswalks would be challenging if there is no sidewalk to cross over to.
- Mr. Murphy mentioned left turn crashes could possibly be addressed with signal timing. He mentioned there are several things that could be done at this intersection to improve safety that are low-cost.

Loop Road/ SR 1680 (West C Street)

Issues:

- Angle and left turn crashes occurred at this intersection, most of which involved the northbound approach.
- The roadway curvature on Loop Road may cause sight problems for northbound left turns when a queue is present in the southbound left lane causing the northbound vehicles to be unable to see the southbound through traffic.

Recommended Countermeasures:

- Review the left turn phasing, allow only protected left turns from northbound Loop Road.
- Add reflective high visibility backplates to the traffic signal heads.
- Move the advanced signal warning sign on northbound Loop Road south of the intersection to south of the trees on the east side of Loop Road for better visibility.
- Add a near side signal head for northbound Loop Road.

Comments:

- Mr. Rowland noted the nearby concert park may be contributing to the crashes at this intersection.
- Mr. Beard suggested another safety concern at this intersection is the lack of lighting and recommended improved lighting. The City will add temporary lighting sometimes at this intersection to facilitate pedestrian crossings at night for events. He mentioned pedestrians are crossing all four directions of this intersection during events.

US 29 (Cannon Boulevard)/SR 1267 (Ebenezer Road)

Issues:

- 67% of the rear-end crashes that occurred at this intersection occurred on the southbound approach.
- The trees in the median north of the intersection block the view of signal heads for the southbound traffic.

Recommended Countermeasures:

- Add reflective high visibility backplates to the traffic signal heads.
- Replace the trees in the median with lower growing landscaping within the curves north and south of the intersection to improve the sight distance.
- Add mini-skip pavement markings to direct traffic on Ebenezer Road across US 29.
- Examine signal coordination and timing.

Comments:

- Mr. Rowland agreed with these recommendations.

General Comments

- When discussing Little Texas Road, Mr. McInnis inquired about the feasibility of widening roadways to three lanes. Mr. Beard and Mr. Rowland both stated this solution is unlikely due to funding constraints. Brian Murphy also expressed concerns about the ability to obtain a safety grant for widening the roadway as it would be a challenge to justify how it would address the specific crash types along the roadway. Mr. Murphy stated there are several low-cost countermeasures that would have a significant impact.

- Mr. Murphy inquired about the nature of the team that did the reviews and developed the countermeasures, was it internal to DRMP or were other agencies involved?
- Mr. McInnis clarified that it was an internal DRMP team that developed the countermeasures.
- Mr. Murphy suggested having an interdisciplinary team review the countermeasures in more detail and help make the decision regarding which solutions to prioritize. He mentioned sometimes after identifying areas of concern a road safety assessment would take place. This would include NCDOT and City staff.

Study Schedule

Mr. McInnis presented the study schedule and stated that currently, things might need to be pushed back to provide more time to further develop the countermeasures. The next stakeholder meeting will be held in November 2025. Mr. Rowland suggested that meetings no longer be held on Wednesdays due to conflicts for the Town of Kannapolis and recommended meeting on Tuesday or Thursday instead.

Next Steps

Mr. McInnis explained that DRMP will provide a technical memo identifying specific countermeasures to the stakeholder committee for review and will schedule the next stakeholder meeting soon so it will be on everyone's calendars. Mr. McInnis asked Mr. Murphy if a draft technical memo would be appropriate. Mr. Murphy said that a draft is appropriate.

Action Items:

- DRMP to provide a draft technical memo, which will identify specific countermeasures, to the Stakeholder Committee for review and comment.
- DRMP to schedule next stakeholder committee meeting.

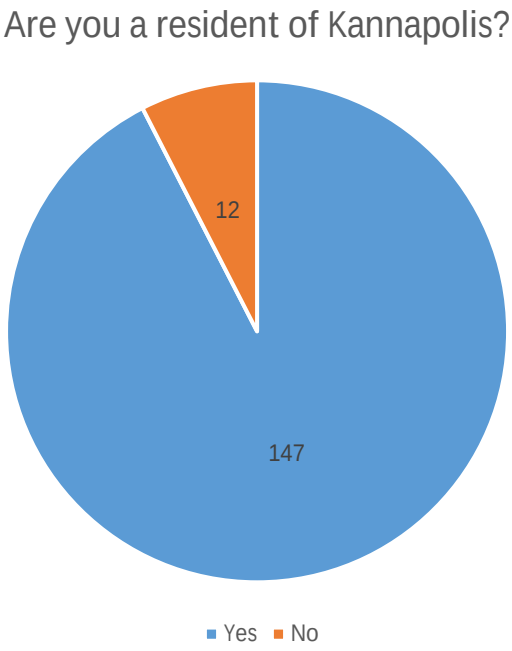
Appendix B

October 2024 Safety Survey Results

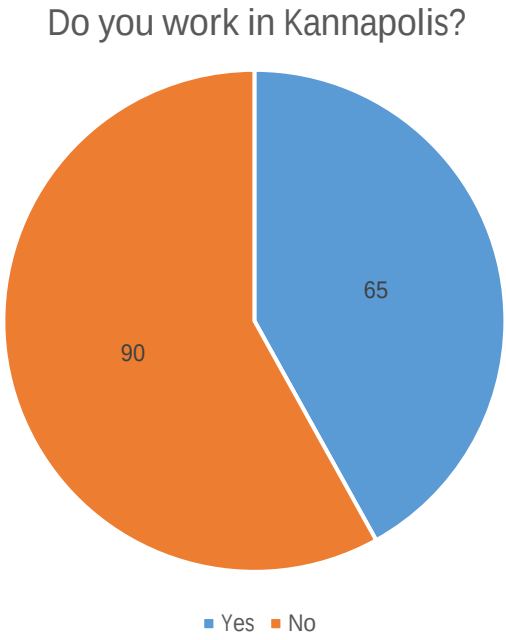
Appendix B-Survey Results

A survey was posted to the City of Kannapolis' website from October 3, 2024 to October 31, 2024. One hundred fifty-nine survey responses were received. Below is a summary of the survey responses.

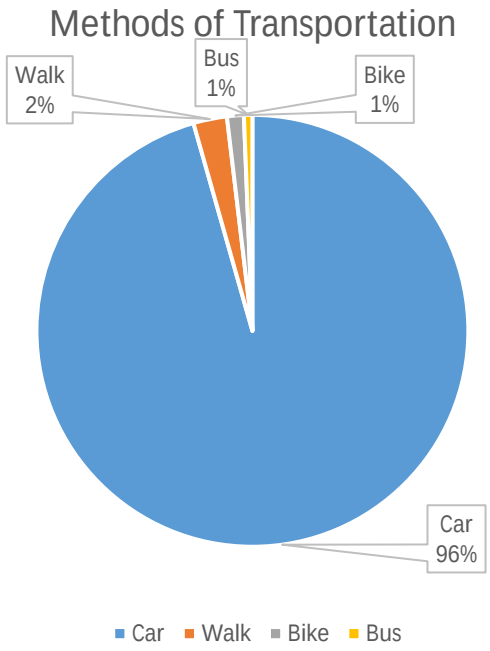
1. Are you a resident of Kannapolis?



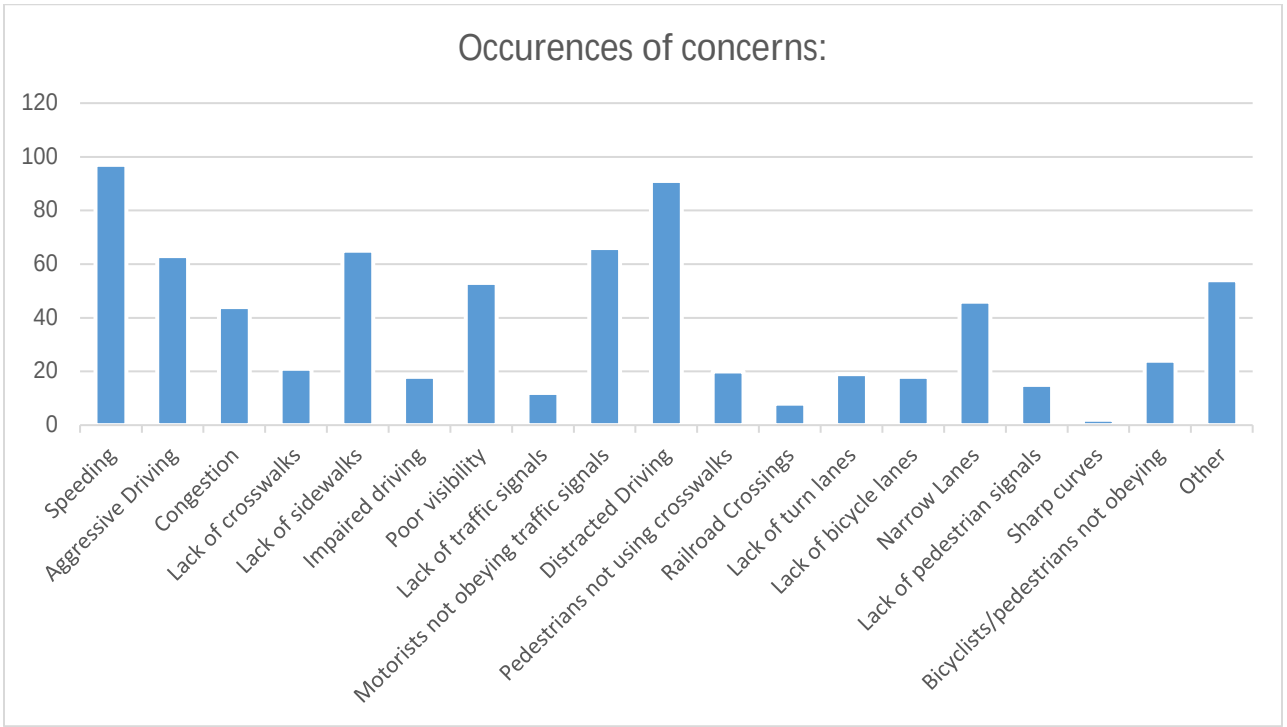
2. Do you work in Kannapolis?



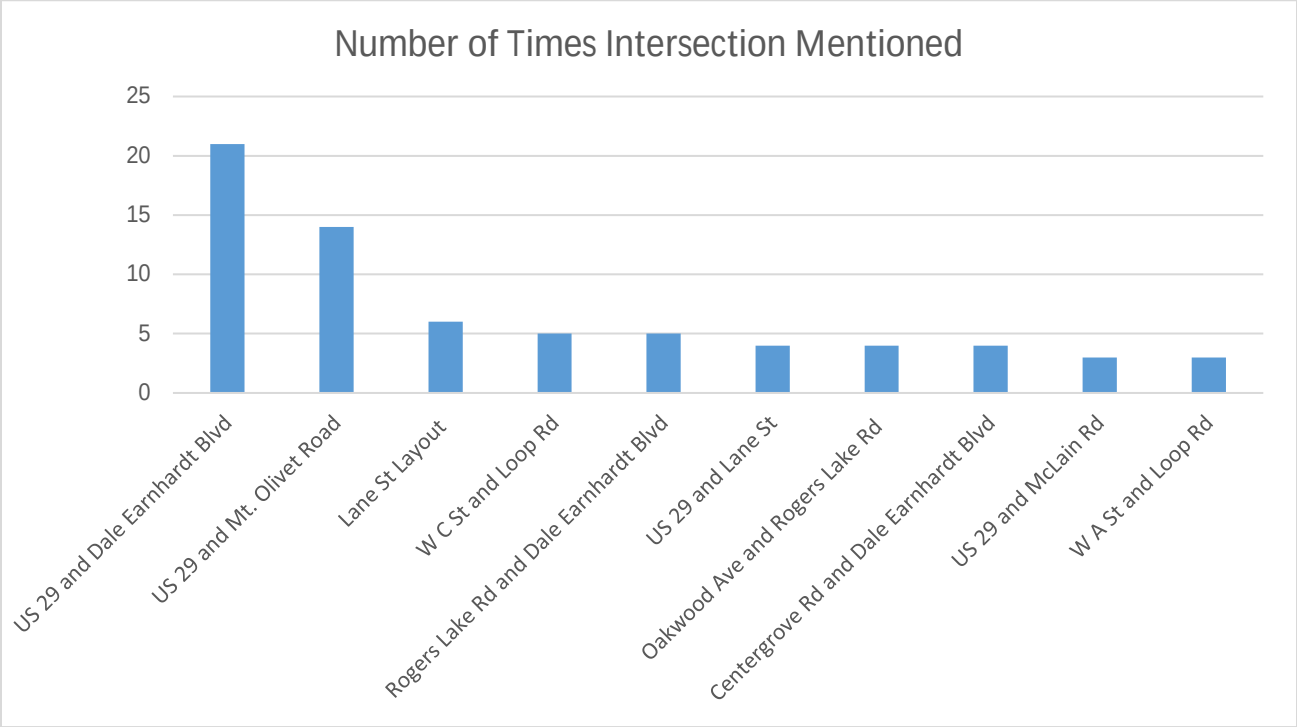
3. How do you typically travel around Kannapolis?



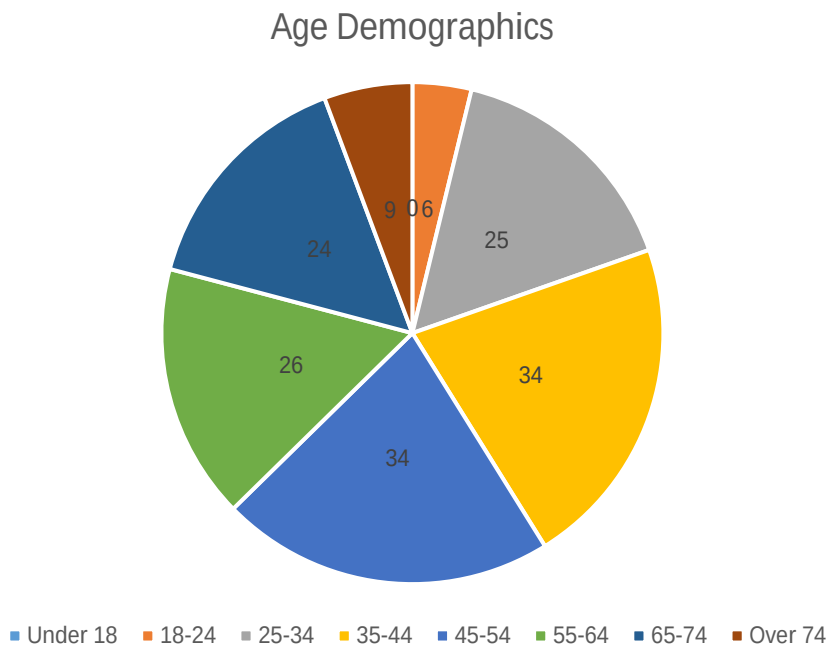
4. Select the top five transportation safety issues in Kannapolis from the list below:



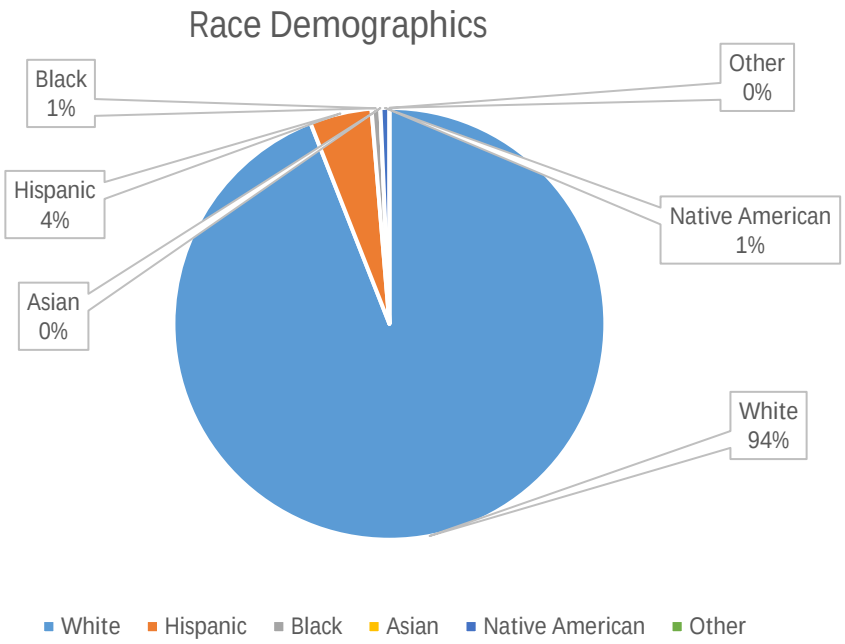
5. List the three intersections or roadway segments in Kannapolis with the most safety concerns



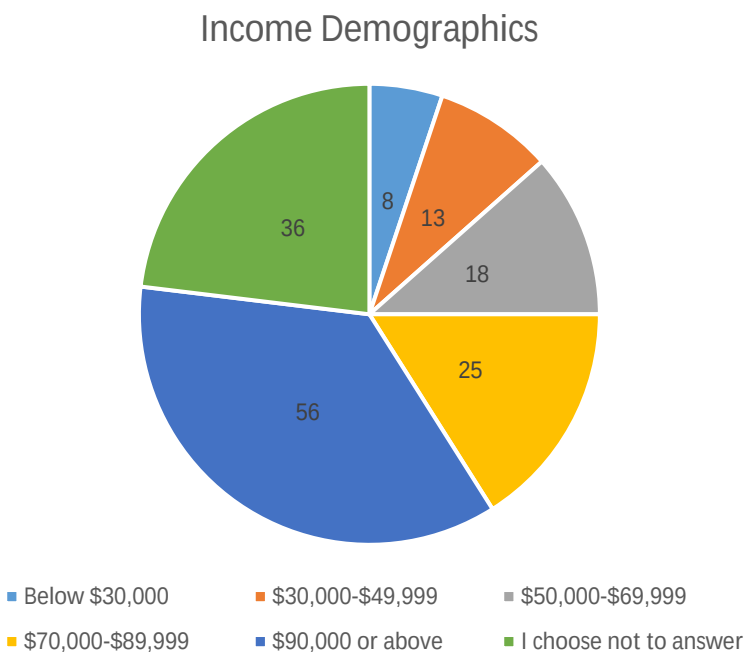
6. What is your age? (Optional question)



7. How would you classify your race? (Optional question)



8. What was your household income last year? (Optional question)



Appendix C

Roadway Segments/Intersections for
Detailed Study

TABLE C1
KANNAPOLIS SAFETY ACTION PLAN
RECOMMENDED ROADWAY SEGMENTS AND INTERSECTIONS FOR DETAILED STUDY

GIS FID	ROUTE/INTERSECTION	FROM	TO	WITHIN DISADVANTAGED CENSUS TRACT?	NO. OF SERIOUS INJURY CRASHES (FATAL OR A)	TOTAL NO. OF B OR C INJURY CRASHES	PROPERTY DAMAGE ONLY CRASHES	TOTAL NO. OF CRASHES	COMMENTS
49, 65, 108, 130, 138	SR 1430 (Kannapolis Pkwy.)	I-85	SR 1622 (Trinity Church Rd.)		6	77	270	353	
2, 33, 44, 83	NC 3	Watson Crick Dr.	SR 1766 (Rogers Lake Rd. E)	Y	6	73	254	333	
1, 95	SR 1643 (Rainbow Dr./Bethpage Rd.)	NC 3 (Mooresville Rd.)	SR 1008 (S. Main St.)	Partially	2	11	22	35	
8, 40, 76, 106, 111, 122	US 29	I-85	Wilson St.	Partially	3	135	441	579	
3, 102, 139, 143	NC 3 (Concord Lake Rd.)	I-85	SR 2126 (Dale Earnhardt Blvd.)	Y	1	37	101	139	
110	SR 2126 (Dale Earnhardt Blvd.)	Old Earnhardt Rd.	I-85	Y	1	26	109	136	
17	SR 1008 (S. Main St.)	Fredrick Ave.	Walker St.	Partially	1	6	21	28	
22, 86, 152, 182	SR 1625/SR 1766 (Rogers Lake Rd.)	Sherwood Dr.	NC 3 (Dale Earnhardt Blvd.)	Partially	2	40	82	124	
32, 117, 181	SR 2154 (Little Texas Rd.)	NC 3 (Dale Earnhardt Blvd.)	Chipola St.	N	1	21	25	47	
45, 167	SR 1124 (West C St.)	SR 1129 (Nathan Ave.)	Glenn Ave.	Partially	1	7	21	29	
10, 63	NC 3 (Mooresville Rd.)	Bethpage Rd.	Cypress Ave.	Partially	0	11	21	32	
155	SR 1008 (S. Main St.)	SR 1790 (Winecoff School Rd.)	Easy St.	N	0	14	32	46	
53	SR 1706 (E. 1st St.)	N. Main St.	N. Harding Ave.	Y	0	2	2	4	Concentration of bicycle and pedestrian crashes.
89	SR 1430 (Kannapolis Pkwy.)/Rogers Lake Rd.			N	1	7	9	17	
135	NC 73/SR 1622 (Trinity Church Rd.)			N	0	10	56	66	
121	US 29 (N. Cannon Blvd.)/SR 1254 (E. 22nd St.)			Y	1	4	16	21	
112	North Loop Rd./SR 1680 (West C St.)			Y	0	5	19	24	Identified in survey.
	North Loop Rd./SR 1913 (West A St.)			Y	N/A	N/A	N/A	N/A	Identified in survey.
126	US 29 (N. Cannon Blvd.)/SR 1267 (Ebenezer Rd.)			Y	0	5	15	20	
124	SR 1238 (China Grove Rd.)/SR 1308 (Moose Rd.)			Y	1	8	11	20	

N/A-Not Available

Appendix D

Conceptual Designs and Cost Estimates

NC 3 (Dale Earnhardt Boulevard) from NC 3 (Mooresville Rd)/Watson Crick Drive to SR 1766 (Rogers Lake Road)

Recommended Countermeasures	Estimated Cost
Lower the speed limit to 35 MPH on sections with a current speed limit of 45 MPH.	$2,200
Signalize Rogers Lake Road intersection or prohibit left turns from Rogers Lake Road onto Dale Earnhardt Boulevard Signal Prohibit left turns (no signal)	 $400,000 $26,060
Prohibit left turns onto Dale Earnhardt Boulevard from McLain Road and Cook Street	$92,948
Prohibit left turns onto Dale Earnhardt Boulevard from Old Centergrove Road	$25,430
Prohibit all turns onto Dale Earnhardt Boulevard from Spring Street Island Remove pavement, add curb and gutter	 $24,035 $77,800
Prohibit left turns onto Dale Earnhardt Boulevard from Leonard Avenue	$23,280
Prohibit left turns onto Dale Earnhardt Boulevard from West G Street	$21,255
Convert two-way left turn lane to a median between South Main Street and Vance Street	$1,126,170
Total Estimated Cost:	$1,339,178 to $1,766,883

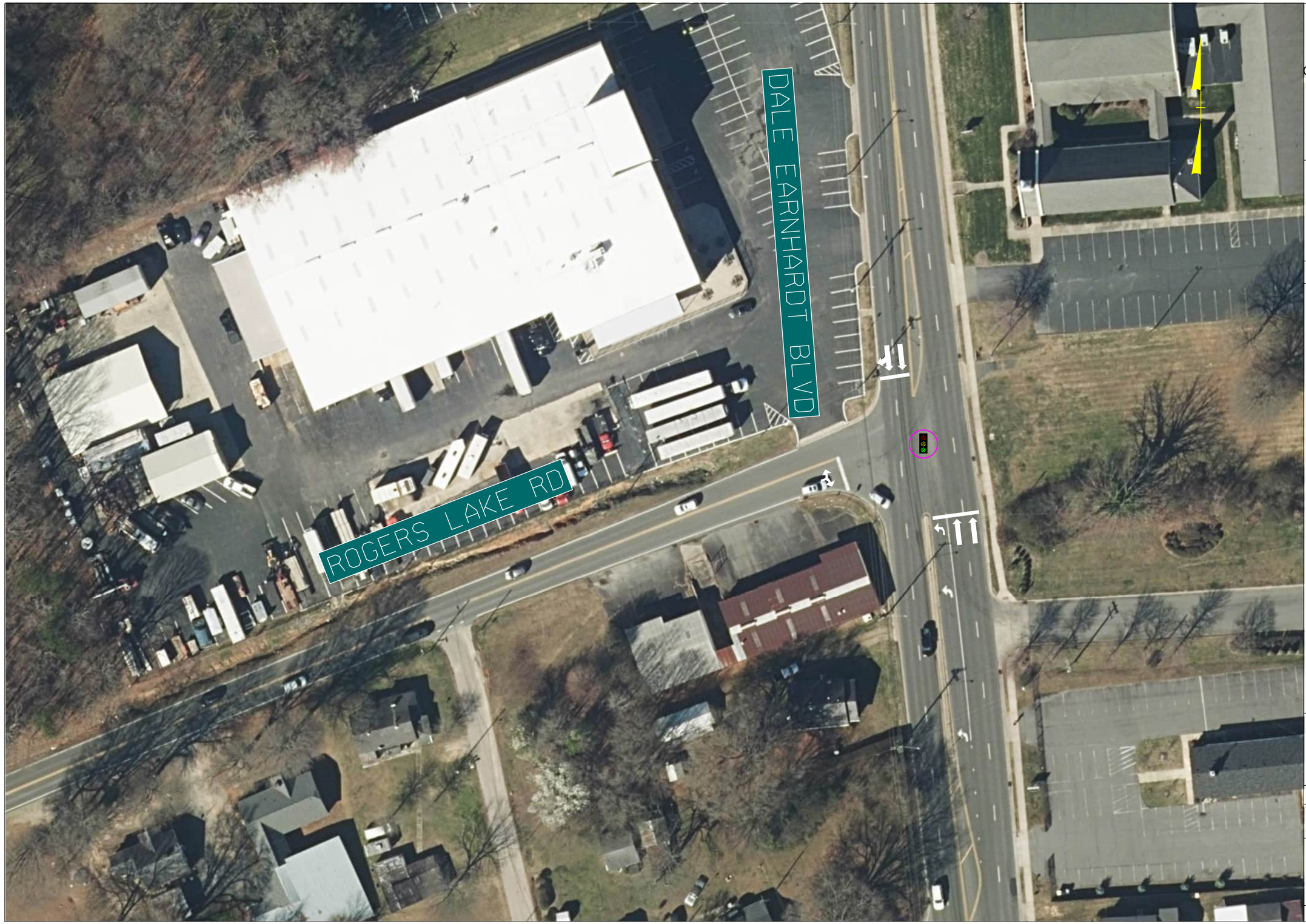


FIGURE D-1

ROGERS LAKE ROAD
CONCEPT INTERSECTION
IMPROVEMENT
(SIGNAL)

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL
- PROPOSED SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

PLANS PREPARED BY:
DRMP
DRMP, INC.
5808 FARINGDON PLACE
RALEIGH, NC 27609
NC LICENSE NO. F-1524 (919) 872-5115

FIGURE D-2

ROGERS LAKE ROAD
CONCEPT INTERSECTION
IMPROVEMENT
(NO RIGHT TURN)

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

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30' 15' 0' 30' 60'

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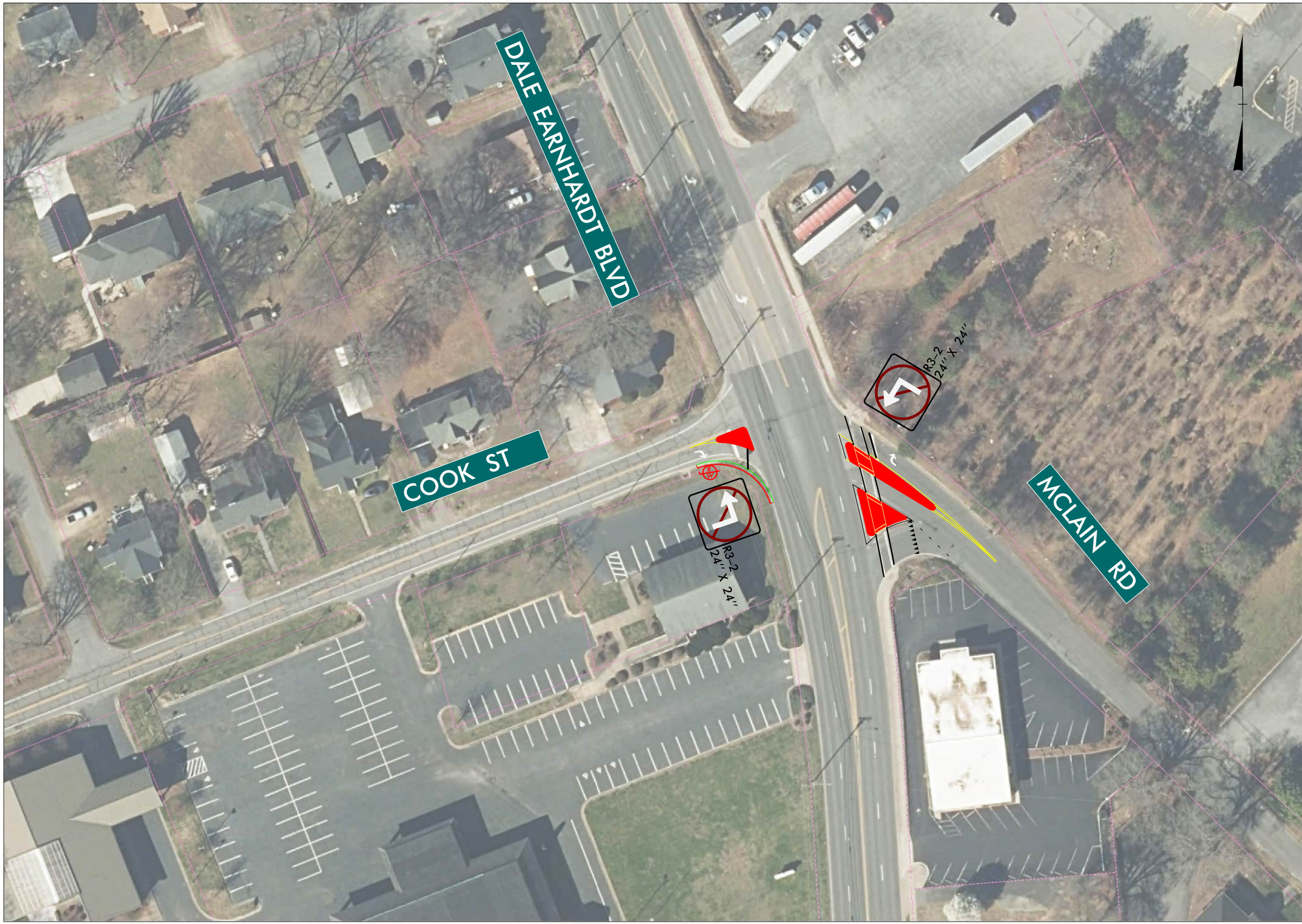

FIGURE D-3

MCLAIN ROAD
CONCEPT
INTERSECTION
IMPROVEMENT

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

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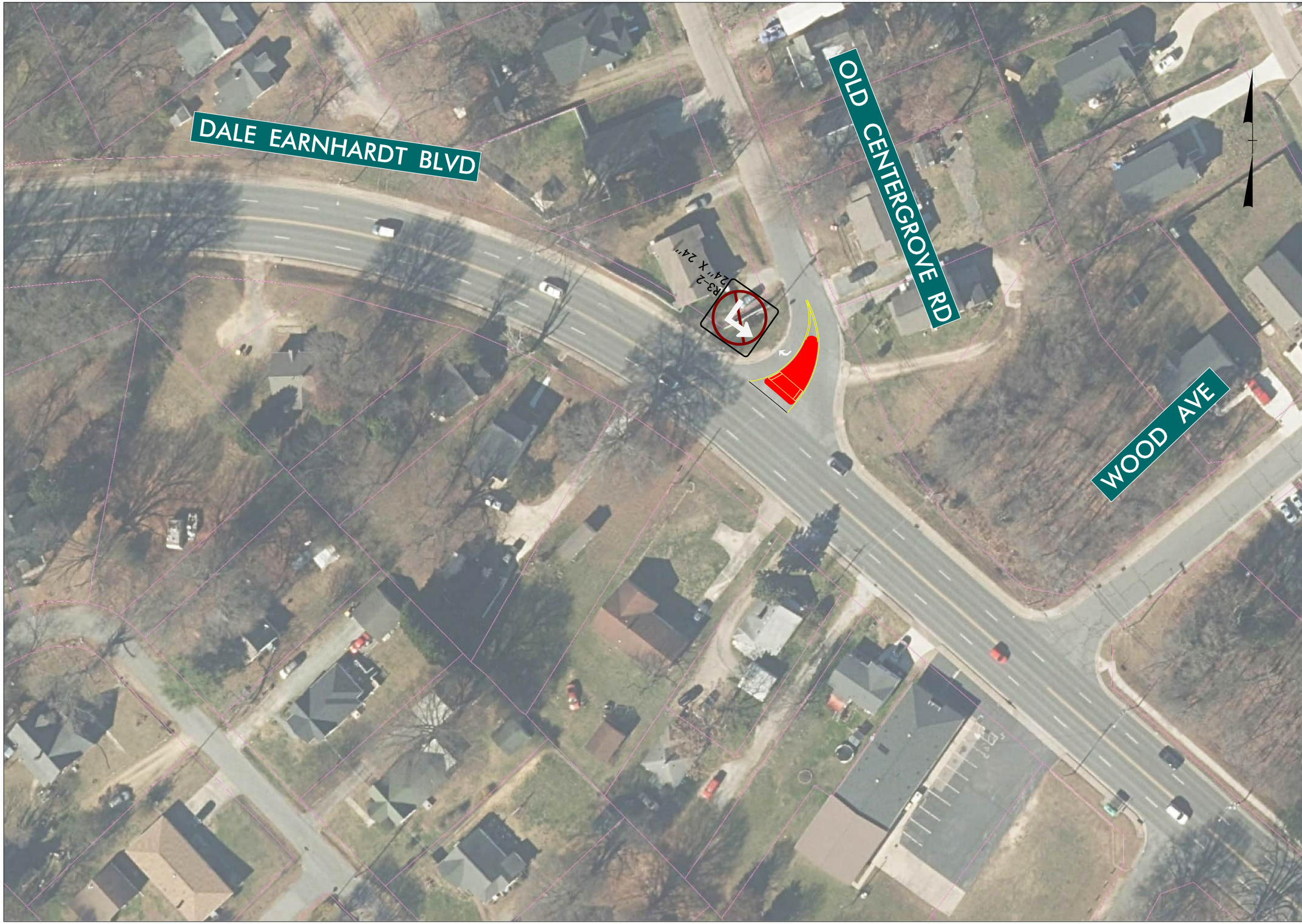

FIGURE D-4

OLD CENERGROVE RD
CONCEPT
INTERSECTION
IMPROVMENT

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

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FIGURE D-5

SPRING ST CONCEPT INTERSECTION IMPROVEMENT ALTERNATIVE A

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

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RALEIGH, NC 27609
NC LICENSE NO. F-1524 (919) 872-5115

FIGURE D-6

SPRING ST CONCEPT INTERSECTION IMPROVEMENT ALTERNATIVE B

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

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DALE EARNHARDT BLVD

SOUTH MAIN ST

LEONARD AVE

R3-2
24" X 24"

CONTINUOUS CURBING (QWICK KURB) WITH PANEL MARKER

FIGURE D-7

LEONARD AVE AND S MAIN ST CONCEPT INTERSECTION IMPROVEMENTS

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

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NC LICENSE NO. F-1524 (919) 872-5115

FIGURE D-8

W G ST
CONCEPT
INTERSECTION
IMPROVEMENT

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

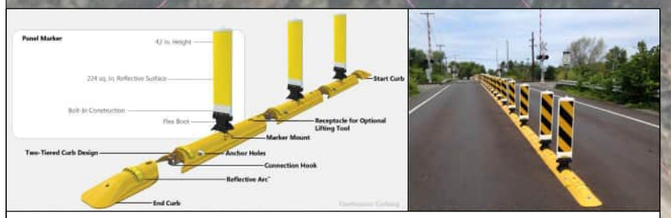
LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

DALE EARNHARDT BLVD

R3-2
24" X 24"

W G ST



CONTINUOUS CURBING (QWICK KURB) WITH PANEL MARKER

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

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30' 15' 0' 30' 60'

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DALE EARNHARDT BLVD

LEONARD AVE

OAK AVE

W G ST

W F ST

W D ST

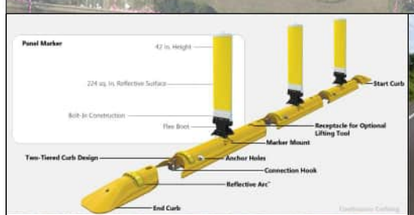
MARTIN CIRCLE

WEST AVE

MARTIN CIRCLE

SOUTH MAIN ST

VANCE ST



CONTINUOUS CURBING (QWICK KURB) WITH PANEL MARKER

FIGURE D-9

DALE EARNHARDT BLVD. CONCEPT IMPROVEMENTS

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

PLANS PREPARED BY:
DRMP
DRMP, INC.
5808 FARINGDON PLACE
RALEIGH, NC 27609
NC LICENSE NO. F-1524 (919) 872-5115

SR 1643 (Rainbow Drive/Bethpage Road) from NC 3 (Mooresville Road) to SR 1008 (South Main Street)

Recommended Countermeasures	Estimated Cost
Bethpage Road/Rainbow Drive intersection	
Roundabout	$1,850,000
All-way stop (no roundabout)	$1,550
Bethpage Road/Leonard Avenue intersection	
Roundabout	$1,750,000
All-way stop (no roundabout)	$1,550
Bethpage Road/Richard Avenue intersection	
Roundabout	$1,550,000
All-way stop (no roundabout)	$1,550
Curb on east side of South Main Street to channelize driveway	$7,590
Total Estimated Cost:	$12,240 to $5,157,590

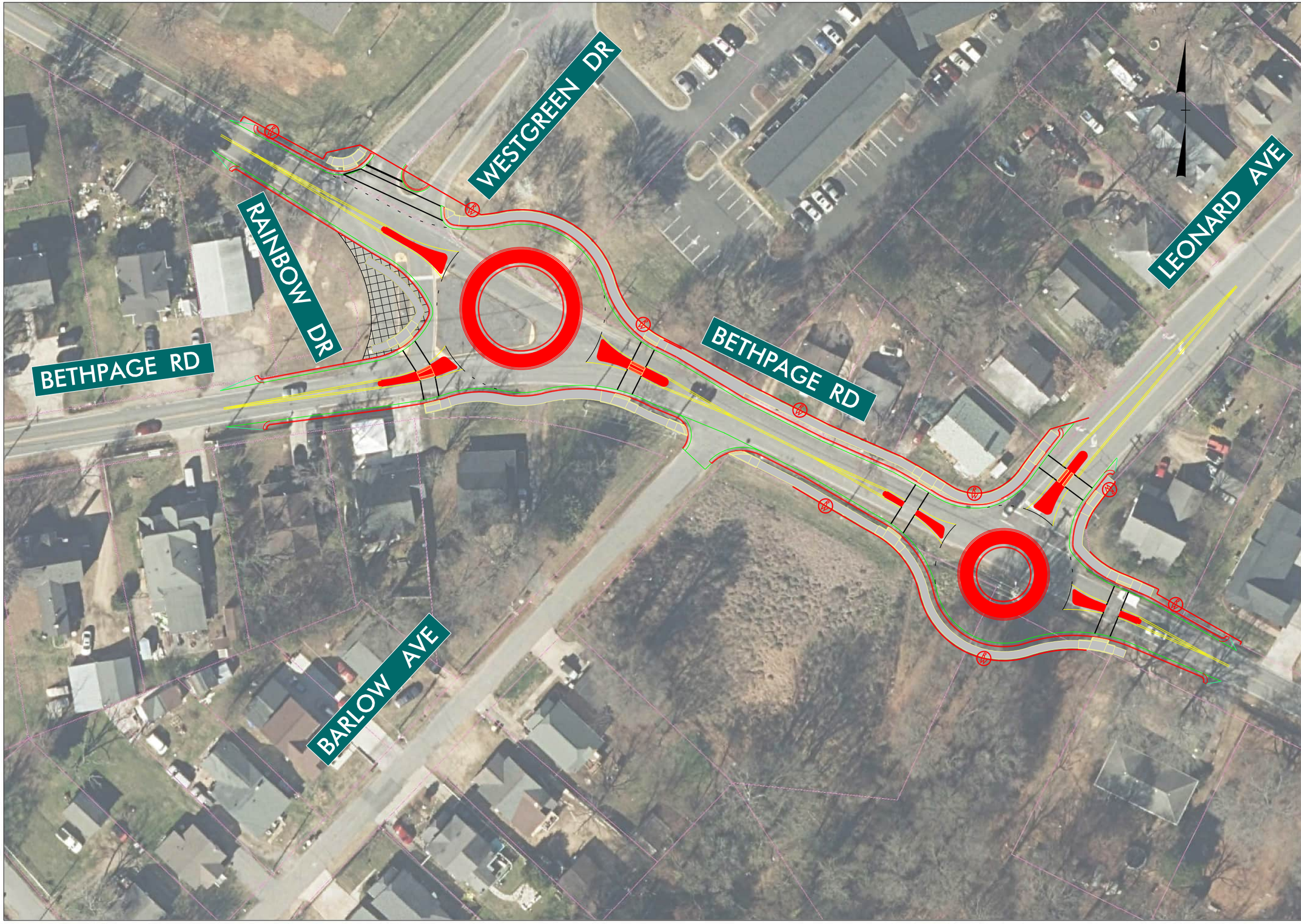


FIGURE D-10

BETHPAGE ROAD
CONCEPT
ROUNDABOUTS

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

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FIGURE D-11

BETHPAGE ROAD
CONCEPT
URBAN ROUNDABOUT

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

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SR 1124 (West C Street) from SR 1129 (Nathan Avenue) to Glenn Avenue

Recommended Countermeasures	Estimated Cost
Add left and right turn lanes on West C Street at Pump Station Road intersection (includes replacing bridge over Irish Buffalo Creek)	$1,382,000
Move start of 35 MPH zone to west of Nathan Avenue	$2,000
Glenn Avenue turn lane/Echo Avenue left turn restriction	$302,600
Total Estimated Cost:	$1,686,600

FIGURE D-12

W C ST AND ECHO AVE CONCEPT INTERSECTION IMPROVEMENTS

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

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FIGURE D-13

PUMP STATION RD
CONCEPT
INTERSECTION
IMPROVEMENT

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

PLANS PREPARED BY:
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NC LICENSE NO. F-1524 (919) 872-5115

NC 73 (Davidson Highway)/SR 1622 (Trinity Church Road)

Recommended Countermeasures	Estimated Cost
Prohibit right turns on red on southbound SR 1622	$2,000
Queue detection and flashing warning sign/install flashing warning sign when signal is red	$11,250
Add reflective high-visibility backplates to traffic signal heads	$1,200
Total Estimated Cost:	$14,450

FIGURE D-14

NC 73/SR 1622
(TRINITY CHURCH RD)
INTERSECTION
CONCEPT

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

PLANS PREPARED BY:
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SR 1600 (West C Street)/South Walnut Street at North Loop Road/Dale Earnhardt Boulevard

Recommended Countermeasures	Estimated Cost
Review left turn signal phasing, allow only protected left turns from northbound Dale Earnhardt Boulevard	$7,500
Add reflective high-visibility backplates to traffic signal heads	$2,200
Move advanced signal warning sign on northbound Dale Earnhardt Boulevard south of the intersection to south of trees located on east side of Loop Road	$695
Add near side signal head for northbound Dale Earnhardt Boulevard	$1,750
Add street lights at intersection	$70,000
Total Estimated Cost:	$82,145

FIGURE D-15

NORTH LOOP RD/
WEST C ST
INTERSECTION
CONCEPT

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

PLANS PREPARED BY:

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DRMP, INC.
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RALEIGH, NC 27609
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US 29 (North Cannon Boulevard)/SR 1254 (East 22nd Street)

Recommended Countermeasures	Estimated Cost
Add high visibility cross walks, curb ramps, and landing pads in all quadrants	$953,495
Add sidewalks along East 22nd Street	
Widen islands on US 29 for pedestrian refuge	
Upgrade traffic signal to include pedestrian actuation	$58,540
Review left turn signal phasing	$4,500
Conduct traffic counts to determine the need for a southbound right turn lane	$1,000
Add reflective high visibility backplates to traffic signal heads	$2,000
Examine signal coordination and timing	$3,000
Add flashing “Prepare to Stop when Flashing” sign on southbound US 29 north of the intersection	$11,250
Total Estimated Cost:	$1,033,785

FIGURE D-16

E 22ND ST AND
N CANNON BLVD
CONCEPT
INTERSECTION
IMPROVEMENT

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

PLANS PREPARED BY:
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DRMP, INC.
5808 FARINGDON PLACE
RALEIGH, NC 27609
NC LICENSE NO. F-1524 (919) 872-5115

US 29 (North Cannon Boulevard)/SR 1267 (Ebenezer Road)

Recommended Countermeasures	Estimated Cost
Add reflective high visibility backplates to the traffic signal heads.	$2,200
Replace trees in the median with lower growing landscaping within the curves north and south of the intersection	$3,000
Add mini-skip pavement markings to direct traffic on Ebenezer Road across US 29.	$250
Examine signal coordination and timing.	$10,000
Total Estimated Cost:	$15,450

FIGURE D-17

US 29
(NORTH CANNON BLVD)/
SR 1267 (EBENEZER RD)
INTERSECTION
CONCEPT

PRELIMINARY PLANS
SUBJECT TO CHANGE WITHOUT NOTICE

KANNAPOLIS, NC
SAFETY ACTION PLAN

LEGEND

- PROPOSED RIGHT OF WAY LINES
- PROPOSED EDGE OF TRAVEL
- PROPOSED PAVED SHOULDER
- PROPOSED CURB & GUTTER
- QWICK KURB
- STREAM
- PROPERTY LINES
- PROPOSED MONOLITHIC ISLAND
- PROPOSED SIDEWALK
- EXISTING PAVEMENT REMOVAL
- EXISTING SIGNAL

CONCEPTUAL DESIGN - SUBJECT TO CHANGE WITHOUT NOTICE.

NOVEMBER 2025

30' 15' 0' 30' 60'

PLANS PREPARED BY:
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DRMP, INC.
5808 FARINGDON PLACE
RALEIGH, NC 27609
NC LICENSE NO. F-1524 (919) 872-5115

Resolution #2022-47

RESOLUTION
APPLICATION FOR SAFE STREETS FOR ALL GRANT

WHEREAS, the City of Kannapolis is seeking to apply to the Safe Streets for All Grant as part of the Bipartisan Infrastructure Law through the Department of Transportation.

WHEREAS, the purpose of this grant is to improve roadway safety by significantly reducing or eliminating roadway fatalities and serious injuries through safety action plan development.

WHEREAS, the City of Kannapolis has experienced an average of 4 roadway fatalities per year and an average of 358 serious injuries per year between 2016 and 2020.

WHEREAS, it is the intent of Kannapolis City Staff to conduct a city wide safety study in which; will analyze and identify existing conditions and historical trends of crashes involving fatalities and serious injuries across the City, identify locations of high impact crashes as well as contributing factors and crash types, and provide an analysis of systemic and specific safety needs as needed.

WHEREAS, if awarded, the City will be required to provide a local match of no less than 20% towards the development of the city wide safety action plan.

NOW, THEREFORE, BE IT RESOLVED, the City Council does hereby fully support the decision to apply for the Safe Streets for All Grant as part of the Bipartisan Infrastructure Law to seek federal funding to develop an action plan with the collective goal of eliminating roadway fatalities and serious injuries in the City of Kannapolis.

Adopted the 12th day of September, 2022.

Milton D. Hinnant
Mayor

ATTEST:

Bridgette Bell, MMC, NCCMC
City Clerk