Imagine Bickett Boulevard

Louisburg, North Carolina

Kerr-Tar Regional Council Of Governments
Regional Transportation Planning Organization

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

LOUISBURG

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Acknowledgements

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"Imagine Bickett Boulevard" Working Group including local business and property owners along the study area:

Bryan Cash
Tom Clancy
Keith Smith
Tony King, Louisburg Assistant Town Administrator/Planning Director
Steve Winstead, NCDOT District Engineer
Ann Stroobant, Regional Planner, Kerr-Tar Regional Transportation Planning Organization

Additional people and groups who have played a supporting role in making this document possible:

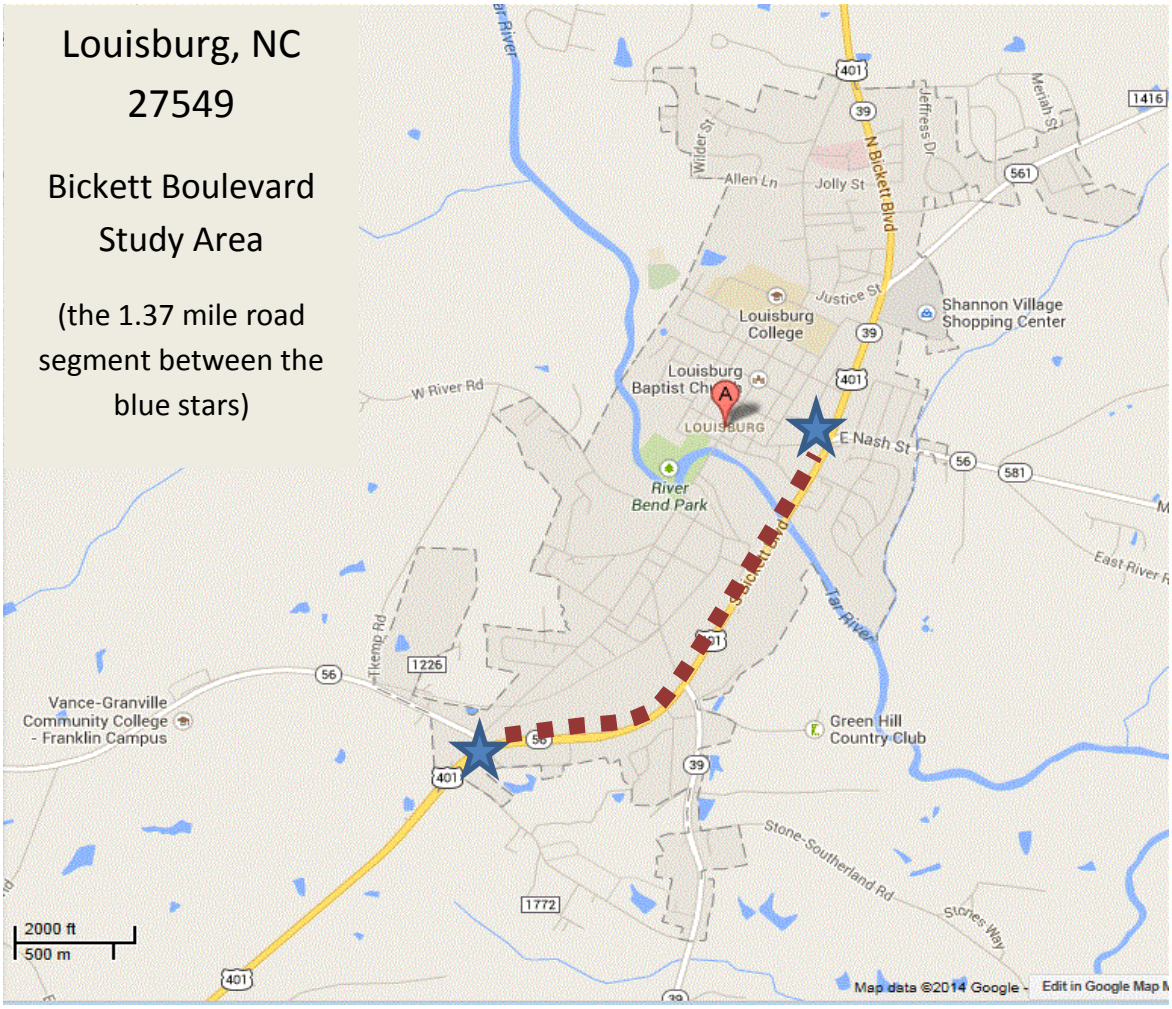
Mayor Karl Pernell
Mark Warren, Louisburg Town Administrator
Members of the Town Council
Members of the Planning Board
Joey Hopkins, NCDOT Division 5 Engineer
Scott Walston, NCDOT Transportation Planning Branch
Kelly Becker, NCDOT Regional Traffic Engineer
Doumit Ishak, NCDOT Congestion Management Regional Engineer
Jeff Weller, NCDOT Congestion Management Project Design Engineer
Brian Murphy, NCDOT Safety Planning Engineer
Justin Green, NCDOT Traffic Safety Project Engineer

Executive Summary

Requested by the Town of Louisburg as a member of the Kerr-Tar Regional Transportation Planning Organization (KTRPO), the study presented in this document examines in detail at the 1.37 mile segment of Bickett Boulevard (US 401) in Louisburg, extending from the intersection of Burke Boulevard and NC 56 to East Nash Street. The purpose of the study is to assist the Town, its citizens and business leaders, envision how redesigning Bickett Boulevard can prolong the life of the Boulevard, improve safety, increase capacity, help people get to jobs, and serve as a more attractive gateway to the Town for visitors and residents. The study area is an aging commercial corridor that will greatly benefit from a renewed vision and plan.

Funding for new roadway construction in North Carolina is scarce and getting more difficult to secure. Therefore, we need to maximize the efficiency of existing roadways and enhance their utility and attractiveness for all road users regardless of how they travel. By utilizing the Town of Louisburg and Franklin County's existing adopted plans, in addition to the information in this document, it is anticipated that Louisburg will have the tools as and when funding becomes available to make informed choices in the 1.37 mile Bickett Boulevard study area. These choices will benefit the physical structure of the town, as well as improve access management, safety, aesthetics and multimodal options for all who travel along this route-the "front door" to Louisburg.

Part 1.0: OVERVIEW



1.1 Background

The Town of Louisburg, as a member of Kerr-Tar Regional Transportation Planning Organization (KTRPO) requested that the Organization conduct a study to assist the Town, its citizens and business leaders, envision how redesigning Bickett Boulevard can prolong the life of the Boulevard, improve safety, increase capacity, help people get to jobs, and serve as a more attractive gateway to the Town for visitors and residents.

Bickett Boulevard is a North Carolina Department of Transportation (NCDOT) controlled roadway that serves as the "front door" to Louisburg. The road is part of US401, an important north-south corridor connecting Louisburg to Raleigh in the southwest and extending north to end at Interstate 85, near the community of Wise.

Funding for new roadway construction in North Carolina is scarce and getting more difficult to secure. Therefore, we need to maximize the efficiency of existing roadways and enhance their utility and attractiveness.

Our study area in Louisburg targets the 1.37 mile road segment at the intersection of Burke Boulevard and NC56 to East Nash Street. This is the same segment included in the Statewide Plan of Transportation (SPOT) Prioritization 3.0 (SPOT ID: H111053) in 2014. The road is also mentioned as needing improvement in the 2014 Franklin County and Louisburg Comprehensive Transportation Plan, the long-range multi-modal transportation plan that covers transportation needs to 2035. The Bickett Boulevard study area is an aging commercial corridor that will benefit greatly from a renewed vision and plan.

1.2 About Louisburg, NC

History and Location

Louisburg, the county seat of Franklin County, was chartered in 1779. The county and town were created at the time of the American Revolution when Benjamin Franklin was the foreign minister to France. The county was named after Benjamin Franklin and the town was named after King Louis XIV of France, in honor of the financial and military support given to the young country by France that ultimately led to its independence.

Located along the banks of the Tar River, the town has two riverside parks, a lovely historic district and is home to Louisburg College, the oldest two-year private college in the United States. The town is situated in the center of Franklin County, a twenty-five minute drive from Raleigh, a forty minute drive from Durham and a fifty minute drive from Chapel Hill (Town of Louisburg Website, http://townoflouisburg.com/about-us/default.aspx).

Land Use, Demographics and Trends

The Town of Louisburg is elongated in shape and covers 2.8 square miles (http://en.wikipedia.org/wiki/Louisburg,_North_Carolina). Main Street is the spine of Louisburg with Bickett Boulevard (US401) diverting around the center of town. NC56 enters Louisburg from the south with NC39 entering Louisburg to the north. Louisburg has a variety of housing, with the majority of land within the town's Extraterritorial Jurisdiction (ETJ) made up of single family residences. The largest institutional land use in town is

Louisburg College. Commercial areas of the town are located in the downtown area along Main Street and along Bickett Boulevard. Industrial land uses are mostly south of the Tar River. The Louisburg Historic District, located along North Main Street and adjacent streets, is federally recognized and listed on the National Register of Historic Places. This historic district has a high degree of intactness and integrity (Comprehensive Land Use Plan, Town of Louisburg, 1998, pp.2-4). Opportunities for infill development exist within the town utilizing undeveloped parcels, with some of these parcels located along the 1.37 mile Bickett Boulevard study area. The potential also exists to redevelop aging commercial properties along this same segment, perhaps with appropriately scaled mixed-use development.

The population of Louisburg increased in the years between the 2000 and 2010 Census, rising from 3,111 to 3,359 individuals. The population of Franklin County has also been increasing during the same time period, with a total population of 47,260 in 2000 rising to 60,619 individuals in 2010. As of 2014, the population of Louisburg has decreased very slightly to 3,354 individuals with the population of Franklin County continuing to increase to 62,549 people.

According to the 2010 Census, the town's racial makeup is nearly equal in the percentage of people who identify as white alone and people who identify as black alone, being 47.3% and 46.9% respectively. The next largest census category includes people of Hispanic origin at 5.5%, with much smaller percentages identifying as American Indian Alone, Asian Alone or people of Two or More Races. The 2019 projected population profile for Louisburg comprises 47.8% of the inhabitants who identify as white alone and 43.0% of the population who identify as black alone, with an increase of people of Hispanic origin making up 9.0% of the population. There are also slight increases in the numbers of people who identify as American Indian Alone, Asian Alone and people of Two or More Races. In both the 2014 and the 2019 population projections, no one in Louisburg identifies as Pacific Islander Alone (American Community Survey and ESRI Demographic and Income Profile for Louisburg, NC).

A majority of Louisburg households, comprising 54.6%, live mostly in homes built before 1980 in established neighborhoods. Often these individuals have lived in the same house for years. This group consists primarily of married couples with an increasing number of singles. Unemployment is lower in this group and 64% have a high school education or some years of college.

The next largest group makes up 25.4% of Louisburg households. This category is predominantly single family, with multigenerational family members present in the household. Over half of the homes in this category are renter occupied. Most of these households have no vehicle or only one car. Unemployment is about 50% in this group and almost a quarter of adults over 25 do not have a high school diploma.

The next category comprises 14.9% of Louisburg households. Within this category, 79% of the homes are owner occupied. The homes are mostly single family with some mobile homes. Most of the households in this category own one, two or in some cases three plus vehicles. 40% of the people in this group have a high school education, with 41% having some college education. Unemployment in this group is 9.2%.

The final category comprises 5% of households. These residents own their single family home or mobile home. People in this category prefer trucks and live primarily in rural areas. Almost 30% of the people in this group have not finished high school, with only 9% having a bachelor's degree or higher. Unemployment in this group is around 14% (ESRI Tapestry Segmentation Guide, "Midlife Constant, Modest Income Homes, Southern Satellites and Rural Bypasses," www.esri.com, 2014.).

The increasing population and corresponding increase in vehicular traffic in Franklin, Wake and surrounding counties will have an impact on the existing road system, including the road segment in our study area. It is projected that by 2035, the vehicular traffic on US 401, including the segment between Burke Boulevard and Nash Street, will be over capacity (The 2014 Franklin County and Town of Louisburg Comprehensive Transportation Plan, pp.1-2, 1-3, Figures 2 and 3).

1.3 Mission Statement, Goals and Scope

Over the course of four Working Group meetings, a Mission Statement and Goals were evolved for the study area. The Working Group consisted of local business people with businesses along or near the 1.37 mile Bickett Boulevard Study Area, the Louisburg Assistant Town Manager, a Town Council Member, the NCDOT District Engineer and a Kerr-Tar Regional Transportation Planning Organization Regional Planner. The Mission Statement and goals were among the items presented at an advertised Public Input Meeting on November 6th, 2014. Details of these meetings are included in Appendices 6.1 and 6.2. The Mission Statement and Goals are as follows:

Mission Statement:

To improve safety for all travelling on Bickett Boulevard between Burke Boulevard and Nash Streets while improving the aesthetics, supporting local economic development and allowing for multimodal transportation choices resulting in reduced congestion and minimized crashes.

Goals:

1) Improve safety through access management by creating medians allowing for safe left turns and U-turns as well as creating signalized intersections with pedestrian crossings to accommodate vehicles, cyclists and pedestrians

2) Stimulate economic development by infilling vacant or underused sites, considering mixed-use development where possible with buildings closer to the street and parking at the rear or side to enhance the pedestrian environment

3) Improve the aesthetics along the route with street trees, planted medians, sidewalks, uniform signage, improved lighting and underground utilities while incorporating shared parking lots and creating the best efficiency of driveways

4) Incorporate bus routes with shelters, bike routes and sidewalks along Bickett Boulevard to tie in to the existing network.

Scope:

This document is intended to help envisage potential improvements to the 1.37 mile segment of Bickett Boulevard from Burke Boulevard to East Nash Street, incorporating the mission statement and goals listed above, guided by The 2014 Franklin County and Louisburg Comprehensive Transportation Plan, which was adopted by the Town of Louisburg on March 21, 2011 and by Franklin County on May 2, 2011 and covers multi-modal transportation needs to 2035**.** Louisburg also has additional documents for guidance, including the Comprehensive Land Use Plan, Town of Louisburg, adopted on December 14, 1998 as well as the Louisburg, North Carolina-Code of Ordinances updated on November 30, 2012. There are also additional county-wide documents such as the Franklin County Unified Development Ordinance which includes the Franklin County Stormwater Ordinance, revised June 30, 2012. The stormwater ordinance is of particular interest, as part of the Bickett Boulevard study area crosses the Tar River and any improvements will need to incorporate its guidance. By utilizing the Town of Louisburg and Franklin County's existing adopted plans, in addition to the information in this document, it is anticipated that Louisburg will have the tools available to make choices in the 1.37 mile Bickett Boulevard study area that will benefit the physical structure of the town, as well as improving access management, safety, aesthetics and multimodal choices for all who travel along this route-the "front door" to Louisburg.

Part 2.0: CURRENT CONDITIONS

Constructed in the 1970's, the Bickett Boulevard Study Area is part of the original by-pass diverting traffic around the center of Louisburg and is an aging commercial corridor. The Comprehensive Land Use Plan indicates that the land use along this part of the Study Area is primarily commercial, containing a range of private businesses, restaurants, fast food franchises as well as some residences (Comprehensive Land Use Plan, Figure 11, p.29).

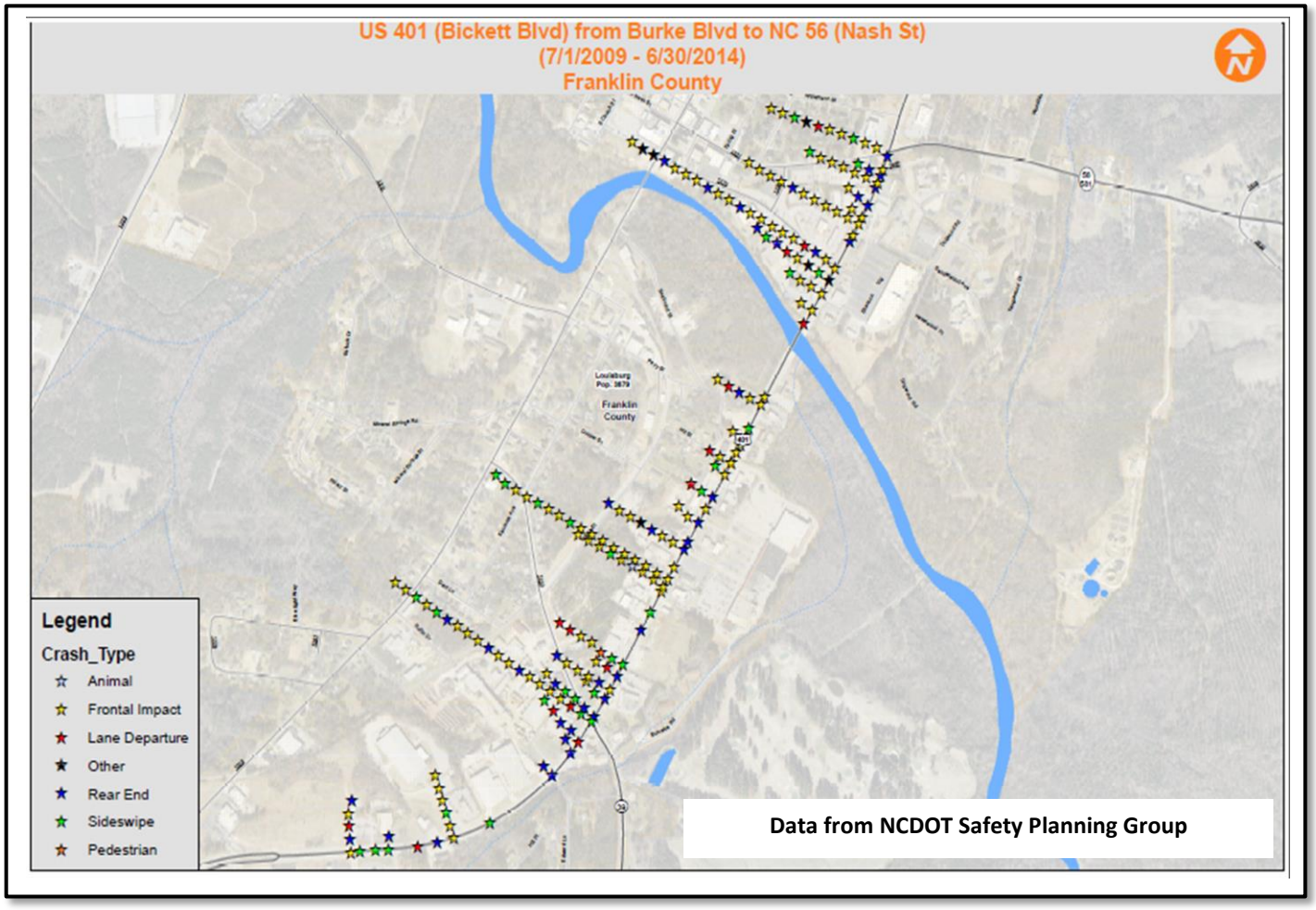
This road segment is presently characterized by:

- Numerous driveways-There are a total of 96 curb cuts over the 1.37 mile segment.
- No medians to help direct turns
- Few designated or signalized crossings for pedestrians
- Existing sidewalks are mostly located along one side of the road next to traffic
- No bus system or routes
- No bike routes along Bickett Boulevard
- Open frontages

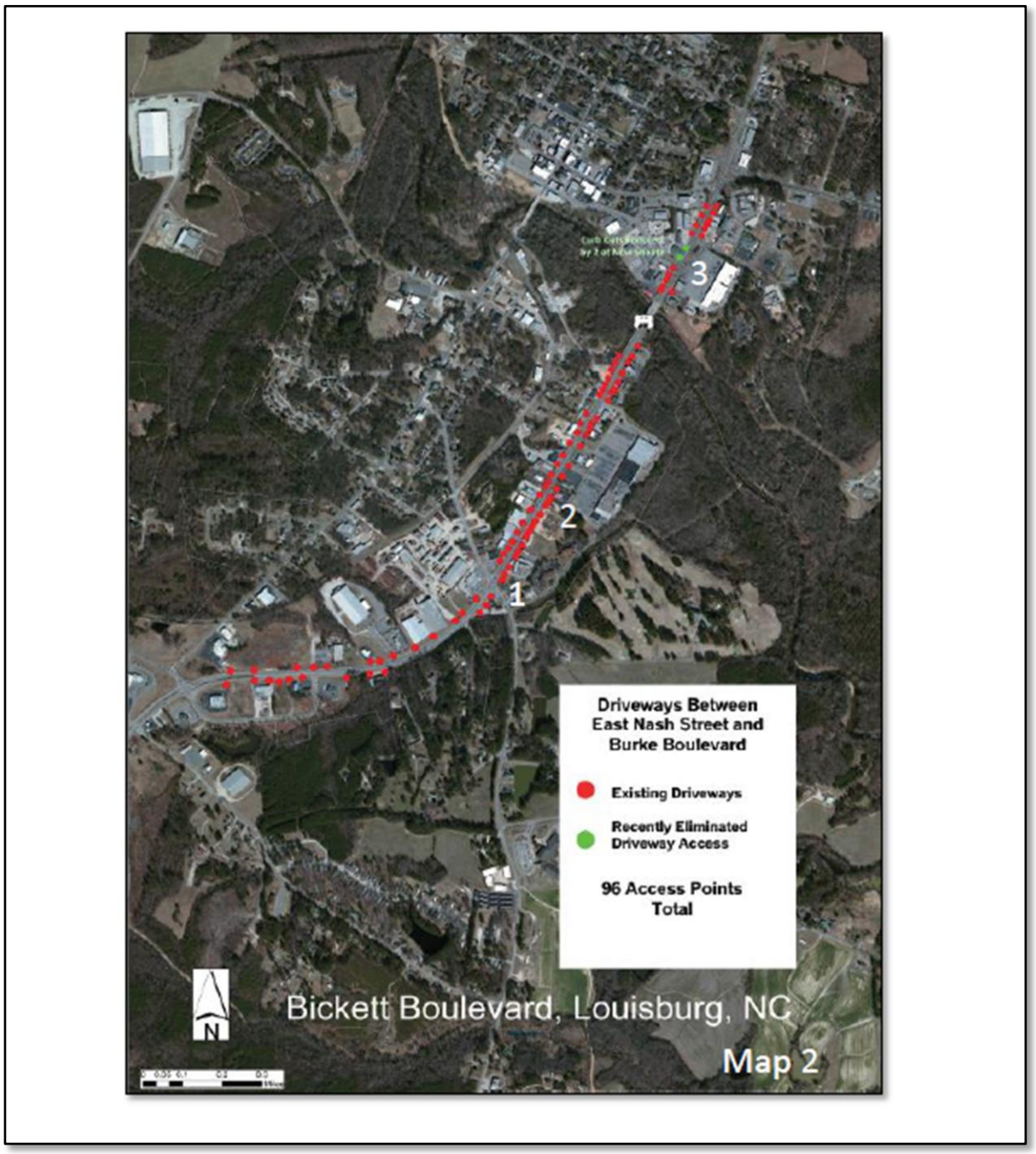
Current Photo Typical of the Bickett Boulevard Study Area Between Burke Boulevard and Nash Street Illustrating Points Listed Above

2.1 Data Collected on Current Conditions in the Bickett Boulevard Study Area

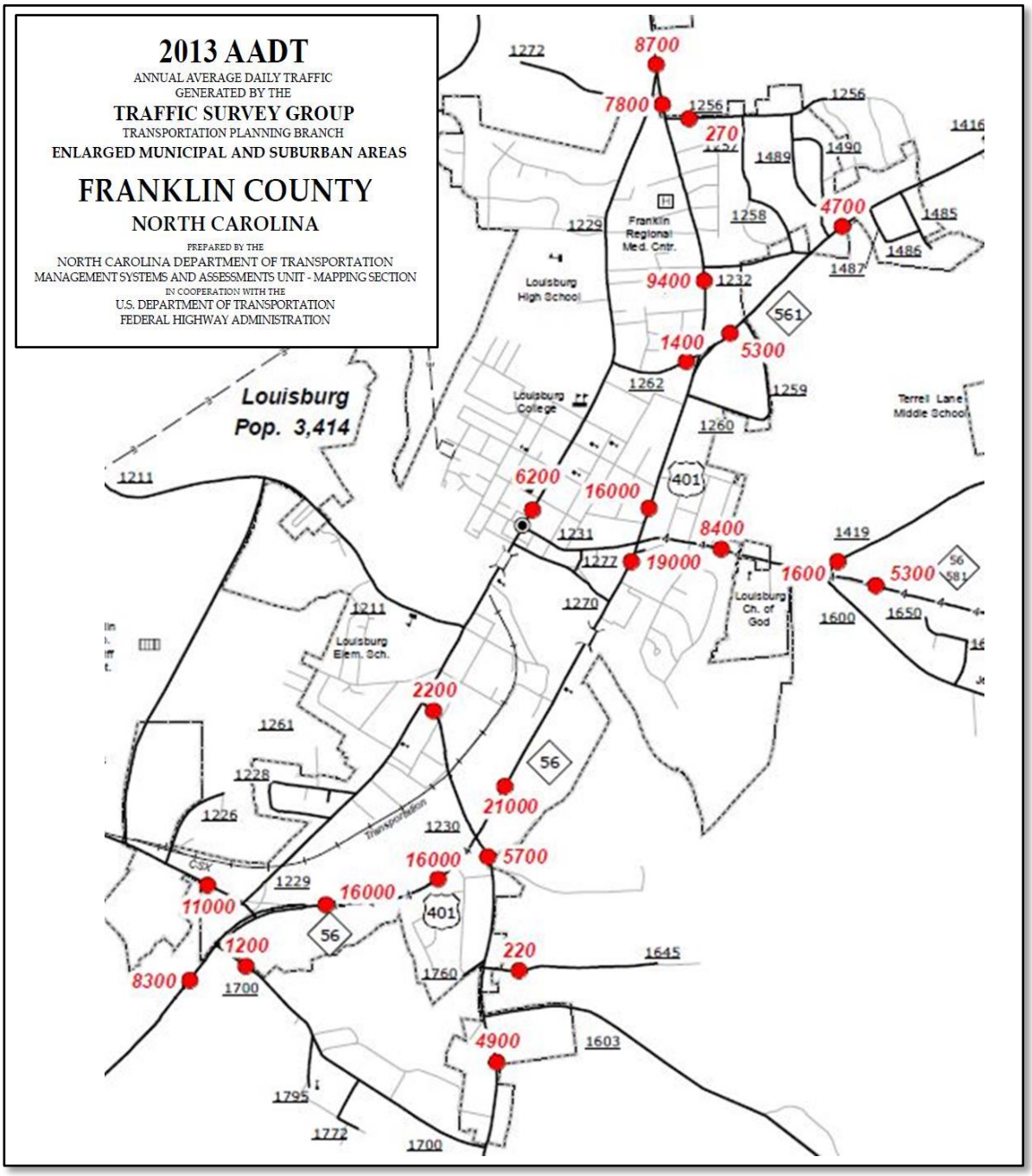
In order to ascertain precisely what was happening along the route segment, the Working Group examined a variety of data provided by the Kerr-Tar Regional Planner working in conjunction with the NCDOT. The detailed NCDOT Traffic Engineering Accident Analysis System STRIP Analysis Report is provided along with details from the Working Group and Public Informational Meeting in Appendices 6.1 and 6.2 .



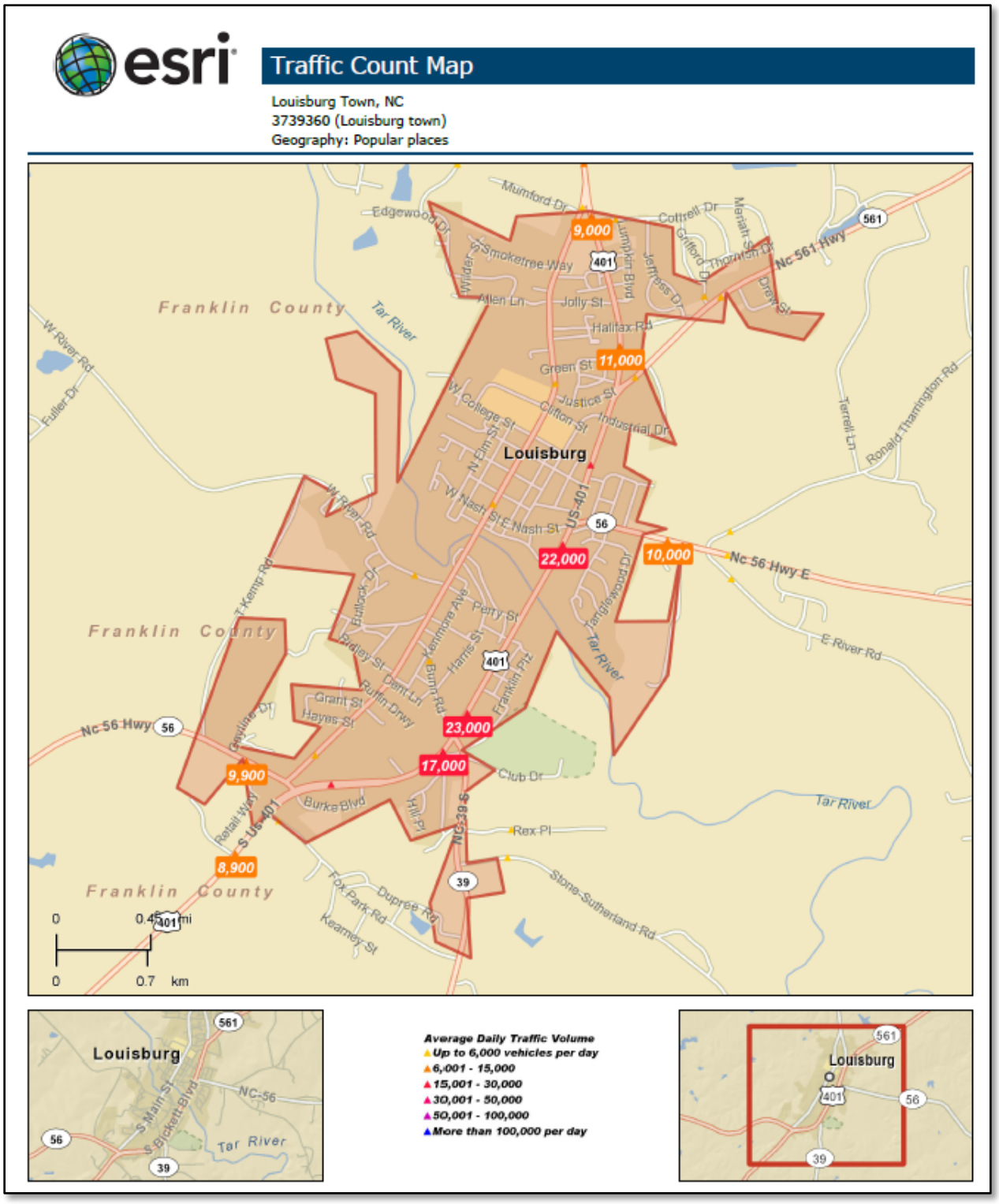
The map above includes the data presented in the five year NCDOT STRIP Analysis Report comprising crash data from **7/1/2009-6/30/2014** and indicates crash type and location along the 1.37 mile segment of Bickett Boulevard. Certain types of crashes occur more often and particular road locations have more crashes than others.



The data included in this map illustrates that there are 96 existing driveways along the 1.37 mile segment of Bickett Boulevard.



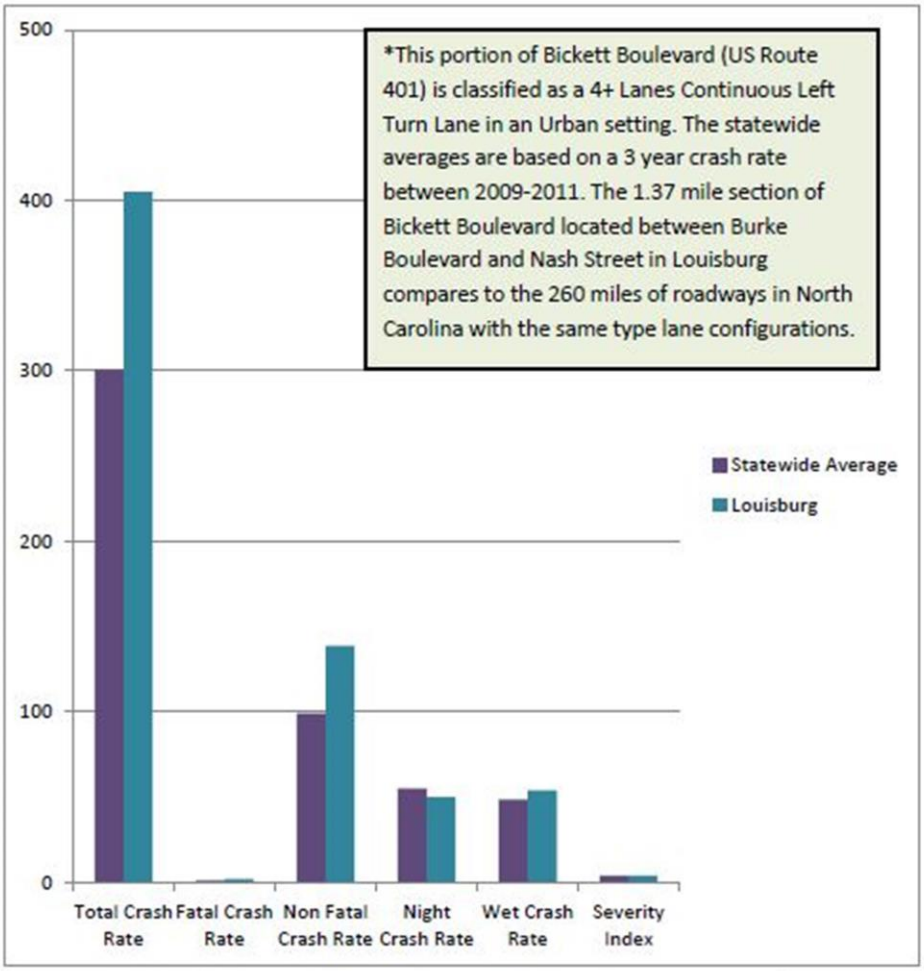
Louisburg, NC-Average Daily Volume Traffic Map from NCDOT produced by the Traffic Survey Group, Franklin County, 2013



Louisburg, NC-Average Daily Traffic Volume from ESRI Community Analyst, 2014

How Bickett Boulevard, Louisburg Compares to Statewide Average Crash Rates:*

	North Carolina Statewide Average	Bickett Boulevard, Louisburg
Total Crash Rate	300.78	405.14
Fatal Crash Rate	1.19	1.93
Non Fatal Crash Rate	99.21	138.90
Night Crash Rate	55.31	50.16
Wet Crash Rate	48.74	54.02
Severity Index	4.02	3.90



Data supplied by:
NCDOT Mobility and Safety Division, 9/18/14

An advertised Public Input Meeting was held and a questionnaire distributed in order to discover individual travel frequencies, destinations, concerns, criticisms and suggestions for design modifications along the 1.37 mile Bickett Boulevard Study Area. The questionnaire was distributed at the Public Input Meeting and was also posted on the Town of Louisburg website. Copies of the questionnaire were available at the Louisburg Town Offices. In addition, people could pick up a survey when going to pay their water bill. A copy of the questionnaire, which includes the aggregated responses, is included in Appendix 6.3. As many people travel this segment of Bickett Boulevard on a daily basis, their opinions and feedback are very useful and informative.

2.2 What the Data Tells Us, Including Public Input Meeting and Questionnaire

The Working Group was able to determine from the data provided that certain areas of the Bickett Boulevard Study Area are more prone to a higher frequency of crashes. Looking at the map showing data from the NCDOT Safety Planning group on page 12, there are four areas within the Bickett Boulevard Study Area where a large proportion of the crashes occur. These areas going from north to south are: 1) around the Bickett Boulevard/Nash Street intersections,
2) at the Wade Avenue /Bickett Boulevard intersection across from Shannon Village, 3) at the southern entrance to Franklin Plaza near McDonald's and 4)around the intersection of Bickett Boulevard/Bunn Road**.**

Maps on pages 14 and 15 from the NCDOT Traffic Survey Group and ESRI Community Analyst show that certain parts of the Study Area, particularly around the Nash Street/Bickett Boulevard and Bunn Road/Bickett Boulevard intersections have a much higher number of vehicles passing thorough every day compared to the rest of the Study Area. The NCDOT survey indicates 19,000 Average Daily Vehicles around the Nash Street/ Bickett Boulevard intersection, with the ESRI analysis indicating 22,000 Average Daily Vehicles at the same area. 21,000 Average Daily Vehicles are indicated in the NCDOT map around the Bunn Road/ Bickett Boulevard intersection with 23,000 Average Daily Vehicles indicated on the ESRI Traffic Count Map in the same area.

The map on page 13 marks the 96 Study Area driveways with a dot. A number of driveways are clustered around the Bunn Road/Bickett Boulevard intersection. There are fewer driveways around the Wade Avenue/Bickett Boulevard intersection, mainly because the number of driveways was reduced by two when the Sheetz was recently added. A large number of driveways along a major route,

such as those found in the Bickett Boulevard Study Area, can result in increased conflict points and potential for crashes.

The bar graph on page 16 illustrates that the 1.37 mile segment of Bickett Boulevard has a higher total crash rate, a higher non fatal crash rate and a higher wet crash rate than other similar types of roadways in the state with the same type of lane configurations measured over a three year period. It is reassuring to note that the night crash rate is somewhat lower on this segment of Bickett Boulevard, although the fatal crash rate and the severity index is comparable to other North Carolina roads of the same type.

Comments during and after the **Public Input Meeting**, held on November 6th, 2014 and included in Appendix 6.2, mentioned the need for signalization at Wade Avenue /Bickett and the need for stoplights and pedestrian crossings at the Bickett/Nash intersection* and at Franklin Plaza. The need for left turn signals was also mentioned at Bickett Boulevard/Wade Avenue and Sandalwood Avenue/Bickett Boulevard. Using planted medians to direct and limit turns was suggested. The congestion and speeding problem around Sheets was an issue for some people. Limiting the exiting direction of the Sheetz traffic coming out on Bickett Boulevard was suggested. Speeding was a problem mentioned by many attendees. Specifically, the area of Bickett Boulevard between Franklin Plaza and Sandalwood Avenue was pointed out as being an area for speeding. In addition to the medians mentioned earlier to prevent left turn accidents, speed breaks, stoplights and traffic circles were suggested to encourage people to slow down.

Judging from the results of the **Imagine Bickett Boulevard Questionnaire** included in Appendix 6.3, the public travels down the 1.37 mile Study Area five or more times per week, mostly by car with a few people riding in trucks or motorcycles. One respondent reported walking along the Study Area. The majority of the respondents frequented the area for its shopping and restaurants. A few people came to the area to go to work or to visit the Senior Center. The Sheetz, Food Lion, Burger King and Wendy's attracted the largest number of visits.

In addition, questionnaire respondents rated the present driving conditions along the 1.37 mile segment of Bickett Boulevard as average, with a few rating the conditions as poor and a very few rating the conditions as excellent. Most of the drivers responding to the questionnaire make cross lane turns to access a destination a few times to five or more times per week. Some respondents travel to where they can safely make a U-turn in order to cross multiple lanes of traffic, while the majority of respondents do not.

**Crossing recently added-see comment at bottom of p.19*

Interestingly, the majority of respondents are concerned with safety or crash problems in the Study Area and the areas that they named corresponded with the areas identified in the crash data provided by the NCDOT Safety Group. Additional areas were mentioned such as the area around Bojangles at 12 Golden Leaf Drive and coming out of the Town and Country Feed Store at 312 S. Bickett Boulevard.

Access management was explained in the questionnaire, where medians are added in the central turn lane with breaks for left turns and U-turns, consolidating some driveways, as well as improving intersections and adding stop lights with signalized crossings. When presented with the concept of access management, the respondents agreed that access management could reduce crash problems.

Conditions for walking along the Bickett Boulevard Study Area were rated as average to poor by respondents. Ranked in order, constructing new sidewalks to join up with existing ones on both sides of the street, marked and signalized pedestrian crossings at key intersections and generally improving the sidewalks along the Study Area were considered important. Someone suggested adding a pedestrian bridge. Intersections were also named by one respondent where marked and signalized pedestrian crossings were especially needed. These intersections were Nash Street/Bickett Boulevard*, Johnson Street(Wade Avenue)/Bickett Boulevard, Bunn Road/Bickett Boulevard as well as Burke Boulevard/Bickett Boulevard.

“Complete Streets” were defined in the questionnaire as a street that provides for all forms of transportation and accommodates all types of users to provide safe access to destinations for everyone no matter how they travel. Features included in “Complete Streets” that were important to respondents ranked in order of preference were sidewalks, marked pedestrian crossings, signalized and marked pedestrian crossings and bike lanes. Bus stops, bus shelters, planted medians, street trees and landscaping were ranked after these, with one person adding that they would like to see a taxi service or bus service in the Study Area.

An open ended question was asked where respondents could comment and contribute their ideas on what they thought could minimize crashes and reduce congestion as well as any improvement that could have a positive impact in the Study Area. Some of these comments coincided with the NCDOT crash data such as concerns at the Nash Street/Bickett Boulevard intersection, the Wade Avenue/Bickett Boulevard intersection and concerns over cars exiting the shopping center. There were general comments regarding reducing the speed limit on Bickett Boulevard, which is currently 45mph.

**Since the Public Input Meeting and completion of the questionnaire, a signalized and marked pedestrian crossing has been added at the Bickett/Nash intersection by the NCDOT in connection with CMAQ projects.*

Although currently just outside the 1.37 mile study area to the south, several people mentioned speed concerns where Bickett joins with NC56 and the problem of traffic backing up on South Main Street onto the NC56 left turn. Tractor trailers turning off NC56 onto Bickett Boulevard to the north at CVS were also mentioned as a concern.

Several people were interested in a shuttle/bus service in Louisburg. One person said a low income transportation service was needed. Another person suggested buying a van to provide transportation around town. Henderson's service was mentioned as an example of the type of transportation that could be provided for Louisburg.

The need for uniform signage along the Study Area was also mentioned.

Respondents mostly represented daily commuters to a job in Louisburg or people going to a business along the route. Several people were Study Area property owners, business owners or renters. Most of the people filling out the questionnaire were between the ages of 30 and 74 years of age, with three older than 74 and one in the 19-29 age bracket. Of the 31 people who filled out the questionnaire, 33% were female and 67% were male.

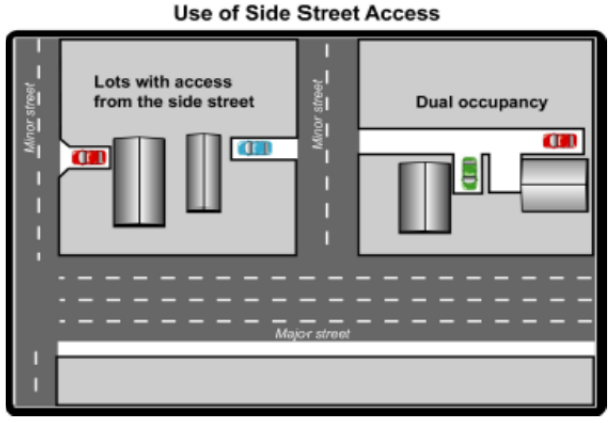
Part 3.0: POSSIBLE SOLUTIONS

In keeping with the Mission Statement, various possibilities have been investigated that could satisfy the Goals evolved by the Working Group and presented at the Public Input Meeting.

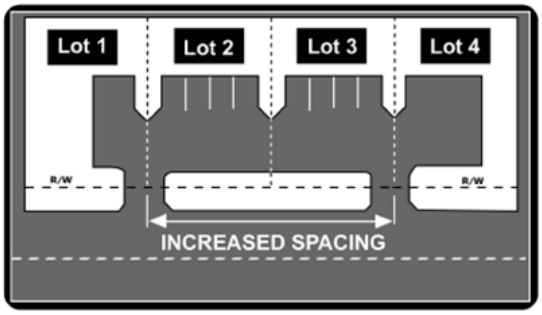
3.1 Possible Solutions to Meet Goal 1:

Goal 1: *Improve safety through access management by creating medians allowing for safe left turns and U-turns as well as creating signalized intersections with pedestrian crossings to accommodate vehicles, cyclists and pedestrians*

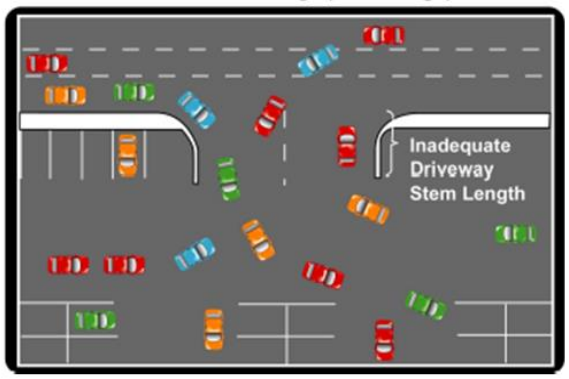
Access management is a collection of techniques that have been proven over time to improve safety, reduce traffic congestion and keep or improve the existing road capacity by guiding the type, design and location of access to properties. Road safety is improved through access management by separating access points so that vehicular turning and crossing movements happen at fewer locations. Medians are used to reduce potential crashes and allow drivers to predict where other drivers will turn and cross. The medians can be landscaped with trees and shrubs and the road can be designed to accommodate vehicles, cyclists, transit riders and pedestrians in keeping with "Complete Streets" principles (Complete Streets, NCDOT, 2012.).



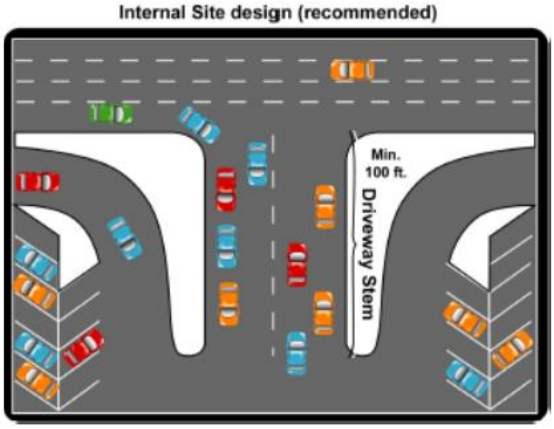
From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P26.



From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P.40



From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P.33

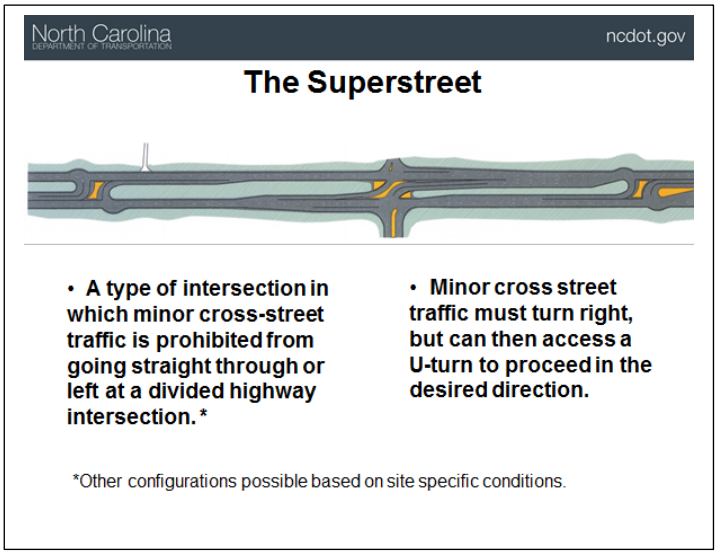


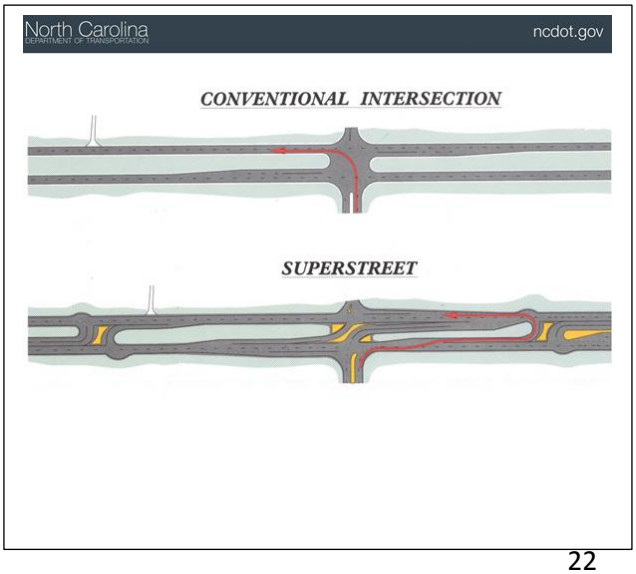
From: NCDOT, Policy On Street And Driveway Access to North Carolina

Benefits of Improved Access Management

- Improves vehicular safety and access
- More room for landscaping
- Accommodates a unified streetscape
- Presents an opportunity to organize signs
- Allows space for bike routes with improved safety
- Allows for safer pedestrian access
- Provides potential to connect adjacent parking lots, thus increasing the opportunity for patronage of adjacent businesses for multiple and convenient shopping stops
- Preserves the road capacity and improves traffic flow

Additional techniques for managing access were discussed such as SuperStreets:





3.2 Possible Solutions to Meet Goal 2:

GOAL 2: *Stimulate economic development by infilling vacant or underused sites, considering mixed-use development where possible with buildings closer to the street and parking at the rear or side to enhance the pedestrian environment*

The 1.37 mile segment of Bickett Boulevard between Burke Boulevard and Nash Streets includes a number of vacant sites as well as vacant and underused properties which have redevelopment potential. Mixed-use developments are growing in popularity and such compact, multimodal neighborhoods can have a positive impact on the fiscal efficiency of a town and could be a positive addition to the Bickett Boulevard study area. This compact type of development enables municipal services such as public safety, water and sewer to be delivered more effectively. Combined with access management, such redevelopment could provide an opportunity to consolidate driveways. In addition, more compact development can play a positive role in revenue delivery to a municipality (Butner Gateway, p.21). Such developments have the potential to enhance the local economy and provide a variety of local destinations within easy walking distance.

Providing opportunities for buildings closer to the street with parking to the rear establishes a continuous street wall and encourages pedestrians to enter at the front of the buildings. Shared parking reduces the need for access drives from the frontage street. Building details on a human scale and continuous sidewalks along the street frontage will encourage pedestrian activity (Butner Gateway, Highway Commercial, and p.6).

3.3 Possible Solutions to Meet Goal 3:

GOAL 3: *Improve the aesthetics along the route with street trees, planted medians, sidewalks, uniform signage, improved lighting and underground utilities while incorporating shared parking lots and creating the best efficiency of driveways*

Improving the aesthetic appearance of this section of Bickett Boulevard with a unified streetscape will have a positive impact on what is essentially the main entrance to the town of Louisburg. Having cross access between parking lots encourages multiple and convenient shopping opportunities, thus reducing driving and congestion.

Medians can have an enormous effect on driver safety and can reduce the crash rate by 37% compared to a continuous two-way left turn lane and also enables safer approaches to businesses. Landscaping the medians with trees and shrubs also improves the image of the area. Such projects can also have a positive impact on property values, by organizing a patchwork of curb cuts and driveways. "Minimizing the number of curb cuts, consolidating driveways, constructing landscaped medians, and coordinating internal site circulation and parking among several businesses results in a visually pleasing and more functional corridor. That protects your investment in your business, the public investment in the roadway, and can even help attract new investment into the area (Safe Access is Good for Business, pp.6-12.)."

3.4 Possible Solutions to Meet Goal 4:

GOAL 4*: Incorporate bus routes with shelters, bike routes and sidewalks along Bickett Boulevard to tie in to the existing network.*

Multimodal solutions combined with the previous goals will create opportunities for people to use public transportation, walk, bike or drive to services, shops and work from where they live. These multimodal solutions are also in keeping with recent development trends where consumer studies have found that people desire to live in neighborhoods with multiple mobility options and a mix of uses.

The Comprehensive Transportation Plan proposes a loop route around Louisburg connecting with local employment and activity centers and travels down Bickett

Boulevard. Bus routes are also proposed from Louisburg into Wake County and from Franklinton/US 1 to Louisburg (CTP, pp.II-54-II-56). Bus shelters can be incorporated at intervals along the route.

Louisburg has existing off-road and on-road cycle routes with improvements to expand the network proposed in the CTP (CTP, p.xxi). Multi-use paths are proposed that connect to Bickett Boulevard, but do not run along this route. If proposals go forward on this segment of road it would be an excellent opportunity to enable cyclists to access the facilities in the Study Area between Burke Boulevard and Nash Street.

Bickett Boulevard would function better for pedestrians if sidewalks were provided along both sides of the route. Increased pedestrian connectivity and safety is needed in Louisburg along this 1.37 mile segment of Bickett Boulevard. The CTP proposes adding sidewalks at the northern end of the route, but improvements are needed to the existing sidewalks as well.

Many ingredients contribute to the overall health and quality of life for Louisburg citizens. Important factors are quality employment opportunities, the local education system and housing affordability, as well as access to alternative transportation and recreational opportunities. These are factors that contribute to the overall enjoyment of living in a certain locale. Communities that possess these amenities are increasingly able to attract new residents, businesses and industries.

3.5 What the 1.37 Mile Bickett Boulevard Study Area Could Look like if the Goals are Implemented:

Conceptual Ideas:

Before:

Bickett and Nash Indicating Possible Improvements

After:

Bickett and Nash with Improvements

- **Stop Light Arms with Overhead Road Signs**
- **Pedestrian Crossing (Timed)**
- **Planted Median with Pedestrian Refuge**
- **Sidewalks on Both sides of Street**
- **Bike Paths**
- **Mixed Use (Businesses/Apartments) Close to Street with Parking Behind**
- **Pull in for Buses**
- **Buried Power Lines**
- **Parking Behind Buildings**
- **Consolidation of Driveways**

Conceptual Ideas:

Bickett Blvd. near McDonald's, Wendy's and Burger King (around 328-332 S. Bickett)

Before:

- No Sidewalk
- Center turn lane allows for multiple conflict points

After:

- Sidewalk added on both sides of road
- Lane marked for cyclists
- Planted median with gap allowing for left turns and U-turn

Conceptual Ideas:

Bickett Blvd. at Franklin Plaza

Before:

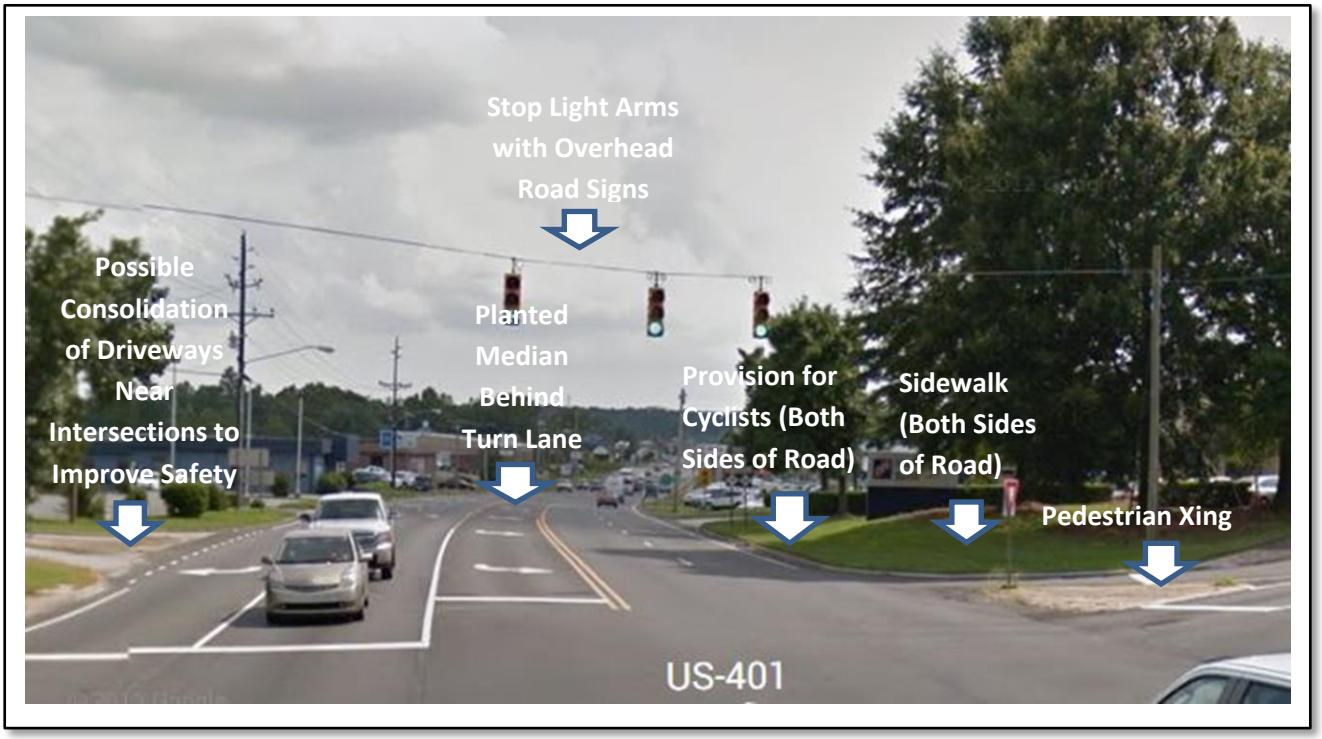
- No sidewalk
- No pedestrian crossing
- No stop light at Franklin Plaza
- No landscaping

After:

- Signalized* and marked pedestrian crossing
- Stop light with arms added at Franklin Plaza
- Sidewalk added
- New landscaping

**The new signalization could also include ingress and egress to the building adjacent to this intersection to the west (formerly Southern States) and the elimination of current safety concerns with driveways.*

(Photo at Bickett and Nash)



Part 4.0: THE NEXT STEPS

4.1 NCDOT Congestion Management Group-Conceptual Congestion Management Options

Having examined general solutions addressing Goals One through Four and raising public awareness, the Town of Louisburg also requested that members of the NCDOT Congestion Management Group propose various conceptual congestion management options addressing the 1.37 mile segment of Bickett Boulevard between Burke Boulevard and Nash Street. The Congestion Management Group was able to complete these options by Spring 2015.

NCDOT Congestion Management introduced three conceptual alternatives of progressively more detailed access management solutions. Each of the three conceptual alternatives included a description addressing safety and congestion management concerns as well as a schematic plan. The conceptual alternatives begin with the most inexpensive options to remedy complaints and address safety

concerns and progress to more complex options which transition the study area into a superstreet. These conceptual alternatives from the NCDOT Congestion Management Group are taken directly from the **US401 (Bickett Boulevard) Safety and Congestion Management Improvements Summary** and are listed below (and can also be found with the conceptual diagrams in Appendix 6.4:

Alternative 1

A majority of the locations identified as safety concerns are located around the Franklin Plaza area, with numerous driveways providing full access movements over a short distance. The opportunity exists for many conflict points.

- Consolidate Southern States driveways into one driveway opposite Franklin Plaza main entrance and add as the 4th leg of the existing signal
- Install median from 750' south of Franklin Plaza main entrance to 350' north of Hill Street/Franklin Plaza entrance 3
- Convert driveways in area to right in/right out (RIRO)
- Provide u-turn facilities at northern and southern termini of median

Alternative 2

This alternative builds on the concepts of **Alternative 1** and extends the median north to the Tar River bridge and beyond the NC 39/SR 1230 (Bunn Road) intersection to the south. An increased superstreet implementation along the corridor further increases safety by reducing conflict points and reduces travel time by providing increased phase lengths for the north and south through movements.

- Implement **Alternative 1** items
- Install median from 600' south of NC 39/SR 1230 (Bunn Road) to beyond Carter Bank & Trust
- Construct backage road behind 4 properties north of Franklin Plaza and close accesses on US 401
- Construct u-turn facility 350' north of Hill Street/Franklin Plaza entrance 3,
- Construct u-turn facility 750' south of Franklin Plaza main entrance
- Construct u-turn facility 600' south of NC 39/SR 1230 (Bunn Road)

Alternative 3

This alternative further builds on **Alternatives 1 and 2** by transitioning the study area corridor into a superstreet. Along with construction of the superstreet other alternative intersection concepts are implemented to benefit access management and the performance of the superstreet.

- Implement **Alternative 1 and 2** items
- Install median throughout entire study area corridor
- Provide truck access to Franklin Times
    - Construct truck access for Franklin Times off of Sandalwood Avenue, if feasible; or
    - Construct southbound leftover with a 2 phase signal and place sensor downstream in the storage bay for the truck to activate the signal before backing in; or,
    - Construct southbound leftover like above with a flashing beacon instead of a signal and a sign that reads 'Truck Entering When Flashing' installed on northbound US 401 in advance of the leftover
- Utilize Nash/Wade/Johnson as a quadrant intersection concept instead of mainline u-turn point
- Construct/provide back access to buildings north of Sheetz and west of US 401 via Johnson Street
- Utilize accesses for buildings south of Sheetz via Johnson Street and close accesses on US 401
- Convert both CVS driveways to right-in/right-out
- Construct u-turn facility 650' north of NC 56/581/SR 1231 (East Nash Street)

4.2 Detailed Safety Analysis and Capacity Analysis will Assist in Decision Making

The three alternatives above are a conceptual representation of possible solutions proposed by NCDOT Congestion Management. A detailed safety analysis and capacity analysis should be undertaken to assist in helping to make decisions concerning the three conceptual alternatives. In general, any effort to reduce access points along this corridor will aid in benefitting safety. A capacity analysis should be performed for this corridor as some concepts may prove more effective than others. A consultant firm could also be hired to execute detailed "Complete Street" designs for the length of the study area.

At this point, the Town of Louisburg has examined the alternatives including approaches for possible solutions to benefit all modes of travel for its citizens and stakeholders, focusing on improving the safety for all travelling on Bickett Boulevard between Burke Boulevard and Nash Streets while improving the aesthetics, supporting local economic development and allowing for multimodal transportation choices resulting in reduced congestion and minimized crashes.

Part 5.0: FUNDING AND IMPLEMENTATION

5.1 Funding

Although the Bickett Boulevard project was highly ranked in Franklin County in the last NCDOT Strategic Prioritization Process (SPOT 3.0), projects in other areas of the state took precedence. The Bickett Boulevard AADT studies (pp.14 and 15) indicate where traffic is heavy, but the segment between Burke Boulevard and Nash Street has not yet reached capacity as has happened in other areas. If the scoring method is modified somewhat in the next Strategic Prioritization Process, perhaps the road segment will receive a higher score, thus becoming more competitive. Another strategy could be breaking down the study area into separate, smaller projects for the next iteration of the Strategic Prioritization Process.

It is also possible that developers could potentially partner with the NCDOT to achieve road improvements in the Study Area. However, a lot depends on the size of the development. A developer could redevelop and upgrade, but it is difficult currently for the NCDOT to have the funds to do the partnering. From a developer's point of view it could take a long time to get the money back. However, if the use or intensity of use changes, the developer would then have to mitigate for traffic impact.

Other options for improving this segment of Bickett Boulevard focus on examining particular areas on a case by case basis. For example, it could be possible for the NCDOT to look at individual driveways or intersections from a safety standpoint and work with the local government of Louisburg. Safety funding has been used by the NCDOT in the past to finance such projects as the ADA ramps at Louisburg College.

Pedestrian and bicycle improvements could be accomplished by the NCDOT partnering with other funded projects. Currently, the NCDOT is participating in

projects that tie in with the Congestion Mitigation and Air Quality Improvement Program (CMAQ) funded efforts. NCDOT projects could be tagged on to the end of a CMAQ project. This is presently happening in Louisburg where the NCDOT has recently worked with local government to extend sidewalks from Oak Drive to Nash Street at the CVS Drugstore. NCDOT has also completed a signalized and marked pedestrian crosswalk across Bickett at Nash Street. NCDOT partnered with Louisburg because it supported and worked well with the CMAQ project. This intersection was identified as an area with a high number of crashes and safety concerns at the Working Groups and Public Input Meeting and could be part of an incremental approach to achieving the desired outcomes in the Bickett Boulevard Study Area.

Public transportation is presently lacking in Louisburg. Potential bus routes are mentioned in the 2014 Franklin County and Town of Louisburg Comprehensive Transportation Plan (CTP, Pp.xiii and II-54 to II-56) and include the potential location of Park and Ride lots. The connectivity and mobility of Louisburg residents needs to be improved to link to activity and employment locations within the town itself and also to the region. The need for such transportation was identified at the Public Input Meeting and in the questionnaire. Potential research and funding for a fixed route service within Louisburg is currently being pursued. Kerr-Tar Regional Council of Governments has applied to the Community Transportation Association of America (CTAA) Rural Passenger Transportation Technical Assistance Program to receive long term technical assistance to develop a fixed route transportation service around Louisburg, equivalent to the Roxboro Uptown Shuttle.

If Governor McCrory's $1.2 billion transportation bond passes, the possibility exists that parts of US401 will be addressed, although the 1.37 mile segment of Bickett Boulevard between Burke Boulevard and Nash Street has not been mentioned at this time.

The US Department of Transportation could have another round of the TIGER Grant Program (Transportation Generating Economic Recovery) next year. The project must be seen as having a significant impact on the Nation, a metropolitan area or a region. For more information, please see http://www.dot.gov/tiger/faq. A 20% match is generally required.

5.2 Sample Cost Estimates for Facilities

Approximate unit costs for potential needs identified in this plan are listed below and are based on some example project costs that have been recently implemented, along with costs of other projects. These are only example costs and should not be used to determine actual costs for specific projects. An engineer's estimate should be obtained before requesting project funding from county, state or federal sources.

Sidewalks

- $15 per foot for curb and gutter (plus 10% for design and administration)
- $30 per square yard sidewalk (plus 10% for design and administration)
- 5' sidewalk – The Town of Mooresville is spending $119 - $200 per linear foot ($629,000 - $1,056,000 per mile) for recent sidewalk projects. This figure includes all necessary costs of design & administration, curb & gutter, various retrofitting costs, etc.

Intersections

- Crosswalk/Countdown signal: $5,000 per intersection (this includes installation and an additional installed post). This cost can be up to $15,000 per intersection if a retrofit is done with Accessible Pedestrian Signals (APS) devices.
- Curb extensions: $5,000 - $25,000
- Simple neighborhood crosswalks with signs and markings: $500 - $1,500
- Enhanced crosswalk with special stencils, raised platforms, or special signage: $5,000
- Raised crosswalks: $2,000 – $15,000
- Refuge island: $10,000 – $40,000
- In pavement illumination: $25,000 – $40,000 per crossing
- Pedestrian only traffic signal: $40,000 - $75,000
- Hawk signal: $40,000 Mid Block Flashing Crosswalk: $20,000 for equipment and $20,000 to install

Lane Marking

- Bicycle or vehicle lane striping (thermoplastic): $15,000/mile with design and administration for both sides of the road
- $1.20 per linear foot of thermoplastic for line striping
- $350.00 for each set of performed thermoplastic bike symbols with arrows

Lighting, Landscaping, and Signage

- Lighting: Varies widely depending on type of light and location. Lighting an underpass could be $2,000 - $5,000 for 3 to 4 lights. Mecklenburg County Parks and Recreation recently paid approximately $11,000 for the wiring and installation of 2 underpasses (8-12 lights under each)
- Landscaping: Contractor installed foliage costs around $400 - $500 per tree and $25 - $50 per shrub
- Marking a route with signs: $2,000 per mile with design and administration
  Signs: $250 – $350 each

Part 6: APPENDICES

6.1 Materials and Notes Presented at the Four Working Group Meetings

Working Group Meeting 1

Imagine Bickett Boulevard
Working Group Meeting

July 29th, 2014 11:30am - 1:00pm

Town Hall, 110 West Nash Street, Louisburg, NC

----------AGENDA----------

1) **Welcome and Introductions**

2) **Overview of Transportation Planning, Decision Making, MPO/RPO Roles**

3) **Bickett Boulevard Slide Presentation**
   - **Introducing Access Management and Other Possibilities for Improvements to the Segment of Bickett Boulevard between East Nash Street and Burke Boulevard - Ann Stroobant, Regional Planner, Kerr-Tar Rural Transportation Planning Organization**

4) **Stakeholder Concerns and Strategies**

5) **Other Suggestions**

6) **Date of Next Working Group?**

7) **Date of Public Meeting/Workshop?**

8) **Adjourn**

SIGN IN SHEET
Bickett Boulevard, Louisburg - Working Group
Date: July 29th, 2014

Please Print!

NAME	EMAIL ADDRESS	AGENCY & TELEPHONE
Stephen Winstead	stevewinstead@ncdot.gov	NCDOT 252-492-0111
Keith Smith	ASEKEITH@AOL.com	Local Business 919-496-0711 (Pete Smith Automotive Group 703 S. Bickett)
Tom Clancy	SFHLNC@NC.RR.COM	Strickland Funeral Home 919-496-4191 (STRICKLAND FUNERAL 103 W. FRANKLIN ST LOUISBURG)
other member not present:		ALSO: GRANNY'S DRIVE-IN 140 WADE AVE.
* BRIAN CASH (set e-mail w/o)		
ANN STROOBANT	astroopent@kerrtarcog.org	KERR-TAR RPO 252-436-2040 X 2004
TONY KING	tking@ncrrbiz.com	ASST. CITY MGR., LOUISBURG 919-496-4145

Imagine Bickett Boulevard
Working Group Meeting #1

Place: Louisburg Town Hall
110 West Nash Street
Louisburg, NC 27549
Time and Date: 11:30am-1:00pm
July 29th, 2014

Members of Working Group:
Owners of local businesses and property in the area:

Tom Clancy- Town Council Member
Director of Strickland Funeral Home, 103 W. Franklin St.
Owner of Granny's Drive-In, 140 Wade Ave.

Keith Smith- Pete Smith Automotive Group, 703 S. Bickett Blvd.
Creator of Shop Sauce and Shop Sauce products

Brian Cash-Owns property on Bickett
Did not attend first working group

Other Members:
Tony King-Assistant City Manager, Louisburg, NC

Steve Winstead-District Engineer, NCDOT

Ann Stroobant-Regional Planner, Kerr-Tar RPO

1) Tony King arranged for a buffet lunch during the meeting. We assembled in the conference room where he welcomed and introduced everyone.

2) Tony King gave an overview of the Transportation Planning Process (currently SPOT 3.0), decision making and the MPO/RPO roles supported with comments from Steve Winstead from NC DOT.

3) Slides introducing the 1.37 mile segment of Bickett Boulevard were presented by Ann Stroobant. The slides included an introduction to access management, Complete Streets and other possibilities for improvements to this area of Bickett between East Nash Street and Burke Boulevard. The slides included maps showing the number of curb cuts, average daily traffic volume, as well as crash data and photos illustrating areas where crashes were more frequent along this area of Bickett between Burke and Nash. Slides were shown of other cities, such as Charlotte and Durham, where streets had been redesigned to allow for

multimodal use. Ann Stroobant also distributed the publication *"Safe Access is Good for Business,"* for further reading.

4) Stakeholder Concerns and Strategies:

Areas identified as potentially dangerous or problematic:

- Southern States (324 S. Bickett Blvd. across from Franklin Plaza)- ingress and egress is very dangerous
- Other areas on the same side of the street have potentially dangerous access. For example, areas around Cuts and Curls (320 S. Bickett Boulevard) and near Town and Country Supply (and 312 S. Bickett Boulevard)
- Turning left at CVS (102 N. Bickett Blvd.) onto NC 56 can be difficult. Maybe a right turn and a left turn signal would help, with some sort of lane control. Looking at traffic counts might indicate a queuing problem here.
- Turning at Nash Street going south next to the Franklin Times (109 S. Bickett Blvd.)
- Turning into or going out of Sandalwood Avenue near Shannon Village (the new Sheetz is on the other side of Bickett and across from Sandalwood Ave.)

Areas that might now be safer:

- New Sheetz (108 S. Bickett Blvd at the corner of Johnson St. Extension.) eliminated two access points
- Wall Mart (279 S. Bickett Blvd.) at Franklin Plaza (behind Wester's Automotive and Remington Grill) across from Hill Street has moved. This might make the crash data better, since this space is now vacant.

Areas currently being improved:

- New sidewalks are being added along Wade and Johnson Streets that will go by such eating establishments as the Roma Restaurant (110S. Bickett near Wade Ave.), Sheetz (108 S. Bickett at Johnson St. Extension and Wade Ave.) and Granny's Drive-In (140 Wade Ave.).

Existing access points along Bickett are grandfathered and will change if a property owner develops a property and has to apply for a driveway permit (because of location along a state road). Any new development that looses its grandfathering is now required to have curb and gutter, instillation of required landscaping and new ingress and egress according to permit specifications. The number of curb cuts along Bickett Boulevard will therefore decrease over time.

Possibilities mentioned regarding curb cuts/entrances:

- Could work with business or property owners to consolidate the number of curb cuts/ entrances or perhaps share-this might be difficult, depending on the business owner.

- Altering the curb cuts/entrances might be more difficult than putting in a median along Bickett. How long would the medians need to be before a turn is allowed?

5) Other Suggestions:

Additional Items:

- The new Advanced Auto Parts located at 353 S.Bickett Blvd. has two entrances-one onto Bunn Road, the other off Bickett Blvd. This is not fair.
- The data might not be as bad as we think. It was pointed out that when the Town of Louisburg established its historic district, people were worried that the additional historic district rules might turn people off. However, there were many houses sold after the first three years of the district's establishment because people felt protected. There was more tax value created for the town through the rehab and improvement of the historic buildings than from businesses like McDonald's.
- These concerns were also mentioned during the discussion:
    - Conflict points in turning
    - Drive-In turn lane
    - Possibility of roundabouts
    - Planted medians
    - Backage roads (like at Southern States)

Ideas of next steps:

- Images that show Bickett Blvd with possible improvements to help people get an idea of what the street could look like-this would be more towards the end of the process to incorporate ideas mentioned

- Examples of other access management projects, so that members of the working group can visit or perhaps see a slide presentation showing these other sites.

- Maybe we can discover some testimonials from businesses and residents involved in other similar access management projects. We can find out what their experience was and if it was positive or negative.

- Places where we think there have been recent access management projects
    - Rolesville, NC (someone has seen an example where the curb has been modified to allow for additional turning radius)
    - Hilandale Rd., Durham, NC
    - Apex/Holly Springs
    - Las Vegas, Nevada

- Bring in a big map of the study area showing all of the buildings and streets-this size would let us mark up problem hot spots as well as being able to see individual buildings and parking lots.

- For Working Group Meeting #2, it was suggested that we invite Mr. Doumit Ishak, from the NC DOT Congestion Management Group in Raleigh. His specialty is access management and he might be able to give us some suggestions on solutions for problem areas in the 1.37 mile section of Bickett.

- Brain Storm and let Tony King know what you have come up with so that we can discuss any new concepts and ideas at the next Working Group meeting.

Goals:

- To improve this segment of Bickett Blvd. from an aesthetic perspective (signs, street trees…)
- Need to incorporate multimodal opportunities like bus routes and sidewalks , for example
- Improve the problem areas for traffic

6) Date of Next Working Group:

- It was suggested that the date of Working Group #2 be three weeks from 7/29/14. The meeting will be sometime during the week of July 18-22 or July 25-29th, depending on the availability of members and of Mr. Doumit Ishak, who we will invite to present and answer some of our access management questions.

7) Date of Public Meeting/Workshop?

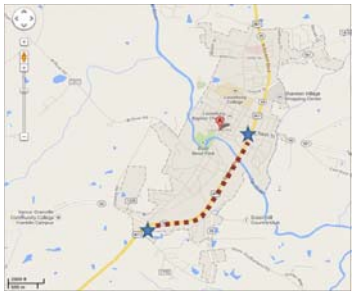
- The possibility of workshop(s) was discussed so that the public will have a chance to participate in the consultation process and will take place after the working group has thought through the process and issues.

8) The meeting was adjourned after lunch at about 1:20pm.

Imagine Bickett Boulevard
Louisburg, North Carolina

Kerr-Tar Regional Council Of Governments

LOUISBURG



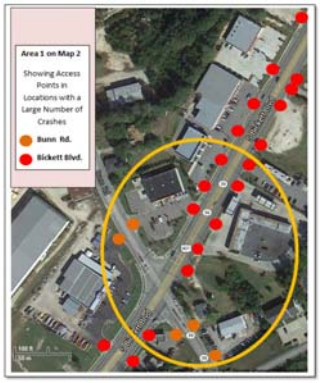
Louisburg, NC:
Area of focus is a 1.37 mile segment of Bickett Boulevard from Burke Boulevard and NCS6 to East Nash Street (SPOT ID H111053)

esri Traffic Count Map

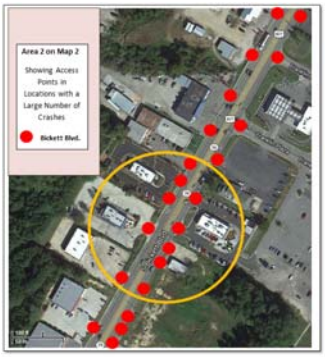
Source: 2012 Market Planning Solutions, Inc.

Crash Data-Individual Crashes 04/01/2009-03/31/2014

Data and Map from Brian Murphy and Justin Green NCDOT Safety Planning Group

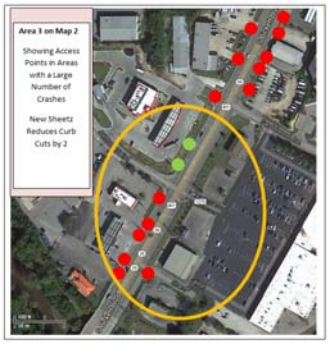


South Bickett Blvd. Looking Towards Bunn Rd.



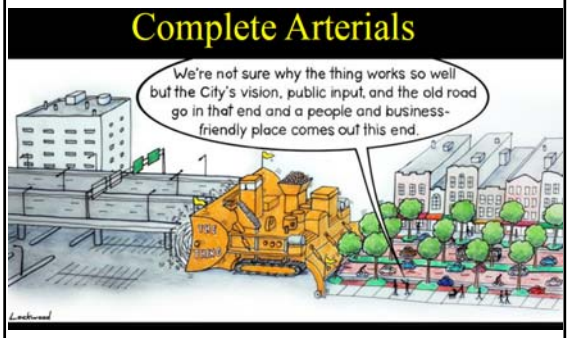
Looking North towards McDonald's and Franklin Plaza

Looking North towards McDonald's and Franklin Plaza



Bickett Blvd. at Donation Center and Sheets
Looking Towards East Nash Street

Bickett Blvd. at Shannon Village and Sheetz Looking Towards East Nash St.



From Ian Lockwood, Toole Design Group

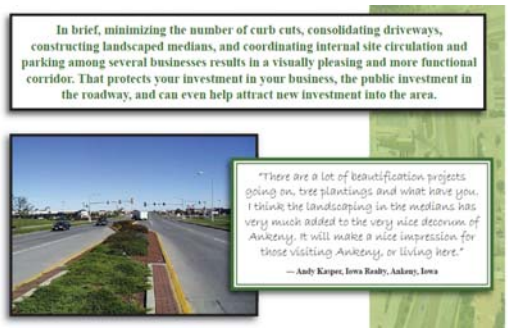
From Danny Pleasant, Director, Charlotte DOT

Neighborhoods in Charlotte, NC

Access Management

A set of proven techniques that can help reduce traffic congestion, improve safety, and preserve existing road capacity by managing the location, design and type of access to property.

From Robbins Road Study, City of Grand Haven, MI, 2010

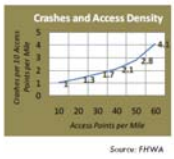


Safe Access is Good for Business, P.12

Benefits of Access Management?

Coordinated management of access location, design and type improves:

- Safety – reduce conflicts and potential for crashes
- Capacity – improves traffic flow
- Aesthetics – provides more room for streetscaping
- Business vitality – helps retain long-term corridor viability
- Preserve Investment – cost effective
- Non-Motorized – fewer conflict points for pedestrians and bikers



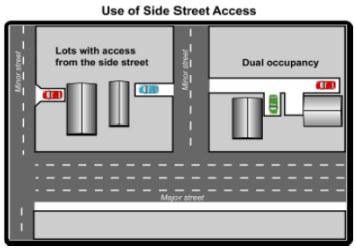
From Robbins Road Study, City of Grand Haven, MI, 2010

No Place for Pedestrians to Cross Safely

Benefit: Aesthetics

- More room for landscaping and parking
- Better accommodates a unified/themed streetscape
- Opportunity to organize signs

From Robbins Road Study, City of Grand Haven, MI, 2010



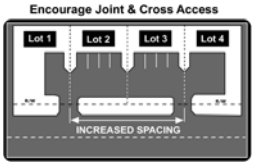
From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P26.

Sharing Access

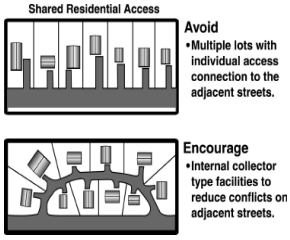
Shared driveways:

- Connect adjacent parking lots
- Promote patronage of adjacent businesses
- Retrofit as practical
- Apply spacing standards to new development

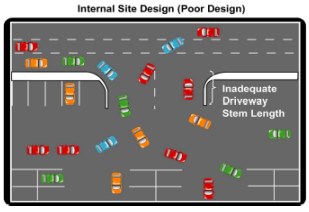
From Robbins Road Study, City of Grand Haven, MI, 2010



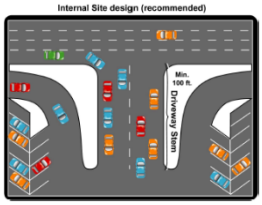
From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P.40



From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P.38



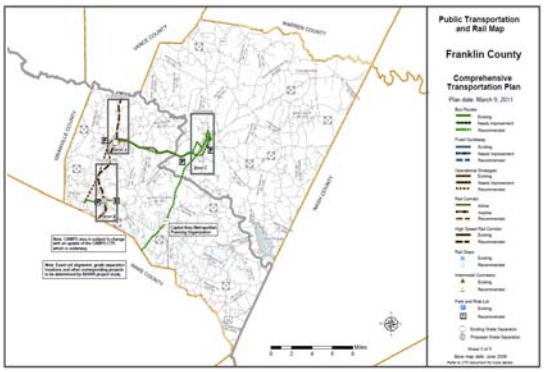
From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P.33



From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P.34

Bickett Blvd. at Franklin Plaza

Hillandale Rd., Durham, NC

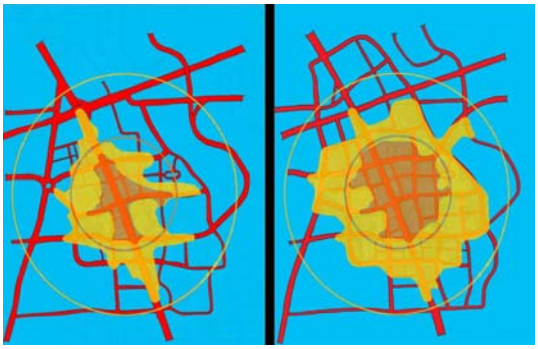


Hillandale Rd., Durham, NC

Bickett and Nash with Possible Improvements

Bickett and Nash with Improvements

- Stop Light Arms with Overhead Road Signs
- Pedestrian Crossing (Timed)
- Planted Median with Pedestrian Refuge
- Sidewalks on Both sides of Street
- Bike Paths
- Mixed Use (Businesses/Apartments) Close to Street with Parking Behind
- Pull in for Buses
- Buried Power Lines
- Parking Behind Buildings
- Consolidation of Driveways



Thank You!

Kerr-Tar Regional Council Of Governments
Regional Transportation Planning Organization

Working Group Meeting 2

Imagine Bickett Boulevard
Working Group #2 Meeting

August 26th, 2014 10:30am

Town Hall, 110 West Nash Street, Louisburg, NC

----------AGENDA----------

1) **Welcome and Introductions**

2) **Brief Overview of Last Meeting on 7/29/14 (see attached notes)**

3) **Presentation by members of the Congestion Management Group, NC Department of Transportation (NCDOT)**
   - **Addressing some of the questions raised at the last working group as well as any new questions**

4) **Slides of Hillandale Road, Durham-a recently completed NCDOT access management project**

5) **Mark-up of Large Bickett Boulevard Maps by workshop participants**
   - **Indicating concerns, possible strategies and additional ideas**

6) **Other Suggestions**

7) **Date of Next Working Group?**

8) **Date of Public Meeting/Workshop?**

9) **Adjourn**

SIGN IN SHEET
Bickett Boulevard, Louisburg - Working Group #2
Date: August 26th, 2014

Please Print!

NAME	EMAIL ADDRESS	AGENCY & TELEPHONE
DOUMIT ISHAK	dishak@ncdot.gov	919-329-8499
Jeff Weller	JWeller@NCDOT.GOV	919.329.8489
Stephen Winstead	stevewinstead@ncdot.gov	252-492-0111
Keith Smith	ASEKEITH@AOL.com	919.496.0711
Tom Clancy	SFHLNC@NC.RR.COM	919-496-4191
Tony Krug	TKrug@NCRRBiz.com	919-496[illegible]-1005
BRYAN CASH	jbcash_INSURER@YAHOO.COM	919-496-5155
ANN STROBANT	astrobant@kerrtarcog.org	252-436-2040 x 2004

Imagine Bickett Boulevard
Working Group Meeting #2

Place: Louisburg Town Hall
110 West Nash Street
Louisburg, NC 27549
Time and Date: 10:30-12:30
August 26th, 2014

Members of Working Group:
Owners of local businesses and property in the area:

Tom Clancy- Town Council Member
Director of Strickland Funeral Home, 103 W. Franklin St.
Owner of Granny's Drive-In, 140 Wade Ave.

Keith Smith- Pete Smith Automotive Group, 703 S. Bickett Blvd.
Creator of Shop Sauce and Shop Sauce products

Bryan Cash-Owns property on Bickett
Affiliated with Hodges Insurance Agency, Inc.

Other Members:
Tony King-Assistant City Manager, Louisburg, NC

Steve Winstead-District Engineer, NCDOT

Ann Stroobant-Regional Planner, Kerr-Tar RPO

1) Tony King welcomed and introduced everyone once we were all assembled in the conference room. He stressed that the Bickett Boulevard schemes that we would see at the end of the Working Group and Public Consultation would be conceptual, since we did not get Technical Assistance money for engineering drawings. We will go through various scenarios so that the Working Group and the public will be able to have an understanding of the types of access management possibilities proposed. The options for this 1.37 mile segment of Bickett Boulevard should also reflect the multimodal possibilities mentioned in the Franklin County and Louisburg Comprehensive Transportation Plan as well as the honoring the Louisburg Comprehensive Land Use Plan.

2) Ann Stroobant gave a brief overview of Working Group #1 for those who did not attend and handed out copies of notes from that meeting.

3) Doumit Ishak and Jeff Weller from the NCDOT Congestion Management Group gave a slide presentation where they discussed various congestion management

options. Congestion management is different from access management since congestion management focuses on moving traffic through and reducing emissions caused by idling vehicles.

4) Ann Stroobant, Regional Planner at Kerr-Tar RPO, presented PowerPoints of the recently completed access management project at Hillandale Road in Durham.

Techniques of congestion management and access management mentioned and discussed during the presentations:

- Super Streets-two roadways that are parallel where people can make U-turns. Movements on minor streets are minimized in favor of maximization of through movements. With a super street, fatal crashes go down and travel time in vehicles is improved. Conflict points are reduced.
    - An example of such a super street is Holly Springs going towards Fuquay-Varina
    - Another example given was the Rolesville by-pass area
- Signals-the phasing of traffic signals is important because efficiency can be increased by cutting down the number of phases. For example, a super street has more signals, but the signals have only 2-3 phases, so the traffic movements are much quicker.
    - 15-501 in Chapel Hill (Orange County) is an example of a signalized Super Street
    - US17 in Pender and N. Hanover Counties is another example of a signalized Super Street
    - U-turns can also be signalized and also synchronized with the rest of the intersection.
- Roundabouts-dual lane roundabouts would be difficult for drivers; this might need to be in conjunction with a road diet where the number of lanes going into the roundabout is reduced
- Road Diet-switching a road from four lanes to two, with a center turn lane, reducing crashes and making walking safer. This is also one way of traffic calming, since the lane numbers are reduced and would help prevent people from speeding. If foot traffic increases, it can help to revitalize the downtown economy. People can walk from one business to the next.
    - An example is Hillsborough Street in front of NC State, which also includes a roundabout
- Left Over
- Elimination of Driveways / Sharing drives with multiple businesses
- Limiting movements at two major Crossroads
- Limiting left turn from side streets
- Backage Roads-a road which provides access to the rear of commercial properties located between the backage road and the arterial. Perhaps if five or so businesses wanted to get together, this could be a possibility.

Concerns raised:

- Members of the Working Group brought up the impossibility of an 18-wheeler making a U-turn at Nash and Bickett. U-turns would have to be made large enough to accommodate a truck of this type. Possible solutions mentioned were:
    - Michigan U-Turn-where a U-turn is designed before the intersection
    - If 15' of space is available a bulb-out could be designed
    - Deliveries by 18-wheelers would still be difficult where the Franklin Times is located.
    - The total road width on Bickett is 64 feet, with lanes at 12 feet each. The outside lane of the road might be 13 feet.

- Everyone wants economic development. Does economic development mean more traffic and more impacts on the town? Is it possible to maintain the small town character in the design?

- Do we really want to speed traffic up? The speed limit is currently 45mph. People speed anyway, as evidenced by the speeding drunk driver who killed someone near Sheetz.

- The political aspects of the project were also touched upon. The bottom line for the project is money and having a supporting policy decision to help enable the direction that we choose to take. We need to:

    - Show the concepts of the Bickett Boulevard visualization process that we like
    - Gain the support of businesses along and near this area of Bickett Boulevard
    - We need to show people in Louisburg that there are beneficial economic aspects to improving this segment of Bickett Boulevard
    - Once we have shown that there is local support from both local people, businesses and politicians, then we can go after funding.

Concept Ideas:

- Perhaps the intersections could apply the signalized U-turns as in the Super Street designs. The intersections need to be looked at to see where this could happen. Other areas would have the median strip like the Hillandale access management example. This concept would use elements of Super Streets, access management and "Complete Streets, allowing for bike, pedestrian and bus possibilities.

- The idea of roundabouts was discussed. Roundabouts could be on a lower traffic volume side street.

- Is there really a need for five lanes on Bickett Boulevard if traffic is not really that heavy? Alternatives could be four lanes with a planted median strip and intervals

allowing for U-turns. An example mentioned in the meeting was Boca Raton, FL where the traffic patterns were reorganized to make the area more bicycle and pedestrian friendly.

Ideas of next steps (possibly for the next meeting):

- Look at crash data (obtain the most up-to-date from NCDOT) and look at types of crashes, injuries, fatalities and property damage on Bickett between Nash and Burke. If it is available, we could examine the Louisburg police data for drunk driving and speeding in this area also.

- Mark-up of large Bickett Boulevard Maps by Working Group to indicate areas of concern, possible strategies and additional ideas. This would be a good partner with the crash data, since we were unable to complete this at the last meeting due to time limitations.

Goals (Added to list from 1st Meeting):

- To improve this segment of Bickett Blvd. from an aesthetic perspective (signs, street trees…)
- Need to incorporate multimodal opportunities like bus routes, bike routes and sidewalks, for example
- Improve the problem areas for traffic, increasing safety
    - Create safe U-turns for vehicles, possibly signalized
- Stimulate economic development by infilling vacant or underused sites

5) Mark-up of large Bickett Boulevard Maps by Working Group to indicate areas of concern, possible strategies and additional ideas: This will take place at the next Working Group, since we used our time to discuss congestion management and access management.

6) Other Suggestions:
Doumit Ishak says that his group might be able to help, but would not draw up plans. Normally the DOT has a private engineering firm do the conceptual plans. If this takes place, it would be separate item and would be undertaken after the "Imagine Bickett Boulevard" consultation process is completed.

7) Date of Next Working Group:

- It was suggested that the date of Working Group #3 be about three weeks from 8/26/14. The meeting will take place on Wednesday, September 17th at the Louisburg Town Offices on 110 W. Nash Street.

8) Date of Public Meeting/Workshop?

- Public workshops will take place after the Working Group has thought through the process and issues, probably in October.

9) Adjourn-The meeting was adjourned at about 12:30pm.

North Carolina
DEPARTMENT OF TRANSPORTATION

Superstreets

A Tool for Safely and Efficiently Managing Congestion

TRANSPORTATION MOBILITY AND SAFETY DIVISION

North Carolina ncdot.gov

NC Department of Transportation

Mission Statement

"Connecting people and places in North Carolina - safely and efficiently with accountability and environmental sensitivity."

2

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The Superstreet

- **A type of intersection in which minor cross-street traffic is prohibited from going straight through or left at a divided highway intersection. ***
- **Minor cross street traffic must turn right, but can then access a U-turn to proceed in the desired direction.**

*Other configurations possible based on site specific conditions.

3

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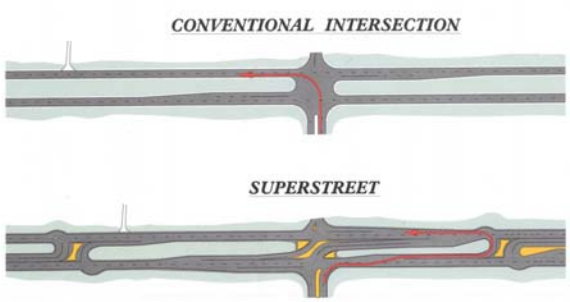

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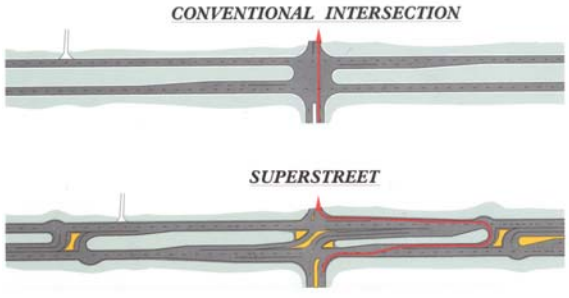

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Why Superstreets?

6

Answer:

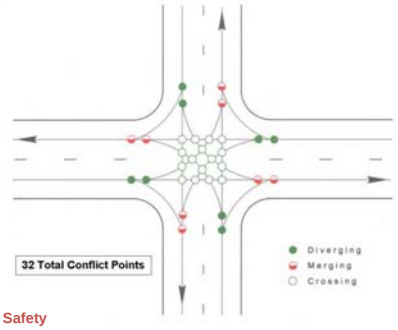
Improved Safety
Less Travel Time
Economically Beneficial
Environmentally Responsible

Why Superstreets?

Improved Safety

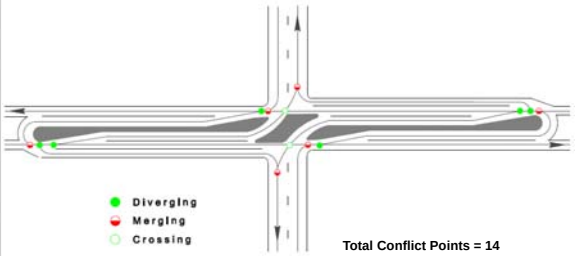
- Reduced likelihood of crashes, especially severe crashes such as side-collisions
- Fewer threats to crossing pedestrians

Conventional Intersection Conflict Points



Improved Safety

Superstreet Conflict Points



Improved Safety

Total Intersection Conflict Points

Conventional Intersection – **32**
16 Crossing Conflicts

Superstreet Intersection – **14**
2 Crossing Conflicts

Improved Safety

Superstreet Benefits and Capacities
(Research Project 2009-06)

Improved Safety

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Reduction in Crashes

- Safety impact by collision type for unsignalized superstreets, %

Collision Type	Crash Reduction %
Total	-46
Fatal and injury	-63
Angle and right turns	-75
Rear ends	-1
Sideswipes	-13
Left turns	-59
Other	-15

Improved Safety

13

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Safety Conclusions

Unsignalized superstreets

- Reduced collisions for total, angle and right turn, left turn, and fatal and injury
- Total collisions reduced by 46% (C-G method)

Improved Safety

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Are U-turns safe?

Improved Safety

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Accidents related to U-turn and left-turn maneuvers at unsignalized median openings occur very infrequently…
The 12 median openings in rural arterial corridors evaluated in detail in this research experienced an average of 0.20 accidents per median opening per year…
Based on these limited accident frequencies, there is no indication that U-turns at unsignalized median openings constitute a major safety concern.

Improved Safety

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Why Superstreets?

Less Travel Time

- Reduced "wait time" or delay
- Increased roadway capacity

Less Travel Time

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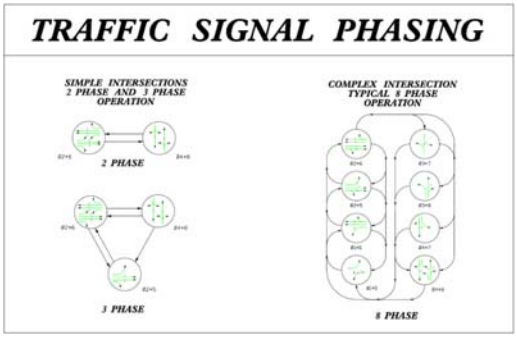

Less Travel Time

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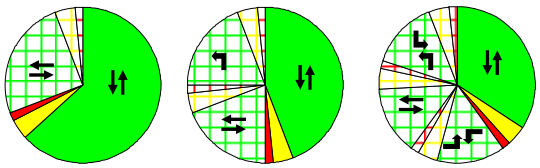
Main Street Green Time

Signal Timing - Two Phase | Signal Timing - Three Phase | Signal Timing - Eight Phase



Less Travel Time

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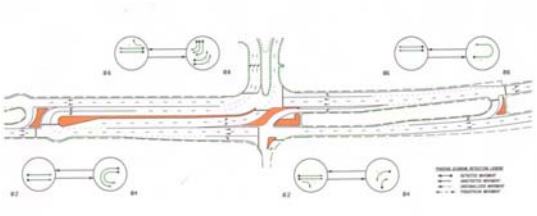
Superstreet Phasing



Less Travel Time

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Why Superstreets?

Economically Beneficial

- Preserves the existing facility
- Less expensive than an interchange
- Provides good access to both sides of the main road for development

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UPS Expects To Save $600 Million by Favoring Right Hand Turns

Economically Beneficial

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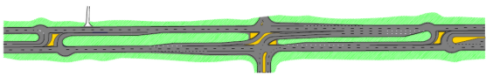
SUPERSTREET FOOTPRINT

SUPER STREET



Economically Beneficial

23

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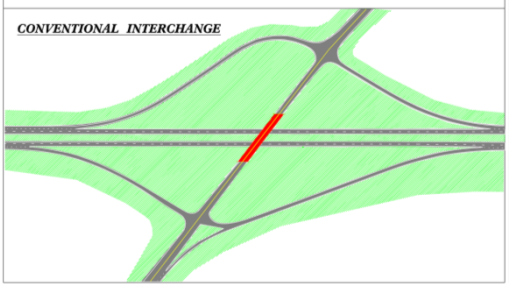
INTERCHANGE FOOTPRINT

CONVENTIONAL INTERCHANGE



Economically Beneficial

24

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Why Superstreets?

Environmentally Responsible

- Less time spent idling at a red light
- Reduction in environmental pollutants (exhaust fumes / fuel usage)
- Less acreage impacted by construction and permanent facility

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Can Superstreets Accommodate Semi-Trailer Combinations?

26

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ABSOLUTELY!

27

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28

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Superstreets in North Carolina

- Selected Existing Locations
  - US 15/501 in Chapel Hill, Orange County (Signalized)
  - US 17 in Pender & New Hanover Counties (Signalized)
  - US 17 in Leland, Brunswick County (Signalized)
  - NC 87 in Harnett County (Signalized)
  - US 23-74 in Haywood County
  - US 1 in Moore County, Vass Bypass
  - NC 87 in Elizabethtown, Bladen County
  - US 601 in Union County
  - US 17 By-Pass in Martin and Beaufort Counties
- Proposed Locations
  - Poplar Tent Road, Concord (Cabarrus County)
  - NC 24-27 in Mecklenburg County
  - Over 60 TIP Projects throughout the state

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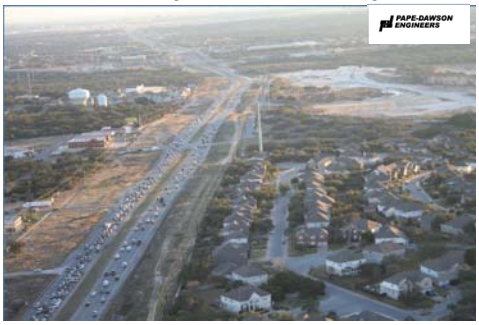
US 281 (San Antonio TX)



2009 – Looking south above Evans Road, PM peak

32

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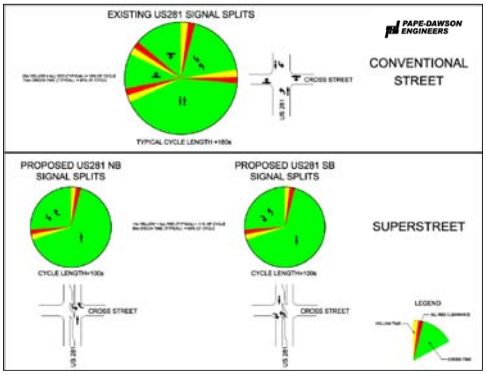

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US 281 Superstreet Comments

As traffic congestion on U.S. Highway 281 eases due to the completion of the superstreet project, construction of new commercial and retail developments along the far North Central San Antonio corridor is ramping up.

"We are close to 90 percent leased with no pad sites left," Elliott remarked. "We've had quite a bit of interest because of the market, which is in a high growth area. And a lot of our tenants say they feel like business has increased since the superstreet was finished."

San Antonio Express-News March 17, 2011

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Superstreets

A tool for protecting North Carolina's Strategic Highway Corridors

35

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Strategic Highway Corridors

- Establishes a "vision" for 5,400 miles of highway along 55 corridors throughout the state.
- Primary purpose: "to provide a network of high-speed, safe, reliable highways throughout North Carolina."

For more information visit **www.ncdot.org/~shc**

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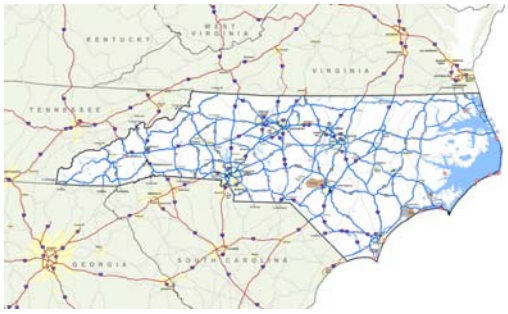
North Carolina Department of Transportation ncdot.gov

Strategic Highway Corridors



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Summary of Superstreet Benefits

- Safety
- Time savings
- Increased capacity
- Improved traffic flow
- Access management
- Land use and corridor protection
- Alternative to interchange (Less $$$)
- Smaller “footprint” than an interchange

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Imagine Bickett Boulevard
Louisburg, North Carolina

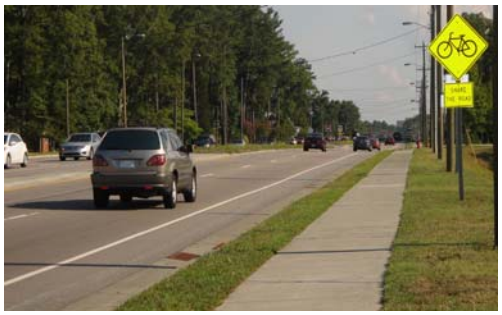
Kerr-Tar Regional Council Of Governments | LOUISBURG

Hillandale Road, Durham-Access Management Example
(from W. Carver St. to 1748)

Intersection of W. Carver St. and Hillandale Rd.

Intersection of W. Carver St. and Hillandale Rd.

Intersection of W. Carver St. and Hillandale Rd.



Looking South down Hillandale Road from W. Carver St.

Hillandale Road - Planted Median

Hillandale Road - Planted Median

Hillandale Road - Planted Median with Turn

Close-Up of Turn

Progressing South towards I-85

Bus Stop Provision at Croasdaile Commons

Bus Stop Provision at Croasdaile Commons Close-Up

Landscaped Entrance to Croasdaile Commons with Pedestrian Crossing and Signal

Landscaped Median where Hillandale Road Crosses Over I-85

Thank You!

Kerr-Tar Regional Council Of Governments
Regional Transportation Planning Organization

Working Group Meeting 3

(Contains full STRIP Accident Analysis Report and Map)

Imagine Bickett Boulevard
Working Group #3 Meeting

September 17th, 2014 10:00am

Town Hall, 110 West Nash Street, Louisburg, NC

----------AGENDA----------

1) **Welcome and Introductions**

2) **Brief Overview of Last Meeting on 8/26/14 (see attached notes)**

3) **Latest Personal injuries, property damage, crash data presented by Ann Stroobant and supplied by the NCDOT Safety Group (Kelly Baker, Brian Murphy and Justin Green)**

4) **Mark-up of Large Bickett Boulevard Maps by workshop participants**
   - **Indicating concerns, possible strategies and additional ideas**

5) **General discussion of goals and consideration of Mission Statement (can finalize at Working Group Meeting #4)**

6) **Date of Next Working Group?**

7) **Date of Public Meeting/Workshop?**

8) **Adjourn**

SIGN IN SHEET
Imagine Bickett Boulevard, Louisburg - Working Group 3
Date: September 17th, 2014

Please Print!

NAME	EMAIL ADDRESS	AGENCY & TELEPHONE
Stephen Winstead	stevewinstead@ncdot.gov	NCDOT
Tony King	TKing@NCRRBIZ.com	Louisburg
Keith Smith	ASEJCEITH@AOL.com	496 0711
BRIAN CASH	jbcash_INSURER@YAHOO.com	496-5155
ANN STROBANT	astrobant@kerrtarcog.org	KERR-TAR RPO (252) 436-2040 X2004

Imagine Bickett Boulevard
Working Group Meeting #3

Place: Louisburg Town Hall
110 West Nash Street
Louisburg, NC 27549

Time and Date: 10:00am
September 17th, 2014

Members of Working Group:
Owners of local businesses and property in the area:

Keith Smith- Pete Smith Automotive Group, 703 S. Bickett Blvd.
Creator of Shop Sauce and Shop Sauce products

Bryan Cash-Owns property on Bickett
Affiliated with Hodges Insurance Agency, Inc.

Other Members:
Tony King-Assistant City Manager, Louisburg, NC

Steve Winstead-District Engineer, NCDOT

Ann Stroobant-Regional Planner, Kerr-Tar RPO

Unable to Attend Today Due to a Schedule Conflict:
Tom Clancy- Town Council Member
Director of Strickland Funeral Home, 103 W. Franklin St.
Owner of Granny's Drive-In, 140 Wade Ave.

1) Tony King welcomed everyone to the third of four Imagine Bickett Boulevard Working Group meetings.

2) Ann Stroobant gave a brief overview of our last meeting, Working Group #2, specifically mentioning the goals for the 1.37 mile segment of Bickett that have been evolving at our meetings, as well as handing out copies of notes from meeting #2 including Xeroxed visuals of a super street; landscaped median with U-turn from Hillandale Road; bus stop with lay-by from Hillandale Road and a neighborhood in Charlotte improved with planted medians, buildings closer to the street with parking behind, sidewalks, bike lanes, signalized pedestrian crossings, new stop light arms, street lights and underground services. She said that she wanted to remind people of the road/area improvements that we had

been discussing and to give them visuals so that they could think about how these images could apply to the potential project area on the 1.37 mile segment of Bickett Boulevard.

3) Ann Stroobant presented the updated accident analysis data from Kelly Becker, Brian Murphy and Justin Green of the NCDOT Safety Group. This data included personal injuries, property damage and crash data listed individually and also summarized. The accident analysis data covered the five year period from July 1, 2009 to June 30th, 2014. The data package also included a GIS map of Bickett from Burke Blvd to Nash Street showing all 210 crashes categorized by type. Each accident was represented by a star on the map.

Concerns:

- The data shows that there was one fatality and three pedestrian injuries during the five year period.
- Questions arising from the data:
    - Is it normal to have 210 accidents along a 1.3 mile section of road?
    - Is this section of Bickett out of the norm in terms of accidents? Could we compare it with Capitol Boulevard in Raleigh, Dabney Drive in Henderson or Hillandale Road in Durham?
    - Do we really have a problem?
    - Could the problem areas be flagged?

Steve Winstead, NCDOT District Engineer, said that he would ask Kelly Becker's group what a normal number would be/what numbers would be acceptable on a similar multilane route.

- The largest number of crashes was of the Angle Accident Type comprising 29% (61 of 210) of the total (P.26 of the report). It was theorized by the members that people were driving in five freely moving lanes and crossed over with vehicles hitting at an angle.

- Certain parts of this segment of Bickett Boulevard have higher traffic counts. Steve Winstead mentioned the most recent NCDOT 2013 counts which showed 21,000 Average Daily Traffic Volume a bit north of Bickett's intersection with NC39. South of this intersection the number is 16,000 vehicles. Bickett Boulevard at the intersection with Nash Street carries a 19,000 Average Daily Traffic Volume, while north of Nash Street the Average Daily Traffic Volume decreases to 16,000.

- Looking at the Strip Analysis Report, starting on Page 32 of the data, members noticed that certain places along the route have higher accident levels. Looking at the report, they could also reference the type of accident. Everyone could see that certain areas along the 1.37 mile segment had more accidents that others

- The area at milepost 11.23 at SR 1230/NC39/Bunn Road has a large number of accidents over the five year period.
- The area around Golden Leaf at milepost 10.95 also has a number of accidents over the five year period.
- The intersections generally appeared to have a lot of rear end collisions.
- Justin Green's GIS map also shows each type of crash marked with a star.

- Pedestrians do seem to have a problem getting across and signalized crosswalks for pedestrians were suggested. Areas along Bickett Boulevard where there is a need for pedestrian crossings:
  - Burger King
  - Sheetz
  - Route 39
  - McDonald's
  - KFC
  - Bank

4) Mark-up of large Bickett Boulevard Maps by Working Group to indicate areas of concern, possible strategies and additional ideas. There are vastly differing opinions in Louisburg about what to do on this section of Bickett Boulevard. The local newspaper says that this is one of the least safe roads in North Carolina versus some of the business people who don't want their access limited or constricted by the medians that would be created in an access management project.

- Areas of concern:
  -Wendy's (328 S. Bickett Blvd) and McDonald's (329 S. Bickett Blvd) where there is a lot of car and pedestrian traffic.
  -where 39 (Bunn Road) enters Bickett
  -Around Franklin Plaza
  -Nash Street
  -Johnson Street (at Johnson Street up to Franklin Plaza, a signialized pedestrian crossing could be installed)
- Ideas for short term safety improvements:
  -Consolidating drives
  -Pedestrian crossings in the areas of concern listed above, if we are really concerned about safety, these crossings should be push button crossings
  -Lowering the speed limit to 35mph from 45mph
- Ideas for traffic congestion management (brought up at Working Group Meeting #2 and mentioned again by members)
  -Super Street
  -Road Diet
  -Access Management (with planted and landscaped medians and spaces for U-turns)

5) General discussion of goals and consideration of Mission Statement (can finalize at Working Group Meeting #4)

Goals (Added to list from 1st and 2nd Meeting):

- To improve this segment of Bickett Blvd. from an aesthetic perspective (signs, planted medians, street trees…)
- Need to incorporate multimodal opportunities like bus routes, bike routes and sidewalks, for example
- Improve the problem areas for traffic, increasing safety
    - Create safe U-turns for vehicles, possibly signalized
- Stimulate economic development by infilling vacant or underused sites

The Imagine Bickett Boulevard Mission Statement should include these elements:

- Safety for all(vehicles as well as cyclists and pedestrians
- Access management
- Improved traffic flow
- Provide Economic growth opportunities
- Be pedestrian friendly
- Improve safety for the elderly
- Plan for future multimodal opportunities, like bus routes and bike lanes
- Improve the aesthetics along the route with sidewalks, trees, plants and uniform signage
- Tie new sidewalks and bike lanes into the existing system

A Draft Mission Statement and Goals will be compiled by Ann Stroobant for discussion at Working Group #4.

Why we are doing this:

Tony King gave a summary of the general framework and background of the project, starting with the structure of Kerr-Tar RPO, to which Louisburg belongs and the NCDOT SPOT process. He reiterated that the 1.37 mile segment of Bickett Boulevard was the highest ranked project in Franklin County. The NCDOT engineers are concerned with congestion management and safety, but recently the focus at the NCDOT Division Level has been to target the funds available to the urban areas. The purpose of the Imagine Bickett Boulevard consultation is to come up with a document that is a starting point to gage public feeling and get support for the project. We need to come up with documented options to consider. He says it is better to have something sitting on the shelf ready to go. In the past, there have been three occasions in Louisburg where they could get going immediately on a project because they had it thought out and had it ready when money suddenly became available. Tony King says that Bickett Boulevard could possibly be given money in a safety related project category. Our whole effort is a beginning point to look at approaches and concepts that could be applicable to this section of road, get ideas from the public and to collect this information in a document.

Tony King gave an overview of the draft Timeline for “Imagine Bickett Boulevard” (Draft Timeline Attached). Is anything else needed?

- Basic Format of Final Document to Include:

-Crash and accident information summaries
-Listing of Working Group Meetings and Public Meetings
-Include public survey/questionnaire and tabulation of results
-Include possible approaches (some could be implemented sooner and some later):
    -Pedestrian crossings
    -Lower speed limit
    -Look at signalization
    -Access management, controlling access into road and consolidating some driveways
    -Super Street
    -Road diet
-Include some conceptual images of areas of concern

Tony King says that he has gotten Bickett Boulevard on Doumit Ishak and the Congestion Management Group’s schedule. This will be a separate item and will be undertaken after the “Imagine Bickett Boulevard” consultation process is completed.

6) Date of Next Working Group:

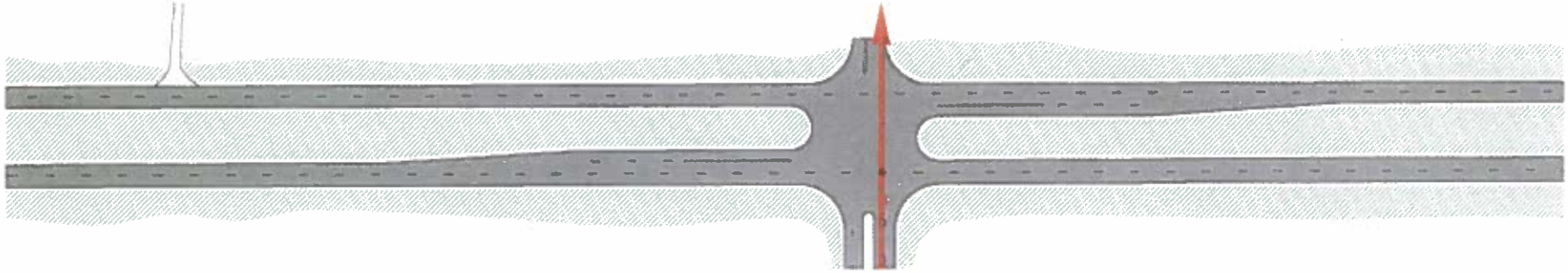
- Working Group #4 will take place on Monday, September 29th, 2014 at 10am. We will meet at the newly completed access management project on Hillandale Road, Durham at the bus stop near Croasdale Commons. Afterwards, we will meet in the NCDOT District Offices at 815 Stadium Drive, Durham to discuss what we have seen and to finalize our Goals and Mission Statement.

7) Dates of Public Meetings/Workshops?

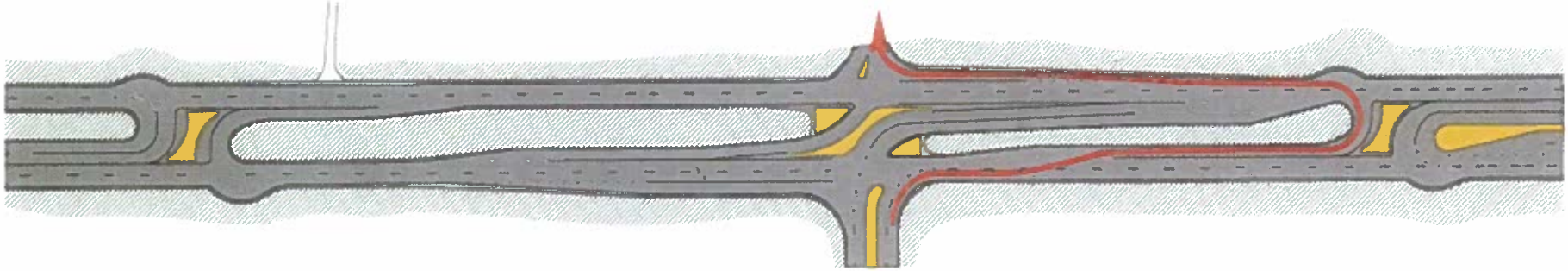
- Public workshops will take place after the Working Group has thought through the process and issues, suggested dates are below and are included in the Draft Timeline.
    -Public Meeting #1-Wednesday or Thursday, October 15th or 16th, 2014(suggested date)
    -Public Meeting #2-Wednesday or Thursday, October 29th or 30th, 2014 (suggested date)

8) Adjourn-The meeting was adjourned at about 12:20pm.

CONVENTIONAL INTERSECTION



SUPERSTREET



75

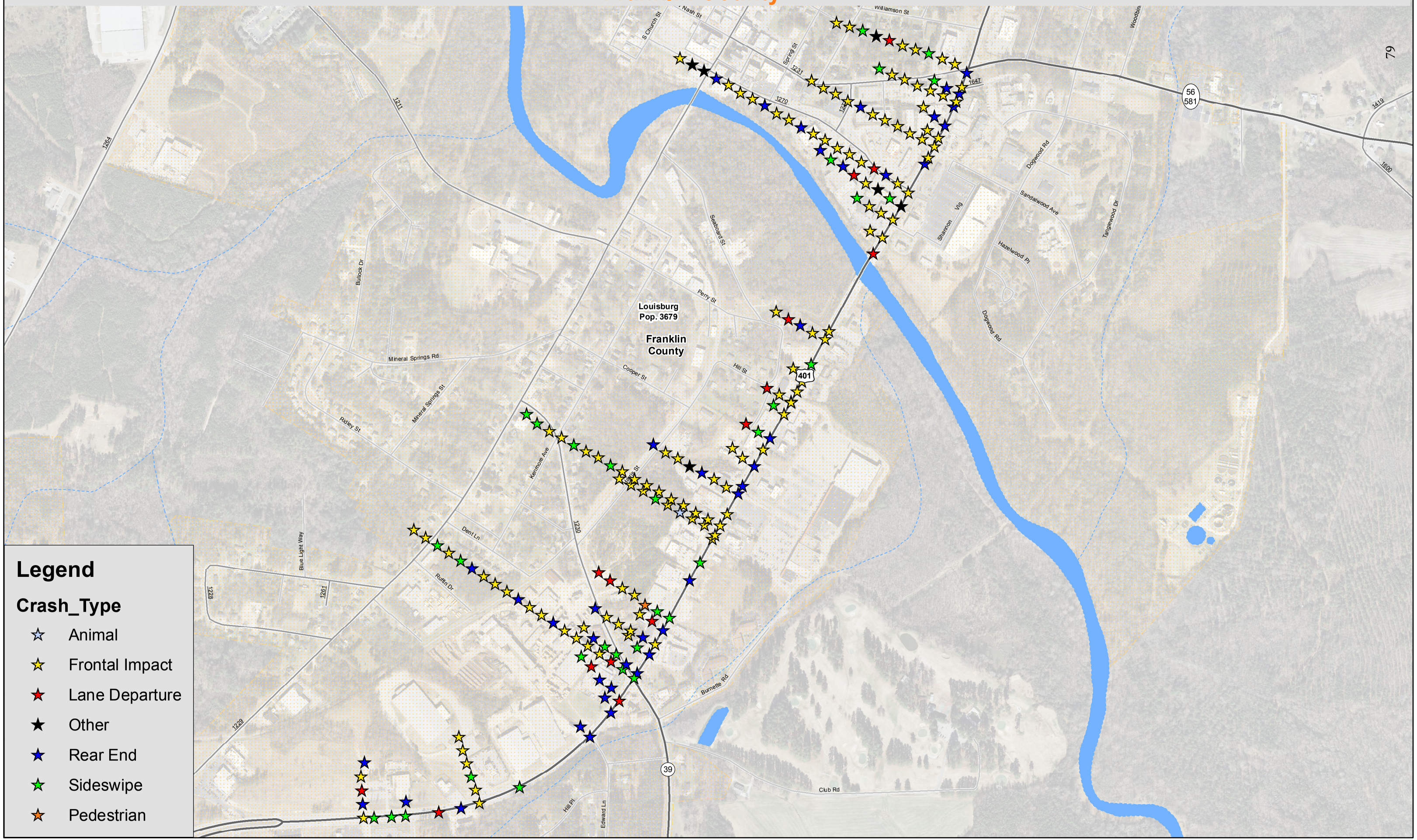
9-17-14 HAND OUT OF ITEMS WE HAVE TALKED ABOUT

Hillandale Road - Planted Median with Turn

Hillandale Rd., Durham, NC

Neighborhoods in Charlotte, NC

US 401 (Bickett Blvd) from Burke Blvd to NC 56 (Nash St)
(7/1/2009 - 6/30/2014)
Franklin County



Legend

Crash_Type

- Animal
- Frontal Impact
- Lane Departure
- Other
- Rear End
- Sideswipe
- Pedestrian

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

Study Criteria Summary

County: FRANKLIN **City:** All and Rural
Date: 7/1/2009 **to** 6/30/2014 **Study:** 41000029196UPDATE
Location: US 401 (Bickett Blvd) from Burke Blvd to NC 56 (Nash St)

Report Details

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
1	**102783519**	10.792	01/15/2010 14:10	ANGLE	$ 7000	0	0	0	0	1	1	1	3	0	1	1
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
2	**103500534**	10.792	07/10/2012 13:29	REAR END, SLOW OR STOP	$ 1600	0	0	0	0	2	1	3	3	0	0	
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**											
3	**103543479**	10.792	09/07/2012 13:15	FIXED OBJECT	$ 3500	0	0	0	1	1	1	1	3	0		
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 37											
4	**103561378**	10.792	09/27/2012 06:20	ANGLE	$ 2500	0	0	0	0	1	1	1	1	0	0	2
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 7	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
5	**103728894**	10.798	04/09/2013 11:00	REAR END, SLOW OR STOP	$ 3100	0	0	0	2	1	1	1	3	0		
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
6	**104047234**	10.806	04/23/2014 13:10	SIDESWIPE, SAME DIRECTION	$ 8100	0	0	0	0	1	1	1	1	0		2
Unit 1 : 14	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
7	**103199441**	10.830	06/30/2011 17:15	SIDESWIPE, SAME DIRECTION	$ 2100	0	0	0	0	1	1	1	1	0	1	1
Unit 1 : 14	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 5	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
8	**102808568**	10.849	02/25/2010 08:00	SIDESWIPE, SAME DIRECTION	$ 2500	0	0	0	0	2	1	3	3	0		
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
9	**103542365**	10.851	09/04/2012 07:00	UNKNOWN	$ 1600	0	0	0	0	1	1	1	1	0		
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
10	**102821960**	10.894	03/08/2010 16:00	RAN OFF ROAD - RIGHT	$ 1500	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		64	
11	**102719391**	10.925	10/30/2009 15:00	REAR END, SLOW OR STOP	$ 11500	0	0	0	2	1	1	2	7	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**3 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
12	**102673484**	10.951	08/07/2009 10:40	ANGLE	$ 3000	0	0	0	0	1	1	2	1	0	1	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
13	**102754731**	10.951	11/25/2009 12:30	ANGLE	$ 4000	0	0	0	0	1	1	1	3	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
14	**102945530**	10.951	08/15/2010 14:00	SIDESWIPE, SAME DIRECTION	$ 1200	0	0	0	1	1	1	1	5	0	1	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:**				12			**Obj Strk:**			
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		64	
15	**102983191**	10.951	10/05/2010 16:00	ANGLE	$ 5500	0	0	0	1	1	1	1	1	0	0	2
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				2			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				2			**Obj Strk:**		45	
16	**103228503**	10.951	08/06/2011 13:25	LEFT TURN, DIFFERENT ROADWAYS	$ 2200	0	0	0	0	1	1	1	7	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
17	**103267228**	10.951	10/04/2011 09:55	LEFT TURN, DIFFERENT ROADWAYS	$ 6000	0	0	0	0	1	1	1	1	0	1	1
Unit	**1 :** 10	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
18	**103820744**	11.010	07/23/2013 07:30	SIDESWIPE, SAME DIRECTION	$ 1000	0	0	0	0	1	1	1	1	0		2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
19	**103692118**	11.128	03/02/2013 15:50	REAR END, TURN	$ 6000	0	0	0	1	1	1	1	1	0	0	
Unit	**1 :** 2	**Alchl/Drgs:** 1	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 9	**Obj Strk:**										
20	**103847459**	11.128	08/23/2013 13:20	REAR END, SLOW OR STOP	$ 3500	0	0	0	0	1	1	1	3	0		
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
Unit	**2 :** 5	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
21	**102966344**	11.171	09/15/2010 09:45	REAR END, SLOW OR STOP	$ 8000	0	0	0	2	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
22	**103081006**	11.184	01/20/2011 12:30	REAR END, SLOW OR STOP	$ 1300	0	0	0	0	1	1	1	1	0		2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
23	**103090250**	11.191	02/05/2011 11:05	HEAD ON	$ 3700	0	0	0	0	2	1	2	3	0		
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
24	**102932905**	11.200	07/30/2010 10:00	REAR END, SLOW OR STOP	$ 10500	0	0	0	1	1	1	1	1	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 5	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**3 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**4 :** 5	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
25	**104037393**	11.200	04/15/2014 17:00	REAR END, SLOW OR STOP	$ 5000	0	0	0	1	3	1	3	3	0	0	
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
26	**103442083**	11.209	04/30/2012 17:56	RAN OFF ROAD - LEFT	$ 30000	0	0	0	1	1	1	1	1	0		2
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 7	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 2	**Obj Strk:**										

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
Unit	**3 :** 4	**Alchl/Drgs:**	7	**Speed:** 0 MPH **Dir:** E		**Veh Mnvr/Ped Actn:**				2			**Obj Strk:**			
27	**103111583**	11.213	03/05/2011 11:30	SIDESWIPE, SAME DIRECTION	$ 1800	0	0	0	0	1	1	1	3	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH **Dir:** S		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH **Dir:** S		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
28	**102867290**	11.228	09/01/2009 06:45	UNKNOWN	$ 1200	0	0	0	0	3	8	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 32	**Alchl/Drgs:**	7	**Speed:** 45 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
29	**102755209**	11.228	09/02/2009 16:10	RIGHT TURN, SAME ROADWAY	$ 2500	0	0	0	1	1	1	1	1	0	3	2
Unit	**1 :** 13	**Alchl/Drgs:**	0	**Speed:** 5 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
30	**102739748**	11.228	11/19/2009 08:58	SIDESWIPE, OPPOSITE DIRECTION	$ 9000	0	0	0	1	2	1	3	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 40 MPH **Dir:** S		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH **Dir:** E		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
31	**102856978**	11.228	04/29/2010 10:00	LEFT TURN, DIFFERENT ROADWAYS	$ 8000	0	0	1	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH **Dir:** E		**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 40 MPH **Dir:** S		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
32	**103033513**	11.228	09/19/2010 16:45	ANGLE	$ 4000	0	0	0	2	1	7	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH **Dir:** S		**Veh Mnvr/Ped Actn:**				6			**Obj Strk:**			
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 45 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
33	**103087555**	11.228	02/01/2011 07:52	ANGLE	$ 3600	0	0	0	1	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** W		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
34	**103113294**	11.228	03/10/2011 14:12	ANGLE	$ 3000	0	0	0	0	1	1	2	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH **Dir:** W		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH **Dir:** S		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
35	**103223033**	11.228	08/02/2011 14:12	REAR END, SLOW OR STOP	$ 19000	0	0	0	1	1	1	1	1	0	3	2
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** E		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH **Dir:** S		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
36	**103466437**	11.228	05/29/2012 11:55	ANGLE	$ 10000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**3 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
37	**103483517**	11.228	06/11/2012 13:14	LEFT TURN, SAME ROADWAY	$ 1300	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
38	**103570883**	11.228	09/29/2012 12:05	REAR END, SLOW OR STOP	$ 2000	0	0	0	0	2	1	2	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
39	**103824058**	11.228	07/26/2013 14:00	ANGLE	$ 11000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**3 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
40	**103836904**	11.228	08/10/2013 15:00	LEFT TURN, DIFFERENT ROADWAYS	$ 4300	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
41	**103850120**	11.228	08/26/2013 16:45	ANGLE	$ 3000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
42	**103867512**	11.228	09/19/2013 21:10	REAR END, SLOW OR STOP	$ 1500	0	0	0	1	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
43	**103895352**	11.228	11/01/2013 16:30	SIDESWIPE, SAME DIRECTION	$ 8000	0	0	0	0	3	1	3	1	0	3	1
Unit	**1 :** 10	**Alchl/Drgs:**	0	**Speed:** 50 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
44	**103982890**	11.228	01/27/2014 08:35	LEFT TURN, SAME ROADWAY	$ 2100	0	0	0	0	1	1	2	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
45	**104048928**	11.228	04/24/2014 13:20	SIDESWIPE, SAME DIRECTION	$ 800	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
46	**104062227**	11.228	05/03/2014 20:09	LEFT TURN, SAME ROADWAY	$ 8000	0	0	0	1	1	2	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
47	**104087813**	11.228	05/18/2014 14:15	LEFT TURN, DIFFERENT ROADWAYS	$ 15000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 50 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
48	**102853447**	11.235	04/23/2010 13:10	REAR END, SLOW OR STOP	$ 3600	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
49	**103579020**	11.237	10/16/2012 16:20	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	1	1	1	1	0	5	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
50	**102682518**	11.241	09/15/2009 14:15	SIDESWIPE, SAME DIRECTION	$ 1150	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
51	**103418065**	11.241	03/22/2012 11:55	RIGHT TURN, SAME ROADWAY	$ 2900	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
52	**103457468**	11.242	05/19/2012 11:00	REAR END, SLOW OR STOP	$ 3800	0	0	0	0	1	1	1	1	0	0	2
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
53	**102815273**	11.247	02/21/2010 18:10	LEFT TURN, DIFFERENT ROADWAYS	$ 7000	0	0	0	0	2	2	2	1	0	0	
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
54	**102757749**	11.266	12/05/2009 17:30	REAR END, TURN	$ 4500	0	0	0	2	2	4	3	1	0	0	2
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
55	**103864430**	11.266	09/05/2013 10:45	SIDESWIPE, SAME DIRECTION	$ 2000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 3	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**3 :** 11	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
56	**103603521**	11.275	11/06/2012 13:45	LEFT TURN, SAME ROADWAY	$ 6000	0	0	0	0	1	1	2	3	0	0	
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
57	**102815510**	11.282	02/27/2010 21:25	LEFT TURN, SAME ROADWAY	$ 18000	0	0	0	5	1	4	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
58	**103317788**	11.282	11/07/2011 15:30	REAR END, SLOW OR STOP	$ 2000	0	0	0	0	1	1	1	1	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
59	**103746931**	11.282	05/03/2013 10:15	ANGLE	$ 4000	0	0	0	0	1	1	1	1	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				16			**Obj Strk:**		14	
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				13			**Obj Strk:**			
60	**103870617**	11.282	05/03/2013 14:00	LEFT TURN, DIFFERENT ROADWAYS	$ 250	0	0	0	0	1	1	1	1	0		2
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**3 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
61	**103825318**	11.282	08/08/2013 11:08	LEFT TURN, DIFFERENT ROADWAYS	$ 1650	0	0	0	1	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
62	**103297654**	11.285	10/27/2011 02:30	REAR END, TURN	$ 6000	0	0	0	0	1	4	1	1	0		2
Unit	**1 :** 14	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
63	**103669814**	11.304	01/14/2013 13:05	REAR END, SLOW OR STOP	$ 6500	0	0	0	0	1	1	2	1	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
64	**103532980**	11.308	08/25/2012 03:50	HEAD ON	$ 15000	0	0	1	0	2	4	3	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8					**Obj Strk:**						
Unit	**2 :** 20	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
65	**103746952**	11.308	05/04/2013 12:32	ANGLE	$ 1900	0	0	1	0	1	1	2	1	0		2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
66	**103381471**	11.323	01/22/2012 18:50	SIDESWIPE, SAME DIRECTION	$ 1000	0	0	0	0	2	4	1	1	0		
Unit	**1 :** 2	**Alchl/Drgs:** 1	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
67	**103452808**	11.323	05/15/2012 12:02	SIDESWIPE, SAME DIRECTION	$ 5500	0	0	0	0	1	1	2	3	0	0	
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 5					**Obj Strk:**						
68	**104087651**	11.323	05/31/2014 20:45	PEDESTRIAN	$ 500	0	0	1	0	1	4	1	1	0	0	2
Unit	**1 :** 24	**Alchl/Drgs:** 1	**Speed:** 0 MPH	**Dir:**	**Veh Mnvr/Ped Actn:**					**Obj Strk:** 14						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:** 14						
69	**103525512**	11.328	08/14/2012 13:35	LEFT TURN, SAME ROADWAY	$ 1700	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8					**Obj Strk:**						
70	**103858960**	11.328	08/31/2013 19:25	LEFT TURN, SAME ROADWAY	$ 2800	0	0	0	2	1	1	1	1	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
Unit	**2 :** 5	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8					**Obj Strk:**						

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
71	**104096928**	11.328	06/22/2014 15:15	FIXED OBJECT	$ 2500	0	0	0	0	1	1	2	1	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 38										
72	**103944193**	11.330	11/17/2013 08:11	OVERTURN/ROLLOVER	$ 12000	0	0	0	1	1	1	2	7	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
73	**102840450**	11.380	04/10/2010 16:50	REAR END, SLOW OR STOP	$ 2400	0	0	0	1	1	1	1	1	0	9	1
Unit	**1 :** 5	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
74	**102901005**	11.409	06/12/2010 12:30	SIDESWIPE, SAME DIRECTION	$ 1600	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
75	**103194055**	11.444	06/13/2011 12:15	LEFT TURN, DIFFERENT ROADWAYS	$ 1100	0	0	0	0	1	1	1	1	0		2
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 210 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
76	**103628424**	11.451	12/10/2012 13:17	ANGLE	$ 5000	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 8 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
77	**102749665**	11.455	12/10/2009 21:05	ANGLE	$ 1800	0	0	0	0	1	4	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
78	**102798099**	11.455	02/01/2010 10:45	LEFT TURN, SAME ROADWAY	$ 4300	0	0	0	0	5	1	4	1	11		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
79	**102908026**	11.455	06/21/2010 08:00	ANIMAL	$ 1500	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 17										
80	**103093210**	11.455	02/04/2011 16:30	ANGLE	$ 2000	0	0	0	0	2	1	3	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 12	**Obj Strk:**										

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
81	**103442178**	11.455	04/30/2012 16:15	RIGHT TURN, SAME ROADWAY	$ 10000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
82	**103690979**	11.455	02/20/2013 18:40	LEFT TURN, DIFFERENT ROADWAYS	$ 3600	0	0	0	1	1	4	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
83	**103853247**	11.455	09/06/2013 14:40	LEFT TURN, SAME ROADWAY	$ 6500	0	0	0	1	1	1	1	2	0	1	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
84	**104123253**	11.455	06/25/2014 09:35	LEFT TURN, DIFFERENT ROADWAYS	$ 4000	0	0	0	1	1	1	1	1	0		
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
85	**102694962**	11.465	09/30/2009 15:13	LEFT TURN, DIFFERENT ROADWAYS	$ 2900	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**			12			**Obj Strk:**				
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:**			12			**Obj Strk:**				
86	**102851154**	11.465	04/21/2010 16:55	ANGLE	$ 7500	0	0	0	4	2	1	3	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			5			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
87	**102868890**	11.465	05/01/2010 15:20	LEFT TURN, SAME ROADWAY	$ 4500	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			7			**Obj Strk:**				
88	**102915071**	11.465	07/03/2010 12:45	LEFT TURN, SAME ROADWAY	$ 6000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
89	**103042029**	11.465	12/06/2010 11:45	ANGLE	$ 2000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**			12			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:**			12			**Obj Strk:**				

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
90	**103044612**	11.465	12/10/2010 19:20	ANGLE	$ 4800	0	0	0	4	1	4	2	3	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
91	**103049554**	11.465	12/14/2010 18:30	ANGLE	$ 1100	0	0	0	0	1	4	1	1	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
92	**103108824**	11.465	03/03/2011 11:35	LEFT TURN, SAME ROADWAY	$ 4800	0	0	0	0	1	1	1	1	0		
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
93	**103520541**	11.465	08/07/2012 13:00	ANGLE	$ 2900	0	0	0	0	1	1	2	1	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 12	**Obj Strk:**										
Unit	**2 :** 5	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
94	**103543485**	11.465	09/08/2012 14:39	RIGHT TURN, SAME ROADWAY	$ 3000	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 12	**Obj Strk:**										
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
95	**103555807**	11.465	09/14/2012 12:00	LEFT TURN, SAME ROADWAY	$ 23000	0	0	0	1	1	1	2	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**									64	
96	**103699329**	11.465	02/26/2013 08:00	LEFT TURN, SAME ROADWAY	$ 14000	0	0	0	3	2	1	3	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
97	**103956401**	11.465	12/24/2013 12:30	SIDESWIPE, SAME DIRECTION	$ 2500	0	0	0	0	1	1	1	1	0		2
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**										
98	**103956440**	11.465	12/28/2013 12:00	LEFT TURN, DIFFERENT ROADWAYS	$ 0	0	0	0	0	1	1	1	1	0		2
Unit	**1 :** 21	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:**	**Veh Mnvr/Ped Actn:**	**Obj Strk:**										
Unit	**2 :** 32	**Alchl/Drgs:** 7	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
99	**103999150**	11.465	01/24/2014 15:15	ANGLE	$ 1750	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 12	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
100	**104009233**	11.465	03/03/2014 12:30	SIDESWIPE, SAME DIRECTION	$ 5000	0	0	0	0	2	1	3	1	0	0	2
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**										
Unit	**2 :** 3	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
101	**104062333**	11.470	05/02/2014 18:00	SIDESWIPE, SAME DIRECTION	$ 1800	0	0	0	0	1	1	1	1	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
102	**102931138**	11.484	07/29/2010 13:00	RIGHT TURN, DIFFERENT ROADWAYS	$ 4000	0	0	0	0	1	1	2	1	0	0	
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**										
103	**103070510**	11.515	12/30/2010 18:20	REAR END, SLOW OR STOP	$ 8200	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
104	**103071646**	11.515	01/04/2011 11:46	LEFT TURN, DIFFERENT ROADWAYS	$ 7300	0	0	0	2	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
105	**103102479**	11.515	02/20/2011 16:55	RIGHT TURN, DIFFERENT ROADWAYS	$ 2000	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**										
106	**103485488**	11.515	06/11/2012 12:20	REAR END, SLOW OR STOP	$ 4000	0	0	0	2	1	1	2	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
107	**103484512**	11.515	06/20/2012 13:15	OTHER COLLISION WITH VEHICLE	$ 4500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
108	**103847461**	11.515	08/24/2013 11:59	ANGLE	$ 13000	0	0	0	0	1	1	1	2	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 12	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
109	**104034267**	11.515	04/08/2014 10:28	ANGLE	$ 2000	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
110	**104044470**	11.515	04/21/2014 08:00	REAR END, SLOW OR STOP	$ 3000	0	0	0	2	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
111	**103500532**	11.527	07/09/2012 09:00	REAR END, SLOW OR STOP	$ 1600	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
112	**103351928**	11.559	12/20/2011 16:10	REAR END, SLOW OR STOP	$ 1100	0	0	0	1	1	1	2	1	0	0	
Unit	**1 :** 5	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
113	**102731099**	11.560	11/10/2009 15:35	ANGLE	$ 1100	0	0	0	0	2	1	3	1	0	0	
Unit	**1 :** 14	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**										
114	**103908590**	11.565	10/27/2013 18:47	LEFT TURN, DIFFERENT ROADWAYS	$ 11000	0	0	3	0	1	4	1	1	0		2
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
115	**102675665**	11.583	08/31/2009 11:47	ANGLE	$ 2200	0	0	0	0	2	1	3	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
116	**102742810**	11.602	11/23/2009 10:25	REAR END, SLOW OR STOP	$ 6500	0	0	0	1	2	1	3	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
117	**103700201**	11.602	03/03/2013 18:45	SIDESWIPE, SAME DIRECTION	$ 1400	0	0	0	0	1	4	2	1	0		
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
118	**104017652**	11.602	03/05/2014 21:25	HEAD ON	$ 2400	0	0	0	3	1	4	1	1	0		2
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
119	**103097722**	11.640	02/16/2011 14:40	ANGLE	$ 1000	0	0	0	0	1	1	1	1	0		2
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
120	**103803316**	11.644	07/02/2013 17:15	SIDESWIPE, SAME DIRECTION	$ 2200	0	0	0	0	1	1	2	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
121	**102756427**	11.659	12/02/2009 14:40	LEFT TURN, DIFFERENT ROADWAYS	$ 16500	0	0	1	1	2	1	3	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
122	**103465893**	11.659	05/25/2012 11:25	LEFT TURN, DIFFERENT ROADWAYS	$ 12000	0	0	0	2	1	1	1	1	0	1	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
123	**103982911**	11.659	01/28/2014 20:30	ANGLE	$ 2000	0	0	0	0	5	4	4	1	0		2
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		34	
124	**104039264**	11.659	04/04/2014 18:00	FIXED OBJECT	$ 8000	0	0	0	0	1	1	1	1	0	1	2
Unit	**1 :** 4	**Alchl/Drgs:**	7	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**		34	
125	**103982894**	11.676	01/27/2014 10:50	ANGLE	$ 2500	0	0	0	2	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				9			**Obj Strk:**			

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
126	**102672128**	11.690	08/27/2009 18:55	ANGLE	$ 1500	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			5			**Obj Strk:**				
127	**103174802**	11.701	05/26/2011 22:44	LEFT TURN, SAME ROADWAY	$ 12000	0	0	1	1	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
128	**103829062**	11.716	08/05/2013 16:15	RIGHT TURN, SAME ROADWAY	$ 14000	0	0	0	3	1	1	1	1	0	0	2
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			7			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
129	**102887290**	11.756	05/25/2010 09:30	LEFT TURN, DIFFERENT ROADWAYS	$ 16000	0	0	0	2	1	1	2	1	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
130	**103383208**	11.756	01/30/2012 11:25	LEFT TURN, SAME ROADWAY	$ 1500	0	0	0	0	1	1	1	1	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
131	**103455896**	11.756	05/15/2012 09:09	REAR END, TURN	$ 12000	0	0	2	0	1	1	2	3	0	14	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 50 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
132	**103663826**	11.756	01/02/2013 08:27	SIDESWIPE, OPPOSITE DIRECTION	$ 6000	0	0	0	0	2	1	2	6	0	14	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
133	**103674030**	11.756	02/01/2013 12:50	LEFT TURN, SAME ROADWAY	$ 1700	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
134	**103594914**	11.768	11/03/2012 10:28	LEFT TURN, SAME ROADWAY	$ 15000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
135	**103956432**	11.890	12/26/2013 07:45	HEAD ON	$ 1000	0	0	0	0	4	1	2	1	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
136	**102658917**	11.914	08/07/2009 20:40	ANGLE	$ 3500	0	0	0	3	1	2	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	2	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
137	**103674031**	11.914	02/02/2013 13:00	LEFT TURN, SAME ROADWAY	$ 3300	0	0	0	0	1	1	1	1	0		
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
138	**102749658**	11.942	12/07/2009 07:20	ANGLE	$ 2000	0	0	0	0	3	3	3	1	0		2
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			2			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			2			**Obj Strk:**				
139	**103414418**	11.942	03/17/2012 20:00	ANGLE	$ 4000	0	0	0	0	1	4	1	1	0		
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
140	**103895356**	11.942	11/03/2013 16:46	LEFT TURN, DIFFERENT ROADWAYS	$ 2000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
141	**104113733**	11.942	06/16/2014 11:45	SIDESWIPE, SAME DIRECTION	$ 2650	0	0	0	1	1	1	1	4	0		2
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 3	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
142	**103085688**	11.964	01/28/2011 10:15	BACKING UP	$ 1800	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 13	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			10			**Obj Strk:**				
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
143	**103117051**	11.967	03/14/2011 13:30	SIDESWIPE, SAME DIRECTION	$ 4300	0	0	0	0	1	1	1	1	0	1	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
144	**103449570**	11.969	05/07/2012 16:30	BACKING UP	$ 2900	0	0	0	2	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 10	**Obj Strk:**										
Unit	**2 :** 5	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
145	**103803380**	11.969	07/05/2013 09:35	LEFT TURN, SAME ROADWAY	$ 3800	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
146	**102703402**	11.970	10/08/2009 12:00	FIXED OBJECT	$ 5200	0	0	0	0	1	1	1	1	6	0	
Unit	**1 :** 10	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 64										
147	**103724110**	11.973	04/04/2013 15:00	REAR END, SLOW OR STOP	$ 4800	0	0	0	0	2	1	2	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
148	**103411062**	11.974	03/13/2012 15:35	SIDESWIPE, SAME DIRECTION	$ 2700	0	0	0	0	1	1	1	1	0	1	
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**										
149	**103867915**	11.979	09/15/2013 19:15	REAR END, SLOW OR STOP	$ 1800	0	0	0	0	1	1	1	1	0		2
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
150	**103429350**	11.984	04/13/2012 10:45	LEFT TURN, SAME ROADWAY	$ 1200	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**										
151	**103085686**	11.989	01/28/2011 12:20	RIGHT TURN, DIFFERENT ROADWAYS	$ 4400	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**										
152	**102646858**	11.990	07/26/2009 22:45	REAR END, SLOW OR STOP	$ 2500	0	0	0	3	2	5	2	1	7	3	2
Unit	**1 :** 5	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
153	**102726370**	11.990	11/04/2009 14:05	SIDESWIPE, OPPOSITE DIRECTION	$ 5100	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 13	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
154	**102806301**	11.990	02/16/2010 14:50	ANGLE	$ 3500	0	0	0	3	1	1	1	4	0	3	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
155	**102898952**	11.990	06/08/2010 06:55	ANGLE	$ 8000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
156	**102945357**	11.990	08/13/2010 11:40	ANGLE	$ 10000	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			2			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			2			**Obj Strk:**				
157	**103013184**	11.990	11/04/2010 11:25	ANGLE	$ 6500	0	0	0	3	2	1	3	1	0	3	1
Unit	**1 :** 14	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
158	**103015774**	11.990	11/09/2010 17:30	ANGLE	$ 4000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
159	**103026755**	11.990	11/18/2010 21:18	REAR END, SLOW OR STOP	$ 16000	0	0	0	1	1	4	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			16			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 50 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**		20		
160	**103193081**	11.990	06/11/2011 09:50	ANGLE	$ 1000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	7	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
161	**103402322**	11.990	02/26/2012 19:28	LEFT TURN, SAME ROADWAY	$ 15000	0	0	0	3	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
162	**103719957**	11.990	04/02/2013 12:38	REAR END, SLOW OR STOP	$ 13000	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
163	**103890853**	11.990	10/26/2013 16:45	ANGLE	$ 3000	1	0	2	1	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	1	**Speed:** 80 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
164	**103916321**	11.990	11/08/2013 10:30	ANGLE	$ 4000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
165	**103988285**	11.990	02/08/2014 17:20	ANGLE	$ 3000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	4	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
166	**104061202**	11.990	05/08/2014 00:00	REAR END, SLOW OR STOP	$ 5500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
167	**104080160**	11.990	05/22/2014 14:55	OTHER COLLISION WITH VEHICLE	$ 11500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
168	**104091427**	11.990	06/04/2014 11:50	OTHER COLLISION WITH VEHICLE	$ 14500	0	0	1	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
169	**104113732**	11.990	06/06/2014 17:00	LEFT TURN, SAME ROADWAY	$ 6500	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
170	**103631080**	12.028	11/30/2012 18:15	REAR END, SLOW OR STOP	$ 4700	0	0	0	0	1	2	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
171	**103173745**	12.038	05/17/2011 13:56	ANGLE	$ 1500	0	0	0	0	1	1	1	1	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
172	**102641425**	12.056	07/14/2009 16:30	ANGLE	$ 11000	0	0	0	1	1	1	1	1	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
173	**102711722**	12.056	10/23/2009 14:40	ANGLE	$ 2500	0	0	0	0	1	1	1	3	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 12	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
174	**102753401**	12.056	11/20/2009 15:15	RIGHT TURN, DIFFERENT ROADWAYS	$ 2200	0	0	0	0	1	1	1	1	0	1	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**										
175	**102982265**	12.056	10/01/2010 12:38	ANGLE	$ 3000	0	0	0	3	1	1	1	1	0		
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
176	**103646226**	12.056	12/27/2012 14:00	ANGLE	$ 6000	0	0	1	1	1	1	1	1	0		2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
177	**103789010**	12.056	05/23/2013 17:15	ANGLE	$ 1800	0	0	0	0	2	1	2	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
178	**103818696**	12.056	07/28/2013 17:33	REAR END, SLOW OR STOP	$ 5000	0	0	0	1	1	1	1	5	0		
Unit	**1 :** 20	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
179	**103962739**	12.056	01/09/2014 15:05	ANGLE	$ 4800	0	0	0	0	1	1	1	1	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
180	**103988996**	12.056	01/20/2014 18:35	LEFT TURN, DIFFERENT ROADWAYS	$ 6500	0	0	0	0	1	4	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 8 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
181	**104090087**	12.056	06/19/2014 12:40	LEFT TURN, DIFFERENT ROADWAYS	$ 7000	0	0	0	2	1	1	1	2	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:** 7	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 7	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
182	**103013101**	12.058	11/04/2010 12:30	ANGLE	$ 1300	0	0	0	0	2	1	3	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
183	**103858954**	12.067	08/30/2013 08:50	ANGLE	$ 3500	0	0	0	0	1	1	1	1	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
184	**102818506**	12.070	03/05/2010 14:50	LEFT TURN, SAME ROADWAY	$ 3000	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
185	**103464631**	12.085	05/25/2012 19:30	REAR END, SLOW OR STOP	$ 1300	0	0	0	0	1	1	2	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 7	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
186	**103935711**	12.090	12/10/2013 17:35	REAR END, SLOW OR STOP	$ 7000	0	0	0	0	1	4	1	3	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
187	**103385972**	12.098	02/03/2012 17:45	LEFT TURN, DIFFERENT ROADWAYS	$ 15000	0	0	0	0	1	1	2	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
188	**102947620**	12.113	08/20/2010 17:20	REAR END, SLOW OR STOP	$ 1200	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
189	**102695211**	12.121	10/02/2009 13:30	LEFT TURN, SAME ROADWAY	$ 5800	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
190	**103327612**	12.121	11/23/2011 13:00	ANGLE	$ 5000	0	0	0	2	1	1	2	1	0		2
Unit	**1 :** 1	**Alchl/Drgs:**	1	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			16			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
191	**103573588**	12.121	10/12/2012 11:50	LEFT TURN, SAME ROADWAY	$ 3300	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
192	**103577477**	12.121	10/15/2012 13:45	ANGLE	$ 1800	0	0	0	0	10	1	2	1	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			12			**Obj Strk:**				
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
193	**103763634**	12.121	04/26/2013 13:30	ANGLE	$ 1100	0	0	0	0	1	1	1	3	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
194	**103818687**	12.121	07/26/2013 11:45	ANGLE	$ 3000	0	0	0	0	1	1	1	1	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			7			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
195	**104061725**	12.123	05/11/2014 21:35	SIDESWIPE, SAME DIRECTION	$ 1300	0	0	0	0	1	4	1	1	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			5			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
196	**103727899**	12.132	04/10/2013 14:00	REAR END, SLOW OR STOP	$ 3200	0	0	0	0	1	1	1	1	0	12	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			11			**Obj Strk:**				
197	**103072997**	12.133	01/08/2011 10:50	REAR END, SLOW OR STOP	$ 28500	0	0	0	3	1	1	2	3	0	0	
Unit	**1 :** 14	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
Unit	**3 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
Unit	**4 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
198	**103573694**	12.135	10/14/2012 16:40	SIDESWIPE, SAME DIRECTION	$ 2800	0	0	0	1	1	1	2	3	0		
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
199	**103036196**	12.142	12/03/2010 16:30	LEFT TURN, SAME ROADWAY	$ 5500	0	0	0	0	1	2	2	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
200	**103683231**	12.161	02/13/2013 17:00	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	2	1	3	1	0	12	1
Unit	**1 :** 9	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
201	**103873490**	12.168	09/25/2013 16:50	ANGLE	$ 13000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
202	**102738158**	12.170	11/16/2009 14:00	ANGLE	$ 9000	0	0	0	1	1	1	1	3	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 3	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
203	**102776759**	12.170	01/12/2010 11:40	SIDESWIPE, SAME DIRECTION	$ 16300	0	0	0	1	1	1	1	3	0		3
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**	40		
204	**103008582**	12.170	10/31/2010 18:50	ANGLE	$ 1600	0	0	0	0	1	4	1	2	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
205	**103142520**	12.170	04/17/2011 19:00	ANGLE	$ 1300	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
206	**103172976**	12.170	05/18/2011 11:00	FIXED OBJECT	$ 8500	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**	33		

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

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
207	**103312815**	12.170	11/02/2011 17:10	OTHER COLLISION WITH VEHICLE	$ 5900	0	0	0	0	1	1	1	3	0	3	1
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 3 : 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
208	**103323428**	12.170	11/16/2011 11:40	SIDESWIPE, SAME DIRECTION	$ 2000	0	0	0	0	1	1	2	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
Unit 2 : 32	**Alchl/Drgs:** 7	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
209	**103365269**	12.170	01/06/2012 10:55	ANGLE	$ 2800	0	0	0	0	1	1	1	3	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
210	**103755431**	12.170	05/10/2013 05:35	ANGLE	$ 1300	0	0	0	0	1	4	1	1	0	3	1
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											

Legend for Report Details:

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

Summary Statistics

High Level Crash Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	210	100.00
Fatal Crashes	1	0.48
Non-Fatal Injury Crashes	72	34.29
Total Injury Crashes	73	34.76
Property Damage Only Crashes	137	65.24
Night Crashes	26	12.38
Wet Crashes	28	13.33
Alcohol/Drugs Involvement Crashes	6	2.86

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	210	100.00
Fatal Crashes	1	0.48
Class A Crashes	0	0.00
Class B Crashes	10	4.76
Class C Crashes	62	29.52
Property Damage Only Crashes	137	65.24

Vehicle Exposure Statistics

Annual ADT = 20600

Total Length = 1.378 (Miles) **2.218 (Kilometers)**

Total Vehicle Exposure = 51.83 (MVMT) **83.42 (MVKMT)**

Crash Rate	Crashes Per 100 Million Vehicle Miles	Crashes Per 100 Million Vehicle Kilometers
Total Crash Rate	405.14	251.74
Fatal Crash Rate	1.93	1.20
Non Fatal Crash Rate	138.90	86.31
Night Crash Rate	50.16	31.17
Wet Crash Rate	54.02	33.57
EPDO Rate	1579.26	981.31

Miscellaneous Statistics

Severity Index =	3.90
EPDO Crash Index =	818.60
Estimated Property Damage Total = $	1098050.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	61	29.05
ANIMAL	1	0.48
BACKING UP	2	0.95
FIXED OBJECT	5	2.38
HEAD ON	4	1.90
LEFT TURN, DIFFERENT ROADWAYS	22	10.48
LEFT TURN, SAME ROADWAY	27	12.86
OTHER COLLISION WITH VEHICLE	4	1.90
OVERTURN/ROLLOVER	1	0.48
PEDESTRIAN	1	0.48
RAN OFF ROAD - LEFT	1	0.48
RAN OFF ROAD - RIGHT	1	0.48
REAR END, SLOW OR STOP	37	17.62
REAR END, TURN	4	1.90
RIGHT TURN, DIFFERENT ROADWAYS	4	1.90
RIGHT TURN, SAME ROADWAY	5	2.38
SIDESWIPE, OPPOSITE DIRECTION	3	1.43
SIDESWIPE, SAME DIRECTION	25	11.90
UNKNOWN	2	0.95

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	1	0.78
Class A Injuries	0	0.00
Class B Injuries	15	11.72
Class C Injuries	112	87.50
Total Non-Fatal Injuries	127	99.22
Total Injuries	128	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	18	8.57
Feb	18	8.57
Mar	13	6.19
Apr	19	9.05
May	24	11.43
Jun	15	7.14
Jul	13	6.19
Aug	20	9.52
Sep	17	8.10
Oct	15	7.14
Nov	22	10.48
Dec	16	7.62

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	29	13.81
Tue	37	17.62
Wed	22	10.48
Thu	31	14.76
Fri	44	20.95
Sat	28	13.33
Sun	19	9.05

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	1	0.48
0100-0159	0	0.00
0200-0259	1	0.48
0300-0359	1	0.48
0400-0459	0	0.00
0500-0559	1	0.48
0600-0659	3	1.43
0700-0759	5	2.38
0800-0859	9	4.29
0900-0959	8	3.81
1000-1059	15	7.14
1100-1159	23	10.95
1200-1259	20	9.52
1300-1359	22	10.48
1400-1459	20	9.52
1500-1559	13	6.19
1600-1659	21	10.00
1700-1759	15	7.14
1800-1859	13	6.19
1900-1959	6	2.86
2000-2059	5	2.38
2100-2159	6	2.86
2200-2259	2	0.95
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	152	21	3	176
Dark	21	4	1	26
Other	5	3	0	8
Total	178	28	4	210

Object Struck Summary

Object Type	Times Struck	Percent of Total
ANIMAL	1	6.25
COMMERCIAL SIGN	1	6.25
OFFICIAL HIGHWAY SIGN BREAKAWAY	1	6.25
OFFICIAL HIGHWAY SIGN NON-BREAKAWAY	1	6.25
OTHER FIXED OBJECT	4	25.00
PARKED MOTOR VEHICLE	1	6.25
PEDESTRIAN	3	18.75
SHOULDER BARRIER END	1	6.25
TREE	1	6.25
UTILITY POLE	2	12.50

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
LIGHT TRUCK (MINI-VAN, PANEL)	5	1.17
MOPED	1	0.23
MOTORCYCLE	2	0.47
OTHER BUS	1	0.23
PASSENGER CAR	229	53.63
PEDESTRIAN	1	0.23
PICKUP	89	20.84
SCHOOL BUS	1	0.23
SINGLE UNIT TRUCK (2-AXLE, 6-TIRE)	3	0.70
SINGLE UNIT TRUCK (3 OR MORE AXLES)	1	0.23
SPORT UTILITY	60	14.05
TRACTOR/SEMI-TRAILER	6	1.41
TRUCK/TRACTOR	3	0.70
UNKNOWN	3	0.70
VAN	22	5.15

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2009	25	0	10	15
2010	38	0	16	22
2011	30	0	8	22
2012	41	0	12	29
2013	48	1	14	33
2014	28	0	12	16
Total	210	1	72	137

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2009	0	17
2010	0	35
2011	0	13
2012	0	19
2013	1	25
2014	0	18
Total	1	127

Miscellaneous Totals

Year	Property Damage	EPDO Index
2009	$ 118150	99.00
2010	$ 220600	156.40
2011	$ 146200	89.20
2012	$ 250400	129.80
2013	$ 225000	227.40
2014	$ 137700	116.80
Total	$ 1098050	818.60

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2009	3	2	4	1	11	3	1
2010	9	1	7	1	15	4	1

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2011	6	2	6	1	8	4	3
2012	11	3	9	2	8	4	4
2013	13	1	12	0	13	7	2
2014	7	0	3	2	6	6	4
Total	49	9	41	7	61	28	15

Strip Diagram

Features	Milepost	Crash IDs
BURKE | ARMORY	10.79	102783519 | 103500534 | 103543479 | 103561378
	10.80	103728894
	10.81	104047234
	10.82	
	10.83	103199441
	10.84	
	10.85	102808568 | 103542365
	10.86	
	10.87	
	10.88	
	10.89	102821960
	10.90	
	10.91	
	10.92	
	10.93	102719391
	10.94	
GOLDEN LEAF	10.95	102673484 | 102754731 | 102945530 | 102983191 | 103228503 | 103267228
	10.96	
	10.97	
	10.98	
	10.99	
	11.00	
	11.01	103820744
EDWARD	11.02	
	11.03	
	11.04	
	11.05	
	11.06	
	11.07	
	11.08	
	11.09	
	11.10	
	11.11	
	11.12	
	11.13	103692118 | 103847459
	11.14	
	11.15	
	11.16	
	11.17	102966344
	11.18	103081006
	11.19	103090250

Features	Milepost	Crash IDs
	11.20	102932905 | 104037393
	11.21	103442083 | 103111583
	11.22	
SR 1230 | NC 39 | BUNN	11.23	102867290 | 102755209 | 102739748 | 102856978 | 103033513 | 103087555 | 103113294 | 103223033 | 103466437 | 103483517 | 103570883 | 103824058 | 103836904 | 103850120 | 103867512 | 103895352 | 103982890 | 104048928 | 104062227 | 104087813 | 102853447
	11.24	103579020 | 102682518 | 103418065 | 103457468
	11.25	102815273
	11.26	
	11.27	102757749 | 103864430 | 103603521
	11.28	102815510 | 103317788 | 103746931 | 103870617 | 103825318 | 103297654
	11.29	
	11.30	103669814
	11.31	103532980 | 103746952
	11.32	103381471 | 103452808 | 104087651
	11.33	103525512 | 103858960 | 104096928 | 103944193
	11.34	
	11.35	
	11.36	
	11.37	
	11.38	102840450
	11.39	
	11.40	
	11.41	102901005
	11.42	
	11.43	
	11.44	103194055
WENDYS	11.45	103628424 | 102749665 | 102798099 | 102908026 | 103093210 | 103442178 | 103690979 | 103853247 | 104123253
	11.46	
WENDYS	11.47	102694962 | 102851154 | 102868890 | 102915071 | 103042029 | 103044612 | 103049554 | 103108824 | 103520541 | 103543485 | 103555807 | 103699329 | 103956401 | 103956440 | 103999150 | 104009233 | 104062333
	11.48	102931138
	11.49	

Features	Milepost	Crash IDs
	11.50	
	11.51	
FRANKLIN	11.52	103070510 | 103071646 | 103102479 | 103485488 | 103484512 | 103847461 | 104034267 | 104044470
	11.53	103500532
	11.54	
	11.55	
FRANKLIN	11.56	103351928 | 102731099 | 103908590
	11.57	
	11.58	102675665
	11.59	
	11.60	102742810 | 103700201 | 104017652
	11.61	
	11.62	
	11.63	
	11.64	103097722 | 103803316
	11.65	
HILL | FRANKLIN	11.66	102756427 | 103465893 | 103982911 | 104039264
	11.67	
	11.68	103982894
	11.69	102672128
	11.70	103174802
	11.71	
	11.72	103829062
	11.73	
	11.74	
	11.75	
	11.76	102887290 | 103383208 | 103455896 | 103663826 | 103674030
	11.77	103594914
	11.78	
	11.79	
	11.80	
	11.81	
	11.82	
	11.83	
	11.84	
	11.85	
BRIDGE NO. 33	11.86	
	11.87	
	11.88	
	11.89	103956432
	11.90	
	11.91	102658917 | 103674031

Features	Milepost	Crash IDs
	11.92	
	11.93	
	11.94	102749658 | 103414418 | 103895356 | 104113733
	11.95	
	11.96	103085688
	11.97	103117051 | 103449570 | 103803380 | 102703402 | 103724110 | 103411062
	11.98	103867915 | 103429350
WADE | SR 1270 | SHANNON VILLAGE | JOHNSON	11.99	103085686 | 102646858 | 102726370 | 102806301 | 102898952 | 102945357 | 103013184 | 103015774 | 103026755 | 103193081 | 103402322 | 103719957 | 103890853 | 103916321 | 103988285 | 104061202 | 104080160 | 104091427 | 104113732
	12.00	
	12.01	
	12.02	
	12.03	103631080
	12.04	103173745
	12.05	
SANDALWOOD	12.06	102641425 | 102711722 | 102753401 | 102982265 | 103646226 | 103789010 | 103818696 | 103962739 | 103988996 | 104090087 | 103013101
	12.07	103858954 | 102818506
	12.08	
	12.09	103464631 | 103935711
	12.10	103385972
	12.11	102947620
	12.12	102695211 | 103327612 | 103573588 | 103577477 | 103763634 | 103818687 | 104061725
	12.13	103727899 | 103072997
SR 1647 | SOCIAL SERVICES	12.14	103573694 | 103036196
	12.15	
	12.16	103683231
SR 1231 | NC 581 | NC 56	12.17	103873490 | 102738158 | 102776759 | 103008582 | 103142520 | 103172976 | 103312815 | 103323428 | 103365269 | 103755431

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000029196UPDATE				76.8	8.4	20600	20000401

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

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
FRANKLIN	34	5	All and Rural		0	7/1/2009	6/30/2014	5.00

Location Text

US 401 (Bickett Blvd) from Burke Blvd to NC 56 (Nash St)

Requestor

Included Accidents	Old MP	New MP	Type
102719391		10.925	I
102783519		10.792	I
103728894		10.798	I
103199441		10.83	I
102808568		10.849	I
102821960		10.894	I
103542365		10.851	I
102673484		10.951	I
102754731		10.951	I
102945530		10.951	I
102983191		10.951	I
103895352		11.228	I
103847459		11.128	I
102966344		11.171	I
103090250		11.191	I
102932905		11.2	I
104037393		11.2	I
103442083		11.209	I
103111583		11.213	I
103223033		11.228	I
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102856978		11.228	I
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103466437	11.228	I
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103850120	11.228	I
103867512	11.228	I
103982890	11.228	I
103525512	11.328	I
103194055	11.444	I
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103825318	11.282	I
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103870617	11.282	I
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103669814	11.304	I
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104047234	10.806	I
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103172976	12.17	I
103323428	12.17	I
103267228	10.951	I
103692118	11.128	I
103452808	11.323	I
103365269	12.17	I
104113733	11.942	I

Fiche Roads

Name	Code
I 1	10000001
US 401	20000401
BICKETT	50002581

Strip Road

Name	Code	Begin MP	End MP	Miles	Kilometers
I 1	10000001	10.792	12.170	1.378	2.218

Working Group Meeting 4

Imagine Bickett Boulevard
Working Group #4 Meeting

September 29th, 2014 10:00am

Hillandale Road Site Visit with Follow-up at NCDOT District Offices, 815 Stadium Drive, Durham

----------AGENDA----------

1) **Welcome and Introductions**

2) **Brief Overview of Last Meeting on 9/17/14 (see notes)**

3) **How Bickett Boulevard, Louisburg Compares to Statewide Average Crash Rates (see table and graph)**

4) **Discussion of what we have just seen on Hillandale Road**

5) **Comparison with Bickett Boulevard-What could work and where? Any other options/ideas to consider? (Mark up map to indicate general areas)**

6) **Consideration of Mission Statement and Discussion of Goals (see Draft Mission Statement and Goals)**

7) **Date of Public Meeting/Workshop?**

8) **Adjourn-Thank you for attending!**

Working Group 4-

Hillandale Road Site Visit
with Follow–up at NCDOT District Offices, Durham

September 29th, 2014

SIGN IN SHEET

Imagine Bickett Boulevard, Louisburg - Working Group 4

Date: September 29th, 2014

Please Print!

NAME	EMAIL ADDRESS	AGENCY & TELEPHONE
Stephen Winstead	stevewinstead@ncdot.gov	NCDOT 252-492-0111
Tom Clancy	SFHLNC@NC.RR.COM	Strickland F.H. 919-496-4191
Keith Smith	ASKEKEITH@AOL.com	919-496-0711
Tony L. King	tking@nerrby.com	919 496 1115
An Stroobant	astroobant@kerrtarcog.org	kerr-tar-cog 252-436-2040 x2004

Imagine Bickett Boulevard
Working Group Meeting #4

Place: Hillandale Road Site Visit with Follow-up at
NCDOT District Offices, 815 Stadium Drive, Durham

Time and Date: 10:00am
September 29th, 2014

Members of Working Group:
Owners of local businesses and property in the area:
Keith Smith- Pete Smith Automotive Group, 703 S. Bickett Blvd.
Creator of Shop Sauce and Shop Sauce products

Tom Clancy- Town Council Member
Director of Strickland Funeral Home, 103 W. Franklin St.
Owner of Granny's Drive-In, 140 Wade Ave.

Other Members:
Tony King-Assistant City Manager, Louisburg, NC

Steve Winstead-District Engineer, NCDOT

Ann Stroobant-Regional Planner, Kerr-Tar RPO

Unable to Attend Today Due to a Schedule Conflict:
Bryan Cash-Owns property on Bickett
Affiliated with Hodges Insurance Agency, Inc.

1) We met at the recently completed access management project on Hillandale Road, Durham since it has many of the elements we have been considering for the 1.37 mile segment of Bickett Boulevard between Burke Boulevard and Nash Streets. We looked at the planted and concrete medians, left turns, sidewalks, bike lanes, covered bus stop with turnout and signalized pedestrian crossings as well as the newly redeveloped Croasdaile Commons shopping/office area. Steve Winstead of the NCDOT provided safety vests for the whole group during our walk.

2) **Overview of Last Meeting on 9/17/14**: Ann Stroobant gave a brief overview of our last meeting, Working Group #3, as well as handing out copies of notes from that meeting. Handouts for Working Group #4 included a graph showing NCDOT data comparing the crash rates on our segment of Bickett Boulevard with the statewide average crash rates and copies of our Draft Mission Statement and Goals. Also distributed were before and after conceptual PhotoShop images of

what the area at the intersection of Bickett and Nash could look like using the road/area improvements that we have been discussing as well as another copy of the paper Safe Access is Good for Business. Several members of the Working Group had requested testimonials from business people who have been through the access management process, which this paper includes. Ann also passed around before and after images from Scott Walton at NCDOT showing improvements on NC301 at Selma/Smithfield with concrete median strips for access management and curb and gutter. As in the previous meeting, she said that she wanted to remind the Working Group of the road/area improvements that we had been discussing and to give people visuals so that they could think about how these images could apply to the potential project area on the 1.37 mile study area of Bickett Boulevard.

3) **How the Study Area on Bickett Boulevard Compares to Statewide Average Crash Rates:** Data provided by Kelly Becker, Regional Engineer from the NC DOT Mobility and Safety Division and Steve Winstead, NCDOT District Engineer, was presented in table and graph form. This data shows how the 1.37 mile segment of Bickett Boulevard compares to statewide average crash rates on 260 miles of NC roadways with the same type lane configurations. The total crash rate and the non-fatal crash rate on Bickett Boulevard are higher than the statewide average. The fatal crash rate is also higher than the statewide average on NC roads with the same type lane configuration.

4) **Discussion of Hillandale Road, Durham:** The Hillandale Road site visit involved walking along the sidewalk from Croasdaile Commons, crossing at the pedestrian crossing on Carver Street and walking down the opposite sidewalk to return to Croasdaile Commons. It was noted that Hillandale Road had new sidewalks on both sides of the road. Sustainable stormwater practices were observed to the left of the sidewalk going towards Carver Street in the open space behind the school offices. Run-off from the embankment next to the sidewalk is absorbed by rushes and other water-loving plants. The planted median strips and signalized pedestrian crossings received favorable comments. It was observed that the road had been widened in places to allow for the turning radius of larger vehicles trying to make a U-turn. The Working Group also was concerned that signage needed to adequately identify areas where left turns and U-turns were allowed, as we saw someone on Hillandale using the wrong lane in the wrong direction. Working Group members also observed how the concrete median strips at the left turn allowed for the organized stacking of vehicles. They also noted the covered bus stop and turnout as well as the sign and lane markings for shared access for cyclists. We also noted that Croasdaile Commons appeared to be a recently constructed office/shopping area along Hillandale.

5) **Bickett Boulevard, Louisburg**: Members of the Working Group indicated areas of concern, which were marked on the large map, starting at the northernmost end of the project area at Bickett and Nash extending south):

a) The intersection of Bickett Blvd and Nash Streets should have better defined crossing areas and pedestrian access. Sidewalks and bike lanes could be added at the sides of the street with landscaped medians replacing the center turn lane in places, for example.

b) The area starting mid-way between Nash Street and Sandalwood Avenue (approximately where The Franklin Times and Griffin Ford at 104 S.Bickett Blvd. are located) with the intersection at Sandalwood Avenue across from Sheets(108 S. Bickett Blvd.) being an area of focus and extending down to the Johnson Street Extension intersection across from Shannon Village.

c) The next area of concern extends from Franklin Plaza south to Burger King (332 S. Bickett Blvd.), Wendy's (328 S. Bickett Blvd) and McDonalds (329 S. Bickett Blvd) and ends at the vacant site (between numbers 333 and 341 S. Bickett Blvd). The Working Group pointed out that there was a lot of congestion here as well as people crossing in the middle of the road.

d) Continuing south, the next area of concern for the group was around the Bunn Road, NC39 Bickett Blvd intersection.

The Working Group thinks that there are opportunities for signalized and safe pedestrian crossings, intersection improvement, sidewalks on both sides of the street and various access management/congestion management solutions in the 1.37 mile Bickett Blvd study area. Bike lanes and buses could also be accommodated in these solutions. The areas of concern stand out as particularly problematic and needing attention.

6) Consideration of Draft Mission Statement and Goals:

Ann Stroobant presented the Draft Mission Statement and Goals that resulted from the Working Group discussion on 9/17/14:

These are as follows:

Draft Mission Statement:

To enhance the appearance of Bickett Boulevard between Burke Boulevard and Nash Streets through aesthetic improvements, supporting local economic development and allowing for multimodal transportation choices while improving safety for all, reducing congestion and minimizing crashes.

Draft Goals:

1) Improve the aesthetics along the route with street trees, planted medians, sidewalks, uniform signage, improved lighting and underground utilities while incorporating shared parking lots and reducing the number of driveways
2) Stimulate economic development by infilling vacant or underused sites, considering mixed-use development where possible with buildings closer to the street and parking at the rear or side to enhance the pedestrian environment
3) Incorporate bus routes with shelters, bike routes and sidewalks along Bickett Boulevard to tie in to the existing network
4) Improve safety through access management by creating medians allowing for safe left turns and U-turns as well as creating signalized intersections with pedestrian crossings to accommodate vehicles, cyclists and pedestrians

The Mission Statement and Goals were evolved over two Working Group Meetings and finalized at the Working Group #4 meeting on Monday, 9/29/2014. The Final Mission Statement and Goals are attached to these notes in a separate handout.

Next Steps:

- Tony King said that he had spoken with Doumit Ishak in the NCDOT Congestion Management Group. Mr. Ishak and his group are happy to use their expertise to put forward a congestion management approach on this 1.37 mile segment of Bickett Blvd. At this point, we will leave open the exact placement of the access management solutions. The images produced for this study will suggest typical areas and will put forward general concepts so that the public will have an idea of what we are proposing.
- The study document should include**(also see suggestions from Working Group #3 below):**
  -Doumit Ishak's congestion management information including SuperStreets
  -Access management concepts
  -Tony King has citation information for certain types of traffic movements from Louisburg Police Department that can be incorporated
  -General images such as a part of the road with a planted median
  -Crash data, maps and graphs
- Public Meeting/Workshops:

Tony King and Ann Stroobant plan to develop a questionnaire to find out what areas of the Bickett Blvd study area are of concern to the public. The public will be able to comment at these meetings.

Suggestions made for the study document at Working Group #3:

- Basic Format of Final Document to Include:

-Crash and accident information summaries
-Listing of Working Group Meetings and Public Meetings
-Include public survey/questionnaire and tabulation of results

-Include possible approaches (some could be implemented sooner and some later):
    -Pedestrian crossings
    -Lower speed limit
    -Look at signalization
    -Access management, controlling access into road and consolidating some driveways
    -Super Street
    -Road diet
-Include some conceptual images of areas of concern

Tony King says that he has gotten Bickett Boulevard on Doumit Ishak and the Congestion Management Group's schedule. This will be a separate item and will be undertaken after the "Imagine Bickett Boulevard" consultation process is completed.

7) Dates of Public Meetings/Workshops?

- Public workshops will take place after Tony King has had a chance to present what the Working Group has been evolving at the City Council meeting on Monday, October 20th.

Tony King's suggestions for the workshops are as follows:

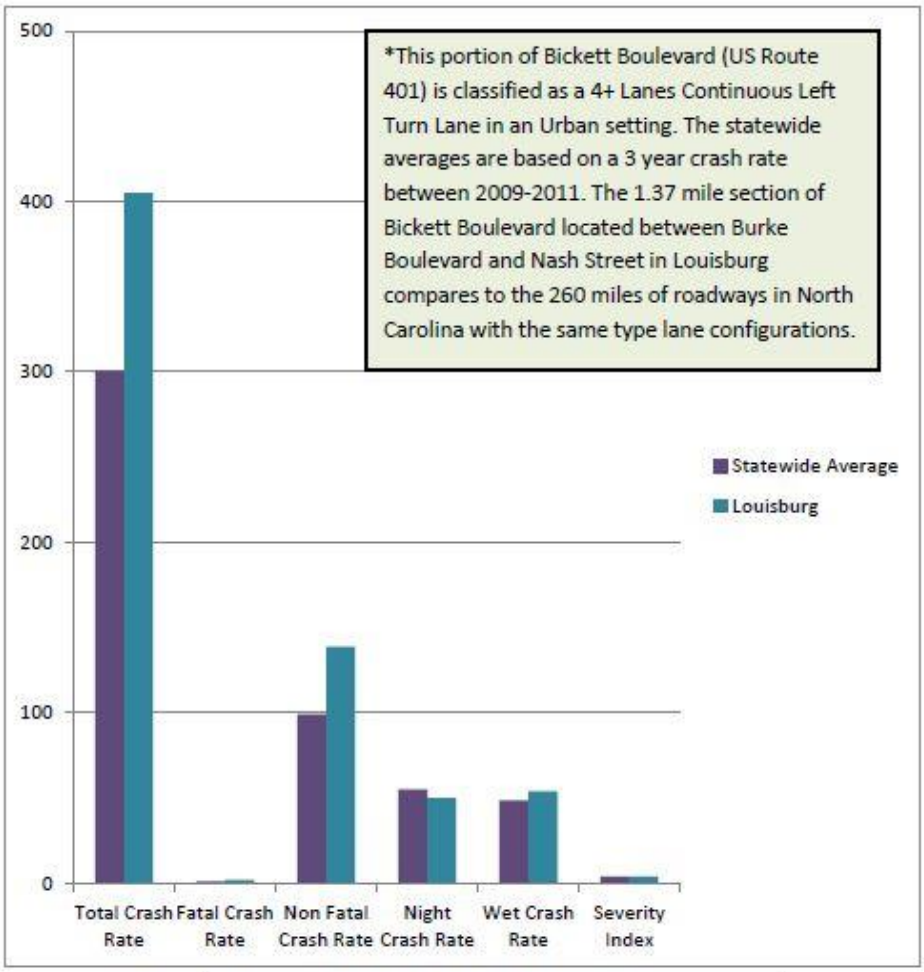
- -Public Meeting/Workshop #1-Thursday, October 23rd, 2014
- -Public Meeting/Workshop #2-Two weeks later on a Thursday (November 6th, 2014)

Tony King would like to have a draft copy of the study available at the final meeting as well as the questionnaire results thus far.

8) Adjourn-Thank you for your participation! The meeting was adjourned at about 12:15pm.

How Bickett Boulevard, Louisburg Compares to Statewide Average Crash Rates:*

	North Carolina Statewide Average	Bickett Boulevard, Louisburg
Total Crash Rate	300.78	405.14
Fatal Crash Rate	1.19	1.93
Non Fatal Crash Rate	99.21	138.90
Night Crash Rate	55.31	50.16
Wet Crash Rate	48.74	54.02
Severity Index	4.02	3.90



Data supplied by:
NCDOT Mobility and Safety Division, 9/18/14

Imagine Bickett Boulevard
Mission Statement and Goals

The Mission Statement and Goals were evolved over two Working Group Meetings.

Mission Statement:

To improve safety for all travelling on Bickett Boulevard between Burke Boulevard and Nash Streets while improving the aesthetics, supporting local economic development and allowing for multimodal transportation choices resulting in reduced congestion and minimized crashes.

Goals:

1) Improve safety through access management by creating medians allowing for safe left turns and U-turns as well as creating signalized intersections with pedestrian crossings to accommodate vehicles, cyclists and pedestrians

2) Stimulate economic development by infilling vacant or underused sites, considering mixed-use development where possible with buildings closer to the street and parking at the rear or side to enhance the pedestrian environment

3) Improve the aesthetics along the route with street trees, planted medians, sidewalks, uniform signage, improved lighting and underground utilities while incorporating shared parking lots and creating the best efficiency of driveways

4) Incorporate bus routes with shelters, bike routes and sidewalks along Bickett Boulevard to tie in to the existing network

Conceptual Ideas:

Bickett and Nash with Possible Improvements

Conceptual Ideas:

Bickett and Nash with Improvements

- Stop Light Arms with Overhead Road Signs
- Pedestrian Crossing (Timed)
- Planted Median with Pedestrian Refuge
- Sidewalks on Both sides of Street
- Bike Paths
- Mixed Use (Businesses/Apartments) Close to Street with Parking Behind
- Pull in for Buses
- Buried Power Lines
- Parking Behind Buildings
- Consolidation of Driveways

SAFE ACCESS IS GOOD FOR BUSINESS

You may be reading this primer because your state transportation agency or local government has told you about plans that will affect access to your business. They may be planning to install a raised median on your roadway, to close a median opening, or to reconfigure your driveway. Perhaps your request for a driveway is under review or the regulating agency has imposed conditions on its approval. Or, maybe the state or local agency is planning a new access policy and you have questions or concerns about the economic effects of these changes.

Whatever the reason, it is important for you to understand the basis for these changes and how they might affect your business. This primer will address questions you may have about access management and its effect on business activity and the local economy. It focuses on economic concerns that may arise in response to proposed access changes or policies, including potential impacts on business activity, freight and deliveries, parking for customers, and property or resale value of affected property.

Why is my access being changed or reviewed?

The access changes being proposed for your business or road are part of a growing effort by government agencies to improve how major transportation corridors are managed. These efforts, known as access management, involve the careful planning of the location and spacing of driveways, street connections, median openings and traffic signals. Access management can also involve using medians to channel left-turns to safe locations, and providing dedicated turn lanes at intersections and access points to remove turning vehicles from through lanes. The combined purpose of these strategies is to reduce crashes and traffic delay.

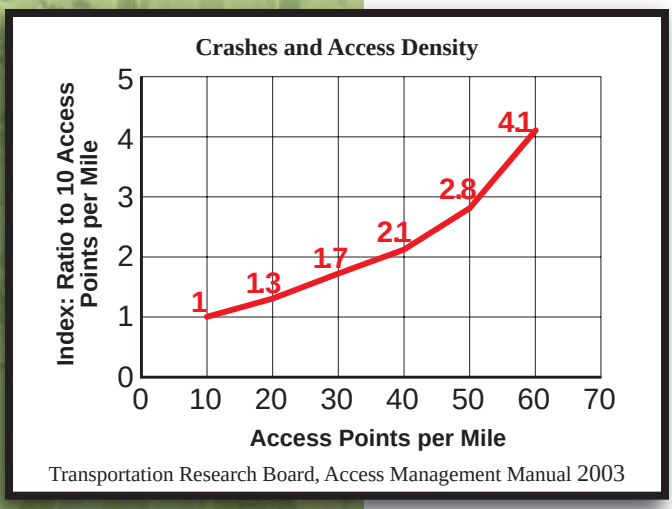
To understand access management, it is important to know that roads have different primary functions; either to provide access or move traffic.

- The main function of ***minor roads***, like neighborhood collectors and local streets, is to provide access. Minor roads must operate at slower speeds so people can enter and exit homes and businesses safely and conveniently.
- The main function of ***major roads***, like interstate freeways and regional highways, is to move traffic over long distances at higher speeds. Access to these roads must be carefully managed so requests for new access to development do not contribute to unsafe or congested conditions.

How exactly does this improve the situation on my road?

One reason managing access on major roads is so important is that driver safety is reduced when access is not properly located and designed. Imagine, for example, a driveway on an interstate freeway – it would certainly cause serious safety concerns. These same safety problems occur with improperly designed access to major arterial roads.

> "In the four years I have lived here we at times have seen a lot of rear end collisions here, and we haven't seen one now for a long time."
>
> **— E. Stanley Tripp of Tripp's Auto Sales in Spencer, Iowa, commenting on a median project in his area.**

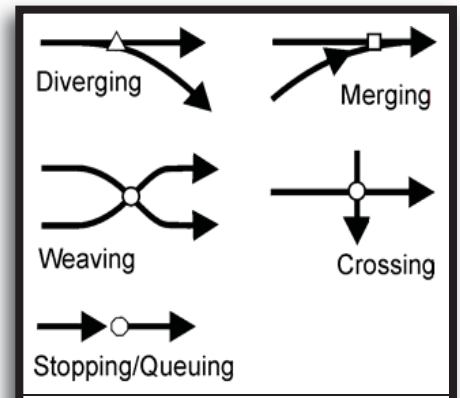


Transportation Research Board, Access Management Manual 2003

Managing access on your road can result in better traffic flow, fewer crashes, and a better shopping experience for you and your neighboring businesses. Consider the effects of adding more access points to a highway. A national study in the late 1990s looked at nearly 40,000 crashes and data from previous studies to determine the crash rate associated with adding access points to major roads. It found that an increase from 10 to 20 access points per mile on major arterial roads increases the crash rate by about 30% *(1)*. The crash rate continues to rise as more access is permitted. This is why **studies consistently show that well-managed arterials are often 40 to 50 percent safer than poorly managed routes** *(2)*.

Example of Crash Involving Left-Turn Movement from Driveway

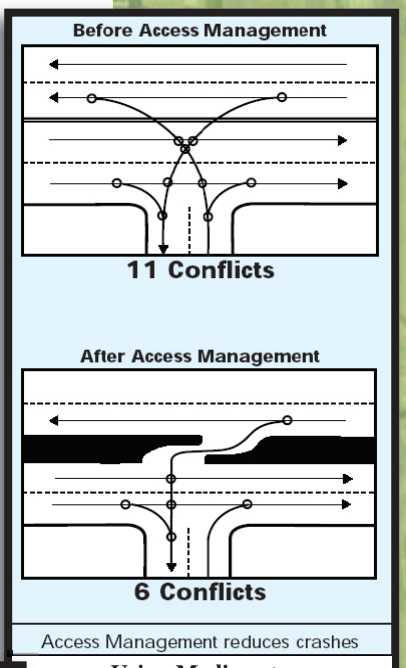
How does access management improve safety?



Types of Traffic Conflicts

Each access point creates potential conflicts between through traffic and traffic using that access. Each conflict is a potential crash. **Access management improves safety by separating access points so that turning and crossing movements occur at fewer locations.** This allows drivers passing through an area to predict where other drivers will turn and cross, and also provides space to add turn lanes.

The figure to the right shows how basic changes in access design, such as incorporating a median or changing a full median opening to a directional opening, can reduce traffic conflicts and the potential for crashes.



Using Medians to Reduce Potential Crashes

If crashes and congestion become frequent on your roadway, people will seek out other routes. Bear in mind that a single crash can tie up traffic and potential customers for hours.

What about congestion and the effect it has on my market area?

Access management not only improves roadway safety, it also helps reduce the growing problem of traffic congestion. Frequent access and closely spaced signals increase congestion on major roads. **As congestion increases, so does delay, which is bad for the economy and frustrating to your customers.** Well-managed arterials can operate at speeds well above poorly managed roadways – up to 15 to 20 miles per hour faster. **This means more traffic past your door and better exposure for your business. It also means a more convenient shopping experience for your customers.**

How will a change in access affect the success of my business?

To address this question, it's important to first determine the type of business that you own – drive-by or destination.

- **"Destination businesses"** are businesses that customers plan to visit in advance of the trip. Examples include electronics stores, doctor or dentist offices (in fact most offices), major retailers, insurance agencies, sit down restaurants, etc.

- **"Drive-by businesses"** are those that customers frequent more on impulse or while driving by, such as convenience stores, gas stations, or fast food restaurants.

If you own a drive-by business, your clients will expect to get in and out easily from the highway. For you, the critical issues are *visibility*, *signage*, and *convenient access*. If your site is relatively small, a driveway connecting to the highway may not be your best option. A driveway on a highway service road or a private circulation lane serving several properties can increase the convenience of your access and the volume of customers you can accommodate. Convenient access can be provided by periodic connections between the service road and the highway, or through the shared private access points. Short driveways or open frontages not only cause safety hazards for pedestrians and traffic, but have less capacity than local roads or long driveways.

Access management has no impact on the demand for goods and services.

"Our business has increased about 20% in customer count."

— C. Randy Rosenburger of City Looks in Ankeny Iowa.

If you are the owner of a destination business, your customers are planning their trips in advance. A driveway on a congested highway or a highway that is perceived as unsafe may actually intimidate customers from making the trip. Most small destination businesses or specialty stores benefit more from access to a lower speed minor road, such as a neighborhood collector road. The greater exposure that a major road provides is an advantage for larger destination businesses, but it's a good idea to have access from more than one roadway. Allowing customers to enter and exit from different directions will increase safety and convenience.

How important is access to the success of my business?

Location and access are factors, but not the most important factors that determine whether businesses succeed or fail. The main reason that businesses fail is lack of management expertise *(3)*. The main reasons that businesses succeed include *(4)*:

- the experience of management,
- how well customers are served,
- the quality of the product or service provided,
- adequate financing and investment,
- well-trained employees,
- the level and nature of competition, and
- keeping costs competitive.

Given that access is not the primary reason that businesses survive or fail, it follows that a change in access will not be the primary cause of whether a business will survive or fail. In fact, access is one of the lesser factors that customers will consider when weighed against price, service, product, and store amenities.

This is not to say that good access is not important to your business. **Whether your business is large or small, it is important that you can handle customer traffic demand.** If you operate or develop major retail centers, factories, or campuses, proper location and design of access is essential to customers and employees. For shopping centers, the Urban Land Institute's Shopping Center Development Handbook states "poorly designed entrances and exits not only present a traffic hazard, but also cause congestion that can create a negative image of the center *(5)*."This is also true for small businesses, especially those on the intersection of busy roads. If your business is difficult or unsafe to enter or exit, then customers may be dissuaded from visiting.

Just think about the roads in your community where access has been carefully planned and compare them to those having lots of driveways, open frontages, and no median. Which roads do you prefer to travel on and which corridors have the most vibrant businesses?

Small corner properties are more difficult to access.

This queue is blocking street traffic and additional customers

Is this a sign of a store doing great business, or one that is telling customers to try the next guy down the street?

What has been the impact to businesses where this type of thing has been done?

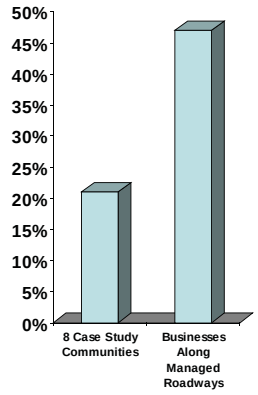
Studies of the business impacts of access management projects in Florida, Iowa, Minnesota, Kansas and Texas have consistently found that most businesses continue to do well when the project is completed. These results are particularly true for destination businesses. However, most drive-by oriented businesses are not unduly affected either. Drive-by businesses have been adversely affected by reconstruction projects that reduce their visibility from the major road or cause them to have highly circuitous or inconvenient access. However, these are not typical impacts of access management projects and where they do occur, it is not uncommon for transportation agencies to compensate business owners for losses.

Business activity: Access management projects alone do not appear to increase or decrease business failure rates *(6)*. This makes sense considering that many factors other than highway access can affect business success. **"Before and after" studies of businesses in Florida, Iowa, Minnesota, and Texas along highways where access has been managed found that the vast majority of businesses do as well or better after the access management projects are completed.** The turnover rate (the proportion of businesses that close or move out each year) of businesses in Iowa and Minnesota was studied along newly access-managed corridors and was similar to or lower than that of the surrounding area. For example:

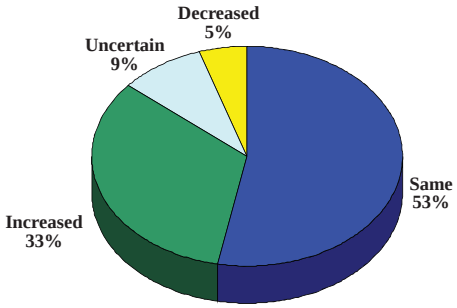
Businesses affected by access management projects in Iowa tended to do at least as well in terms of growth in retail sales, but usually better than those in surrounding communities, after the projects were completed. Most of these Iowa business proprietors said that sales were similar or greater following the completion of the projects. Only five percent reported a sales decrease *(6)*.

Impact of Access Management on Retail Sales Growth

- In the 1990s, retail businesses along eight recently access managed roadways in Iowa were compared to their surrounding communities.
- The businesses along the managed corridors experienced much higher retail sales growth during the decade than those businesses in other locations in these eight communities.



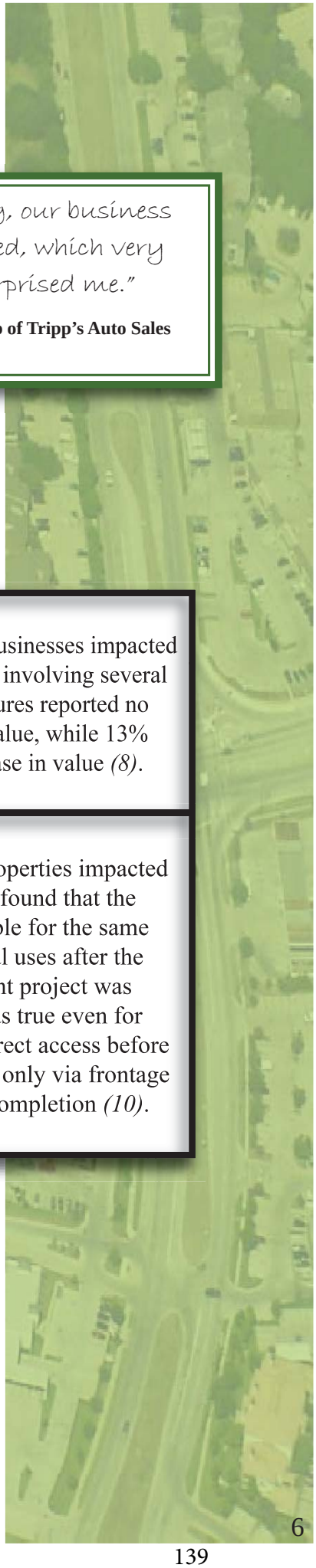
Business Proproietors' Reported Sales Comparisons



Business owners report that the actual impacts to their businesses were much less than they anticipated. Most adverse impacts were due to construction and not to access changes.

"If anything, our business has increased, which very much surprised me."

— D. Stanley Tripp of Tripp's Auto Sales in Spencer, Iowa



Property values: Most property owners surveyed following an access management project do not report any adverse effect of the project on property values. Often, such projects can have a positive effect by cleaning up the patchwork of driveways and curb cuts. For example:

A study of property values on **Texas** corridors with access management projects found that land values stayed the same or increased, with very few exceptions *(7)*.	More than 70% of the businesses impacted by a project in **Florida** involving several median opening closures reported no change in property value, while 13% reported some increase in value *(8)*.
A 2005 study of commercial property values along a major access management project in **Minnesota** found that property values depend more on the strength of the local economy and the general location of the property in the metropolitan area; changes in access seemed to have little or no effect on the value of parcels *(9)*.	A study of **Kansas** properties impacted by access changes found that the majority were suitable for the same types of commercial uses after the access management project was completed. This was true even for businesses that had direct access before the project and access only via frontage roads after project completion *(10)*.

Customers and deliveries: The majority of customers and truck drivers surveyed in before-and-after studies have reacted positively to access management projects as improving both safety and traffic flow. Business customers surveyed about access management projects in Iowa, Texas and Florida overwhelmingly supported the projects because their drive became quicker, easier and safer *(6)*.

What are some common types of access management projects and what are the impacts?

There are many access management techniques, each with a specific purpose and different type of impact. One common type of access change is the building of a **median** on a road or closing existing median openings. Another common type of project is providing a **frontage road** or a rear service road along a highway for access to businesses. Below is an overview of these strategies, the types of issues or impacts associated with these projects, and how you can work with the agency to adjust to these changes.

MEDIANS and MEDIAN OPENINGS

A *median* is a grass or raised divider in the center of a road that separates opposing traffic and discourages or prevents vehicles from crossing the divider.

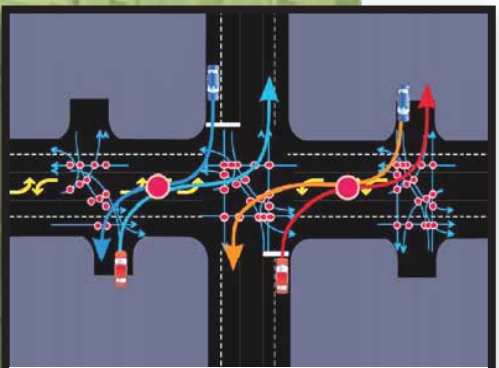
Openings in the median provide for different turning or crossing maneuvers, depending on how they are designed.

- A ***directional median opening*** only allows certain movements, usually a left-turn in or U-turn.
- A ***full median opening*** allows all turning and crossing movements and is often signalized.

Where too many full median openings exist, agencies may reconstruct the median and close the excess median openings.

Turn lanes at median openings provide a safe haven for turning vehicles.

Why use a median and not a two-way left turn lane?



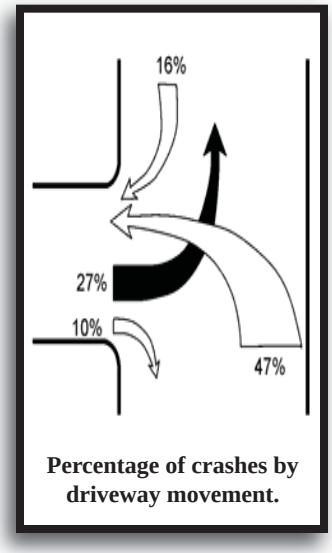
Conflicts and potential crashes associated with continuous two-way left turn lanes

Medians can have a profound effect on driver safety compared to two-way left-turn lanes. Adding a median to a road that previously had a continuous two-way left turn lane can reduce the crash rate about 37% and the injury rate about 48% *(11)*. **For example, when a continuous two-way left turn lane was replaced with a median on Atlanta's Memorial Drive, the crash rate was cut in half *(12)*.**

One reason a two-way left turn lane is less safe than a median is that a driver who is turning left must be able to ensure that the traffic is clear from two directions in multiple lanes. When this is not quite possible, drivers will sometimes use a two-way left-turn lane in the middle of the road while attempting to merge into traffic. Such maneuvers can lead to serious crashes and become more frequent as traffic volumes increase.

Won't I lose customers if they can't turn left into my business anymore?

The number of your customers making left turns into your business is likely already very low during peak travel periods or if you are on a congested roadway. This is because left turns into any business become increasingly difficult as traffic volumes in the opposing lanes increase.



Percentage of crashes by driveway movement.

Perhaps today your customers wait with apprehension to turn left as cars queue behind them, or must shoot across a busy road to complete a left turn out. A turn lane at a median opening or signalized intersection will allow them to wait safely to complete a U-turn when traffic clears, and that is truly a safer option on a busy road. **In fact, the left-turn into and out of a driveway is less safe than a U-turn and comprises the majority of driveway crashes.** Studies have shown that making a U-turn at a median opening to get to the opposite side of a busy highway is about 25% safer than a direct left turn from a side street or other access point *(13)*.

Surveys show that a majority of drivers have no problem making U-turns at median openings to get to businesses on the opposite side of the road. Where direct left-turns are prohibited, studies show that motorists will change their driving or shopping patterns to continue patronizing specific establishments. In fact, most drivers are reporting that access management improvements made the roads safer and that they approve of the changes, despite minor inconveniences associated with U-turns.

Some owners of drive-by businesses have reported a loss of customers following a median project or other change that has eliminated the left-turn-in opportunity (and less often left-turn-out), although the majority do not. For example, a before-and-after study of a median reconstruction project in Florida involving numerous median-opening closures found that **the majority of surveyed merchants, 68% of the 96 respondents, reported little or no economic impact to their businesses, although 27% reported some type of loss** *(14)*. Generally, businesses that feel they were adversely impacted also have competition nearby or may have experienced reduced visibility of signage.

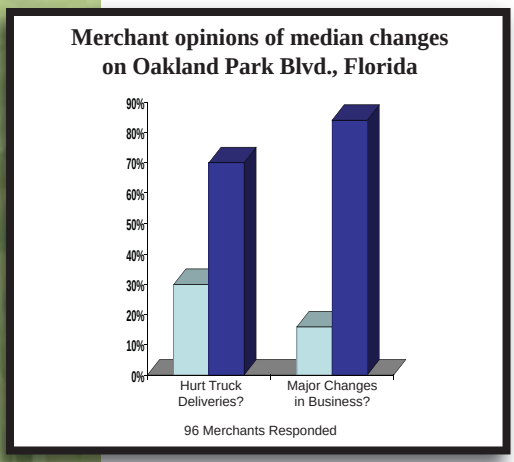
> "Because of the design of the roads, the timing of the traffic signals, and the way the traffic is broken up, it has become very convenient for people to pull into a safe haven, or storage lane within the raised median, take their time and make a safe and convenient u-turn to access properties that were concerned about that problem."
>
> **— Kurt Easton, Executive Director of Merritt Island Redevelopment Agency, Florida**

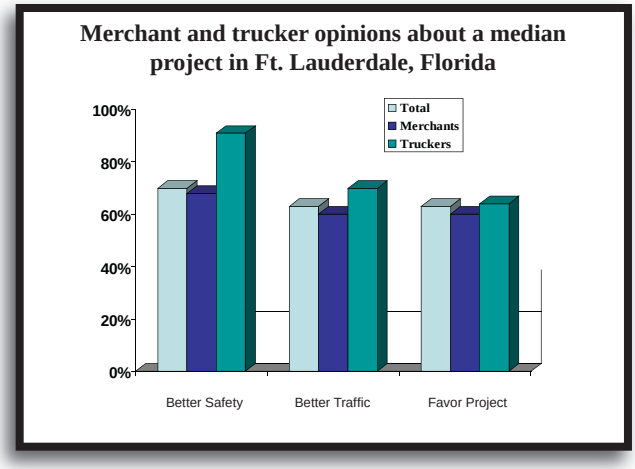
Why not just signalize all median openings and high volume driveways?

The decision on whether or not to signalize a median opening or access point depends on many factors, including the volume of traffic using the access, the proximity of other traffic signals, and the potential impact on public safety and traffic congestion. Most signal warrants are related to traffic volumes, but some consider school crossings, crash history, pedestrian crossings, "factory" peaks, and other situations. Unwarranted signals cause undue delays as motorists wait at a red light while little or no cross traffic exists. Worse, unwarranted signals may eventually be disobeyed or ignored by frustrated motorists who are only one reckless incident away from causing an accident or emerging as a casualty themselves. For these reasons, median openings and driveways should not be signalized where they do not meet the requirements of a traffic signal study.

What about impacts on truck deliveries?

The limited number of before-and-after studies have found that truck deliveries may be inconvenienced, at worst, but may in fact benefit from improved opportunities resulting from a change in access. And while the actual studies may be few, the anecdotal comments are many and favorable.





What are the other issues with medians and median opening closures?

- Alternative access through side streets, service roads, or internal connections with neighboring developments helps increase accessibility on busy or median separated roads – especially if the result allows several properties access to a signal.
- Minor roadway improvements, such as additional pavement on the shoulder, may be needed to accommodate U-turning traffic.
- Some trucks and large vehicles may need to take alternate routes as U-turns can be difficult to negotiate.
- Medians can be landscaped to enhance the image of an area and help attract investment and customers.

FRONTAGE or SERVICE ROADS

A *frontage road* is a type of service road that parallels a major road or freeway and is located between the road and building sites abutting the road. *Service roads* can also run behind businesses.

The purpose of these roads is to provide lower-speed access to commercial sites along a major roadway and to separate business traffic from higher-speed through traffic. Connections of frontage or service roads to side streets or onto the highway must be well away from signalized intersections, so entering and exiting traffic doesn't conflict with traffic queuing at signals.

Rear service roads providing access to highway commercial properties.

A frontage road.

How will I get access while I'm waiting for a frontage or service road to be finished?

Some sites may need to be given temporary access to the major roadway until the service road system is complete. This is typically needed when a service road is being constructed in segments through the development process, rather than built by a transportation agency as part of a road construction project. Most agencies will require you to remove your temporary driveway and build a driveway to the frontage or service road at a later time, so it's important to design your site access and circulation to accommodate that change.

How will people know how to get to my business from the highway?

Frontage roads maintain good visibility for businesses along a major road and typically it is apparent how to enter and exit the road to get to a business. Points of entry can be signed to identify businesses that can be accessed from that entrance, if it is not already apparent. **It's a good idea to provide signs where a service road or frontage road connects at a side street, so customers know they can obtain access** to businesses that may not be visible from the side street.

What are the other issues with frontage or service roads?

- **Service roads that run behind highway properties are often less disruptive to existing businesses than frontage roads, less costly for an agency, and more functional than a frontage road.**
- Rear service roads can provide access to businesses on each side and can operate safely from both directions. Frontage roads provide access only to businesses fronting on the highway and are much safer when designed for one-way traffic.
- Additional right-of-way will be needed for the frontage or service road and for connecting a service road back to the highway or side street. If your site will be impacted, it is important to work with the agency on how to reduce adverse effects. For example, if your site becomes nonconforming under local zoning regulations because of a smaller setback or other change, ask the local agency if they will waive that status, given that it was caused by a government right-of-way taking.

What are other commonly used access management techniques?

Regulate minimum spacing of median openings and access connections (driveways and street connections).	Limit the number of access points per property, or consolidating access points and encouraging shared driveways.	Establish standards for driveway width, driveway throat length and internal drive aisles to move traffic smoothly off of the adjacent street.
Move access points away from signalized intersections and freeway ramps.	Incorporate right- and left-turn lanes into roadways.	Close or replace a full median opening with a directional opening.
Provide a service road or parallel collector roads and side streets for site access along an arterial roadway.	Promote interconnection of parking lots and unified on-site circulation systems.	Install a median on an undivided roadway or replace a continuous two-way left-turn lane with a median.

So what's the bottom line on access management?

Efforts by government agencies to manage access in site development and road projects can help businesses, even those operating on older highway corridors, in a variety of ways. Here are some specific benefits to you and your customers:

- **Fewer roadway delays and better traffic flow will result, which will preserve and possibly even enhance the market reach of businesses in your corridor;**
- Safer approaches to businesses result from installation of medians, which can also be landscaped to improve the image of the area;
- Properly designed entrances shared by multiple businesses allow more site area for parking, more customer options to access your site, and improved landscaping or other site amenities;
- Service roads along the highway allow customers to enter and exit businesses conveniently and safely, away from faster moving through-traffic;
- Internal connections between businesses allow customers to circulate easily, without reentering a busy road; and/or
- Driveways and service road entrances farther away from signalized intersections allow easy access for customers, even during times of peak congestion.

> "It has been a very positive thing all the way around, from the economic, and the community sides. We have improved our tax base, we have improved our traffic problem, and plus we have improved our business community."
>
> **— Chuck Fisher, Supt. Public Works Ankeny, Iowa**

In brief, minimizing the number of curb cuts, consolidating driveways, constructing landscaped medians, and coordinating internal site circulation and parking among several businesses results in a visually pleasing and more functional corridor. That protects your investment in your business, the public investment in the roadway, and can even help attract new investment into the area.

> "There are a lot of beautification projects going on, tree plantings and what have you. I think the landscaping in the medians has very much added to the very nice decorum of Ankeny. It will make a nice impression for those visiting Ankeny, or living here."
>
> **— Andy Kasper, Iowa Realty, Ankeny, Iowa**

What can be done to keep my business going during construction?

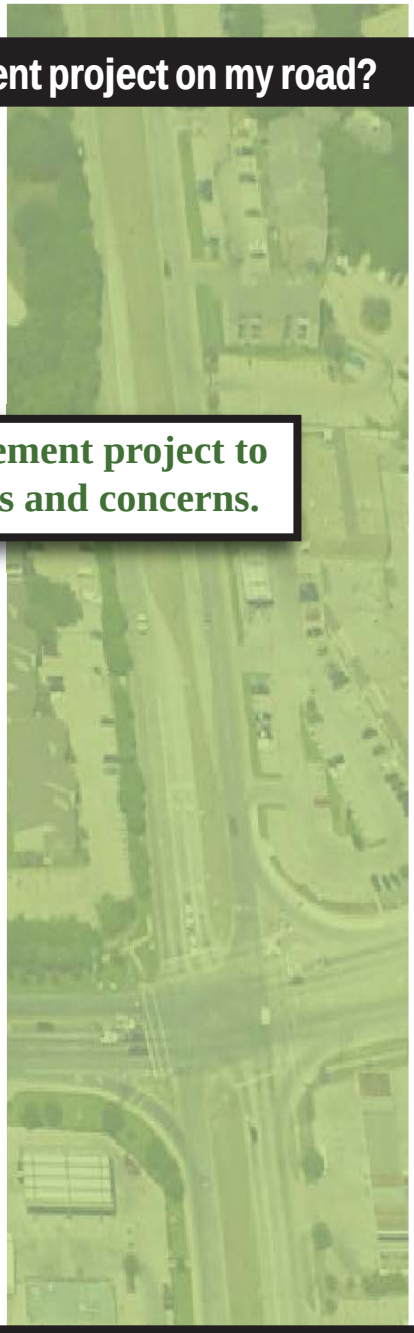
There's no doubt about it, road construction can disrupt customers and drivers, but there are ways adverse impacts can be minimized. **Two key issues during construction are maintaining open access to businesses for customers and deliveries, and having sufficient sign visibility so your customers know you are open, and know how to enter and exit your site during this period.** When your road is scheduled for reconstruction, your transportation agency will initially notify you about what to expect in terms of traffic, duration of construction, any foreseeable disruptions, and so on. It is important for you to respond to them about your special needs and concerns. Below are some of the things that you can ask of the agency:

- Provide clear signs from the roadway to business entrances;
- Provide temporary and/or secondary business access points, where feasible;
- Schedule construction for after business hours or to occur during times of low usage for seasonally-oriented businesses;
- Provide alternative parking, if possible and avoid taking or blocking parking spaces;
- Stagger construction along a corridor so impacts are localized and staged;
- Expedite construction through incentive/disincentive programs;
- Avoid blocking business entrances with construction equipment or construction barriers;
- Establish a single point of contact in the agency about the construction project to communicate with property and business owners and help address issues that may arise;
- Provide regular project progress reports to business and property owners.

Business owners certainly may see drops in gross revenues during construction. But these are not unlike drops you may routinely experience during expansions, remodeling, seasonal variations, or other self-initiated management. Experience has shown that "construction" drops are temporary too, and that retail sales typically return to pre-construction levels or greater. Research findings from corridors in Texas indicate that businesses did not change employment levels during construction periods. This finding indicates that retailers understand that construction projects are a temporary and perhaps even an inevitable disruption to business, and that loyal patrons will return to stable businesses. The same research found that gross revenues typically either returned to pre-construction levels or were higher after construction was complete *(7)*.

How can I have a say in the access management project on my road?

Get involved! All government agencies are required to involve the public in transportation policy and project decisions. Most state transportation agencies offer open house meetings during transportation project planning and design, and both state and local government agencies conduct public meetings and hearings when making important policy or regulatory changes that involve access management. Prospective business owners can also review area master plans to research potential changes.



It is important for you as a stakeholder in an access management project to attend public meetings and hearings and to voice your ideas and concerns.

These meetings are opportunities for you to hear more about an access management project or plan and to make the planners and engineers aware of how it impacts your business. This might involve issues related to internal traffic circulation and parking, deliveries, plans for expansion, etc. Knowing this information early in project planning or design allows them to make better project decisions and can result in changes that reduce or avoid adverse impacts on your business.

For example, many businesses depend on trucks for deliveries and other functions. Larger trucks are not typically able to make certain movements (such as U-turns). It is important to work with agency staff to develop a plan that will accommodate truck access to your business in a manner as convenient as possible. Sometimes this will require that trucks follow a slightly different route to arrive at the property. Project planners can work with you to assure that trucks will be able to access your business. This is just one of many ways your input is important.

Where can I go to learn more about access management?

Hopefully this primer has answered some of the questions that you, as a business or property owner, may have. Your state or local transportation agency or your state's Federal Highway Division office (on larger projects) are other excellent resources to point you to the right project manager, or to answer your general questions concerning access changes. These transportation agencies need and value your input as they strive to provide a safe and efficient highway system.

For the latest information on access management or to order the latest Access Management Library CD/DVD collection, go to **www.accessmanagement.gov**. Other important sources for information on the economic effects of access management include the TRB Access Management Manual, and NCHRP Report 420: Impacts of Access Management Techniques, which are both available from the Transportation Research Board at **www.trb.org**.

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U.S. Department of Transportation
Federal Highway Administration
Office of Operations

400 Seventh Street, SW
Washington, DC 20590

www.ops.fhwa.dot.gov/access_management
August, 2006
FHWA-HOP-06-107
EDL 14294

US 301 - Current

NCDOT ENTERPRISE
Visualization
www.ncdot.org/it/visualization

Proposed Improvements to US 301 - Selma/Smithfield, NC

Revision:

Revision:

Artist Concept - May not reflect final Design

6.2 Materials and Notes from the Public Input Meeting

Imagine Bickett Boulevard

Welcome!

Bickett Boulevard Between Burke Boulevard and Nash Streets

Public Input Meeting

7-9pm Thursday, November 6, 2014

Agencies involved: Kerr-Tar Regional Council of Governments, NCDOT and the Town of Louisburg

Imagine Bickett Boulevard

Kerr-Tar
Regional Council Of Governments
Regional Transportation Planning Organization

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

LOUISBURG

Bickett Boulevard Between Burke Boulevard and Nash Streets

Public Input Meeting Scheduled at the Louisburg Training Center Located at the Police/Fire Station, 104 Wade Avenue, Louisburg, NC 27549

7-9pm Thursday, November 6, 2014

The public is invited to attend a Public Input Meeting to learn about and comment on ideas **for future safety and aesthetic improvements to Bickett Boulevard in the 1.37 mile section between Burke Boulevard and Nash Streets**. The meeting will present and discuss possible improvements to this segment of Bickett Boulevard that **could be implemented when and if funding becomes available**.

A Working Group has been meeting to consider possible opportunities for this section of Bickett Boulevard. The meeting will share the concepts that have been discussed, providing interested individuals with the opportunity to comment and to fill out a questionnaire.

The Mission: To improve safety for all travelling on Bickett Boulevard between Burke Boulevard and Nash Streets while improving the aesthetics, supporting local economic development and allowing for multimodal transportation choices resulting in reduced congestion and minimized crashes.

Agencies involved: Kerr-Tar Regional Council of Governments, NCDOT and the Town of Louisburg

Imagine Bickett Boulevard
Public Input Meeting

November 6th, 2014 7:00-9:00pm

Louisburg Training Center, 104 Wade Avenue, Louisburg, NC 27549

---------- Plan of Events ----------

1) **Welcome and Introductions**

2) **Imagine Bickett Boulevard Slide Presentation**
   - **Introducing Possibilities for Improvements to the Segment of Bickett Boulevard between East Nash Street and Burke Boulevard**

3) **Attendees are invited to:**
   - **Fill out our questionnaire**
   - **Look at the large maps of the study area and comment**
   - **Comment on the Mission Statement and Goals evolved by the Working Group**
   - **Ask questions or express your concerns after the presentation (Please sign up if you wish to comment. Depending on how many people attend, comments will be limited to two minutes.)**

4) **If time permits, the slide presentation will be given again**

5) **Adjourn**

SIGN IN SHEET
Imagine Bickett Boulevard, Louisburg – Public Input Meeting
Date: November 6th, 2014 7-9pm

Please Print!

NAME	EMAIL ADDRESS	AGENCY & TELEPHONE
F. Becky Leonard	fleonard@franklincountync.us	FCHD 919 496-8100
James Bumpass	JC Bumpass@Embarq Mail.Com	919 496 3594
Joe Shearon	203 Tucker Dr Louisburg	Lbg Town Council
[illegible]	PO. Box 119 Louisburg	Times 496-6503
FRANK WARREN	fWarren@ncrrbiz.com	Town 496-4145
Rosemary Champion	RosemaryChampion@CARTERBANKTRUST	919-496-0125
Geraldine Manley	gmanley@NC.rr.com	Louisburg Planning Board.
Stephen Winstead	stevewinstead@ncdot.gov	NCDOT 252.492.0111
ANN STROBANT	astrobant@kerrtarcog.org	Kerr TAR COG
Alfred Cassidy	acassidy@kerrtarcog.org	Kerr-Tar COG
[illegible]		Town of Louisburg
Rep. Bobbie Richardson	bobbie.richardson@ncleg.net	919-715-3032 NC GA
Emma B. Stewart	buddyandemmab@gmail.com	Lbg. Town Council 919-496-2956

SIGN IN SHEET

Imagine Bickett Boulevard, Louisburg – Public Input Meeting

Date: November 6th, 2014 7-9pm

Please Print!

NAME	EMAIL ADDRESS	AGENCY & TELEPHONE
Rick Lassiter	lbgpdchf@ncrbi2.com	LOUISBURG POLICE 919-496-4175
George Manley	gmanley@.nc.rr.com	Louisburg
AT MEETING, DID NOT SIGN IN:		
TONY KING	tking@ncrrbiz.com	(919) TOWN OF LOUISBURG 497-1003
JOEY HOPKINS	jhopkins@dot.state.nc.us	(919) NCDOT DIVISION ENGINEER 220-4600

Imagine Bickett Boulevard
Public Input Meeting

Place: Louisburg Training Center, 104 Wade Avenue, Louisburg, NC 27549

Time and Date: 7:00-9:00pm
November 6th, 2014

1) Welcome and Introductions:
Tony King (Assistant City Manager, Louisburg, NC) welcomed everyone to the Training Center. He recognized these members of the audience in attendance:

Representative Bobbie Richardson, NC House of Representatives, 7th District
Karl Pernell, Mayor of Louisburg
Emma Stewart, Louisburg Town Council Member
Joe Shearon, Louisburg Town Council Member
Joey Hopkins, Division Engineer, NCDOT
Steve Winstead, District Engineer, NCDOT
Alfred Cassidy, Regional Planner/ Mobility Manager, Kerr-Tar RPO
Ann Stoobant, Regional Planner, Kerr-Tar RPO

Tony King gave an overview of the "Imagine Bickett Boulevard" Project which is currently one of the study items on the Kerr-Tar RPO work schedule. Kerr-Tar has been liaising with the Town of Louisburg and the NC Dept. of Transportation in order to obtain background information. The study involves gathering data to formulate an understanding of what is happening in the1.37 mile area of Bickett Boulevard between Burke Boulevard and Nash Street, as well as researching solutions that have been applied to similar stretches of road in other areas. In addition, conceptual images have been introduced to show what the area could look like if some of the ideas currently under discussion are implemented. The study will encompass an initial review of Bickett Boulevard using the data and images gathered to help formulate an understanding of what is happening in this specific segment of Bickett Boulevard.

Tony King also mentioned that we would be presenting ideas from the Imagine Bickett Boulevard Working Group consisting of individuals with businesses and property located near and on Bickett Boulevard. These members are Tom Clancy, Bryan Cash and Keith Smith. Other people associated with the Working Group are Tony King from the Town of Louisburg, Steve Winstead from NCDOT and Ann Stroobant from Kerr-Tar RPO. The business and property owners in the working group have known the road segment under study for many years and played a vital role in requesting information and scrutinizing the data, helping to form a more complete picture of Bickett Boulevard between East Nash Street and Burke Boulevard.

The Working Group also formulated a Mission Statement and Goals for the 1.37 mile segment of Bickett Boulevard which evolved over the course of two meetings. This

information was available to the public attending the meeting as a handout and was also posted in large poster form on the wall of the Public Input Meeting space for people attending the meeting to view.

2) Imagine Bickett Boulevard slides, illustrating data gathered and possibilities for improvements to the segment of Bickett Boulevard between East Nash Street and Burke Boulevard

Tony King introduced Ann Stroobant, Regional Planner at Kerr-Tar RPO, who gave a slide presentation showing maps and graphs of data collected specific to the area of Bickett Boulevard under study, illustrating average daily traffic volume, crash data and safety issues. According to the data, there are three areas along the 1.37 mile section of Bickett Boulevard where crashes and accidents are more frequent. These areas were incorporated into a map and made available to the public in a handout showing where the actual crashes occurred over a five-year period. These areas are:

1) Around the intersection of Bunn Road (NC39) and Bickett Boulevard.
2) Around Franklin Plaza/McDonald's/Wendy's/Burger King
3) Around Shannon Village and Johnson Street Extension/Wade Avenue
   (A large number of crashes also occur around the Bickett Boulevard/Nash Street intersection, although not as many as in 1-3)

Ann also presented road and design elements discussed in the Working Group such as stop light arms with overhead road signs, protected left turns, signaled and timed pedestrian crossings, planted medians with pedestrian refuges, sidewalks on both sides of the street, bike paths/lanes, bus turn outs and shelters, buried power lines, consolidated /shared driveways and parking lots, as well street tree planting and unified signage. These options also enable the general public to have healthier transportation choices and will improve air quality. Adding mixed use-developments consisting of businesses and apartments close to the street with parking located behind the buildings helps to form a unified streetscape and encourages people to come to the area. Slides were shown that illustrated examples of "Complete Streets," "SuperStreets", and access management solutions from other areas as well as some conceptual before and after slides of Bickett Boulevard itself. Tony King mentioned that with access management and SuperStreets, accidents are greatly reduced. With SuperStreets, there is a 46% total reduction in accidents, a 63% reduction in fatal accidents and a 75% reduction in angle and right turn accidents. Both Ann and Tony King stressed that the PowerPoint images represent different potential approaches to the Bickett Boulevard study area in order to give stakeholders and the public in general an idea of what is possible. The concepts mentioned above are a starting point and will also include public input from the meeting as well as public input from the questionnaire.

Once the questionnaires are completed, the results will be incorporated with the other data into a report. The next step of the process will involve members of the NCDOT Congestion Management Group looking at this segment of Bickett Boulevard, probably in the spring of 2015. If funding for improvements becomes available, the Town of Louisburg will have examined the alternatives including approaches for possible

solutions to benefit all modes of travel as well as options to improve the aesthetics along the road itself for its citizens and stakeholders. The focus is to improve safety for all travelling on Bickett Boulevard between Burke Boulevard and Nash Streets while improving the aesthetics, supporting local economic development and allowing for multimodal transportation choices resulting in reduced congestion and minimized crashes.

4) After the presentation, the meeting attendees were invited to:

- Fill out our questionnaire
- Pick up handouts of the crash data, Mission Statement and Goals, Bickett Boulevard study area location map and the paper "Safe Access is Good for Business" if they have not done so already
- Look on the tables at the large maps of the study area, place a dot and sticky note with comments on their areas of concern (and also discuss with Ann and Alfred)
- Comment on the Mission Statement and Goals evolved by the Working group
- Ask questions and express their concerns

Questions asked by the public at the Public Input Meeting:
Relating to SuperStreets:
Where would stop lights be located on a SuperStreet? Tony King says that SuperStreets can be signalized on non-signalized.

What would be the speed limit on a SuperStreet?
The speed limit would be in the range of 45-55mph.

Is a SuperStreet possible? A SuperStreet may not be possible. The Congestion Management Group from the NCDOT will be taking a look at this segment of Bickett to determine if a SuperStreet or other solutions will work. Falls of the Neuse Road and Hillandale Road were mentioned. A member of the public said that they didn't think that the 1.37 mile segment of Bickett Boulevard was long enough for a SuperStreet.

Comments relating to particular parts of the study area between Burke Boulevard and Nash Streets:

"I would like to see signalization at Wade Avenue because traffic backs up."

Possible left turn signal at Bickett and Johnson Street Extension/Wade Avenue.

"People need to slow down on Bickett Boulevard at Nash Street at least to Bunn Road. 35 is unrealistic, but it could be 40 mph."

Limit the traffic to a left turn at Sandalwood because sometimes people don't signal.

"If I want to go left, I go to the stoplight at Shannon Village to turn left because it is safe."

The speed on Bickett Boulevard needs to be limited to be limited to 25mph.

There needs to be a pedestrian crossing at Franklin Plaza.

Regarding the Sheets Entrances:
Concern was expressed about the entrance to Sheetz. Teenagers speed out of the exit onto Bickett and it is dangerous. Limit the exit to one direction coming out on Bickett at the very least.

The Sheets entrance onto Bickett Boulevard needs to be cut off.

Regarding East Nash Street:
Completely close East Nash Street to traffic.

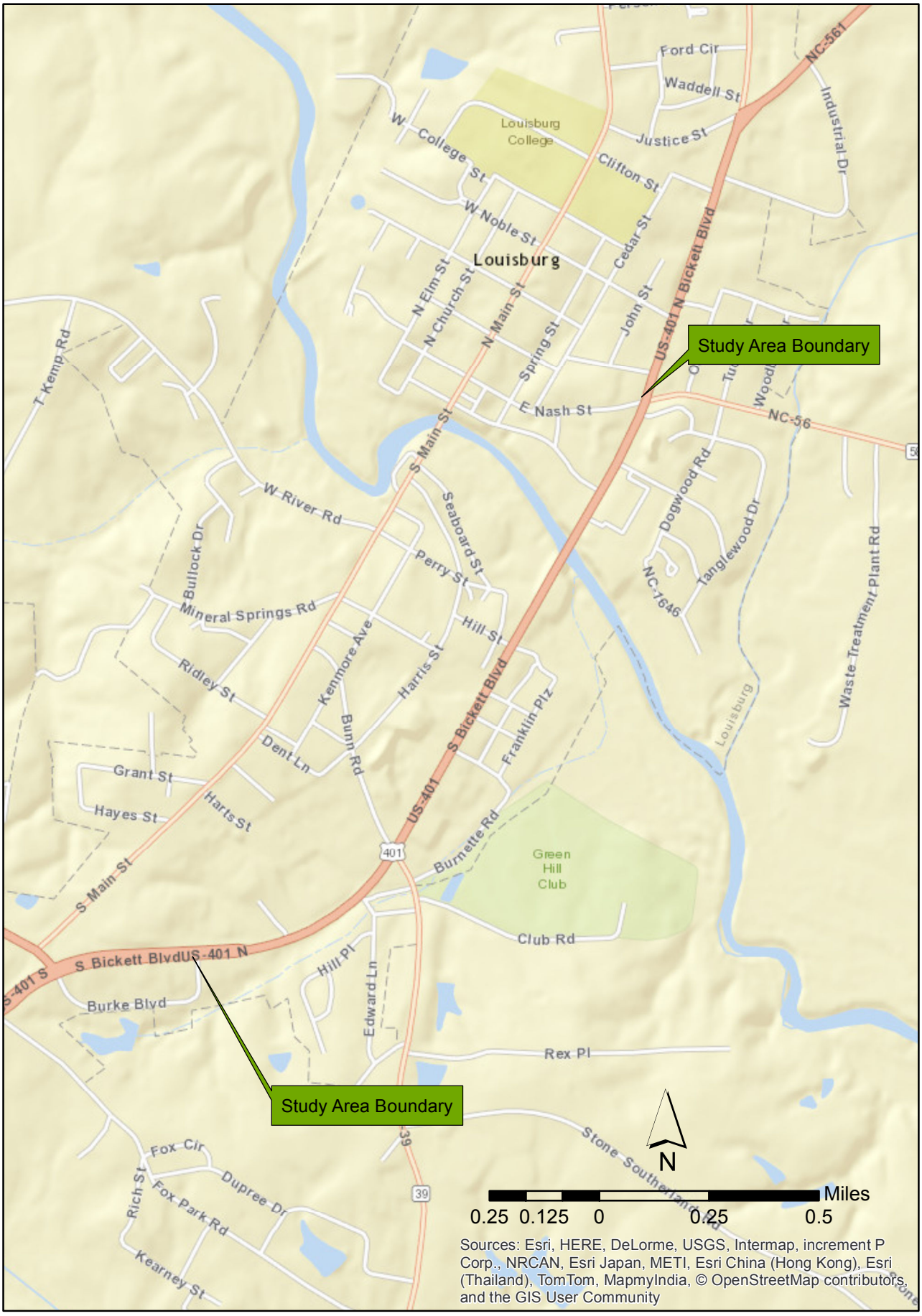
There needs to be stoplights and pedestrian crossings at the Bickett/Nash intersection.

There needs to be turn arrows on all sides of Nash/Bickett (56/401).

The intersection of Hwy 56 and Bickett at the CVS (102 N. Bickett) needs a signal. Traffic backs up as people are waiting to turn.

Speeding Problem:
The area of Bickett Boulevard between Franklin Plaza and Sandalwood Avenue is a big area for speeding. 90% of all of the accidents happen here. There needs to be medians to prevent left turn accidents, as well as solutions such as speed breaks, stoplights and traffic circles to get people to slow down(this comment was from Chief Rick Lassiter, Louisburg Police Department).

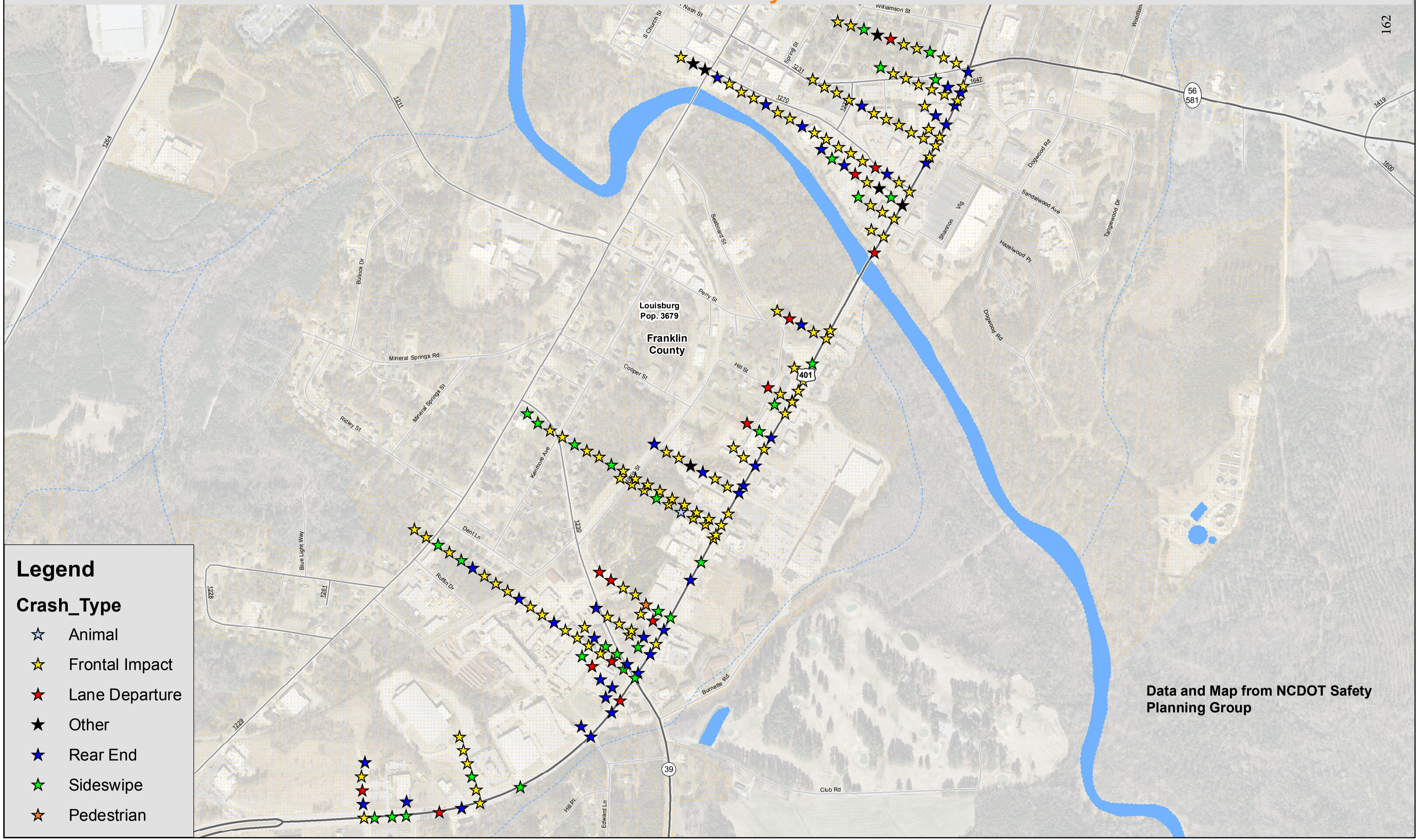
5) Adjourn- The attendees were reminded to fill out their questionnaires. Thank you for your participation!



Bickett Boulevard Between Nash Street and Burke Boulevard

Map by Ann Stroobant
July 22, 2014

US 401 (Bickett Blvd) from Burke Blvd to NC 56 (Nash St)
(7/1/2009 - 6/30/2014)
Franklin County



Imagine Bickett Boulevard
Mission Statement and Goals

The Mission Statement and Goals were evolved over two Working Group Meetings.

Mission Statement:

To improve safety for all travelling on Bickett Boulevard between Burke Boulevard and Nash Streets while improving the aesthetics, supporting local economic development and allowing for multimodal transportation choices resulting in reduced congestion and minimized crashes.

Goals:

1) Improve safety through access management by creating medians allowing for safe left turns and U-turns as well as creating signalized intersections with pedestrian crossings to accommodate vehicles, cyclists and pedestrians

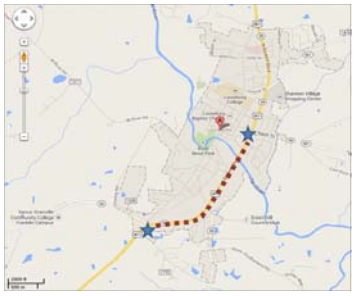
2) Stimulate economic development by infilling vacant or underused sites, considering mixed-use development where possible with buildings closer to the street and parking at the rear or side to enhance the pedestrian environment

3) Improve the aesthetics along the route with street trees, planted medians, sidewalks, uniform signage, improved lighting and underground utilities while incorporating shared parking lots and creating the best efficiency of driveways

4) Incorporate bus routes with shelters, bike routes and sidewalks along Bickett Boulevard to tie in to the existing network

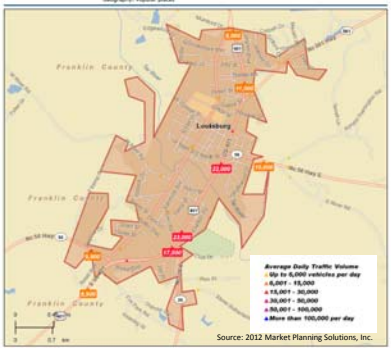
Imagine Bickett Boulevard
Louisburg, North Carolina

Kerr-Tar Regional Council Of Governments | LOUISBURG



Louisburg, NC:
Area of focus is a 1.37 mile segment of Bickett Boulevard from Burke Boulevard and NC56 to East Nash Street (SPOT ID H111053)

esri Traffic Count Map

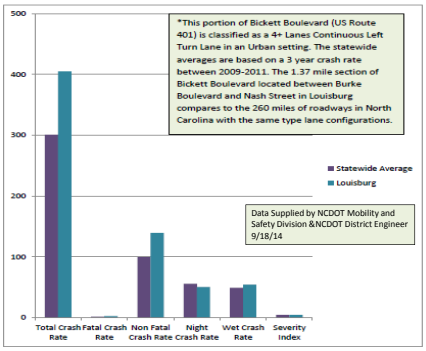


Source: 2012 Market Planning Solutions, Inc.

Crash Data-Individual Crashes 7/1/2009-6/30/2014

Data and Map from NCDOT Safety Planning Group

How Bickett Boulevard, Louisburg Compares to Statewide Average Crash Rates:*



Location on Bickett Boulevard with a Large Number of Crashes

South Bickett Blvd. Looking Towards Bunn Rd.

Location on Bickett Boulevard with a Large Number of Crashes

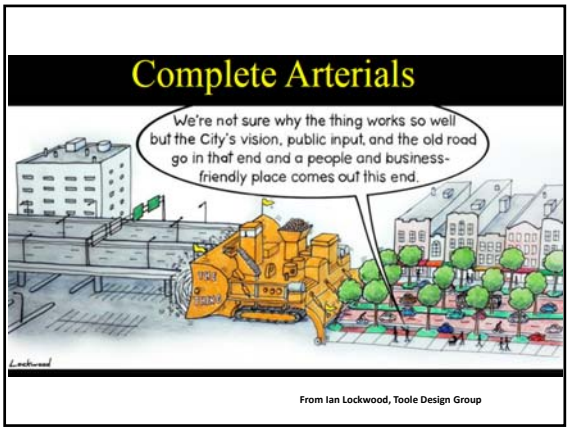
Looking North towards McDonald's and Franklin Plaza

Looking North towards McDonald's and Franklin Plaza

Location on Bickett Boulevard with a Large Number of Crashes
(around Shannon Village and E. Johnson St.)

Bickett Blvd. at Donation Center and Sheets Looking Towards East Nash Street

Bickett Blvd. at Shannon Village and Sheetz Looking Towards East Nash St.



From Ian Lockwood, Toole Design Group

From Danny Pleasant, Director Charlotte DOT

Neighborhoods in Charlotte, NC

Access Management

A set of proven techniques that can help reduce traffic congestion, improve safety, and preserve existing road capacity by managing the location, design and type of access to property.

Benefits:

- Safety – reduce conflicts and potential for crashes
- Capacity – improves traffic flow
- Aesthetics – provides more room for streetscaping
- Business vitality – helps retain long-term corridor viability
- Preserve investment – cost effective
- Non-Motorized – fewer conflict points for pedestrians and bikers

From Robbins Road Study, City of Grand Haven, MI, 2010

In brief, minimizing the number of curb cuts, consolidating driveways, constructing landscaped medians, and coordinating internal site circulation and parking among several businesses results in a visually pleasing and more functional corridor. That protects your investment in your business, the public investment in the roadway, and can even help attract new investment into the area.

"There are a lot of beautification projects going on, tree plantings and what have you. I think the landscaping in the medians has very much added to the very nice decorum of Ankeny. It will make a nice impression for those visiting Ankeny, or living here."
— Andy Karper, Iowa Realty, Ankeny, Iowa

Safe Access is Good for Business, P.12

The Superstreet

- **A type of intersection in which minor cross-street traffic is prohibited from going straight through or left at a divided highway intersection. ***
- **Minor cross street traffic must turn right, but can then access a U-turn to proceed in the desired direction.**

*Other configurations possible based on site specific conditions.

Source: NCDOT Congestion Management Group 20

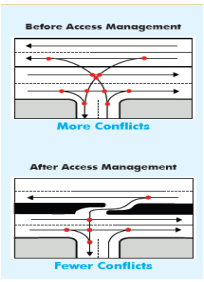
CONVENTIONAL INTERSECTION

SUPERSTREET

Source: NCDOT Congestion Management Group 21

Benefits: Improving Safety

- By reducing conflicts, Access Management reduces crashes



From: Access Management, Florida DOT, P.3

Designated Pedestrian Crossings Needed

Benefit: Aesthetics

- More room for landscaping and parking
- Better accommodates a unified/themed streetscape
- Opportunity to organize signs

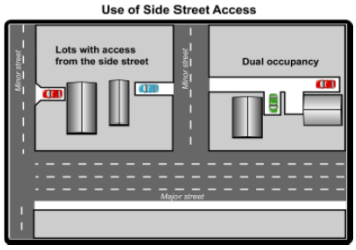
From Robbins Road Study, City of Grand Haven, MI, 2010

Sharing Access

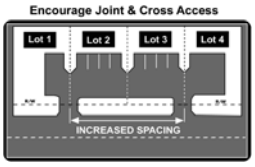
Shared driveways:

- Connect adjacent parking lots
- Promote patronage of adjacent businesses
- Retrofit as practical
- Apply spacing standards to new development

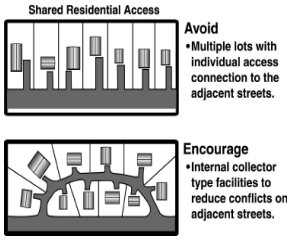
From Robbins Road Study, City of Grand Haven, MI, 2010



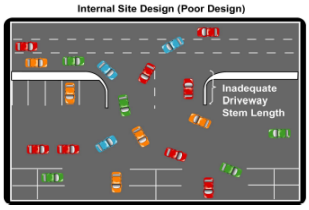
From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P26.



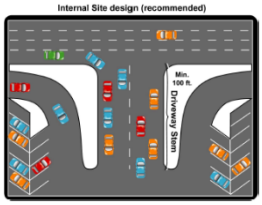
From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P.40



From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P.38



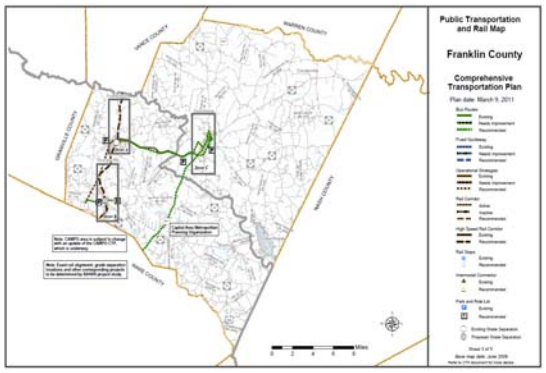
From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P.33



From: NCDOT, Policy On Street And Driveway Access to North Carolina Highways, July 2003, P.34

Bickett Blvd. at Franklin Plaza

Hillandale Rd., Durham, NC



Hillandale Rd., Durham, NC

Conceptual Ideas:

Bickett Blvd. near McDonald's, Wendy's and Burger King (around 328-332 S. Bickett)

Before:
- No Sidewalk
- Center turn lane allows for multiple conflict points

After:
- Sidewalk added on both sides of road
- Lane marked for cyclists
- Planted median with gap allowing for left turns and U-turn

Conceptual Ideas:

Before:

Bickett and Nash Indicating Possible Improvements

After:

Bickett and Nash with Improvements

- **Stop Light Arms with Overhead Road Signs**
- **Pedestrian Crossing (Timed)**
- **Planted Median with Pedestrian Refuge**
- **Sidewalks on Both sides of Street**
- **Bike Paths**
- **Mixed Use (Businesses/Apartments) Close to Street with Parking Behind**
- **Pull in for Buses**
- **Buried Power Lines**
- **Parking Behind Buildings**
- **Consolidation of Driveways**


Thank you!
Kerr-Tar
Regional Council
Of Governments
LOUISBURG
The images shown in this presentation are conceptual only and should not be interpreted as the final design.

Imagine Bickett Boulevard Questionnaire

(The 15 questions relate to the 1.37 mile segment of Bickett Boulevard between Burke Boulevard and Nash Streets. Please look on both sides of the paper!)

1. **How often do you travel down this segment of Bickett Boulevard between Burke Boulevard and Nash Street? (Please circle one)**

- Never
- Few times/month
- Few times/ week
- 5+ times/week

2. **What is your mode of travel on Bickett Boulevard?**
   (Please circle all that apply to you)
   - Car
   - Bus
   - Bicycle
   - Walking
   - Other What is it?_____

3. **Why do you frequent this particular segment of Bickett Boulevard?**
   (Please circle all that apply to you.)

- Shopping Which stores?_____
- Restaurants Which ones?_____
- Senior center
- My workplace is located here
- My business is located here
- Other Please list_____

4. **How do you rate present conditions for driving along this 1.37 mile segment of Bickett Boulevard?**
   (Please circle one)
   - Excellent
   - Average
   - Poor

5. **Do you make cross lane turns on Bickett Boulevard to access a destination when driving?**
   (Please circle one) Yes No

   If yes, how often do you cross lane turn when traveling on this segment of Bickett Boulevard?
   (Please circle one)

- Never
- Few times/month
- Few times/ week
- 5+ times/week

6. **Do you travel to a point where you can safely make a U-turn in order to avoid crossing multiple lanes of traffic when driving?**
   (Please circle one) Yes No

7. **Are there any areas along this 1.37 mile segment of Bickett Boulevard where you are concerned with safety or crash problems? (Please circle one)** Yes No

   If yes, please give a description of the location.

8. **Crash problems can be reduced by access management, where medians are added in the central turn lane with breaks for left turns and U-turns, consolidating some driveways, improving intersections and adding stop lights with signalized crossings. Do you think that access management would help on this segment of Bickett Boulevard?**
   (Please circle one) Yes No

9. **How do you rate present conditions for walking along this 1.37 mile segment of Bickett Boulevard?**
   (Please circle one)
   - Excellent
   - Average
   - Poor

10. What improvements could be made for pedestrians along this 1.37 mile segment of Bickett Boulevard? (Please circle all that apply)

- Improved sidewalks
- Constructing new sidewalks to join with existing ones along Bickett so that there are sidewalks along both sides of the street
- Add marked and signalized pedestrian crossings at key intersections
- Other Please name_____

11. In addition to vehicles like cars and trucks, a "Complete Street" provides for all forms of transportation (pedestrian, bicycles and buses) and accommodates all types of users to provide safe access to destinations for everyone no matter how they travel. What features are important to you in a "Complete Street?"
(Please circle all that apply)

- Sidewalks
- Marked pedestrian crossings
- Signalized **and** marked pedestrian crossings
- Bike lanes
- Bus stops
- Bus shelters
- Planted medians
- Street trees
- Landscaping
- Other Please name_____

12. Please list any other comments or concerns that you think would minimize crashes and reduce congestion on this 1.37 mile segment of Bickett Boulevard between Burke Boulevard and Nash Streets as well as any other improvement that you think would have a positive impact.

Optional Questions:

13. What type of Bickett Boulevard stakeholder are you?
(Please circle all that apply)

- Business owner
- Property owner
- Property renter
- Daily commuter to out-of-town job
- Daily commuter to in-town job
- Consumer accessing businesses on Bickett Boulevard
- Other Please explain_____

14. What is your age? (Please circle one)

0-18 19-29 30-44 45-59 60-74 75 and older

15. What is your gender?

Male Female

Thank you for completing our questionnaire!

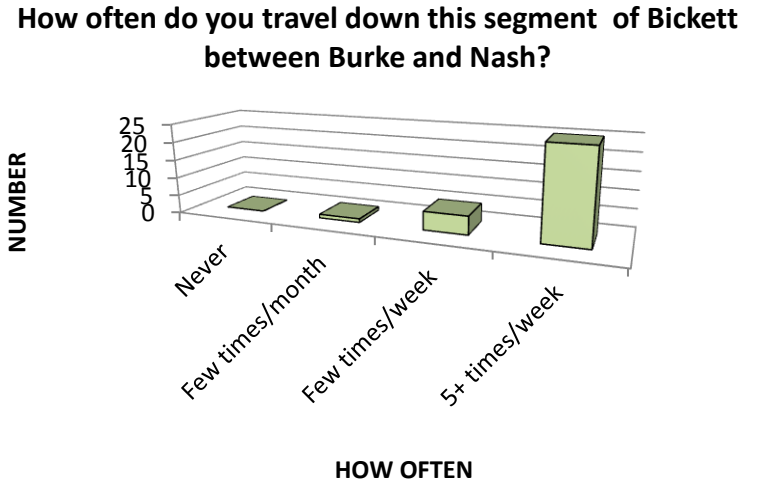
6.3 Town of Louisburg "Imagine Bickett Boulevard" Survey Response

Imagine Bickett Boulevard Questionnaire

The 15 questions relate to the 1.37 mile segment of Bickett Boulevard between Burke Boulevard and Nash Streets. This questionnaire was distributed at the Bickett Boulevard Public Input Meeting on November 6th, 2014 and was also posted on the Town of Louisburg Website. There were 31 completed questionnaires returned by November 21st, 2014.

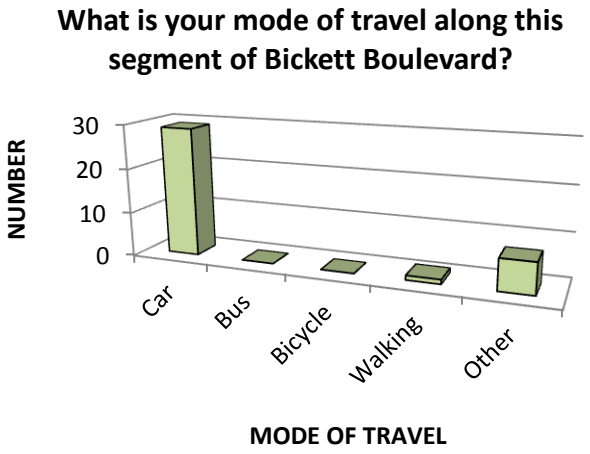
1. **How often do you travel down this segment of Bickett Boulevard between Burke Boulevard and Nash Street? (One answer circled per respondent)**

How often do you travel down this segment of Bickett?	Number
Never	**0**
Few times/month	**1**
Few times/ week	**5**
5+ times/week	**25**



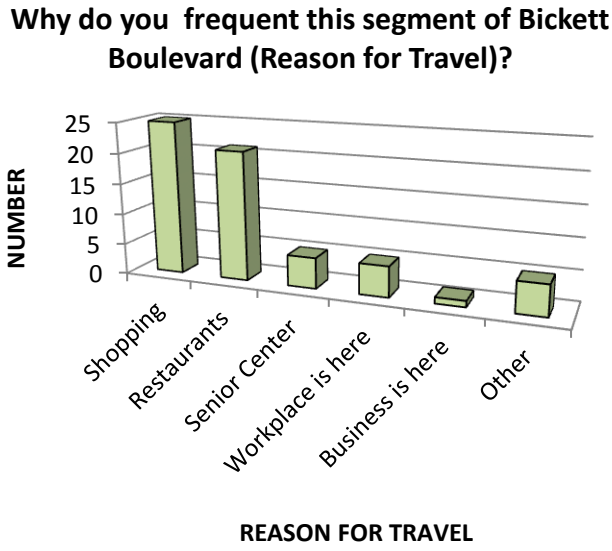
2. What is your mode of travel on Bickett Boulevard?
(All modes that applied per respondent were circled)

Mode of Travel	Number
Car	**29**
Bus	**0**
Bicycle	**0**
Walking	**1**
Other(Breakdown):	**7**
Lawnmower	1
Truck	5
Motorcycle	1



3. Why do you frequent this particular segment of Bickett Boulevard? (All modes that applied per respondent were circled)

Reason for Travel	Number
Shopping	**25**
Restaurants	**21**
Senior Center	**5**
Workplace is here	**5**
Business is here	**1**
Other	**4**

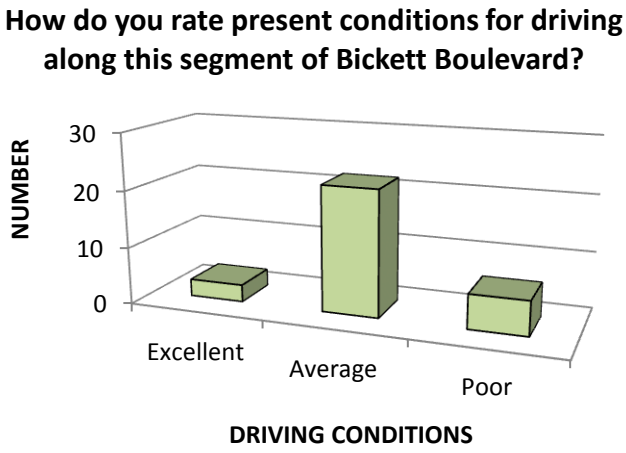


Question 3 (continued)
Response Breakdown of Stores, Restaurants and Other Categories
(all stores and restaurants frequented along the 1.37 mile segment of Bickett were requested in this question, so each respondent listed multiple places of business)

Stores Frequented	Address of Business	Number
Cato	283 N. Bickett Blvd	**2**
Sheetz	108 S. Bickett Blvd.	**6**
Wilco Hess	112 S. Bickett Blvd.	**5**
Just Save	115 S. Bickett Blvd	**3**
CVS	121 S. Bickett Blvd.	**1**
Good Will	136 S. Bickett Blvd.	**1**
Town & Country Supply	312 S. Bickett Blvd.	**1**
Food Lion	321 S. Bickett Blvd	**9**
Sears	326 S. Bickett Blvd	**1**
Toney Ace Hardware	402 S. Bickett Blvd.	**4**
Walgreens	25 Burke Blvd.	**2**
WalMart	705 Retail Way	**1**
All Shops		**1**
Restaurants Frequented	**Address of Business**	**Number**
Pizza Hut	116 S. Bickett Blvd.	**2**
Johnny Bulls	125 S. Bickett Blvd.	**4**
Taco Bell	207 S. Bickett Blvd.	**1**
Kentucky Fried Chicken (KFC)	207 S. Bickett Blvd.	**1**
Remington Grill	309 S. Bickett Blvd.	**3**
Subway	313 S. Bickett Blvd.	**1**
Hibachi	314 S. Bickett Blvd.	**1**
Wendy's	328 S. Bickett Blvd	**7**
McDonald's	329 S. Bickett Blvd.	**5**
Burger King	332 S. Bickett Blvd.	**6**
El Perico	336 S. Bickett Blvd.	**1**
Mexican	**?**	**1**
Waffle House	343 S. Bickett Blvd.	**2**
Bojangles	12 Golden Leaf Dr.	**4**
Go to All Restaurants in study area		**4**
Other	**Address of Business**	**Number**
Travel during work		**1**
Bank (BB&T)	512 S. Bickett Blvd.	**1**
Cutting grass along this segment		**1**
General stores here and there in the segment		**1**

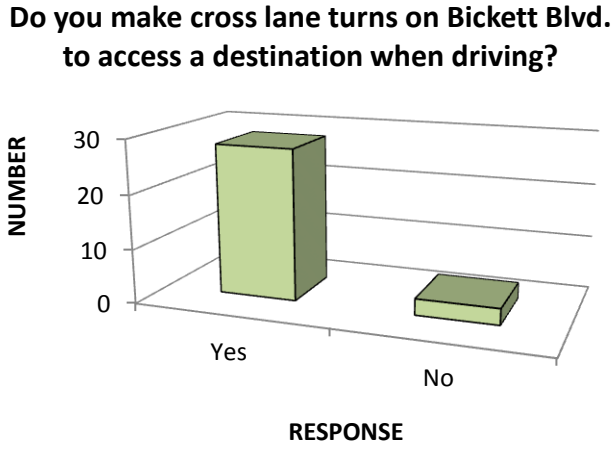
4. How do you rate present conditions for driving along this 1.37 mile segment of Bickett Boulevard? (One answer circled per respondent)

Rating of driving conditions along 1.37 mile segment	Number
Excellent	**3**
Average	**22**
Poor	**6**

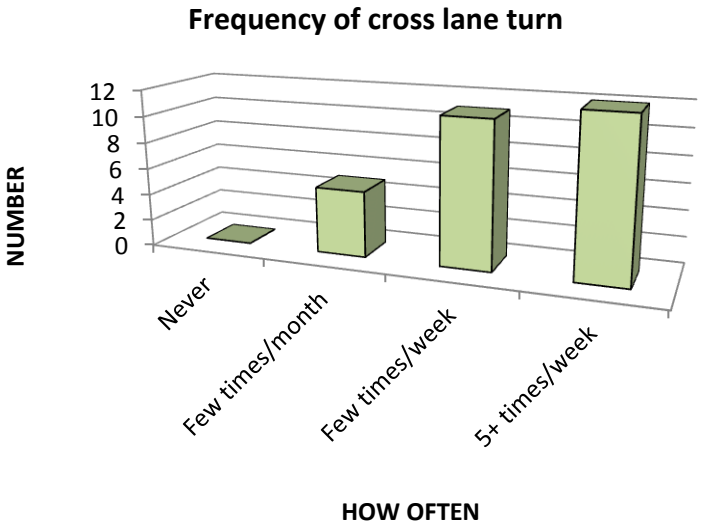


5. **Do you make cross lane turns on Bickett Boulevard to access a destination when driving? (One answer circled per respondent)**

Cross lane turns to access destination	Number
Yes	**28**
No	**3**

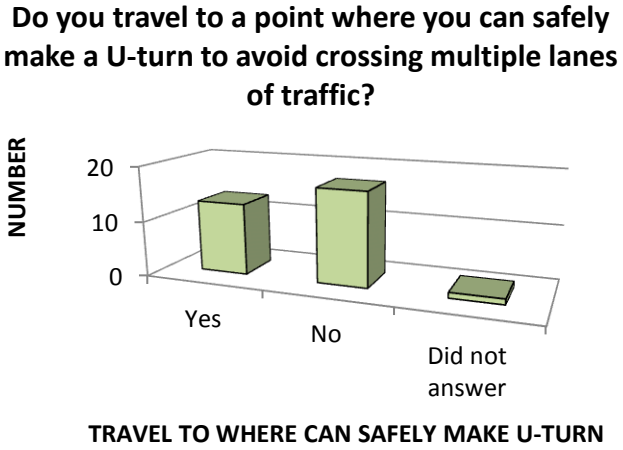


If yes, how often do you cross lane turn when traveling on this segment of Bickett Boulevard? (Respondent circled one answer if responded yes)



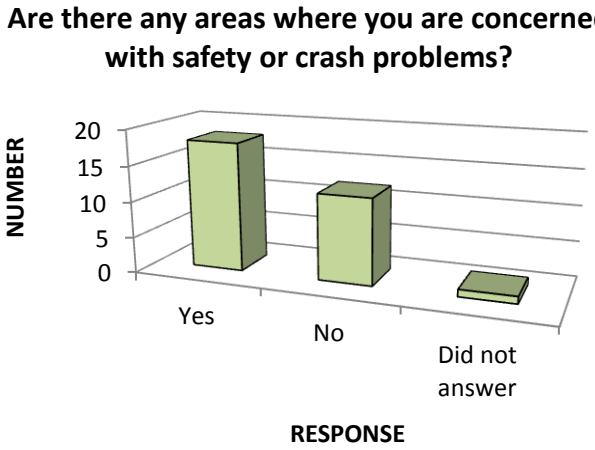
6. **Do you travel to a point where you can safely make a U-turn in order to avoid crossing multiple lanes of traffic when driving?**
   (One answer circled per respondent)

Travel to where can safely make U-turn	Number
Yes	**13**
No	**17**
Did not answer	**1**



7. **Are there any areas along this 1.37 mile segment of Bickett Boulevard where you are concerned with safety or crash problems? (One answer circled per respondent)**

Are there areas where you are concerned with safety or crash problems?	Number
Yes	**18**
No	**12**
Did not answer	**1**



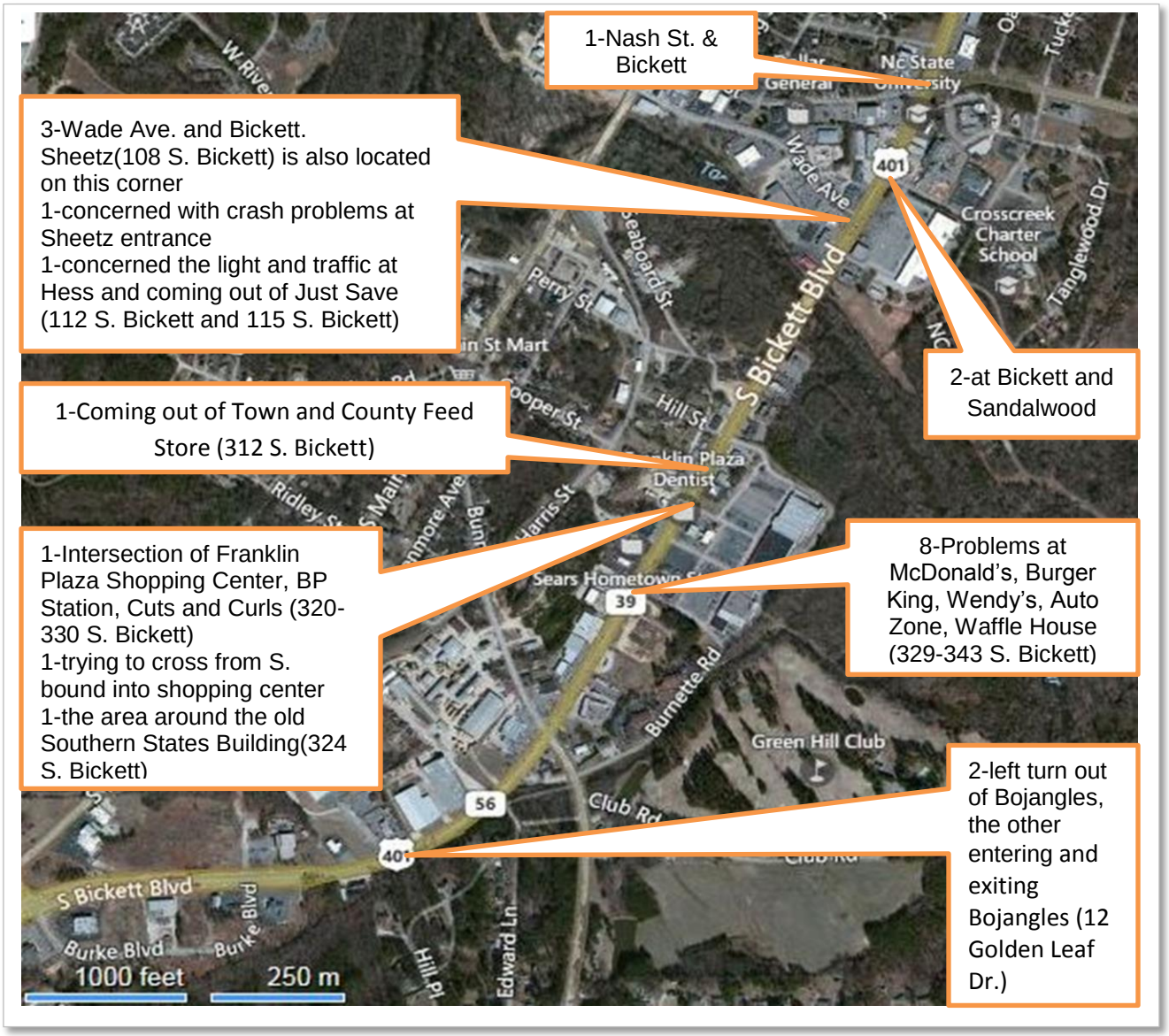
Of the 18 respondents that answered yes, the following location descriptions were given regarding areas of concern for safety or crash problems along this segment of Bickett (some repondents gave multiple locations):

- Everywhere/All of it (2 respondents were concerned about safety and crashes along the entire 1.37 mile route)
- "I just drive careful."
- Detailed comment on the **intersection of Sandalwood Drive and Bickett**: "I have seen a lot of accidents there and since Sheetz is on the other side and they have a drive located across from the road. It's sometimes very hard to get out."
- Detailed comment on the area around Wendy's and McDonald's: "When someone is trying to turn into McDonald's and Wendy's at the same time from opposite directions (there is concern about crashes as the turn land gets backed up)".

Outside of Study Area:

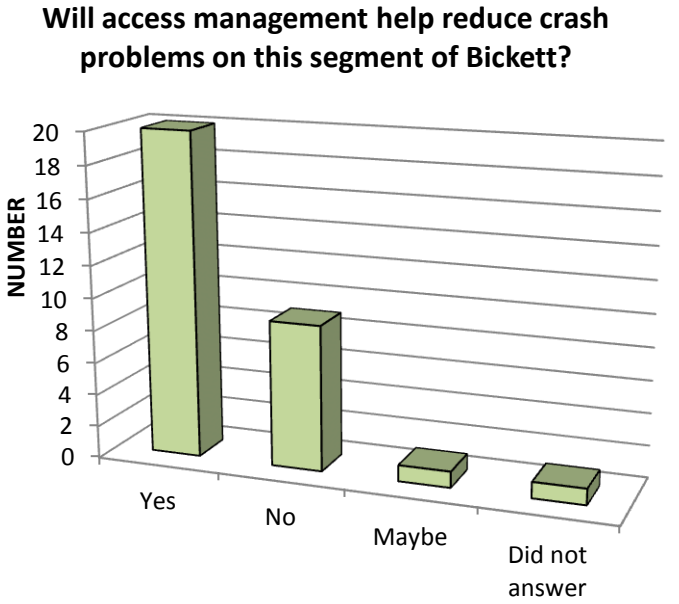
- Left turns from Bickett onto Noble St.

Areas Referred to in Question 7 Responses that were of Concern for Safety or Crash Problems (numbers refer to the number of times mentioned)



8. **Crash problems can be reduced by access management, where medians are added in the central turn lane with breaks for left turns and U-turns, consolidating some driveways, improving intersections and adding stop lights with signalized crossings. Do you think that access management would help on this segment of Bickett Boulevard?**
   (One answer circled per respondent)

Will access management help reduce crash problems on this segment of Bickett?	Number
Yes	**20**
No	**9**
Did not answer	**1**
Maybe	**1**

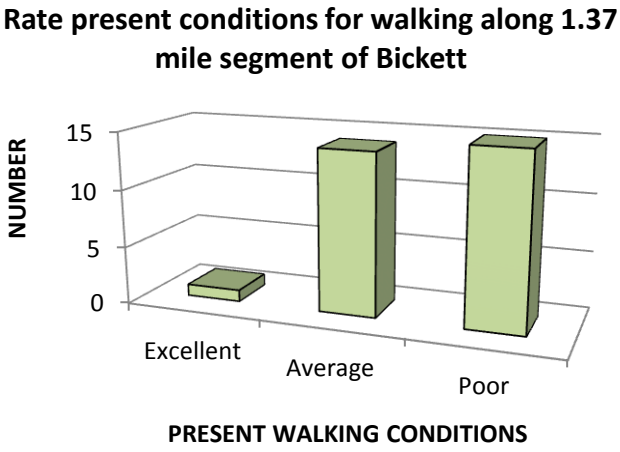


WILL ACCESS MANAGEMENT REDUCE CRASH PROBLEMS?

9. How do you rate present conditions for walking along this 1.37 mile segment of Bickett Boulevard? (One answer circled per respondent)

Rate present conditions for walking along 1.37 mile segment of Bickett	Number
Excellent	**1**
Average	**14**
Poor	**15**

One qualified answer: Average except poor from Trade Mart (112 S. Bickett Blvd.) to Nash St.



10. What improvements could be made for pedestrians along this 1.37 mile segment of Bickett Boulevard?(Respondents circled all answers that applied)

Pedestrian improvements along 1.37 mile Bickett segment	Number
Improved sidewalks	**15**
Constructing new sidewalks to join with existing, so on both sides of street	**19**
Marked and signalized ped xings at key intersections	**18**
Other (breakdown)	**5**
Overhead ped xing(bridge)	1
Ped signals & lights	1
Add a bike lane	1
Marked & signalized xings, both sides of street	1
Marked & signalized xings at key intersections	1**(named intersections)***

***The named intersections** for marked and signalized pedestrian crossings were:

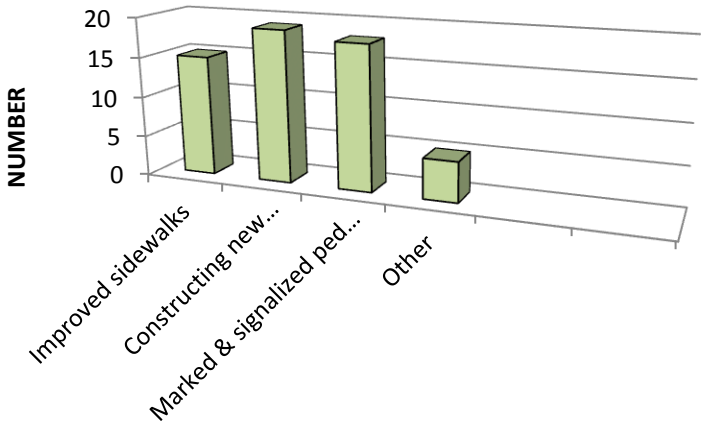
Nash St. and Bickett

Johnson and Bickett

Bunn Rd. and Bickett

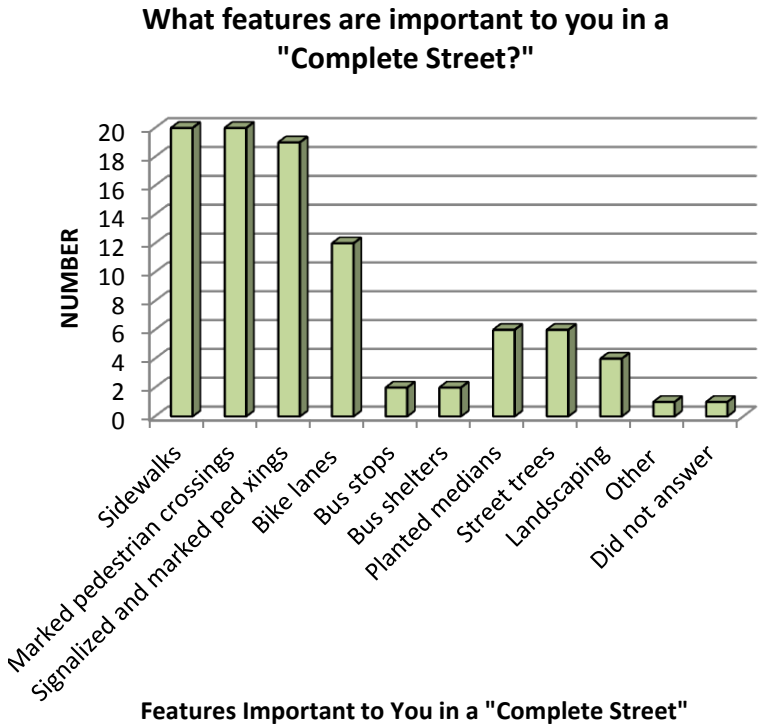
Burke Blvd. and Bickett

What improvements could be made for pedestrians along this 1.37 mile segment of Bickett?



11. In addition to vehicles like cars and trucks, a "Complete Street" provides for all forms of transportation (pedestrian, bicycles and buses) and accommodates all types of users to provide safe access to destinations for everyone no matter how they travel. What features are important to you in a "Complete Street?"
(Respondents circled all answers that applied)

Features important to you in a "Complete Street"	Number
Sidewalks	**20**
Marked pedestrian crossings	**20**
Signalized **and** marked ped xings	**19**
Bike lanes	**12**
Bus stops	**2**
Bus shelters	**2**
Planted medians	**6**
Street trees	**6**
Landscaping	**4**
Other	**1**(Need taxi or bus service in this area)
Did not answer	**1**



12. Please list any other comments or concerns that you think would minimize crashes and reduce congestion on this 1.37 mile segment of Bickett Boulevard between Burke Boulevard and Nash Streets as well as any other improvement that you think would have a positive impact.

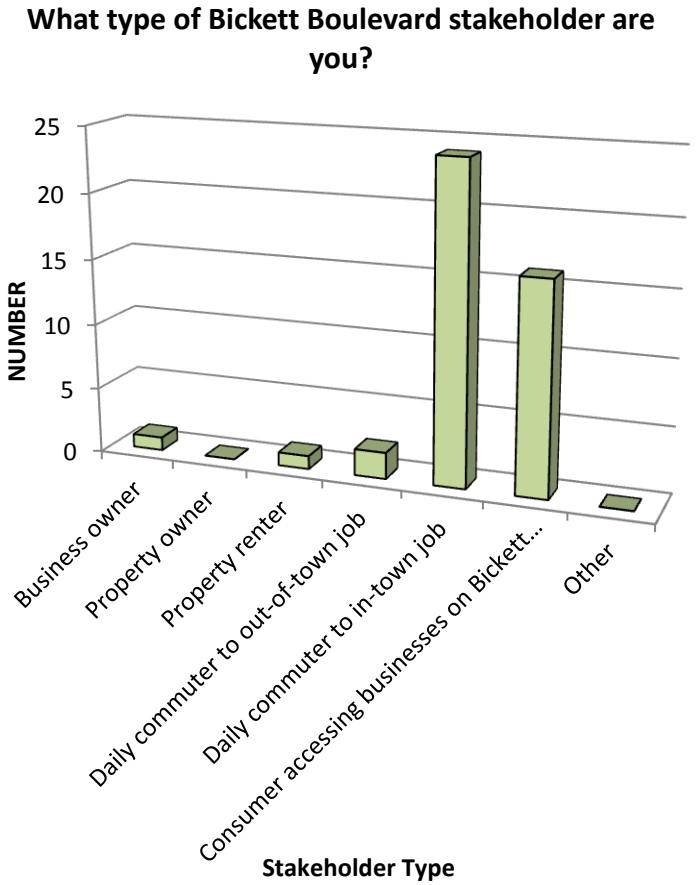
26 respondents did not answer this question. Of those that did answer, their comments were:

- Coming out of Nash and making a left turn onto Bickett is dangerous
- Vehicles coming from NC56 onto Nash come in speeding
- Reduce speed limit on Bickett (2 respondents)
- Intersection of Wade Ave. and Bickett needs attention with cars turning
- Cars coming out of the shopping center make turns when it is not their turn and cause wrecks
- Concerned with tractor trailers making a right turn off NC56 onto Bickett Boulevard at CVS
- Traffic backs up at South Main Street onto NC56 left turn
- Uniform signage is needed
- We need low (income) transportation assistance. Maybe the town can provide a shuttle service. I would drive it from 8am to 4pm and maybe from 4pm to 8pm or 9pm.
- Buy a van that will only provide transportation around town. Henderson has one and hopefully we can get one.

Optional Questions:

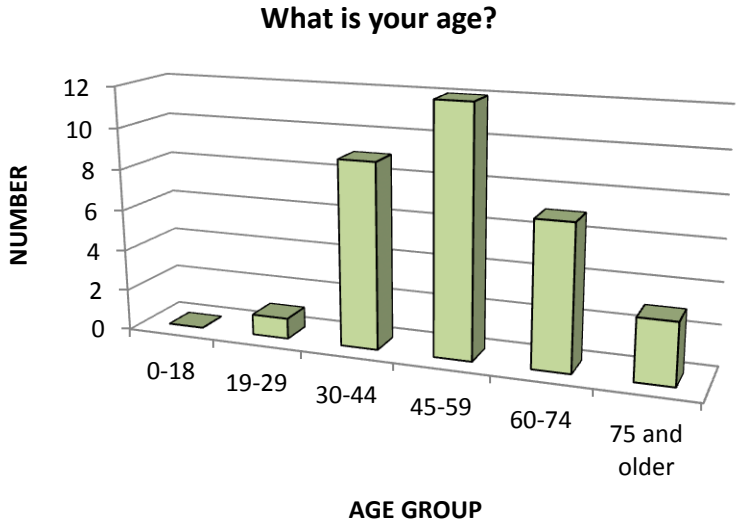
13. What type of Bickett Boulevard stakeholder are you?
(All that applied per respondent were circled)

Stakeholder Type	Number
Business owner	**1**
Property owner	**0**
Property renter	**1**
Daily commuter to out-of-town job	**2**
Daily commuter to in-town job	**24**
Consumer accessing business on Bickett Boulevard	**16**
Other	**0**



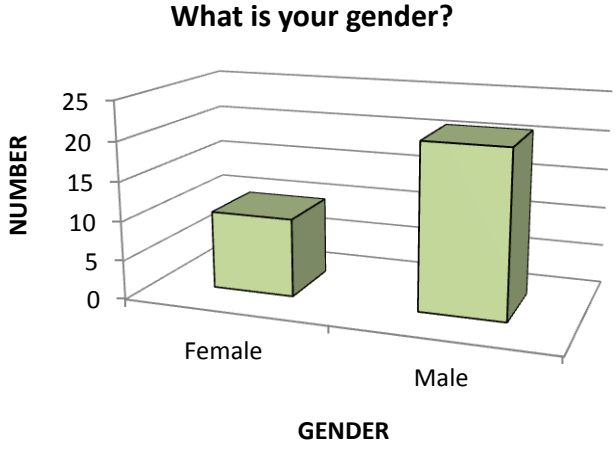
14. What is your age? (One answer circled per respondent)

Age	Number
1-18	**0**
19-29	**1**
30-44	**9**
45-59	**12**
60-74	**7**
75 and older	**3**



15. What is your gender?

Gender	Number
Female	**10**
Male	**21**



6.4 NCDOT Congestion Management Group Conceptual Alternatives with Schematic Diagrams

US 401 (Bickett Boulevard) Safety and Congestion Management Improvements

Background

NCDOT Congestion Management was requested by the Town of Louisburg, NC to provide conceptual ideas to mitigate safety and congestion issues identified by Town official and various stakeholders. Herein lies three alternatives of varying breadth and implementation requirements.

Alternative 1

A majority of the locations identified as safety concerns are located around the Franklin Plaza area, with numerous driveways providing full access movements over a short distance the opportunity exists for many conflict points.

- Consolidate Southern States driveways into one driveway opposite Franklin Plaza main entrance and add as the 4th leg of the existing signal
- Install median from 750' south of Franklin Plaza main entrance to 350' north of Hill Street/Franklin Plaza entrance 3
- Convert driveways in area to RIRO
- Provide u-turn facilities at northern and southern termini of median

Alternative 2

This alternative builds on the concepts of **Alternative 1** and extends the median north to the Tar River bridge and beyond the NC 39/SR 1230 (Bunn Road) intersection to the south. An increased superstreet implementation along the corridor further increases safety by reducing conflict points and reduces travel time by providing increased phase lengths for the north and south thru movements.

- Implement **Alternative 1** items
- Install median from 600' south of NC 39/SR 1230 (Bunn Road) to beyond Carter Band & Trust
- Construct backage road behind 4 properties north of Franklin Plaza and close accesses on US 401
- Construct u-turn facility 350' north of Hill Street/Franklin Plaza entrance 3,
- Construct u-turn facility 750' south of Franklin Plaza main entrance
- Construct u-turn facility 600' south of NC 39/SR 1230 (Bunn Road)

Alternative 3

This alternative further builds on **Alternatives 1 & 2** by transitioning the study area corridor into a superstreet. Along with construction of the superstreet other alternative intersection concepts are implemented to benefit access management and the performance of the superstreet.

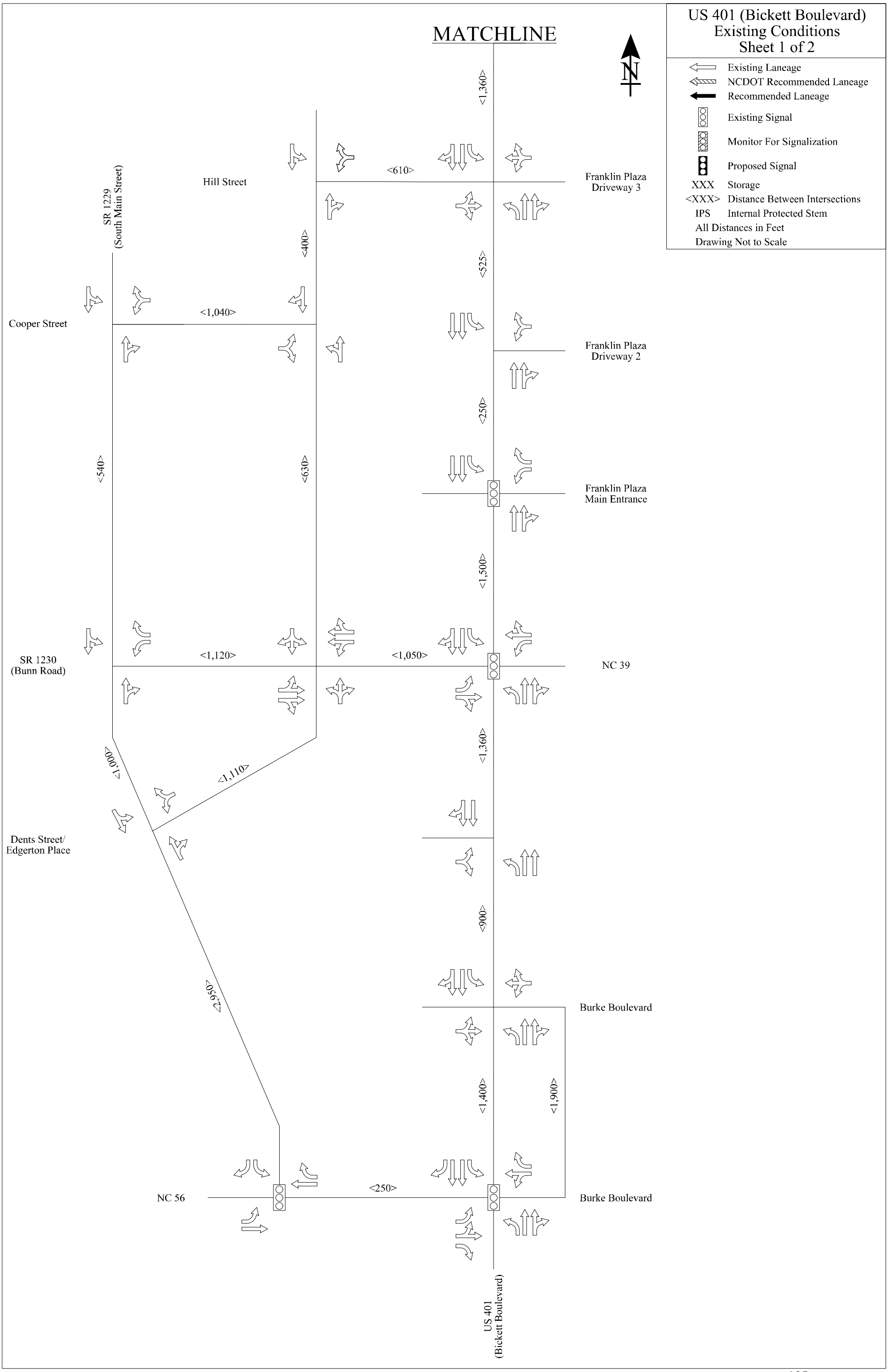
- Implement **Alternative 1 & 2** items
- Install median throughout entire study area corridor
- Provide truck access to Franklin Times
    - Construct truck access for Franklin Times off of Sandalwood Avenue, if feasible; or,
    - Construct southbound leftover with a 2 phase signal and place sensor downstream in the storage bay for the truck to activate the signal before backing in; or,
    - Construct southbound leftover like above with a flashing beacon instead of a signal and a sign that reads 'Truck Entering When Flashing' installed on northbound US 401 in advance of the leftover
- Utilize Nash/Wade/Johnson as a quadrant intersection concept instead of mainline u-turn point
- Construct/provide back access to buildings north of Sheetz and west of US 401 via Johnson Street
- Utilize accesses for buildings south of Sheetz via Johnson Street and close accesses on US 401
- Convert both CVS driveways to right-in/right-out
- Construct u-turn facility 650' north of NC 56/581/SR 1231 (East Nash Street)

Summary

These alternatives are a conceptual representation of possible solutions. No safety analysis and no capacity analysis have been performed at this time. In general, any effort to reduce access points along this corridor will aid in benefitting safety. A capacity analysis should be performed for this corridor as some concepts may prove more effective than others.

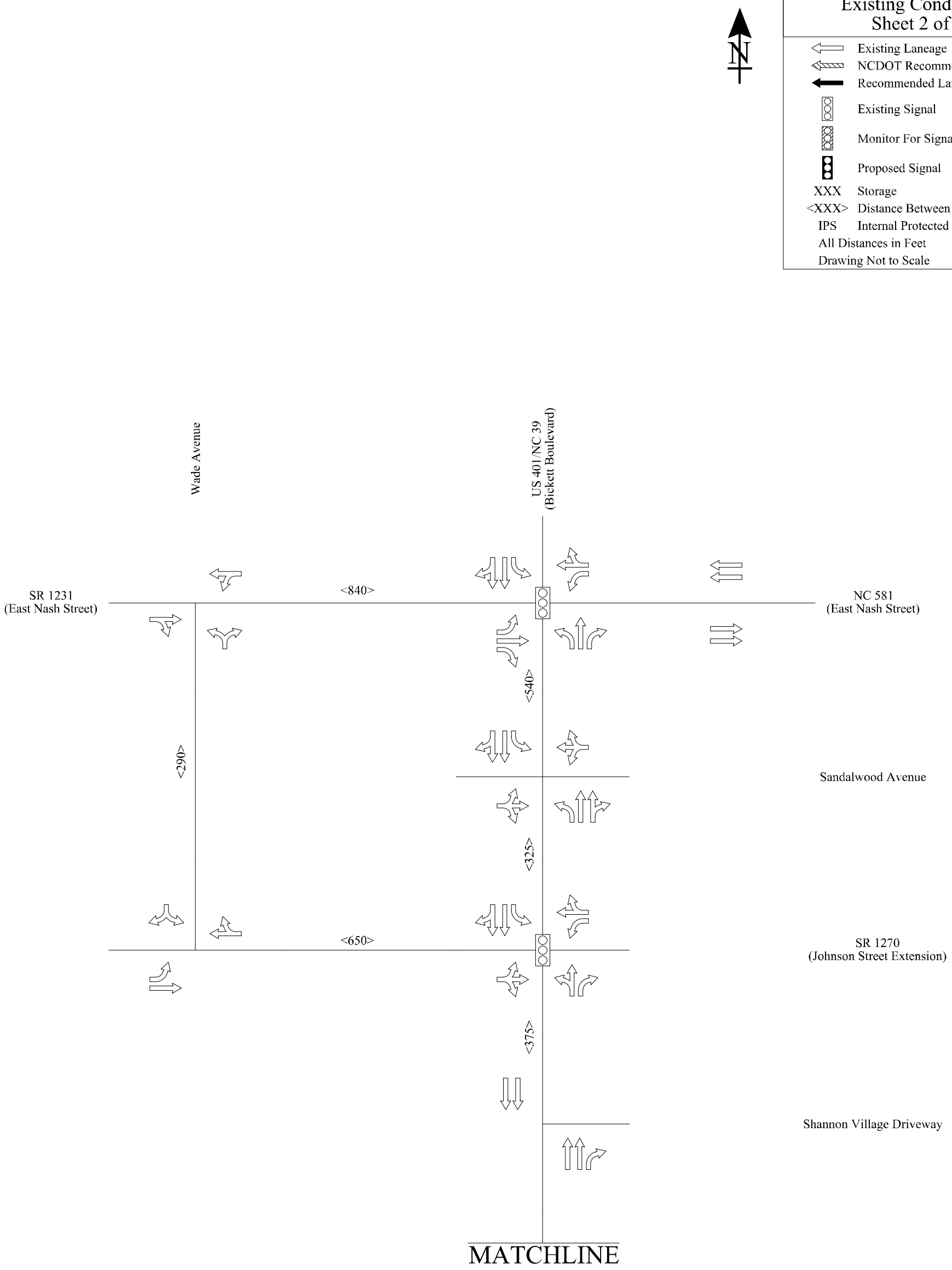
US 401 (Bickett Boulevard)
Existing Conditions
Sheet 1 of 2

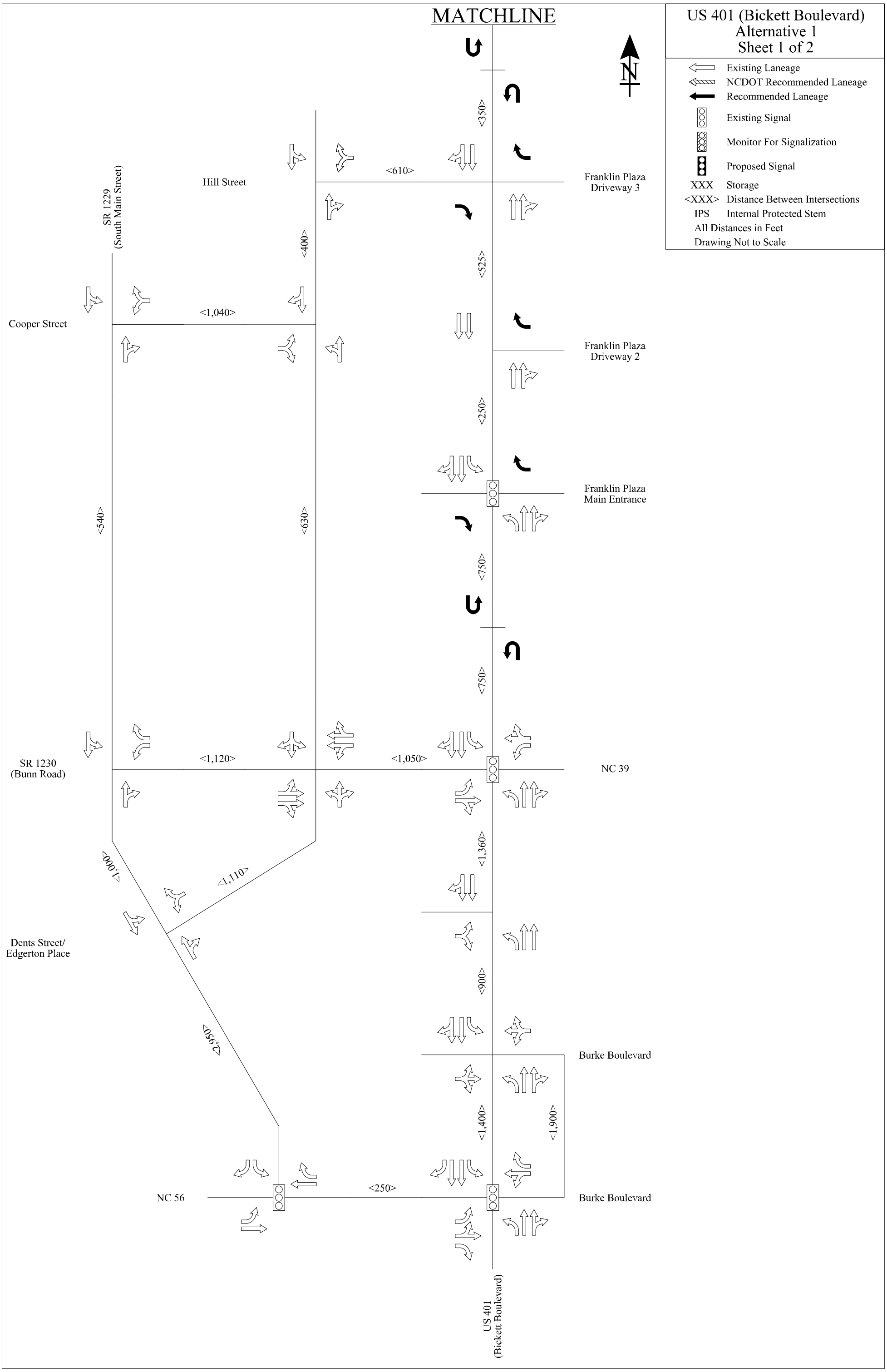
- Existing Laneage
- NCDOT Recommended Laneage
- Recommended Laneage
- Existing Signal
- Monitor For Signalization
- Proposed Signal
- XXX Storage
- <XXX> Distance Between Intersections
- IPS Internal Protected Stem
- All Distances in Feet
- Drawing Not to Scale



US 401 (Bickett Boulevard)
Existing Conditions
Sheet 2 of 2

Existing Laneage
NCDOT Recommended Laneage
Recommended Laneage
Existing Signal
Monitor For Signalization
Proposed Signal
XXX Storage
<XXX> Distance Between Intersections
IPS Internal Protected Stem
All Distances in Feet
Drawing Not to Scale




MATCHLINE
US 401 (Bickett Boulevard)
Alternative 1
Sheet 1 of 2
Existing Laneage
NCDOT Recommended Laneage
Recommended Laneage
Existing Signal
Monitor For Signalization
Proposed Signal
XXX Storage
<XXX> Distance Between Intersections
IPS Internal Protected Stem
All Distances in Feet
Drawing Not to Scale
N
SR 1229
(South Main Street)
Hill Street
Cooper Street
Franklin Plaza
Driveway 3
Franklin Plaza
Driveway 2
Franklin Plaza
Main Entrance
SR 1230
(Bunn Road)
NC 39
Dents Street/
Edgerton Place
NC 56
Burke Boulevard
Burke Boulevard
US 401
(Bickett Boulevard)
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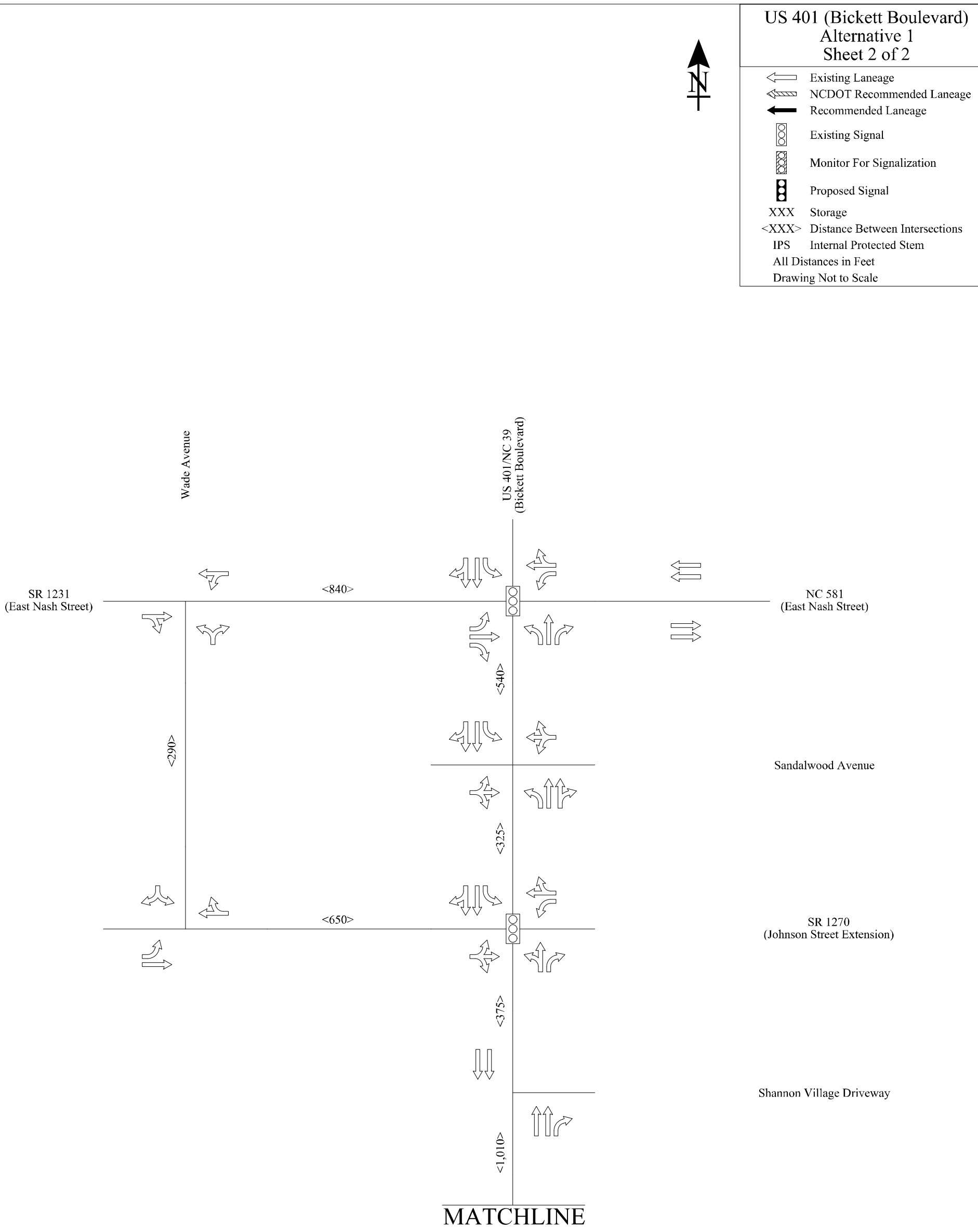
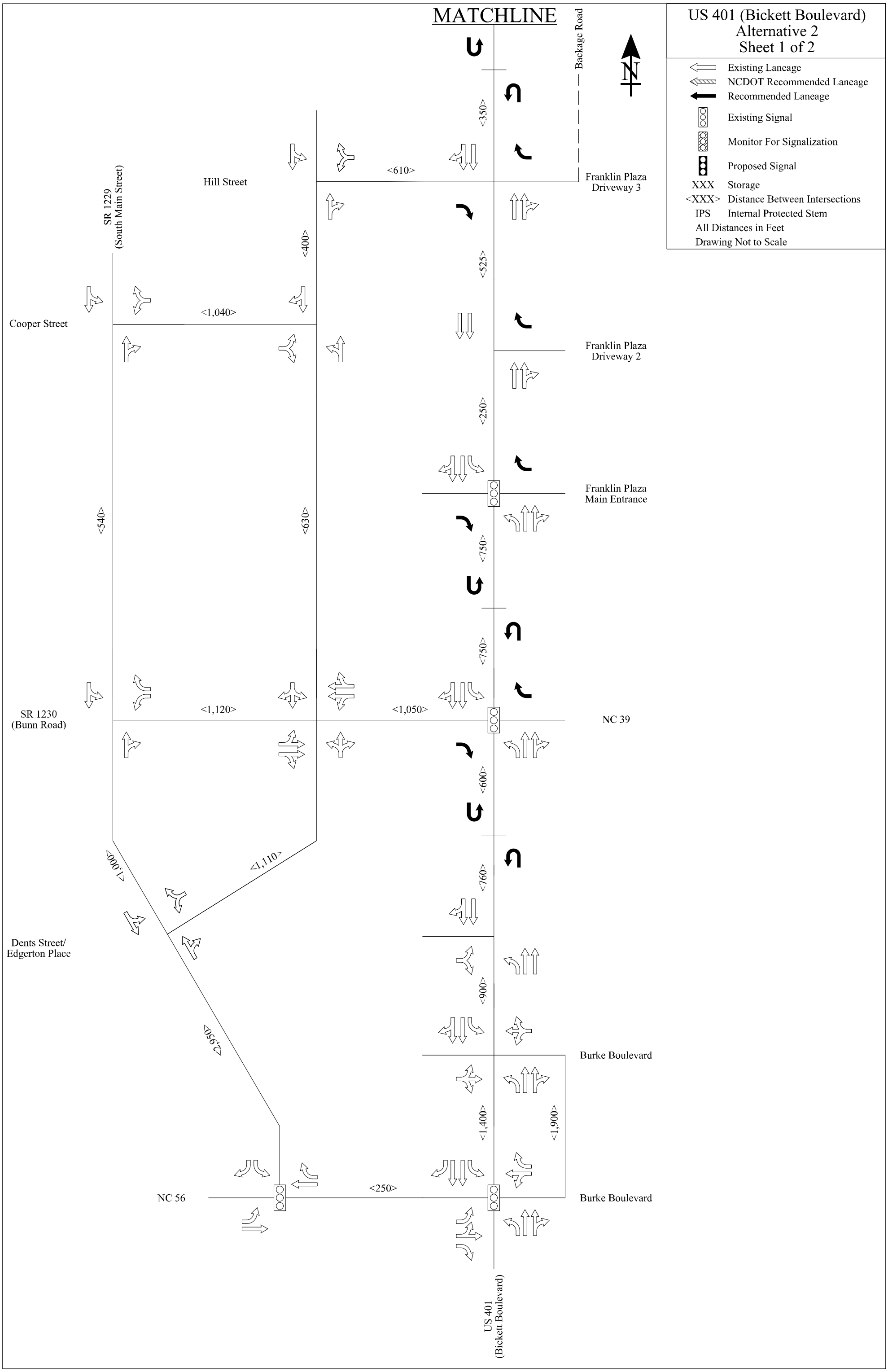
US 401 (Bickett Boulevard)
Alternative 1
Sheet 2 of 2




MATCHLINE
US 401 (Bickett Boulevard)
Alternative 2
Sheet 1 of 2
Existing Laneage
NCDOT Recommended Laneage
Recommended Laneage
Existing Signal
Monitor For Signalization
Proposed Signal
XXX Storage
<XXX> Distance Between Intersections
IPS Internal Protected Stem
All Distances in Feet
Drawing Not to Scale
N
Backage Road
Franklin Plaza Driveway 3
Franklin Plaza Driveway 2
Franklin Plaza Main Entrance
Hill Street
SR 1229 (South Main Street)
Cooper Street
SR 1230 (Bunn Road)
NC 39
NC 56
Burke Boulevard
Burke Boulevard
Dents Street/ Edgerton Place
US 401 (Bickett Boulevard)
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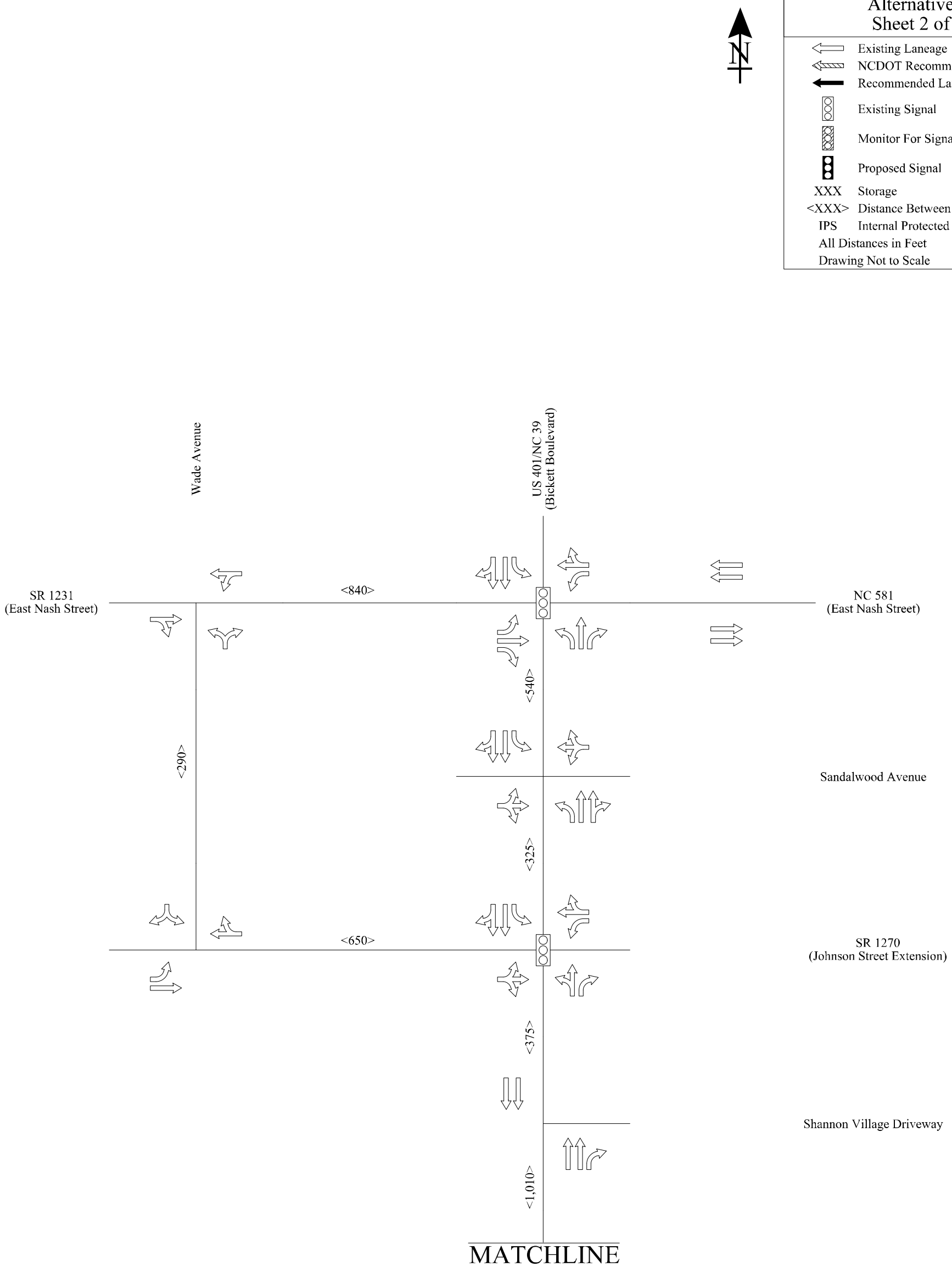
US 401 (Bickett Boulevard)
Alternative 2
Sheet 2 of 2

Existing Laneage
NCDOT Recommended Laneage
Recommended Laneage
Existing Signal
Monitor For Signalization
Proposed Signal
XXX Storage
<XXX> Distance Between Intersections
IPS Internal Protected Stem
All Distances in Feet
Drawing Not to Scale



US 401 (Bickett Boulevard)
Alternative 3
Sheet 1 of 2

Existing Laneage
NCDOT Recommended Laneage
Recommended Laneage
Existing Signal
Monitor For Signalization
Proposed Signal
XXX Storage
<XXX> Distance Between Intersections
IPS Internal Protected Stem
All Distances in Feet
Drawing Not to Scale

MATCHLINE

Backage Road

N

<350>

Hill Street

<610>

Franklin Plaza
Driveway 3

SR 1229
(South Main Street)

<400>

<525>

<1,040>

Cooper Street

Franklin Plaza
Driveway 2

<250>

Franklin Plaza
Main Entrance

<540>

<630>

<750>

<750>

SR 1230
(Bunn Road)

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NC 39

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<760>

<1,000>

<1,110>

Dents Street/
Edgerton Place

<900>

<2,950>

Burke Boulevard

<1,400>

<1,900>

NC 56

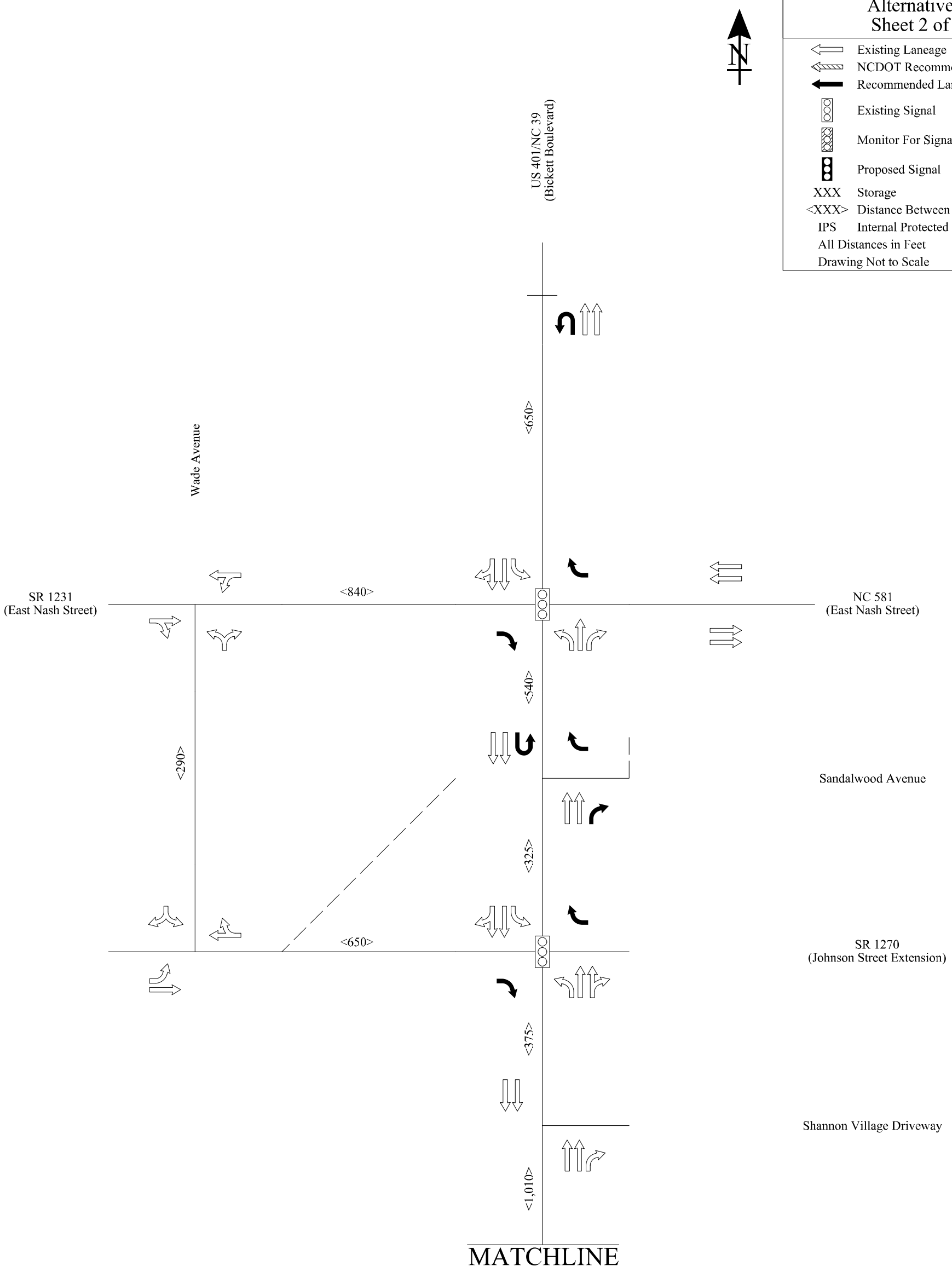
<250>

Burke Boulevard

US 401
(Bickett Boulevard)

US 401 (Bickett Boulevard)
Alternative 3
Sheet 2 of 2

Existing Laneage
NCDOT Recommended Laneage
Recommended Laneage
Existing Signal
Monitor For Signalization
Proposed Signal
XXX Storage
<XXX> Distance Between Intersections
IPS Internal Protected Stem
All Distances in Feet
Drawing Not to Scale



6.5 Glossary of Terms

6.5 Glossary of Terms

AADT-Annual Average Daily Traffic measures volume for all lanes in both directions passing a point on the highway system. It represents the average of all days during the year with typical traffic conditions. An AADT estimate is generated using procedures that comply with the standards specified in the Traffic Monitoring Guide published by the Federal Highway Administration.

Access Management- A collection of techniques that have been proven over time to improve safety, reduce traffic congestion and keep or improve the existing road capacity by guiding the type, design and location of access to properties.

ADA-Americans with Disabilities Act

CMAQ-Congestion Mitigation and Air Quality Improvement Program: a federal program that supports surface transportation improvement projects and other related efforts that contribute to air quality improvements and congestion relief

Complete Streets-Complete Streets is North Carolina's approach to interdependent, multi-modal transportation networks that safely accommodate access and travel for all users, including cyclists and pedestrians.

Connectivity-the ability to travel to desired destinations

CTAA-Community Transportation Association of America

CTP -Comprehensive Transportation Plan

Economic Prosperity-the ability to create a more competitive business climate, provide a good quality of life and to move people and goods efficiently

KARTS-Kerr Area Transportation Authority

Mobility-the ability to move safely, efficiently and unimpeded

NCDOT-North Carolina Department of Transportation

SPOT-Strategic Prioritization Office of Transportation, part of the NCDOT

6.6 Sources

6.6 Sources

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