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Greeting:

The Raleigh Police Department conducts Crime Prevention through Environmental Design (CPTED) evaluations free as a public service to the residents of Raleigh North Carolina. The mission of the Raleigh Police Department's Community Policing Program is to assist community members with non-emergency issues ranging from quality of life violations to nuisance abatement and various other concerns. Community police officers also act as liaisons for Raleigh residents, assisting them with addressing concerns to other city government offices through the use of our Community Oriented Government (COG) program. In an attempt to best serve the public community police officers strive to form partnerships with local businesses and residents to best approach all problems and issues. The use of CPTED evaluations are just one part of the Raleigh Police Department's crime prevention strategies and will be supplemented with continued police presence, enforcement and assistance. For any and all additional requests or needs please contact the Raleigh Police Department at 919-996-3335, and you will be directed to your local district office.

Disclaimer

This security survey has been conducted as a public service of the Raleigh Police Department's Crime Prevention and Community Policing Program. The information contained herein is based on guidelines set by the N.C. Governors' Crime Commission and the National Institute for Crime Prevention and the observations of the individuals conducting the survey. All recommendations contained herein are provided strictly as a courtesy and not as an obligation. The recommendations detailed in this report are based on the research and experience and experience of the conducting officer, and the City of Raleigh makes no representations as to the accuracy or reliability of any information contained in this report. The City of Raleigh shall assume no liability for any errors, omissions, or inaccuracies in the report, regardless of the action taken or not taken in reliance on the recommendations provided herein. The City of Raleigh makes no guarantees or warranties, express or implied, that crime will be reduced or eliminated in the event that recommendations contained in this report are adopted.

ALL NEW CONSTRUCTION OR RETROFITS SHOULD COMPLY WITH EXISTING BUILDING CODES, ZONING LAWS AND FIRE CODES. PRIOR TO INSTALLATION OR MODIFICATIONS THE PROPER LICENCES AND VARIANCES SHOULD BE OBTAINED AND INSPECTIONS SHOULD BE CONDUCTED BY THE APPROPRIATE AGENCY. (1)

About the Author:

Senior Officer KA Kratzer has been employed with the Raleigh Police Department for six years and has spent his entire career working in the Southeast District of the city. Officer Kratzer has accumulated over 950 hours of additional non-mandatory training and has acquired numerous training certificates including multiple professional certifications to include anti-terrorism officer, training officer, critical incident officer, criminal investigator specialist, FEMA instructor and advanced CPTED through the National Institute for Crime Prevention. Officer Kratzer has obtained a bachelor's degree in criminal justice from Kutztown University in Pennsylvania and is nearing completion for a master's degree in intelligence studies from the American Military University. After spending four years on patrol responding to 911 emergency calls he was transferred to the Community Police Squad, where the focus shifted from reactive to proactive enforcement and encouraged engagement from community members and leaders. As a function of this office, Officer Kratzer has been trained to perform CPTED evaluations on residences, businesses and city owned properties.

Crime Prevention through Environmental Design – CPTED

CPTED is defined as the proper design and effective use of the built environment that can lead to a reduction in the fear and incidence of crime and an improvement in the quality of life. The goal of CPTED is to reduce opportunities for crime that may be inherent in the design of structures or in the design of neighborhoods. This is accomplished by physically inspecting all areas of a purposed site, from the common areas to restricted zones and everything in-between. Many structures and communities are constructed with the intentions of easy accessibility, personal comfort and reduced costs; however, crime prevention is often left out of the planning stages and consequently, inherent flaws or neglected areas develop. The goal of this evaluation was to identify any possible features in the current physical design of the site which could be improved to facilitate reduced criminal activity. Inherent in most structures are design flaws which encourage abnormal (suspect) users to migrate to and congregate in specific areas for the purposes of engaging in nefarious activities. The areas of concentration for this evaluation included the perimeter, parking areas, utility lighting and general public spaces. CPTED recommendations hope to improve physical structures in four areas which are the four main principles of CPTED: natural surveillance, natural access control, territorial reinforcement and maintenance. (2)

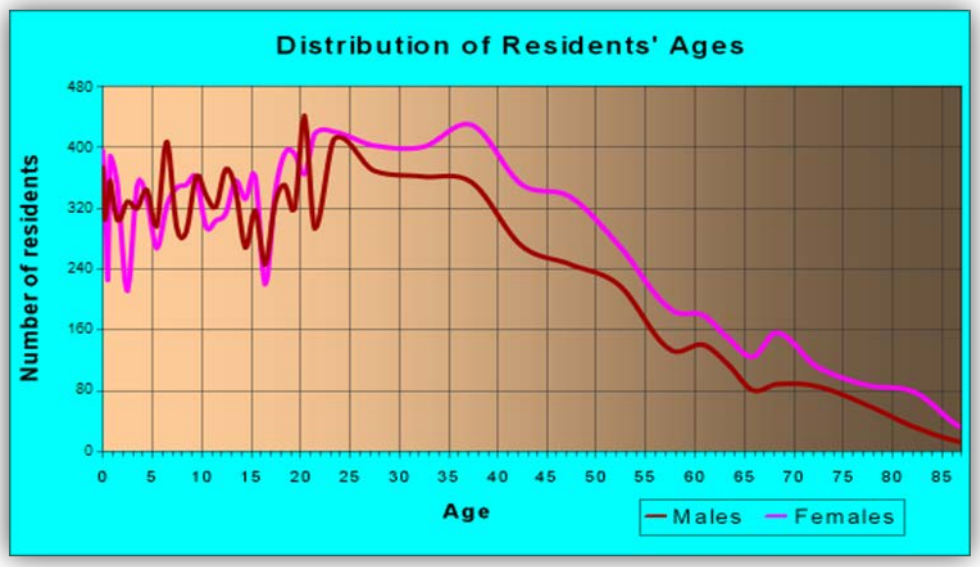
Through natural surveillance an increase in total visibility throughout the site is desired, decreasing the possibility that activity will go unnoticed and increasing the risk factor for abnormal users. Natural access control

seeks to improve the ability of individuals to navigate through the site, easily finding their destination and avoiding loitering and trespassing. Territorial reinforcement works with the concept that people are less likely to view a site as a target if it is cleared marked, identified and controlled. Knowing that an entity cares for the property and is invested in it decreases the possibility that abnormal users will use it for loitering, trespassing or as an area to perform various other criminal acts. Lastly, maintenance simply states that once all three of the above features have been addressed, proper upkeep must be performed to ensure that the prescribed measures stay in place. Maintenance is nothing more than replacing burned out light bulbs and trimming shrubbery and the lawn. The totality of these principles assist property owners and the police department in reducing not only the incidence of crime, but the incorporated fear of same while improving quality of life. Each section will be covered in more detail following a review of the site location, usage and threat assessment.

The Multi-facets of CPTED

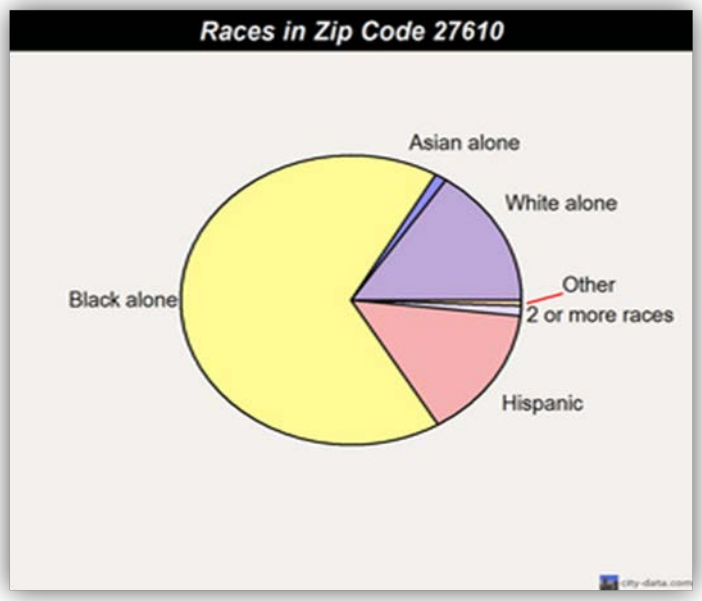
Demographics:

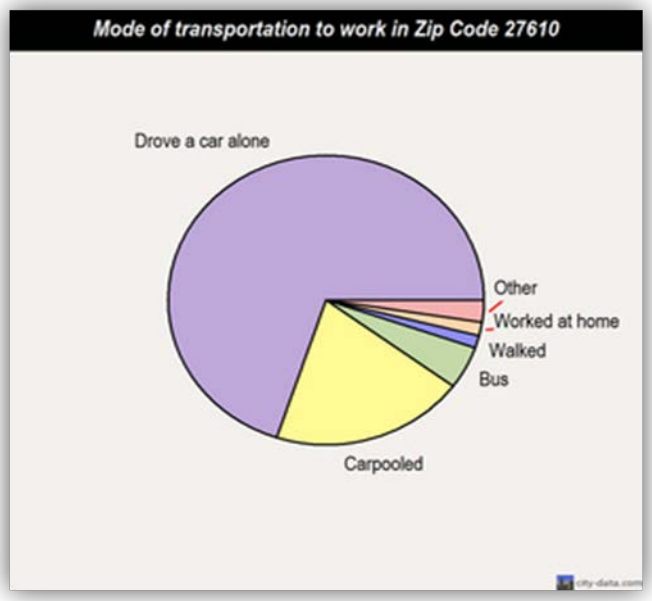
The demographics section of this evaluation is included simply to impress upon the reader a better understanding of the individuals residing within the study area. The graphs and figures included in this evaluation document the distribution of resident's ages, races, modes of transportation, household values and incomes for citizens residing within the 27610 zip code of Raleigh North Carolina.



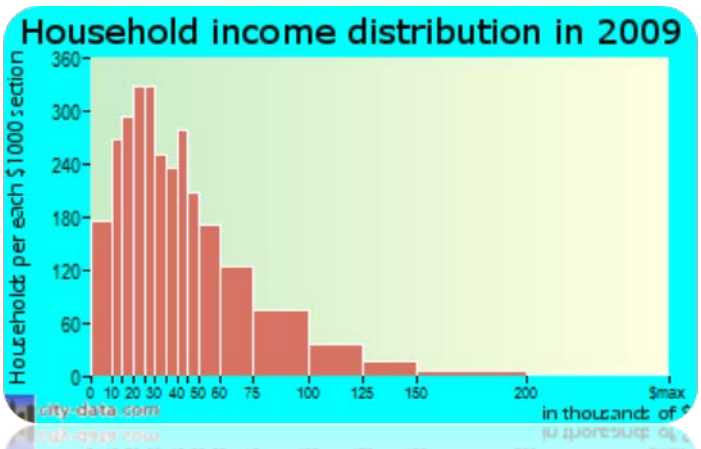
Residents age distribution in zip code 27610: Majority fall from18-40

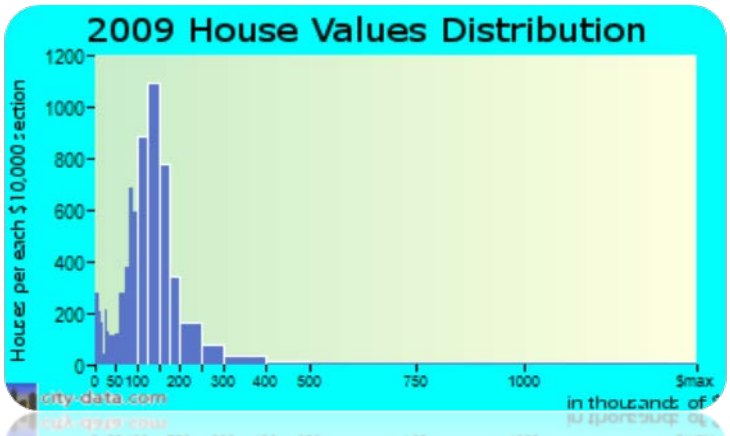
What can be observed from this information is that the majority of residents falls between 18-40 years of age and are of African American heritage. It can also be seen that residents of the 27610 zip code mainly possess individual transportation with public transportation utilized by a small portion of the population. It should also be noticed that the greatest percentage of household income distribution lie below 60 thousand per household.





A). Distribution in order: Black, White, Hispanic, Asian, Other zip code 27610
B). Breakdown of Mode of Transportation for zip code 27610





Household income Distribution and House Values: Zip Code 27610

Threat/Risk Assessment:

This crime prevention survey was performed at the request of the City of Raleigh Planning Department. Due to the upcoming New Bern Corridor Project it was concluded that a complete assessment be executed to determine any areas which may pose hazards or potential areas of criminal concern. Since the projects scope includes streets, residential areas, businesses and public and private areas, there were many issues which required consideration as part of this threat assessment. This section of the evaluation will highlight some of the key trends and criminal issues which were examined prior to initiating the CPTED evaluation. For a proper evaluation to be completed, the officer first must be aware of the environment in which the study area is contained to better understand the elements which will influence the day to day occurrences within that area.

The first consideration which must be accounted for is the size of the target area. The greater the physical distance involved, the more difficult it is to supply an effective coverage of resources. While a small community can be properly patrolled by a single unit, a sprawling commercial area will demand attention from several officers. The New Bern corridor area spans four police patrol zones or beats. This is important because for each officer, only a section of New Bern Avenue is part of their larger patrol zones, which include other commercial and residential areas. The second consideration is accessibility. When analyzing commercial crime, the ease in which offenders can access a site and then escape is important. The New Bern corridor is connected to five major roads including Milburnie Road, Poole Road, Raleigh Boulevard, Sunnybrook Road and King Charles Road as well as many other local streets. As a major thorough fare to the downtown area, New Bern Avenue's access can continue to lead to commercial larcenies and vehicular traffic/accidents. Access control problems could arise here since it will be difficult to properly direct flows when the corridor is accessible from a plethora of points.

New Bern Avenue is also faced with a multitude of challenges/threats to physical and personal security. There is a gang population surrounding the immediate area leading to an increase in related crimes with more than six different gangs having been already identified. Because of the size of the corridor and the commercial nature, it is difficult for citizens and police to quickly and easily discern between legitimate and illegitimate users. One of the primary concerns associated with gang members in commercial areas is gang loitering. With gang loitering follows many other possible crimes such as narcotic distribution, assaults, damage to property, larcenies and violent crimes such as robberies, as well as residential burglaries. In CPTED, individuals accessing an area are categorized into two areas, normal users and abnormal users.

Normal users or consumers are the individuals who are rightfully at a location, residents who live in an area, consumers who are actively shopping or purchasing goods or services at business, etc. Abnormal or illegitimate users are those who are not rightfully in the spaces they occupy, such as trespassers, loiterers individuals engaged in criminal activity. To coincide with the gang issue is the homeless population, which frequents the New Bern corridor. Raleigh city codes allow for individuals to beg once they have obtained the proper permit imposing some restrictions on times and locations allowed. Most beggars in this area are permitted and well aware of the limitations and will continue to populate commercial areas for the purposes of soliciting money from potential customers. If vagrants establish in this area, property crimes and quality of life violations, such as public alcohol consumption and trespassing, tend to follow.

This evaluation will address each problem area identified in the New Bern corridor with recommendations and possible target hardening solutions in an attempt for crime prevention and reduction. The following sections will address the primary principles of CPTED to include territorial reinforcement, natural access control, natural surveillance and maintenance. Each principle will be identified and explained, followed by a site assessment in each category with recommendations to increase security measures.

Crime Analysis

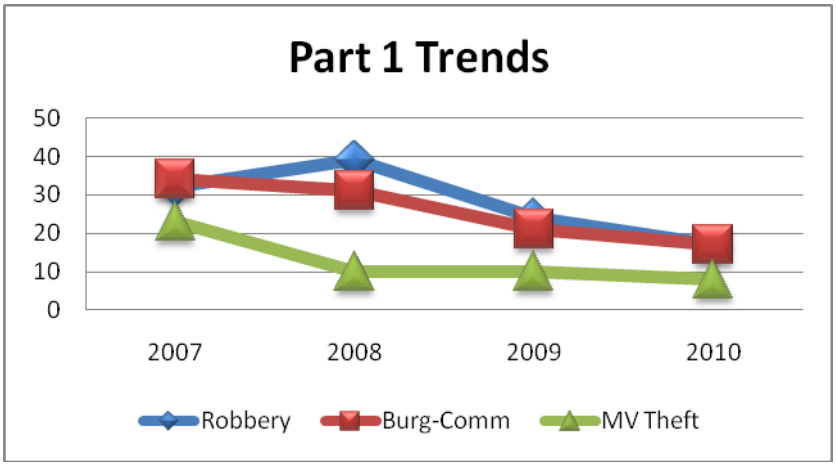
This section covers the crime analysis which was completed on the New Bern Corridor study area and will detail a historical review of the area and display the current crime environment. The first part of the analysis will show a four-year review of Part One and Part Two crimes in the focus area which was completed by Intelligence Analyst Christian Dixon of the Raleigh Police Intelligence Center (R.I.C.). The Raleigh Police Department's Intelligence Center is the main component of crime analysis and is staffed with civilian intelligence analysts as well as intelligence officers and detectives. The Crime Analysis Unit works with multiple computer programs to extract data or information from databases created by officer's every day. This is accomplished by storing emergency calls for service, reports generated by officers and other various public information services such as tax records, county registry and utility bills. Through these databases analysts are able to retrieve activity in particular areas to help determine what problems are most destructive to the quality of life for citizens and, in turn, play an intricate role in shaping police enforcement and patrol strategies. This section will identify the crimes that have been reported through emergency communications and will list their volume for the last four years. The last four years will be compared against each other to give the reader a better understanding of the current climate in and around New Bern Avenue in regards to criminal activity. Once the initial statistics were completed, I took the information and created easy to understand yearly comparison charts and yearly trend graphs to better assist the reader with comprehension of those statistics.

This second feature of the crime analysis section will also display density maps to help illustrate the facts provided. A density map is a geographic picture of the target area that has been colored or layered to signify higher amounts of activity. For example, if an officer was trying to determine where most of the burglaries were occurring in his patrol area, a density map could be generated to clearly mark which areas have experience little to no activity and those where crimes are rampant. The higher crime areas would be indicated by darker colors, for this department the highest levels would be red as opposed to green which indicates low crime. The density maps generated for this evaluation were created by Crime Analyst Melissa Cabrera. The density maps will focus solely on the years of 2009 and 2010 covering both Part One and Part Two crimes. Focusing here on the previous two years will assist in accurately assessing and predicting future trends. This tool is also the best for applying the collected crime information and trends against proposed plans to appraise their integrity and security.

Part One Crimes	2007	2008	2009	2010	1 Year % Change	2 Year % Change	3 Year % Change
Murder	1	1	0	0	N/C	-100%	-100%
Rape	2	3	1	2	100%	-33%	0%
Robbery	32	39	24	17	-29%	-56%	-47%
Agg Assault	30	31	41	32	-22%	3%	7%
Violent Crime	65	74	66	51	-23%	-31%	-22%
Larceny from MV	37	31	46	25	-46%	-19%	-32%
Larceny	108	71	89	96	8%	35%	-11%
Burg - Res	14	14	7	8	14%	-43%	-43%
Burg - Comm	34	31	21	17	-19%	-45%	-50%
MV Theft	23	10	10	8	-20%	-20%	-65%
Total	216	157	173	154	-11%	-2%	-29%

Above: Part Once Crimes for the last four years for the New Bern Corridor (3)

The first chart listed above shows the Part One crimes for each of the last four years in the New Bern Corridor area and details the percentage change for each from year to year. Part one crime, such as rapes, robberies, homicides, burglaries, etc., are heinous, mostly violent and higher priority crimes that are less frequent in occurrence. Not all Part One crimes are violent and include higher value property crimes such as residential and commercial burglaries and motor vehicle thefts. It can be seen from the chart that overall part one crimes have reduced in the target area by 29 percent from 2007 to 2010. The statistics show a dramatic decrease from 2007 to 2008 and then a spike in crime during 2009, only to decrease again in 2010. The spike in 2009 can be explained by a sharp increase in larcenies and larcenies from motor vehicles. The chart below demonstrates the three areas with the greatest reduction in numbers: robberies, commercial burglaries and motor vehicle thefts. Each of the areas has decreased over the last four years which can be attributed to target enforcement and high visibility in the area.



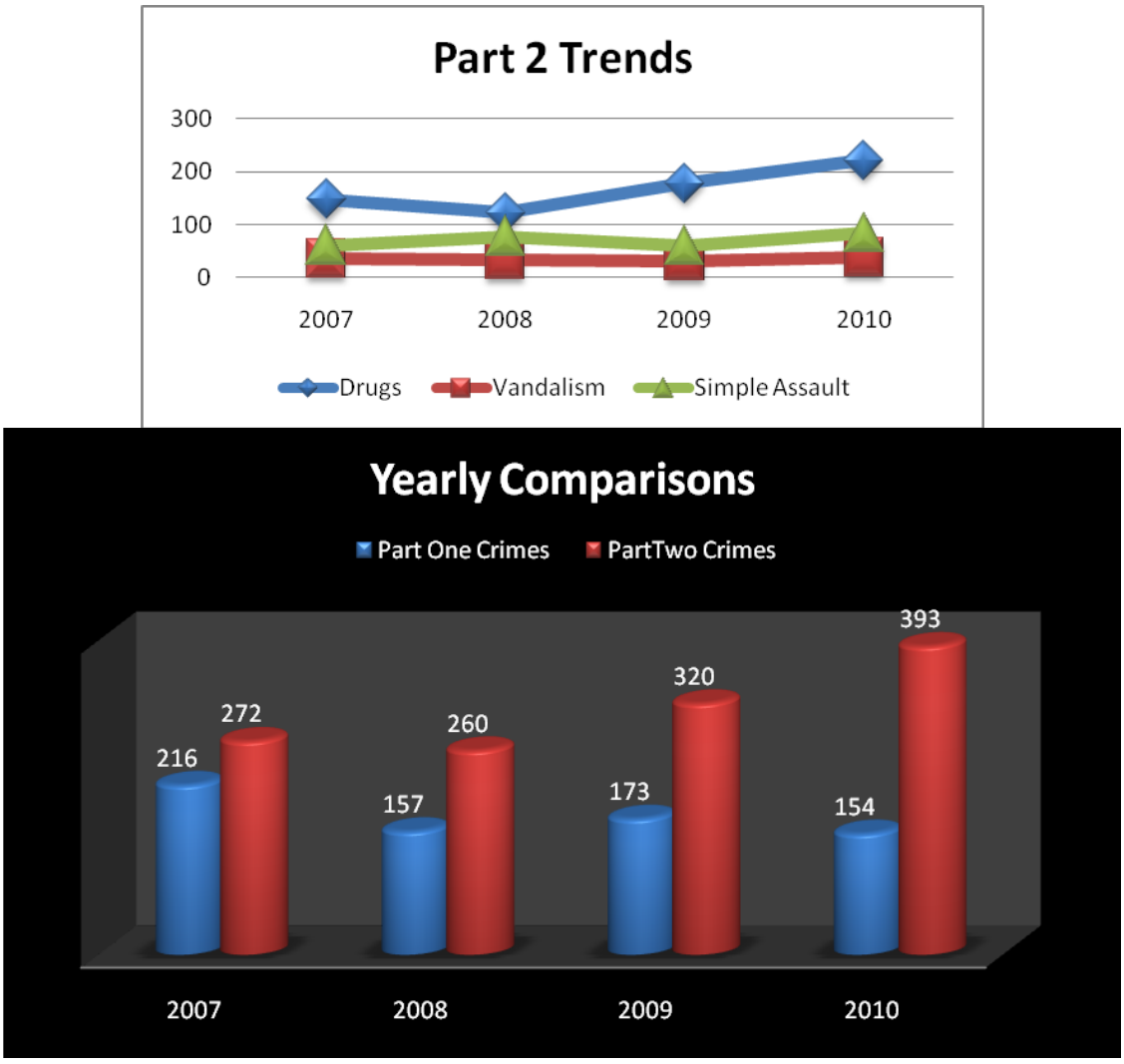
Above: Crime Trends for Robbery, Commercial Burglary and Motor Vehicle Theft

The reduction in Part One crimes for the most part demonstrates that predatory crimes have reduced due to environmental changes. With the addition of new residential housing through the Swain St area, natural surveillance increased creating more community awareness, which was coupled with initiatives to combat the open-air drug market in the Idlewild area with increased foot patrols and specialty enforcement. These combined efforts have been productive in reducing the opportunity for predatory crime in the lower end of the New Bern Corridor. With targeted enforcement there is displacement and increased officer initiated arrests which can be seen by viewing the statistics for Part Two crimes. The chart below demonstrates the percentage change in Part Two crimes in the New Bern Corridor over the past four years. Many of the crimes seen in areas such as College Park, Raleigh North and Idlewild have drifted into the New Bern Corridor area over the past few years and can be seen by the sharp increase in drug offenses and an increase in prostitution and assaults. Part Two crimes seen in this area can be explained largely by the increase of drug enforcement activity. Drug activity acts as a gateway for secondary crimes to occur, closely followed by prostitution, disorderly conduct and weapons violation – all interrelated crimes.

Below: Part Two Crimes for the last four years for the New Bern Corridor (3)

Part Two Crimes	2007	2008	2009	2010	1 Year % Change	2 Year % Change	3 Year % Change
Disorderly Conduct	4	4	6	10	67%	150%	150%
Drugs	148	122	178	221	24%	81%	49%
Prostitution	5	1	11	11	0%	1000%	120%
Shots Fired	12	7	11	9	-18%	29%	-25%
Simple Assault	61	78	60	84	40%	8%	38%
Vandalism	35	34	32	38	19%	12%	9%
Weapons	7	14	22	20	-9%	43%	186%
Total	272	260	320	393	23%	51%	44%

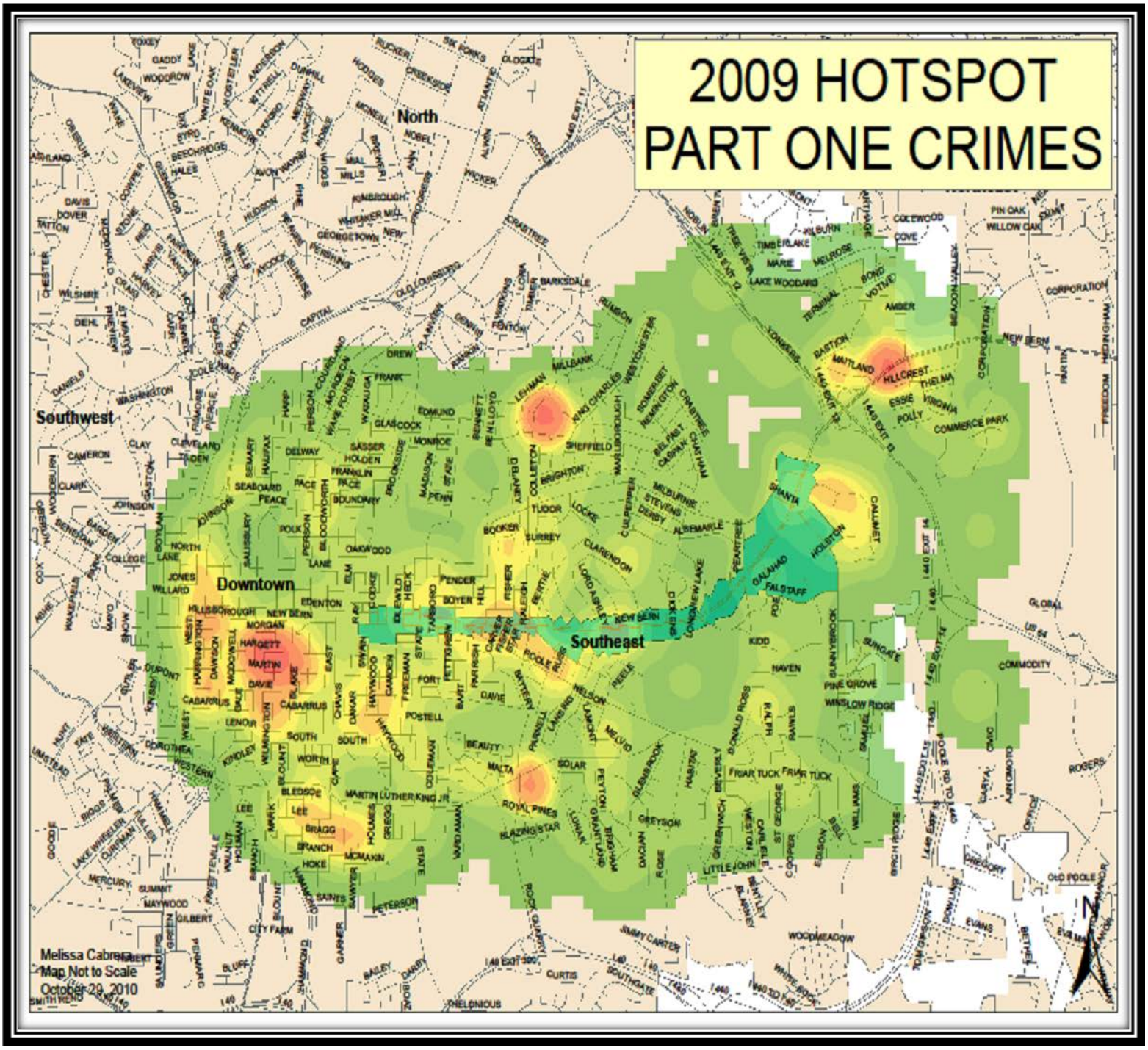
Below: Crime Trends for Drugs, Vandalism and Simple Assaults

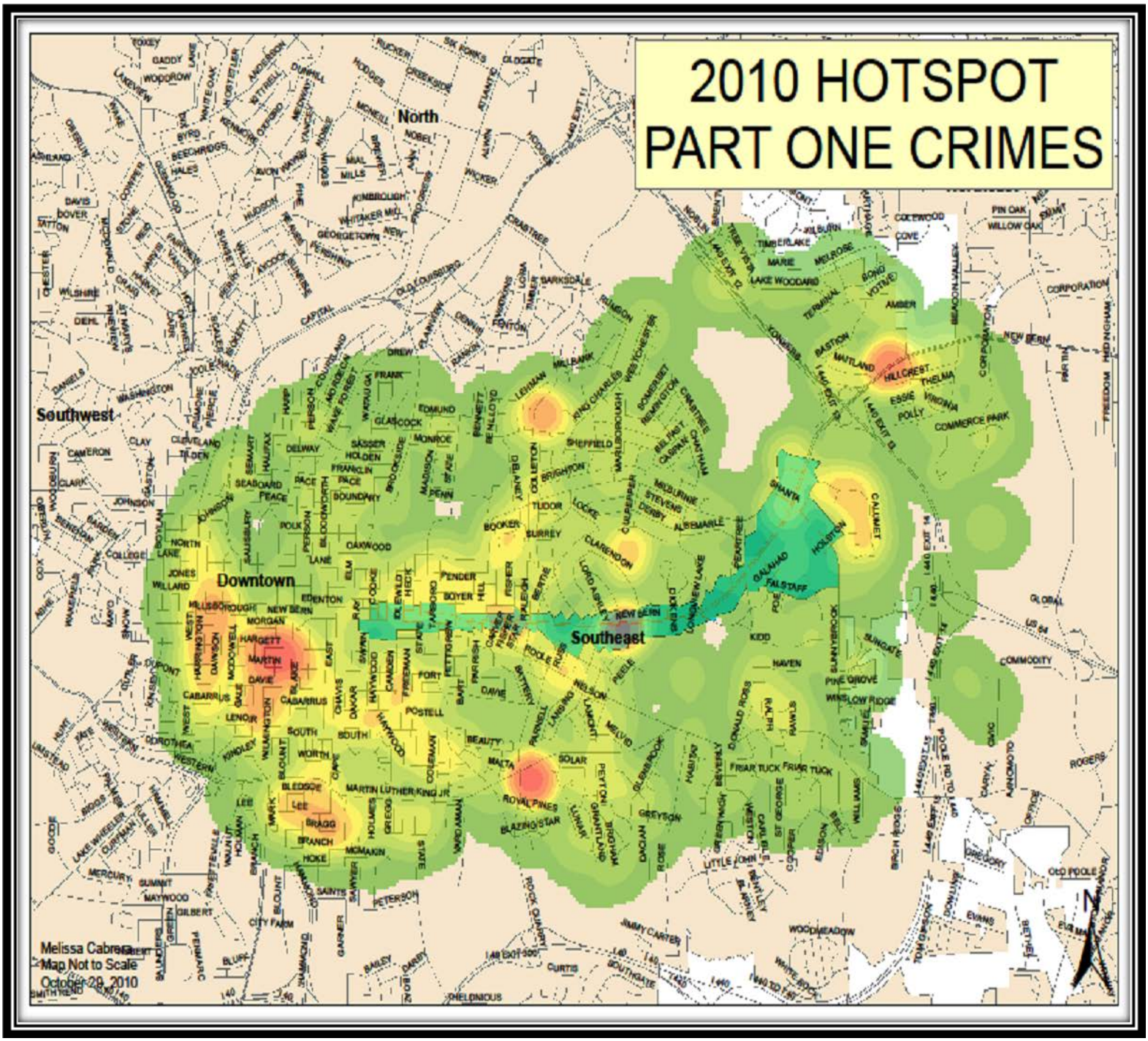


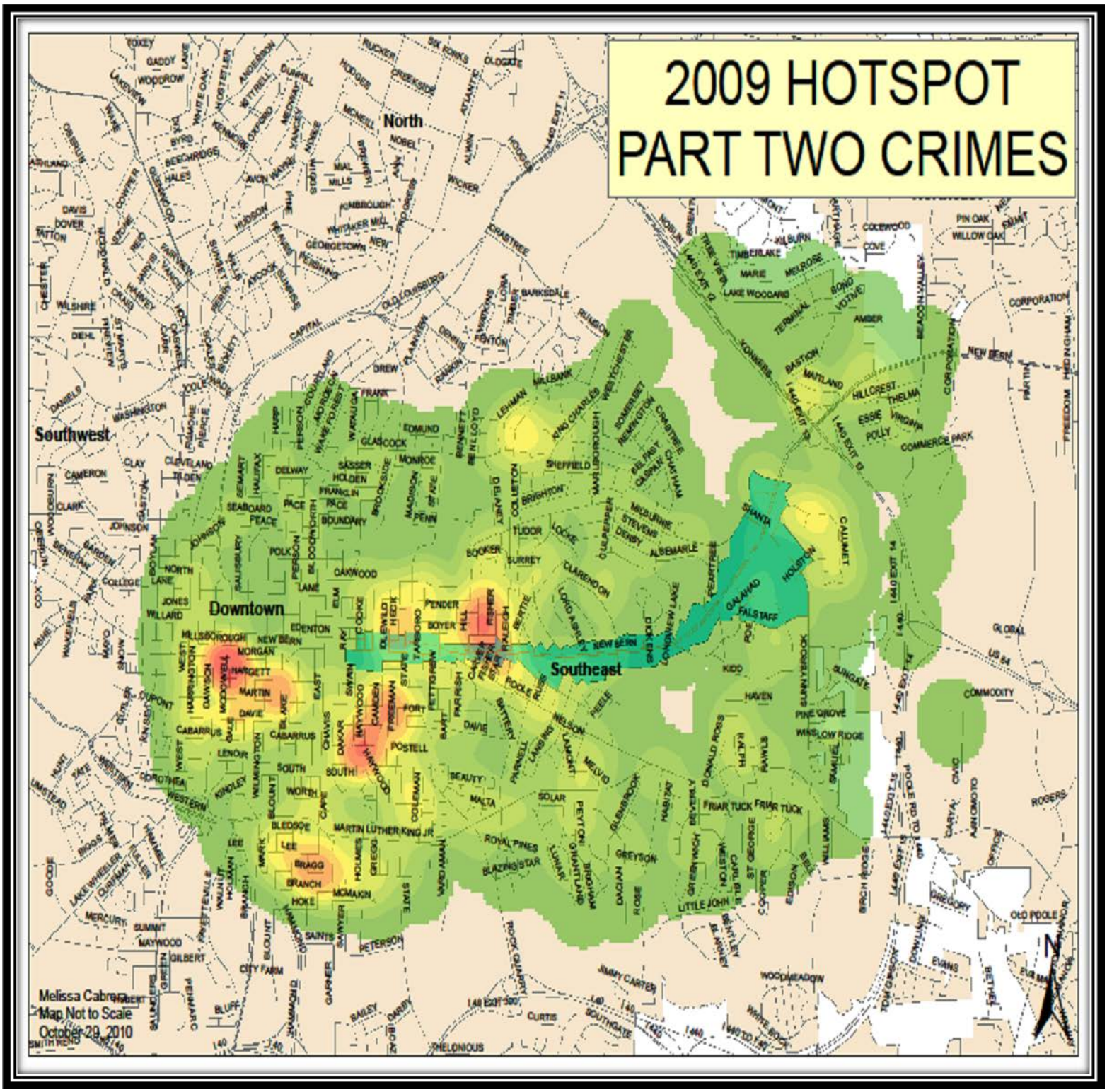
Above: Yearly Comparisons of Part 1 and Part 2 crimes (2007-2010)

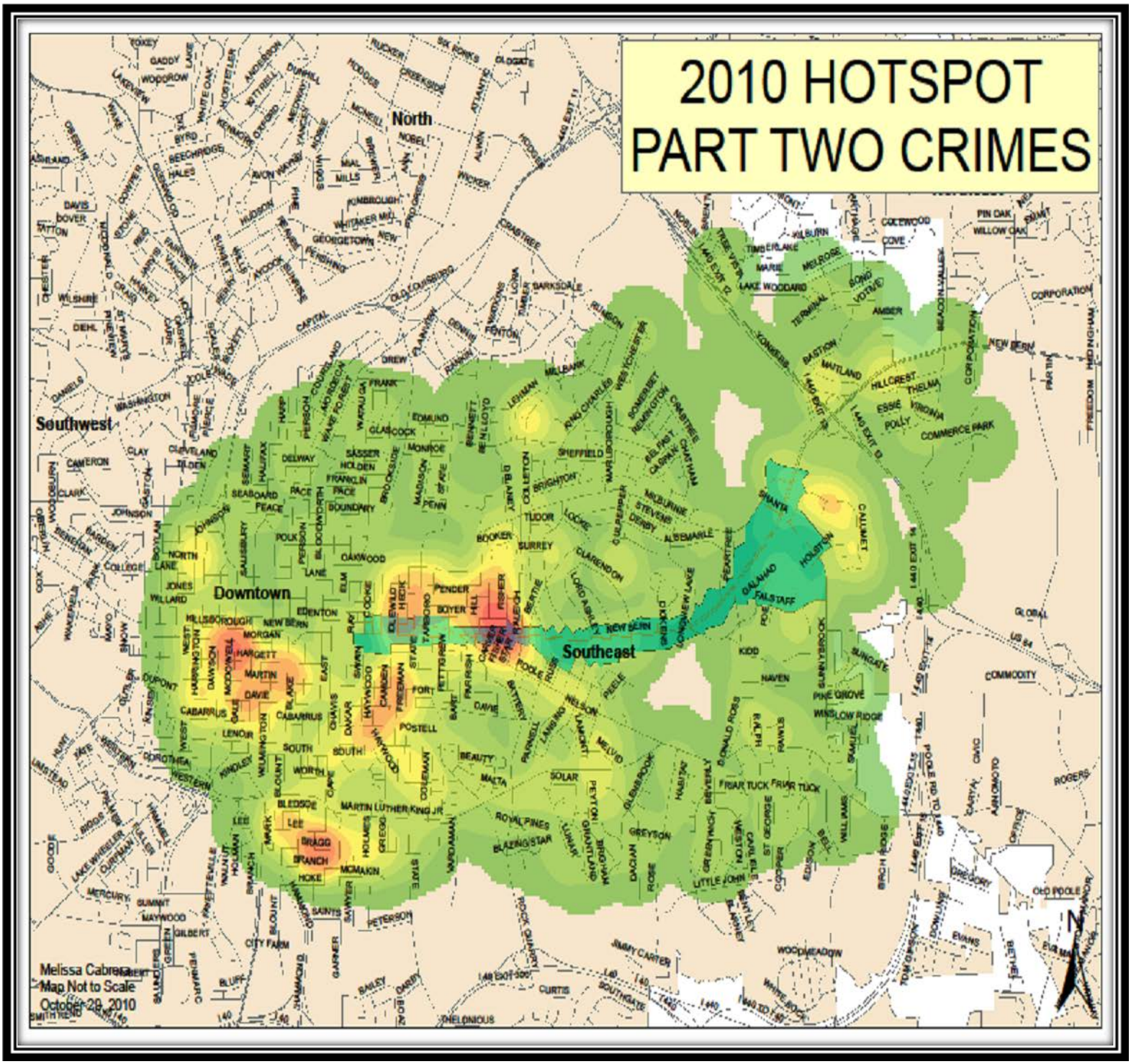
The chart above better demonstrates the overall trend in crime for the New Bern Corridor showing Part One crime decreasing while Part Two crime increases. This trend focuses CPTED efforts of reducing the opportunity for Part Two crimes, mainly crimes involving the loitering of persons and traffic flow from commercial to residential areas. The next few pages contain density maps illustrating the location of the statistics provided above. 2009 and 2010 comparative density maps are listed for both Part One and Part Two crimes. What is striking about these maps is that while Part Two crimes were displaced into the New Bern Corridor and increasing statistics, the areas in which crime occurred did not change. When additional crime came into a vicinity, it localized in traditional areas such as the 1600 block of New Bern Avenue and Longview shopping center. Each of these locations is identified as a focal point due to the businesses in the general vicinity: gas stations, convenience stores and beauty marts. This provides an important note when beginning CPTED evaluations or city planning strategies. While the face of the area may change, the perception of the individuals in and around it has remained the same leading to the belief that similar crimes may occur even after restructuring efforts are completed. All efforts must be made not only to address current

environmental flaws but continue those recommendations through new development. Individual CPTED evaluations will be completed on each business and provided to the business owners and included in this packet.




2010 HOTSPOT
PART ONE CRIMES
North
Southwest
Downtown
Southeast
Melissa Cabrera
Map Not to Scale
October 29, 2010


2009 HOTSPOT
PART TWO CRIMES
North
Southwest
Downtown
Southeast
Melissa Cabrera
Map Not to Scale
October 29, 2010

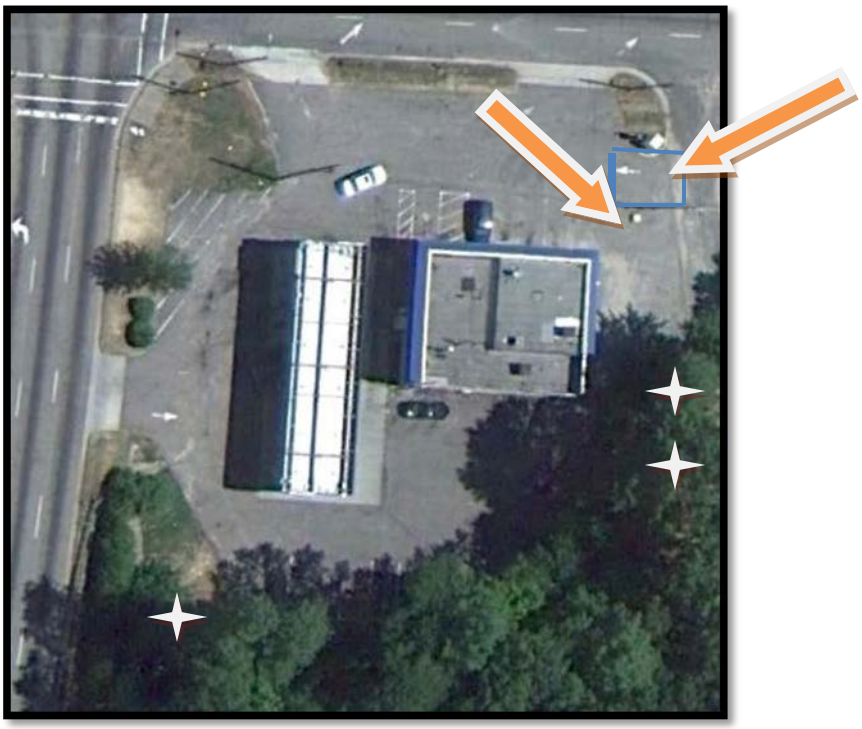


New Bern Corridor Site Plan Recommendations-

1830 New Bern Ave-

The spaces surrounding the business at 1830 New Bern Ave are privately owned property according to Wake Tax records and the business owner. This area presents the most security risks for this property by means of needless access points, storm water flooding concerns and ambush points/dark hiding places. The first concern addressed in this section will be the multiple access points. As a part of the design, the Valero Mart includes two access points from Hawkins Street where only one is needed. This causes traffic confusion as way finding measures have faded and customers are unaware which side to enter into or exit from.

Two vehicular access points from Hawkins Street compromises efficient traffic flow and increases likelihood of collisions. Unnecessary concrete block in parking lot has caused many single car accidents on the property. Worn foot paths have been created at multiple locations around the property due to lack of legitimate sidewalks and walking paths.



The stars represent access points by manmade walking paths. All walking paths are located on city owned property. Unnecessary access points make surveillance and security difficult, since abnormal users cannot be properly monitored.

Recommendation: Eliminate excessive walking paths in the wood line to restrict access (white stars). Also close the first entry from Hawkins Street to eliminate confusion and correctly direct traffic into and out of the business lot (blue box). Remove the cement block located in the middle of the entranceway from Hawkins Street to avoid future vehicular collisions.

The wood line area separating 1830 New Bern Avenue from the Lightner Lane Apartments is privately owned property and is need of attention. The area is completely dark at night and has become a haven for late night drinkers and even serves as a sleeping ground for vagrants. The area is littered with trash and discarded mattresses. Proper maintenance is needed to clean out the area, while some form of overhead lighting is needed to illuminate the area at night and discourage vagrants from congregating. The fence line between the lot and the apartment complex has also been cut and peeled back to allow access between the two locations. While this is trespassing, the business owner has not complained since the apartments provide him with a great deal of business. This section of the fence should be closed and rather than providing a celebrated walkway here, proper access control should be utilized to direct traffic around the fence and in from the street. An additional sidewalk could be added from Poole Rd and Raleigh Blvd to New Bern Ave, eliminating the desire to create a short cut. Without a walkway here, the residents will continue to damage the fence at the cost of the city.

As additional traffic and businesses are relocated into the New Bern Corridor area these access points and unsecured areas will present a security risk to pedestrians and travelers. Individuals utilizing the proposed bus terminals may be accosted by vagrants and unlicensed street peddlers attempt to solicit handouts or purchases. Blocking these points will increase security not only to the business but to the surrounding areas as well.

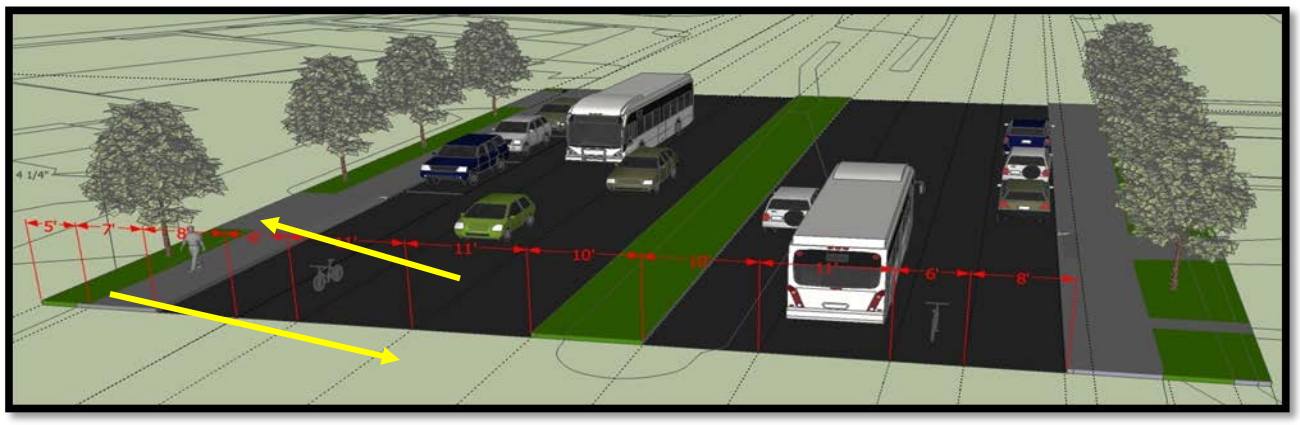
Dark private property is used by vagrants as an area to sleep, congregate and drink. Maintenance is needed to clear out the area and lighting should be added to illuminate the space for natural surveillance. Hedges bordering Raleigh Blvd need to be trimmed to increase visibility when exiting the parking lot to avoid future vehicular accidents.

Bike Lane-

From a green-conscious perspective and a functional view the bike lane would serve a good purpose on New Bern Avenue. The concept of non-motorized transportation encourages less vehicular traffic to the downtown area and would help alleviate excess congestion, increase the health and well-being of the local residents and possibly encourage safer driving from the travelers on New Bern Avenue. From a safety perspective there are always concerns when adding a bike lane into an area. Drivers must adapt to reduced travel lanes and be conscious of slower moving, less visible traffic in the adjacent bike lane. The bike lane can present a security risk should drivers and cyclists not strictly adhere to safety laws and regulations associated to bike lanes. From the site plans provided it was observed that the bike lane would be located between the travel lanes and the on street parking. The space provided for the bike lane is adequate to allow for multiple users to operate at the same time. A safety concern is that cars wishing to park on the street need to cross through the bike lane; and cars seeking to reenter the roadway

need to cross back over the bike lane as well. There is a risk of accidental collision in those situations and could result in additional vehicular incidents as vehicles or cyclists are struck into the traffic lanes, which have been reduced from three lanes to two. Additionally, traffic turning onto side streets will also have to cross through the bike lane. Any vehicle wishing to access New Bern Ave from a side street such as Sunbury, Heath or Fisher, or any vehicle on New Bern Ave wishing to turn off will be required to cross through the bike lane as well. There is a risk for vehicular-cyclist collisions as individuals are trying to make a changing light or are simply focusing their attention on the location of the business they are attempting to visit.

The design constructed for the New Bern Corridor Project has been proven effective on several projects within the City of Raleigh and within other jurisdictions. On Hillsborough Street and Glenwood Avenue, the bike lane accommodates low to high density usage from the student population and citizen populations and is adjacent to a single lane of traffic on Hillsborough Street and multiple lanes on Glenwood Avenue. Increased speed and grade of terrain also play factors in cyclist safety when examining a bike lane in on New Bern Avenue. Safety concerns for this feature then focus on user error rather than design complications. To combat these inherent risks, the Raleigh police Department would recommend public awareness and educational programs targeted at the populations effected by the new bike lane on New Bern Avenue. Although cyclists are entitled to equal usage and responsibility of roadways as vehicles, many citizens are not aware of basic movement regulations and restrictions directed towards cyclists. To increase this safety, the Raleigh Police Department will provide information regarding City of Raleigh ordinances as well as state statutes, lane operation rules and restrictions and frequently asked questions regarding bike lanes. This cumulative information will equip travelers with the appropriate knowledge to utilize New Bern Avenue and the implemented bike lane in a safe and productive matter for all users.



Though no side street is labeled in this example of a generated image, the concept of crossing the bike lanes for entering/exiting the roadway is illustrated by the yellow arrows crossing through

Idlewild Avenue-

Idlewild Avenue is located on the lower end of the New Bern Corridor Study area and has historically been a problem location. This perception has been combated greatly in the past few years by increased community awareness, police involvement and targeted specialized enforcement. A CPTED evaluation has already been completed for the local corner store; Big John's and additional follow up will be completed as well. One issue that arose during the course of this evaluation was parking on the 0-99 block of Idlewild Avenue between New Bern and Edenton. Because of the corner store, individuals line the sides of the street with vehicles and encroach upon the corners. This obstructs the views of pedestrians attempting to cross and vehicles trying to enter the major roadways. While there is an established parking violation restricting individuals from parking within 25 feet of the intersection, erecting no parking signs on the corners of the street will discourage individuals from parking there even when there is no police presence. This will increase visibility and help cut down on the number of vehicular incidents at these intersections.

The red dots represent proposed locations for no parking signs, clearing the corners to increase visibility and reduce the possibility of vehicular collisions

Carver Street-

Carver Street intersects New Bern Avenue at the 1600 block and directly next to the business at 1601 New Bern Avenue A CPTED evaluation has been performed at that convenience store due to the high number of criminal complaints at that location. This area has experienced a great deal of prostitution, street level drug distribution and

gang activity during the recent Street Combined efforts from the Raleigh Police and Community Development departments have been very effective in reducing the number of criminal complaints in the College Park area over the past few years. To continue this declining trend, additional changes can be applied to increase the natural surveillance and restrict the access control to the area. Once access is controlled abnormal users will be channeled to main entrances, increasing the likelihood that they will be observed and recognized by residents and business owners. This in turn will increase the chances of them being identified later on during the course of an investigation should a criminal act be completed. Residents will have a better recognition of those who live in the area and belong as opposed to those who do not.

Restricting access from Carver St will force travelers to pass by the Wake County Public Library on the Western side or over to Oakwood Avenue on the Eastern side. Each access point would pose excellent natural surveillance since multiple structures will be located in those areas. Restricting the access into College Park from New Bern Avenue can easily be accomplished by extending sidewalks into the travel lanes and creating neck downs. A neck down is simply an extension of pavement which reduces the number of useable lanes, in this case taking a two way street and rendering it a one way. Signage should also be included to make travelers aware of the access limitations. With a one way street, residents are still able to exit their community without allowing non-residents to enter from Carver Street This effort will also assist Community Development with their future endeavors in the College Park area. This effort would also be combined with enforcement efforts from the Raleigh Police Department to discourage usage.

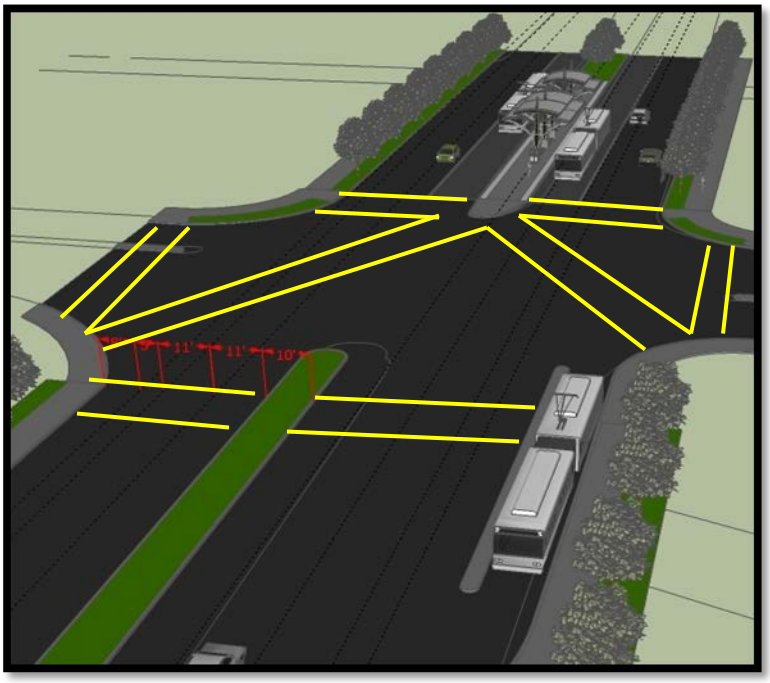
Extending the current pavements on Carver St would restrict access inward and only allow traffic leaving the community. The stores to the right are still accessible by two entrances off of New Bern Ave. The red dot represents a suggested stop sign for leaving traffic and the green dot represents a suggested location for a wrong way sign.

Raleigh and New Bern

The goal for this intersection is to maximize the amount of pedestrian traffic from originating from the surrounding communities to the bus terminal located on New Bern Avenue, without disrupting the current traffic flow. The model which was provided to me showed a generous pedestrian island connecting to the bus terminal on New Bern Avenue allowing for a large number of people to congregate safely and await the appropriate traffic signals to cross. With a traditional cross walk system, each adjacent corner connected, the new bus terminal will cause pedestrians to stack up on each corner, waiting for the appropriate signal and cluttering the intersections. It would be ideal to disperse all people at once, completely clearing the entire intersection and allowing unrestricted vehicular visibility around each corner. To accomplish this scramble cross walks or diagonal cross walks would flush all people from the intersection at once, removing the need to cross twice to reach the terminal and increase pedestrian safety since all directions of traffic are stopped together. The diagonal cross walk provides a reduced chance of a pedestrian being struck by a vehicle trying to make a turn. Examples:

Since the terminal is located in the middle of New Bern Avenue there is no need for an X-framed cross walk system. This would be useless since pedestrians would be forced to cross twice regardless. However, if this concept was used and formatted for the intersection, a V-style diagonal cross walk would be very effective at clearing the entire intersection in the safest manner possible. The outer areas would be traditionally connected, corner to

corner; the middle of the intersection would contain a V leading from the west side corners of New Bern Avenue and converging on the center pedestrian island of the bus terminal.



Constructing a diagonal cross walk in a V formation will allow the entire intersection to clear at once, removing the chance of vehicles making turns while pedestrians are crossing and keeping pedestrian build-ups on corners from occurring.

Hawkins Street-

Storm water drainage is funneled through this area down the south side of New Bern Avenue to an open drainage area at the corner of Hawkins Street and New Bern Avenue This drainage continues under the property at 1830 New Bern Ave. through the city owned portion and is intended to connect to the storm water piping system at Raleigh Blvd. It has been reported that every time a generous amount of rain is precipitated, the drainage area floods

and channels through the parking lot at 1830 New Bern Avenue and into the intersection of Raleigh Boulevard. and New Bern Avenue. The business owner at that location made me aware that he reported this flaw to the city back in 2007, where a survey was eventually performed by NCDOT. At this time, I have not been able to reach NCDOT for an official comment, however I have confirmed that there is an active file on the issue. During the course of this evaluation there were several heavy rainfalls and each time the intersection flooded. A recommendation is to check the pipeline for incompletion, blockages or any obstruction which would be causing this backup. As the intersection has already weathered the effects of water erosion, causing several dips in the road, correcting this issue would be vital to the long term sustainability and quality of the intersection through this project.

Above: Picture displays storm water route (blue line) and drainage area (yellow box) as well as supposed ending area (red X)

1300-1600 Poole Rd-

Much like the suggestion made previously in this evaluation for Carver Street on the north side of New Bern Avenue, an excellent recommendation for the area of 1300-1600 Poole Road is to incorporate street closures to restrict access to the area. When viewing this small area, it can be seen that there currently stands five separate access points from New Bern Avenue (Poole Road, Sunbury Street, Heath Street, and two exits at Fisher Street) There is also an informal access point located through the Shell gas station parking lot at the corner of New Bern Avenue and Raleigh Boulevard. where many vehicles have been observed cutting through the parking lot onto Star Street The ease of access to this area is beneficial to an open air drug market since non-residents are able to enter and exit the area often times without being noticed by established residents. As confidence is gained by the abnormal user, they are more likely to return to the area, no longer feeling fear of identification or apprehension. An abundance of cross streets also contributes to the inability of residents to distinguish between vehicles which belong in the area and those which do not, diminishing their natural surveillance capabilities. Cutting off access points in this small community will increase the ability of residents to take notice of illegitimate use, which when communicated to the police department, will assist in developing a greater understanding of drug activity (times, days of the week, and individuals involved). With this in mind, the recommendations would be to incorporate barriers next to the Shell gas station parking lot on Star St to close the informal cut-through, blocking the entrances at Fisher Street and closing the

Southern access to Star Street Access from the intersection of Poole Road is essential to responding emergency units as well as providing a necessary relief valve for afternoon traffic congestion. Blocking off the entrance to Fisher Street from New Bern Avenue will avoid vehicular confusion due to the suggested bus terminal at the intersection of New Bern Avenue and Raleigh Boulevard. This will lead to proper traffic direction in the area. It is recommended that Heath Street Remain open since it provides direct access for travelers to Lincoln Park Holiness Church. The closing of this street would result in older citizens being channeled through the area exposing them to current undesirable elements. Echoing previous statements, there are also five entrances/exits to Poole Rd from this area. Sunbury, Heath, Carver, Fisher and Star all cut through the community providing access in and out in either direction. To coincide with the recommendations in this section, road closures would be most effective when completed at each end. Closures of Carver street from Poole Road would direct access strictly through Fisher and Heath streets, causing incoming traffic to pass through other residential sections of the community before reaching its' destination, inherently increasing natural surveillance and recognition. The picture below displays the current landscape of the area and highlighted recommendations for possibly closures. Temporary closures can be constructed with traffic control devices and permanent closures can be completed with the addition of pavement treatments or barriers. Closures should be addressed through prioritization, and progressed as needed. Since Star Street would be the primary target of this initiative, the first recommendation would be to close off the direct access routes to Star, followed by Carver Street

Above: Possible locations for street closures for natural access control

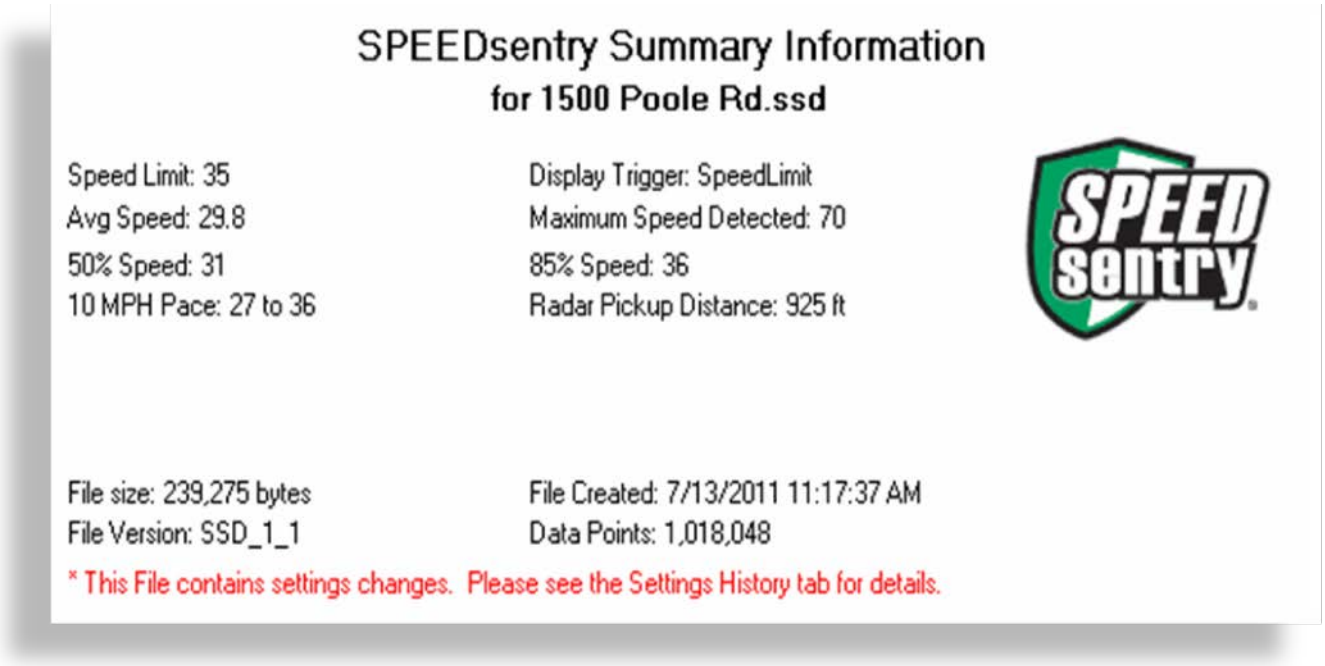
Conclusion-

The New Bern Corridor site plans provide aesthetically pleasing landscape and pavement additions to increase the overall perception of the area while at the same time inviting new residents and customers. The addition of crosswalks throughout the study area increases the overall safety of pedestrian traffic and helps to properly channel citizens in an effort to avoid jay walking and prevent pedestrian-vehicular incidents. One of the best aspects of the study site plans is the inclusion of formalized public transportation locations. The open design of the bus terminals allows for proper natural surveillance, providing the ability to view ones entire surroundings when approaching the terminal or upon exiting the bus. If routes are to continue during nighttime hours or times when throughout the year natural light will be minimal, the proper illumination will be required to keep visibility efficient.

Another exciting addition to the New Bern Corridor is the on-street parking through the 1600 block back towards downtown. This parking will greatly increase the capacity for parking for each of the businesses located there and creates a more inviting downtown feel. This parking is established through the proper construction of extended sidewalks and pavement areas to naturally control the access and flow of traffic while traveling through the corridor. The addition of permanent pavement fixtures eliminates confusion and properly guides vehicular traffic while providing more than an adequate amount of space for pedestrian traffic along the business section of the corridor. The construction of a second street connecting Milburnie Road to Calumet Dr. will assist in relieving the congestion and stress observed at the main intersection located at New Bern Ave and Sunnybrook Road Providing a secondary route through this area is important since a large majority of traffic originating from the south side of New Bern Avenue is directed toward the beltline.

The suggestions and recommendations stated in this evaluation were not intended for any purpose other than safety considerations and security. Aesthetic value, economic and constructional considerations were not taken into account, simply the perspective of reducing the opportunity of crime and safety issues. Once more, the recommendations in this evaluation are not mandates, just simple suggestions for crime prevention and reduction. The individual businesses which were surveyed and evaluated will be contacted on a personal level where officers will assist them in creating safer and more productive establishments in an ongoing effort with the Raleigh Police Department’s crime prevention initiative. Results and analyses completed regarding the crime statistics will aid the police department in shaping its response strategies to better prioritize and direct its efforts to meet the needs of current identified issues. This effort will continue with periodic re-evaluations throughout the course of the New Bern Corridor Project. As issues arise, are resolved or displaced, strategies will be readdressed to ensure the most appropriate enforcement activities are being utilized. The Raleigh Police Department is committed to partnering with other city departments, local business owners and residents in a coordinated effort to increase the quality of life and safety, and decrease the fear and incidence of crime throughout the New Bern Corridor and the city of Raleigh, North Carolina.

Appendix A
Survey Results



SPEEDsentry Summary Information
for 1500 Poole Rd.ssd

Speed Limit: 35
Avg Speed: 29.8
50% Speed: 31
10 MPH Pace: 27 to 36

Display Trigger: SpeedLimit
Maximum Speed Detected: 70
85% Speed: 36
Radar Pickup Distance: 925 ft

File size: 239,275 bytes
File Version: SSD_1_1

File Created: 7/13/2011 11:17:37 AM
Data Points: 1,018,048

* This File contains settings changes. Please see the Settings History tab for details.

New Bern and Poole Rd
Accidents 2007-2010

2007 – 7 accidents
2008 – 3 accidents
2009 – 11 accidents
2010 - 5 accidents

Appendix B

Examples of Hostile Vegetation

KNOCKOUT ROSE BUSH

HOLLY BUSH

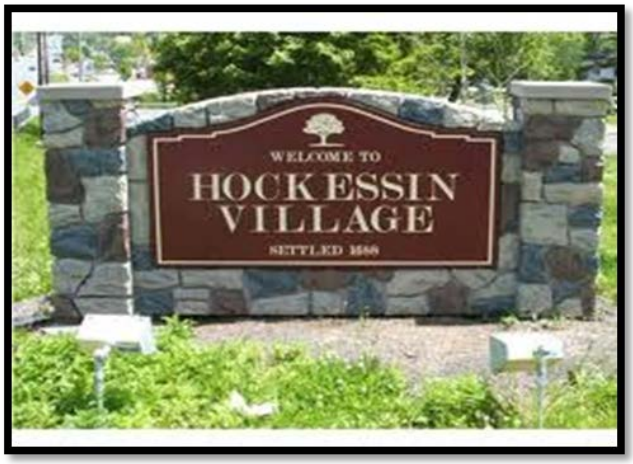
PRICKELY PEAR CACTUS

CENTURY PLANT

NATAL PLUM

JERUSALEM THORN

APPENDIX C
EXAMPLES OF CELEBRATED ENTRANCEWAYS



APPENDIX D

NO TRESPASSING SIGNS

MOTION SENSOR LIGHTS

WALKWAY LIGHTS

FENCING

LIGHT POLES

ACCESS BOLLARDS