



TOWN of CARY

Downtown Neighborhood Characteristics Study

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EXECUTIVE SUMMARY

From February to June, 2007 the Town of Cary, with assistance from a graduate student at North Carolina State University, conducted a study of various neighborhood characteristics within two of its downtown neighborhoods. The purpose of the study was to illuminate residents' attitudes toward their neighborhood, ways in which neighbors interact with one another, involvement in community life, and potential concerns as well as assets within the neighborhoods. The Town hoped to gain insight into the organization of the neighborhoods, concerns of the citizens, and ways in which to reach residents. The geographic focus of the study was the downtown Cary area. This was comprised of two census block groups located on the east and west side of the heart of downtown (intersection of Chatham and Academy St). One neighborhood was census block group 535.01-1 and the other was 535.07-1. Both are lower income neighborhoods with one being comprised of 69% low to moderate income and the other 29% low to moderate income. They both have a high proportion of renters in comparison to the whole Town. Both neighborhoods are also somewhat diverse with almost 30% minority group population.

The Town utilized a paper-based survey methodology. The survey contained items measuring neighborhood definition, sense of community, neighboring, citizen participation, needs and assets, perception of safety and demographics. It was mailed to all 633 households within the target area. The survey went out to 306 households within block group 535.01-1 and 327 within block group 535.07-1. A total of 154 responses were obtained resulting in a very good response rate, 24.3%. Participants were mostly female, Caucasian, and homeowners.

Results of the survey were quite surprising. Sense of community was found to be only about average on a 5-point scale. Neighbor interaction was very low. For behaviors that took the most amount of effort such as how many neighbors residents considered as friends and how many they would borrow things from the most frequent response was 0. Citizen participation was also quite low. Residents are only participating in neighborhood activities and community problem solving "rarely" or at most "sometimes." Less than 15% participate in each of these activities "often" or "everyday." Results also reveal that almost 72% of the participants are not involved in any community groups. This finding along with the fact that only 6% stated that there was a homeowner's association within their neighborhood has serious implications for using civic organizations to reach residents.

Although there were some disappointing results, the survey did bring to light some promising aspects of the two neighborhoods. The number of needs selected from the list of 18 was low with the average being only about 3. Another positive indicator is the fact that the average number of assets selected was double the number of needs selected. Results also indicate that the perception of safety in the downtown Cary area is high. Very few residents stated that they agreed with statements that their neighborhood was dangerous or unsafe. However, results of the overall safety indicator found that perception of safety was slightly higher than average.

The two neighborhoods were compared across all of the constructs. Results of comparison reveal that positive indicators are all higher for the higher income census block group and negative indicators are higher for the lower income census block groups.

A multitude of future research projects and neighborhood programs can be proposed for this data. A sampling of possible projects is provided. Based on the results, the Town should focus their efforts on increasing neighboring behaviors, involving youth in their neighborhoods, helping residents overcome individual differences, increasing citizen participation, fostering neighborhood pride, providing a forum for residents to address their concerns, evaluating existing programs, and conducting future research endeavors.

CHAPTER 1: INTRODUCTION

Description of Study

In the spring of 2007 The Town of Cary conducted a survey of two neighborhoods comprising the downtown area. The two neighborhoods were two census block groups located on the southwest and southeast sides of downtown Cary and are within the purview of the Town's community development plan. The purpose of the study was to capture various aspects of each neighborhood that would inform the Town of the health of the area as well as how to better work with the residents within each neighborhood. More specifically, the survey was undertaken in order to inform the Town how to improve and market existing programs and develop new ones; to understand the baseline of various neighborhood characteristics for a downtown area plan; as a vehicle for residents to provide input as to the needs of their neighborhoods; to understand formal and informal communication networks within the neighborhoods as well as the organization of the neighborhoods. The survey measured neighborhood definition, sense of community, neighbor interaction, citizen participation, needs, assets, safety, and demographic variables.

Role of the Town of Cary

It is clear that this study fits into the current focus of the Town of Cary based on mayoral statements as well as Town developed plans. For example, in the 2007 State of the Town address, Mayor Ernie McAlister stated, "our sense of community is strong" (Town of Cary, 2007^a). The Town Council Quality of Life Work Sessions also repeatedly make mention of building a sense of community within the town in order to increase the quality of life of its residents (Town of Cary, 2006^a). Town plans such as the pedestrian plan (Town of Cary, 2007^b) and land use plan (Town of Cary, 2003) refer to building a sense of community as a goal or objective. So, community characteristics, especially sense of community, are driving forces in the town management. For this reason sense of community, along with other neighborhood characteristics were included in this study. It provides a preliminary examination of the level of certain characteristics of the existing environment within the downtown neighborhoods that can be used as baseline data, monitoring of goals and objectives of existing plans and planning future endeavors. Other evidence that this study is in the purview of local governance comes from past research that has proposed that the role of municipalities is changing. City and Town managers as of late have been called on to participate in community building efforts by helping residents create a community identity, seeing to the needs and values of the community, encouraging residents to participate in the decision-making process, and creating partnerships with other community entities (Nalbandian, 1999; Nalbandian & Oliver, 1999). This study is the first step in understanding the downtown area in order to prepare for community building efforts.

Importance of Neighborhoods

Communities are an important part of American life not only for the impact that they have on governmental institutions but also for the impact that they have on the lives of the residents. Jasek-Rysdahl (2001) states, "Strong communities are constructive, necessary and that they need to be strengthened. Communities provide support, order, and a framework that people need to help make sense of their lives." (p. 318-319). In terms of the individual, neighborhoods can link people together creating channels for information flow and assistance. Neighborhoods can foster weak ties between neighbors, which have been found to be beneficial. Weak ties are people who

are considered more of acquaintances than friends. When looking at the possibilities of diffusion of information concerning the neighborhood as well as community mobilization within the neighborhood, linkages between neighbors become increasingly important. When people are linked by weak ties and interact with one another on occasion, information from governance and from other residents can cover a wider area (Granovetter, 1973). From an ecological standpoint, the neighborhood influences individuals since it is a system in which the individuals are embedded. So, in order to understand the well being of individuals, behaviors or social problems, one must understand the systems in which individuals are embedded (Bronfenbrenner as cited in Dalton, Elias, & Wandersman, 2001; Maton, 2000). Another reason for assessment of neighborhood characteristics stems from the fact that every neighborhood within a city is different. There are no two exactly alike in terms of physical or social characteristics. In order to fully understand a neighborhood's problems and design successful interventions, one must first understand the characteristics of the neighborhood. (Denhardt & Glaser, 1999)

Variables

As mentioned above the present study examined neighborhood definition, sense of community, neighbor interaction, citizen participation, needs, assets, safety, and demographic variables.

Neighborhood Definition

A neighborhood is defined as “a spatial construction denoting a geographical unit in which residents share proximity and the circumstance that come with it” (Chaskin, 1997, p.522-523). Defining a neighborhood seems like a straightforward task. However, each individual person within a neighborhood may have a different conception of where the boundaries of that neighborhood lie. For the purposes of this survey the two neighborhoods were defined as census block groups. Even though census boundaries do allow for the comparison of a sample to the population they are arbitrary geographic markers. Each resident within a census block group may have a different notion of what constitutes his/her neighborhood. Research has found enormous variation when it comes to participants defining their neighborhood in terms of physical boundaries. On average, residents of Nashville neighborhoods reported that their neighborhood encompasses 15 blocks. However responses for physical boundaries ranged from 1 block to over 200 blocks (Lee & Campbell, 1997). For that reason, the present study included a question to determine how residents define their neighborhood. This item can provide the Town with a frame of reference as to how to target programs. For example, if the majority of residents feel that their neighborhood constitutes just their block, then program efforts should be targeted at the block level.

Sense of Community

Sense of community has been defined in many different ways. For the purposes of this study, it included the following aspects based on McMillan and Chavis' (1986) theory of sense of community: “feelings of membership and belongingness, trust and mutual influence, and shared emotional ties with others in the neighborhood” (Martinez, Black, & Starr, 2002, p.28).

Sense of community is an extremely important characteristic for communities. It has been linked to certain aspects of psychological health such as subjective well-being, happiness, coping, worrying (Prezza, Amici, Roberti, & Tedeschi, 2001), loneliness, and life satisfaction (Davidson & Cotter, 1991). It has also been found to influence residents' behaviors to improve their

neighborhoods. How we perceive a setting affects how we behave within that setting. If the Town needs to know if people are willing to participate in any kind of revitalization or citizen participation within their neighborhoods, they need to know how people perceive their neighborhoods (Manzo & Perkins, 2006). In terms of behaviors, sense of community has been linked to discussing neighborhood problems with neighbors, (Bolland & McCallum, 2002), neighboring and involvement in neighborhood groups (Manzo & Perkins, 2006). The measurement of sense of community is also important since sense of community within a neighborhood is not a given. Just because people live in close proximity to one another does not mean that they feel a sense of community toward the neighborhood or each other (Manzo & Perkins, 2006).

Neighboring

Sense of Community and Neighboring are often considered the same construct. However, Farrell, Aubry, & Coulombe (2004) indicate that sense of community is a “psychological variable” (p.10) since it refers to beliefs and attitudes about one’s community. Neighboring then is considered a “behavioral variable” (p.10) since it refers to the actions among neighbors. Unger and Wandersman (1985) define neighboring as “the social interaction, the symbolic interaction, and the attachment of individuals with people living around them and the place in which they live” (p.141). As with sense of community, neighboring has implications for psychological health. It has been found to have an indirect effect on personal well-being. It has been found to increase sense of community, which in turn increases personal well-being (Farrell et al, 2004). Neighboring also has an effect on community related behaviors. It has been found to influence residents discussing neighborhood problems, working with neighbors to solve those problems, and contacting elected officials (Bolland & McCallum, 2002). Neighboring also has important implications for American families. As family structure continues to change in America there may be more of a need for dependence upon neighbors. There has been an increase in single parent homes, dual earner households, individuals choosing to live alone, and extended families no longer living close to one another (McCamant & Durrett, 1988; Bronfenbrenner, 1984). Neighbors could take the place of the traditional nuclear family as well as the role of the extended family in terms of support. Neighbors provide support for one another, reduce fear of crime, and provide friendships. Neighbor networks are also able to reduce crime through collective social control (Unger & Wandersman, 1985). However, it should be noted that even though neighbors may be able to provide social support and possibly take the place of extended families, time demands may limit the potential for interaction with neighbors.

Citizen Participation

Citizen participation is basically defined as involvement in decision-making. Murphy and Cunningham (2003) define citizen participation as “a process whereby the people of a community, regardless of income or position, join meaningfully in making social, political, and economic decisions related to the general affairs of the community” (p.111). Resident participation in civic organizations is important for the community work of municipalities. It has been proposed that government affects individuals through community organizations. More specifically, governments work through civic organizations to reach individuals (Sinclair, 2002). For that reason, it was important for the Town to understand whether individuals are involved in the community through civic organizations and with which groups they are involved.

Needs and Assets

Professionals guard against conducting needs assessments since they can have the effect of communities being seen as lacking something or deficient in some way. In some communities this causes a feeling of hopelessness. Another approach is to assess competencies of residents and neighborhoods instead of deficiencies. Every community has assets, whether they are from individuals, associations, or institutions. Therefore, it is the responsibility of community development endeavors to highlight those assets when defining a neighborhood (Kretzmann & McKnight, 1993). Although asset assessments are beneficial to communities, it is still important to understand the needs in order to know what programs/services are needed within a neighborhood. It is also possible that what external entities see as needs do not match what residents feel are the needs of the neighborhood (Witkin & Altschuld, 1995). Needs are also important to assess since past research has found that perceived needs within a neighborhood affect place attachment with both the home and the block. When there are more needs in the neighborhoods an individual's attachment with his or her home and block decrease (Brown, Perkins, & Brown, 2003). For this study, both needs and assets were captured. Needs were assessed in order to target specific improvements to the neighborhoods. Assets could potentially be matched to needs.

Perception of Safety

The final construct examined in this study was perception of safety. The literature on fear of crime suggests that there are many costs associated with fear of crime. These include health losses due to stress and anxiety, a change in behavior that incurs costs such as increasing the time it takes to leave the house, taking taxis instead of walking or taking public transportation, loss in value of home, loss of productivity, reducing social activity, and reducing physical activity (Dolan & Peasgood, 2006). Past research has found that perception of safety does have an impact on one's health through influencing the likelihood of physical activity. Overall, an increase in perception of safety increases the likelihood of occasional exercise by 27% (Shenassa, Liebhaber, Ezeamama, 2006). Fear of crime also influences feelings and behaviors not just toward the home but also toward the block or neighborhood. Brown, Perkins, and Brown (2003) found that fear of crime was significantly negatively associated with place attachment to the block or neighborhood. In terms of individual well-being, perception of safety has an affect on loneliness. When there is a low perception of safety in the neighborhood and a person has a need for a high level of safety, loneliness increases (Gibbs, Puzanchera, Hanrahan, & Giever, 1998). Perception of safety is also important specifically to the Town of Cary. Safety is one of the Town's Quality of Life Guiding Principles (Town of Cary, n.d.^a).

CHAPTER 2: METHODOLOGY

Setting

The setting for this study was a section of the downtown area of Cary, NC. The survey was sent to residents within two census block groups, which were 535.01-1 and 535.07-1. One is on the west side of downtown (535.07-1), the other on the east (535.01-1). From here on 535.01-1 will be referred to as census block group A and 535.07-1 will be referred to as census block group B. Academy Street serves as a boundary between the two block groups and Chatham Street serves as an approximate northernmost boundary to both of the block groups. These neighborhoods were chosen because of their proximity to one another as well as their similar population sizes. They also encompass part of the inner Maynard Loop, which is the focus of Community

Development Block Grant funding as well as the Healthy Neighborhoods Initiative. The area encompassed in this survey is the historic part of Cary, deemed the heart of Cary (Town of Cary, n.d.^b). It is the location of the first homes in Cary, the first public high school in Wake County, the first subdivisions in Cary, and the first churches in Cary (Byrd, 1994). Appendix B includes the maps of each of the neighborhoods surveyed.

The overall area surveyed is fairly diverse. There is about an equal number of men and women and about an equal number of renters and owners. The racial makeup of the area is somewhat diverse, having about 28% minority group population (U.S. Census Bureau, 2000). See appendix A for exact percentages of each variable along with a comparison to the whole Town of Cary.

Block group A has a population of 623 and B has a population of 781 (U.S. Census Bureau, 2000). Cary GIS found there is only one pharmacy, library and school located within the block groups. According to Cary GIS data, the two census block groups are fairly similar when it comes to amenities. There is one park within each. Heater Park is located in census block group B and Urban Park is located within A. Two banks are located within each. There are no large chain grocery stores within either and the C-Tran runs along the boundary of the block groups (traveling down Chatham and Academy streets). However, there are a few differences in terms of amenities. Google Earth shows there is one church within B and 2 within A. The block groups also differ in terms of ratio of residential to commercial properties. For the total area examined the ratio of residential to commercial was 5.46. Within census block group A the ratio is 4.06 and within B it is 7.46.

Wake County GIS data lists a few subdivisions located in each of the block groups. The subdivisions within A are Park Grove, Hunter Park, Hunter Creek, Adams Park, Callan Park, and Forest Park. Coronado Village and Rainbow Estates are not contained within the block group but sit on the edge of the boundary. The subdivisions within B are Krendle Woods, Montclair, Carr Hills, Russell Hills, and Pine Valley.

The 2000 US Census reports that for A the median age is 32 and for B the median age is slightly higher, 37. For A the proportion of males to females is higher than for B. In A 52% are male and 48% are female. In B 47% are male and 53% are female. Also, more people rent in A (59.5%) than in B (43.3%). Census block group A is more of a diverse neighborhood than B. For those over the age of 18, there are more non-Caucasian groups within the neighborhood (U.S. Census Bureau, 2000).

Within block group A 69% of households are low to moderate income households. Low to moderate is defined by earning less than 80% of the median income (Town of Cary, 2004). Within block group B only 29% are low to moderate income households.

According to Cary Police Department (Town of Cary, n.d.^d), within block group A, there were 45 total crimes between January and May 2007 as well as 17 calls for services. Within block group B there were 33 total crimes as well as 16 calls for service. A call for service occurs when a report is completed for information purposes only. It is important to note that Cary does not track crimes based on census boundaries. So these results may encompass a slightly larger area than a block group.

Participants

The survey and cover letter were sent to all 633 households within the downtown area. The cover letter asked only residents 18 and older to complete the survey. The majority of participants were Female, Caucasian, and Homeowners. Tables 1 and 2 and Figures 1 through 4 show the results of each demographic variable for the total respondents and each census block group.

Race

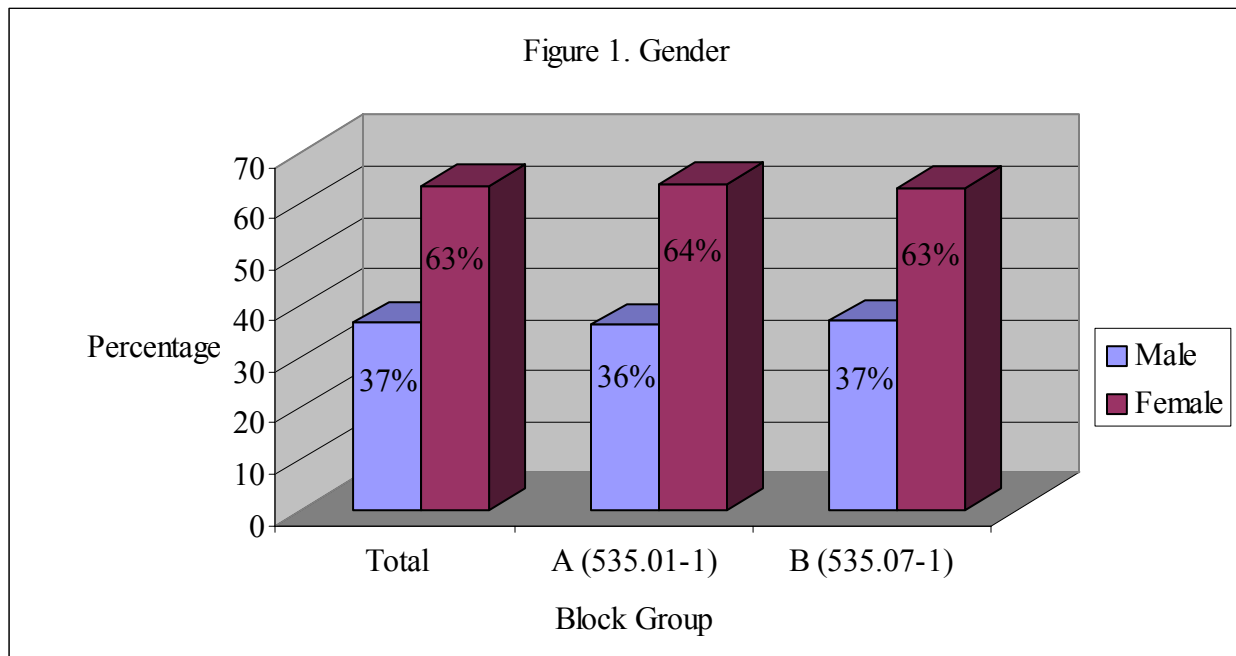
For the population as a whole, the majority was Caucasian. The same is true for each of the census block groups. However, a higher percentage of minority residents responded from block group A than did from block group B. Responses to qualify the “other” option were Asian and Caucasian, Asian Indian, Caucasian and Native American or Alaskan, and White/Hispanic mix.

Table 1. Race

Race	Total (percent)	A (percent)	B (percent)
Caucasian	89.4	82.7	94.0
African-American	4.9	8.6	2.4
American Indian	2.1	3.4	1.2
Asian or Pacific	.7	1.7	0
Hispanic	0	0	0
Other	2.8	3.4	2.4

Gender

There were a higher percentage of females responding to the survey for the group as a whole and for each of the census block groups. The ratio of male to female respondents was approximately equal for each census block group and the group as a whole.



Income

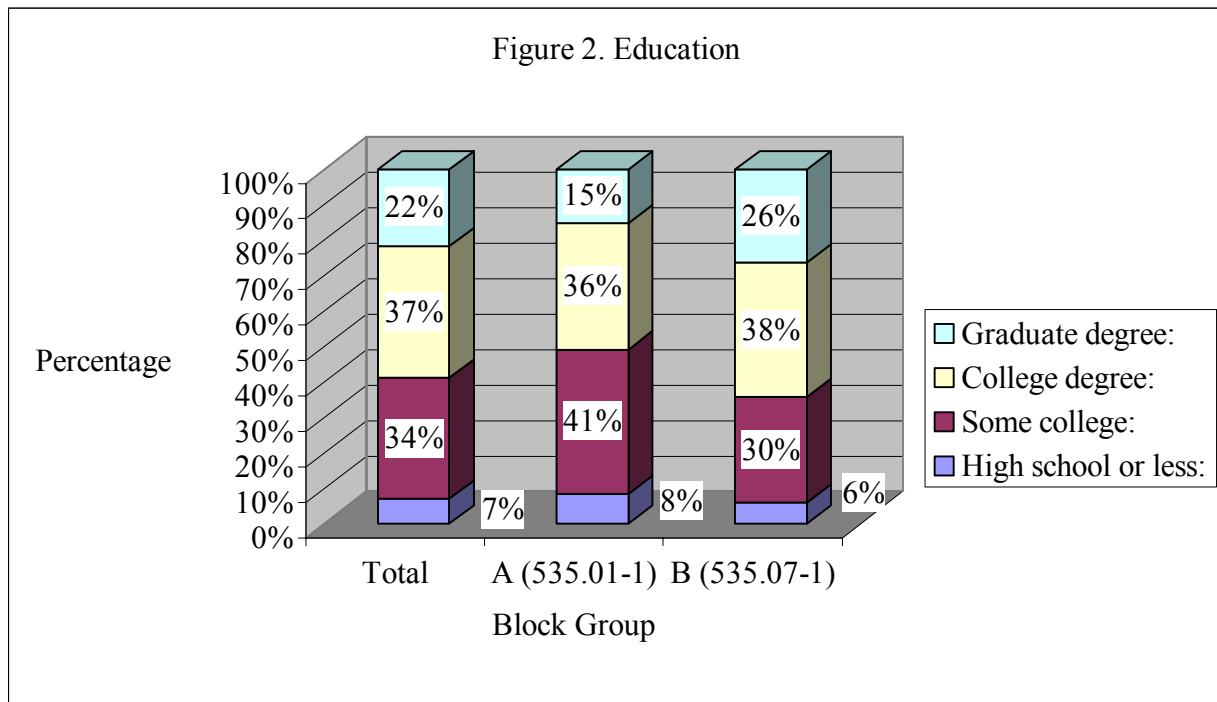
Results show that a larger proportion of higher income individuals responded to the survey from block group B than in block group A. The median range for the entire group was \$50,001-70,000. The median range for block group A was \$30,001-50,000 and for block group B was \$70,001-100,000. This is indicative of pre-existing data on the income of the residents within each block group that states that B is higher income area than A. The US Census Bureau reports that in 1999 the median income for A was \$28,833 and the median income for B was \$50,167.

Table 2. Income

Income	Total (percent)	A (percent)	B (percent)
\$0-20,000	8.0	10.0	6.7
\$20,001-30,000	12.0	18.0	8.0
\$30,001-50,000	18.4	30.0	10.7
\$50,001-70,000	25.6	28.0	24.0
\$70,001-100,000	18.4	10.0	24.0
\$100,001-120,000	11.2	2.0	17.3
\$120,001-140,000	3.2	0.0	5.3
\$140,001-160,000	0.8	0.0	1.3
Over \$160,000	2.4	2.0	2.7

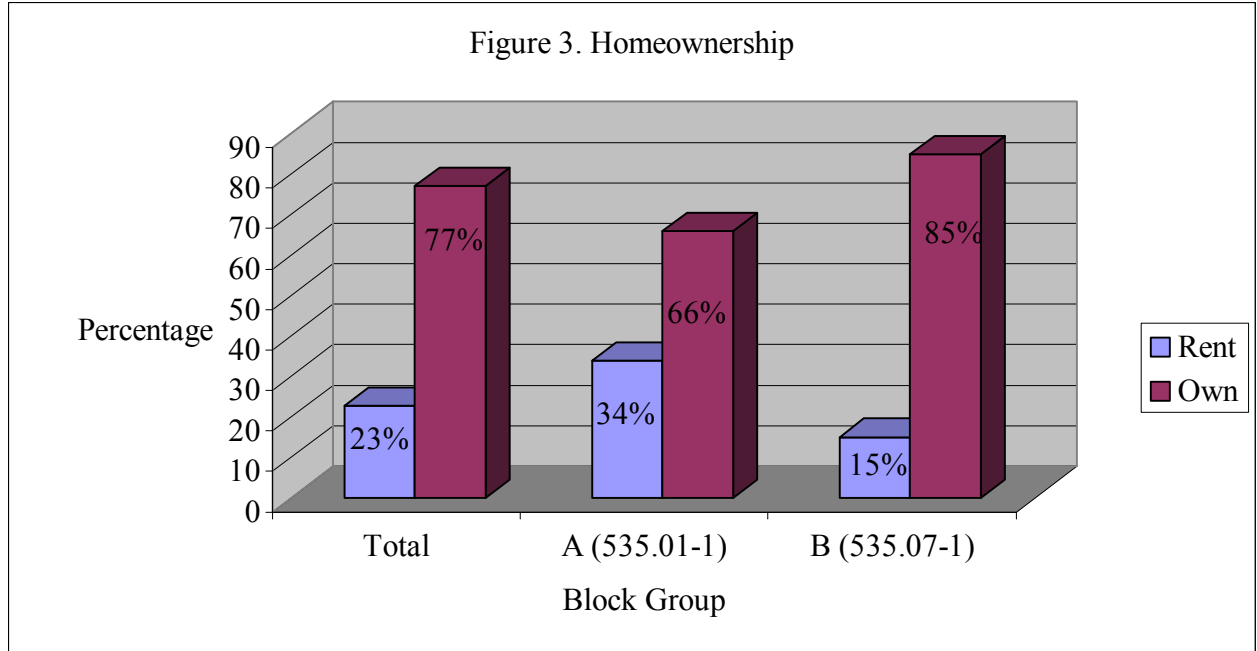
Education

The majority of respondents had completed some college or more. This was evident in both block groups as well as the group as a whole. However, within block group B, more respondents had completed a higher degree.



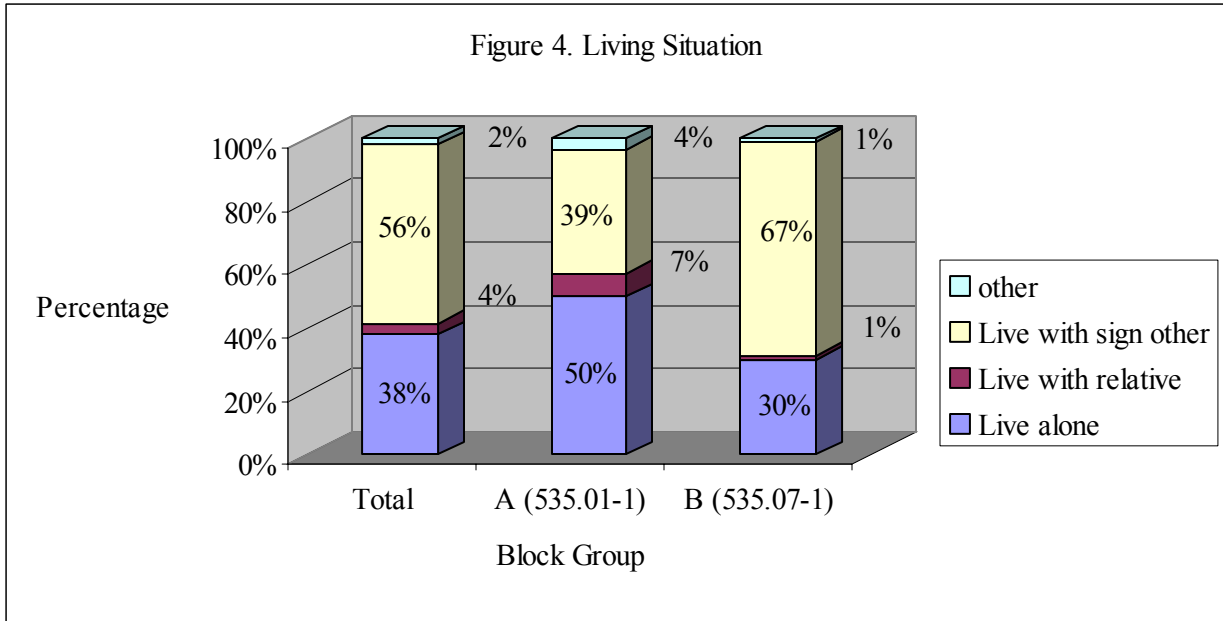
Homeownership

Results show that more people own their homes in each block group. However, within A, almost twice as many rent as do in block group B. This could be due to the fact that block group A is a lower income area than B.



Living Situation

Results were collapsed to compare those who live alone with those who live with someone else. Someone else could be the “live with relative” option or the “live with significant other or married” option. Results show that more people live alone than with someone else in block group A than in B or the group as a whole. In block group A 50% live alone and 46.4 % live with someone else. In block group B 30.2% live alone and 68.6% live with someone else.



In terms of living with children, for the group as a whole 29% said they have children living in the house. This was 30% for block group A and 28% for block group B. So whether people have children living in their home is fairly similar across the two block groups. For the entire survey area the range of number of children living in the household was 1 to 4 with a mean of 1.55. The most frequent response was 1 child.

Age

Age had a wide range in the present study. Respondents ranged from 24 to 85 with a mean of 50 years old. The mean age for A was approximately 47 and the mean age for B was approximately 52, which was a significant difference.

Tenure in Neighborhood

There was a very large range in terms of how long residents have lived in their neighborhood. It was .08 to 57 years, with a mean of 15.22. The average number of years in the neighborhood for A was 12.2 and for B was 17.2, which was a nonsignificant difference. In terms of how long residents think that their neighbors have lived in the neighborhood, the mean number of years within the neighborhood for the whole group was 16.6 with a range of 1 to 80. The average number of years the residents thought their neighbors had lived in the neighborhood for A was 13.3 and for B was 18.9, which was a nonsignificant difference.

Tenure in Cary

There was a very large range in terms of how long residents have lived in Cary. It was .08 to 83 years, with a mean of 20.9. The average number of years in Cary for A was 18.7 and for B was 22.4, which was a nonsignificant difference. In terms of how long residents think their neighbors have lived in Cary, the mean number of years within Cary for the whole group was 20.3 with a range of 1 to 100. The average number of years the residents thought their neighbors had lived in Cary for A was 15.5 and for B was 23.7, which was a significant difference.

Comparison of Respondents to Population

The table below illustrates the comparison of the participants to the population. Education, Income, Tenure, and Living situation cannot be compared to census data since the census data is either not available for these variables or is not in a compatible format.

Table 3. Representativeness of Participants to Population

Variables ¹	Response Options	Present 535.01-1	Present 535.07-1	2000 US Census 535.01-1	2000 US Census 535.07-1
Race	Caucasian	82.7	94.0	68.5	83.5
	African-American	8.6	2.4	13.8	8.6
	American Indian	3.4	1.2	0	.3
	Asian or Pacific	1.7	0	1.0	1.7
	Hispanic	0	0	16.1	4.6
	Other	3.4	2.4	0.6	1.3
Gender	Male	36.2	36.9	51.8	45.5
	Female	63.8	63.1	48.2	54.5
Homeownership	Rent	33.9	15.1	59.5	43.3
	Own	66.1	84.9	40.5	56.7
Children present	Yes	30.0	28.2	25.7	25.8
	No	70.0	71.8	74.3	74.2

For age the respondents are not entirely representative of the population. They are slightly older than the population. The median age found for A is 45 and for B is 51. However, the US Census reports that the median age for A is 32 and for B is 37 for the total population. The median age ranges for A and B for only those over the age of 18 were 35-39 and 40-44, respectively, which is slightly closer to the medians found in the present study.

So for race, gender, homeownership, and age the respondents are not representative of the population. This could be due to survey methodology. It was a mail-based survey, there was no Spanish version and it was not random within households. The disparities between the gender variable seems plausible since typically females respond more than males (Caldwell, Jackson, Tucker, Bowman, 1999).

Response Rate

Since this was a mail survey, response rate was a concern. However, results show a relatively good response rate. Out of the 633 surveys sent to residents, a total of 157 were returned yielding a response rate of 24.8%. However, 3 respondents were removed, two because they were businesses and one because it was missing the indicator of which block group the survey was coming from. The final N was 154. The survey was sent to 306 households within A and 64 were returned, yielding a response rate of 20.9%. It was sent to 327 households within B and 92 were returned, yielding a response rate of 28.1%. However, 2 of the respondents were businesses and were subsequently deleted, yielding a final response rate of 27.5% for block group B.

¹ For Census data race was by population 18 and over, gender was by population 18 and over, homeownership was by household, children present was by household.

Online versus Mail Surveys

In order to increase response rate, the survey was available online through a webpage sponsored by North Carolina State University. Online surveys, as opposed to more traditional methods, allow the researcher to reach a wider variety of participants thereby increasing response rate. It is also more cost effective and considerably less time consuming. However, there have been concerns with the representativeness of the participants of online surveys compared to that of traditional methods. Past research has found that representativeness of the sample to the population should not be a concern and with some demographic characteristics, the sample obtained through web-based forms are more representative of the population than samples obtained through more traditional methods (Gosling, Vazire, Srivastava, & John, 2004). So, there were no concerns with representativeness of the population completing it online. However, after data was collected the major concern was response rate of people completing it online. After deleting the items mentioned above, only 7 completed it online and 147 completed it by mail. The Town of Cary Guide to Citizen Services (Town of Cary, 2007^c) states that 94% of the Cary population has internet access either at home or at work. However, very few completed the survey online. The block groups examined may encompass the 6% that do not have internet access or they may choose not to use it as a feedback mechanism.

Confidence Interval

The total number of respondents was 154 resulting in a margin of error of +/- 6.9%. Census block group A had 64 respondents which yielded a margin of error of +/-10.9% and census block group B had a response of 90 yielding a margin or error of +/-8.8%.

Measures

The following variables were measured in this survey: neighborhood definition, sense of community, neighboring, citizen participation, needs, assets, perception of safety, and demographics. Reliabilities were computed for most of the variables. Reliability is an indicator of the consistency with which the constructs are measured. Estimates of reliability fall between 0 and 1 with estimates closest to one indicating that the construct was measured with the least amount of error. All reliabilities were at least moderate except for citizen participation and needs. The full survey is represented in Appendix C.

Neighborhood Definition

Since the survey needed to stay anonymous in order that an informed consent form not be required, addresses could not be collected. To determine how people conceptualize their neighborhood, they were asked to indicate which four streets serve as boundaries to their neighborhood. Other items included whether the neighborhood has a name with response options of 0=don't know, 1=no, and 2=yes. If they answered "yes" to this question, they were asked for the name of the neighborhood. Items were developed by the researcher with assistance from Town of Cary Planning Staff.

Sense of Community

For the purposes of this study, the sense of community subscale of the Perceived Neighborhood Scale was used to measure sense of community. Past research has found that the Perceived Neighborhood Scale is made up of four distinct and separate subscales: social embeddedness, sense of community, satisfaction with neighborhood, and perceived crime. The scale was

originally developed to assess neighborhood characteristics and their relationship to parenting (Martinez, Black, & Starr, 2002). All items on the sense of community subscale were left in tact.

Residents were asked to rate their level of agreement or disagreement with the following items with response options ranging from 1=strongly disagree to 5=strongly agree.

- There are people I can rely on among my neighbors.
- People trust each other in my neighborhood.
- I feel I belong in my neighborhood.
- I care about what my neighbors think of my actions (e.g., how I dress, how I treat my child).
- I feel close to some of my neighbors.
- People in my neighborhood are usually warm and friendly.
- We help each other out in my neighborhood.

Past research has found a moderate reliability for the sense of community scale, $\alpha=.85-.86$ (Martinez, Black, & Starr, 2002). The present study found that the reliability for sense of community was high, $\alpha=.912$. However one item had a low item to total correlation and if deleted would increase the reliability to .928. This item was “I care about what my neighbors think of my actions.” All of the other items had a moderate item to total correlation and would decrease the reliability if the item were deleted.

Neighboring

Neighboring behavior was measured using a modified version of Prezza, Amici, Roberti, and Tedeschi’s (2001) Neighborhood Relations Scale. This scale was developed to study the relationships between sense of community, neighboring, and quality of life. All items from the Neighborhood Relations Scale were left in tact. However, two items were added to the scale. One measured how many neighbors participants would recognize if they saw them and the other measures how many neighbors participants know by name.

Neighboring was measured with 2 sets of items. The first set consisted of 5 items asking participants to rate how often they participate in the following behaviors with response options ranging from 1=never to 5=everyday:

- Visit with neighbors in their homes
- Have neighbors over to house to visit
- Stop and talk with people in the neighborhood
- Meet with neighbors to spend some time doing things together
- Exchange favors with neighbors

The other set of items asked participants to fill in how many neighbors they:

- Would recognize if they saw them
- Know by name
- Consider as friends
- Would have no problem asking to borrow little things

The original Neighborhood Relations Scale reportedly has a high reliability, $\alpha = .89$ (Prezza et al. 2001). The reliability for the final entire neighboring scale used in this study was moderate, $\alpha = .837$. However, the item that asks residents how often they stop and talk with people in their neighborhood had a low item to total correlation; however, if deleted would increase the reliability of the total scale only slightly.

Citizen Participation

Citizen participation was measured with a variety of items developed by the researcher. First participants were asked to rate how often they do the following: informally talk with neighbors about a community problem, participate in neighborhood related activities (e.g. neighborhood dinners, festivals, etc.), and personally participate in community problem solving when a problem arises. Response options ranged from 1=never to 5=everyday. Reliability was only computed for these first three items. It was found to be quite low, $\alpha = .779$. However, if any of the items were deleted the reliability of the scale would decrease.

Residents were then asked in which type of community they participate in community problem solving. Response options were “within the block”, “within the neighborhood”, “within the town”, and “none”. The survey then asked about homeowner’s associations. Participants indicated whether there was a homeowner’s association within their neighborhood and if so what the name of the association is. Finally, participants were asked to indicate with what groups they were involved. Options were “neighborhood groups/associations”, “town-wide community groups”, “informal neighborhood groups”, “homeowner’s associations”, and “none”. If they weren’t involved with any of the groups, they were asked to indicate why. If they were involved with any of the groups, they were asked for the names of the groups.

Needs and Assets

Some of the needs items were drawn from McGuire’s (1997) Neighborhood Characteristics Questionnaire and Observation Scale. The Neighborhood Characteristics Questionnaire was originally developed to assess crime and delinquency and was then modified for a program evaluation and tailored toward use with families with small children. (McGuire, 1997) The items drawn from the Questionnaire were litter/trash, graffiti, drug addicts, alcoholics and public drinking, vacant/abandoned store fronts, burned down buildings, unemployed people hanging out, and traffic. The rest of the items were developed by the researcher with the assistance of Town of Cary Planning staff. The reliability for the needs scale was low, $\alpha = .715$. However, it is fairly similar to that found in a study using the original Neighborhood Characteristics Questionnaire, which was .77. (McGuire, 1997). The reliability index found in the present study would be increased slightly if the following items were deleted: traffic, inadequate parking, and other. All asset items were developed by the researcher with the assistance of Town of Cary Planning staff and had a moderate reliability $\alpha = .823$. The reliability would be increased slightly if the “other” option was deleted.

Participants were asked to indicate what problems they see with their neighborhood. The following needs were listed as options:

- Litter/Trash
- Graffiti
- Drug addicts
- Alcoholics & Public Drinking

- Vacant/Abandoned store fronts
- Burned down buildings
- Unemployed people hanging out
- Traffic
- Inadequate parking
- Noise
- Houses/yards not well kept
- Lack of common spaces
- Lack of recreation facilities
- Lack of sidewalks
- Inadequate sidewalks
- Street pavement in poor repair
- Curb and gutter in poor repair
- Other

Participants were asked to indicate what the assets are in their neighborhood. The following assets were listed as options:

- Large lot sizes
- Friendly people
- Pedestrian friendly
- Child-friendly
- Attractive landscape
- Available recreational facilities
- Close proximity to resources (e.g. grocery store, laundromat, bank, library, etc.)
- Locally owned businesses
- Religious organizations/resources
- Cultural organizations/resources
- Close proximity to restaurants
- Citizen/neighborhood associations
- Historic buildings
- Attractive homes
- Other

Perception of Safety

One of the safety questions was taken from McGuire's (1997) Neighborhood Characteristics Questionnaire and Observation Scale, specifically; neighborhood has become worse and more dangerous than other parts of the town. Other items were developed by the research in cooperation with Town of Cary staff.

Safety was measured in two parts. First, participants were asked to indicate their level of agreement with the following four statements with response options ranging from 1=strongly disagree to 5=strongly agree:

- This neighborhood is more dangerous than other parts of the town.
- People are afraid to go out after dark in this neighborhood.
- Friends/Relatives don't visit this neighborhood because of safety concerns.
- This neighborhood has become more dangerous since I moved in.

The reliability of the scale was moderate, $\alpha=.861$. It would increase slightly (.898) if the overall safety item were deleted. Participants were then asked to rate how safe they feel within their neighborhood on a 9-point scale. The item was taken from the Town of Cary Biennial Citizen Survey (Town of Cary, 2006^b).

Demographics

The demographic items assessed race, income, education, gender, age, homeownership, tenure in the neighborhood and in Cary, and living situation. They were developed by the researcher and the Town of Cary Planning staff. The items measuring education, race, and income were taken from the Town of Cary Biennial Citizen Survey with slight modifications (Town of Cary, 2006^b).

Open-Ended

Five open-ended questions were added in order to determine whether there were any program development possibilities. Each item was developed by the researcher. The open ended items were:

- If you could change ONE thing about your neighborhood, what would it be?
- What is the ONE best aspect of your neighborhood?
- What is ONE thing that could increase your sense of community with your neighborhood?
- What is ONE thing that could increase your level of interaction with your neighbors?
- Where do you obtain the majority of information about issues/events in your neighborhood?

Procedure

The survey was designed, implemented, and analyzed by a graduate student at North Carolina State University. All instruments and procedures were approved by the North Carolina State University Institutional Review Board.

The procedure was as follows:

1. All surveys were labeled with either an A or a B that corresponded to the census block group to which they were being sent. That way, when returned, each survey could be matched to one of the two block groups.
2. The survey was also available online for those participants that prefer using the internet to completing a paper-based form. This was also done in order to increase the response rate.
3. The survey along with a cover letter explaining the study was mailed to all 633 households within the two block groups.
4. Three weeks after the initial mailing was sent, a follow-up mailing was distributed. This mailing included another copy of the survey along with a follow-up cover letter. Since this was an anonymous survey there was no way of tracking those who had already responded to the survey. So, the follow-up was sent to all households within the two census block groups. Multiple contacts were used since past research has shown that increasing the number of contacts the researcher has with the participants will increase the response rate (Dillman, 2000).
5. Three weeks after the follow-up was sent, the survey was closed.

CHAPTER 3: RESULTS

Neighborhood Definition

Overall Results

Participants were first asked to identify the four streets that bound their neighborhood. These were then mapped to code the number of census blocks contained within those boundaries. The number of blocks could not be computed for some cases based on the boundaries. For those that could be computed, the average number of blocks was approximately 6 with a standard deviation of approximately 9. The most frequently cited number of blocks was 3. The range was 1 to 39. Residents were also asked whether their neighborhood had a name. 25% of participants

responded with “don’t know”, 27% said “no” and 48% said “yes”. They were then asked to identify the name. Table 4 lists the frequencies of each name reported.

Table 4. Names of Neighborhood

Name	Frequency	Percent
Bad Neighborhood	1	1.3
Callan Park	1	1.3
Cary Historic District	1	1.3
Clay St	1	1.3
Don’t know but it does	1	1.3
East Park St	1	1.3
East Park St and Clay St	1	1.3
Heater Subdivision	1	1.3
Hillsdale Forest	1	1.3
Historic downtown Cary!	1	1.3
Krendle Woods	1	1.3
M.B. Dry	1	1.3
near Russell Hills	1	1.3
Older Part of Cary	1	1.3
Park Grove	1	1.3
Think its Kildaire Farms	1	1.3
Urban Terrace	1	1.3
Urban Terrace Part of Town Center (TCAP)	1	1.3
Wishing Well Village	1	1.3
Heart of Cary	2	2.6
Hunter Creek	2	2.6
Russell Hills/Downtown Cary	2	2.6
Heater Park	4	5.1
Downtown	5	6.4
Montclair	7	9.0
Pine Valley	8	10.3
Forest Park	10	12.8
Russell Hills	19	24.4

Comparison of A and B

The mean number of blocks that make up a resident’s neighborhood were compared. Block group B had a higher mean number of blocks, 6.8, than A, 4.7. However, this difference was not significant.

In block group A, 39% said that their neighborhood has a name. In block group B more people said that their neighborhood had a name, 55%.

Actual names for A:

- Bad neighborhood

- Callan park
- Clay St
- Downtown Cary
- East Park St
- East Park St and Clay St
- Forest Park
- Heater Subdivision
- Hillsdale forest
- Hunter Creek
- Hunter Creek Townhomes
- Older Part of Cary
- Park Grove
- Urban Terrace
- Urban Terrace Part of Town Center (TCAP)

The names given for B were:

- Cary Historic District
- Downtown
- Heart of Cary
- Heater park
- Historic Downtown Cary
- Heater Park neighborhood
- Krendle Woods
- M.B. Dry
- Montclair
- Russell Hills
- Pine Valley
- Russell Hills/Downtown Cary
- Kildaire Farms
- Wishing Well Village

Sense of Community

Overall Results

Seven items were used to measure sense of community. Each had response options that ranged from 1=strongly disagree to 5=strongly agree. Table 5 shows the means for each of the sense of community items. The means were all about average. Each fell between 3 and 4, which correspond to the response options of “neither agree/disagree” and “agree”. However, for all seven items, the most frequent response was “agree”.

Table 5. Sense of Community Items Means

Items	Mean
1. There are people I can rely on among my neighbors	3.85
2. People trust each other in my neighborhood	3.63
3. I feel I belong in my neighborhood	3.77
4. I care about what my neighbors think of my actions	3.50
5. I feel close to some of my neighbors	3.57
6. People in my neighborhood are usually warm and friendly	3.75
7. We help each other out in my neighborhood	3.50

Table 6 shows the percentage of people selecting each response option for each item. Results indicate that for items “I care about what my neighbors think of my actions”, “I feel close to some of my neighbors”, and “we help each other out in my neighborhood” more people selected response options below “agree” than for any of the other items.

Table 6. Sense of Community Item Responses

Items	Strongly disagree	Disagree	Neither agree/disagree	Agree	Strongly agree	Percent above 3 (neither agree/disagree)
1. There are people I can rely on among my neighbors	6.7	7.3	13.3	40.0	32.7	72.7
2. People trust each other in my neighborhood	5.3	9.3	21.2	45.7	18.5	64.2
3. I feel I belong in my neighborhood	7.3	4.0	18.5	44.4	25.8	70.2
4. I care about what my neighbors think of my actions	6.0	10.7	26.2	40.9	16.1	57.0
5. I feel close to some of my neighbors	6.0	12.6	23.2	35.1	23.2	58.3
6. People in my neighborhood are usually warm and friendly	4.6	7.3	17.9	48.3	21.9	70.2
7. We help each other out in my neighborhood	9.2	9.9	22.4	38.8	19.7	58.5

An overall score for sense of community was analyzed based on a composite score. The composite score was developed by computing the mean of the seven items. The mean for the composite score was found to be 3.65, which falls between the response options of “neither agree/disagree” and “agree”. This indicates that, in general, residents have about an average level of sense of community based on the response option scale. However, there are no indices of average sense of community within settings. This may be due to the fact that it is a context specific variable and varies from one community to another making it difficult to compare communities (Hill, 1996).

Comparison of A and B

Mean levels for each of the sense of community items is higher in block group B than in A. This difference is significant for all items except 4 and 5. Table 7 shows the means for the 2 groups for each of the 7 sense of community items.

Table 7. Comparison of Block Groups for Sense of Community

Items	Means	
	A	B
1. There are people I can rely on among my neighbors*	3.61	4.01
2. People trust each other in my neighborhood*	3.29	3.87
3. I feel I belong in my neighborhood*	3.51	3.96
4. I care about what my neighbors think of my actions	3.35	3.61
5. I feel close to some of my neighbors	3.42	3.67
6. People in my neighborhood are usually warm and friendly*	3.40	4.00
7. We help each other out in my neighborhood*	3.21	3.70

*Significant at $\alpha=.05$

The mean levels of the overall sense of community composite score were also examined. Results show that sense of community is indeed higher in block group B than in A. The mean for A was 3.4 and the mean for B was 3.8, which was a significant difference. However, sense of community may also be conceptualized differently in B than in A.

Neighboring

Overall Results

Participants were asked to rate how often they participate in the following five types of neighboring behaviors: visiting with neighbors in their homes, having neighbors over to visit, stopping and talking, spending time doing things together, and exchanging favors with one another. Response options were on a five point scale that included never=1, rarely=2, sometimes=3, often=4, and everyday=5. Participants were then asked to indicate how many neighbors they would recognize, know by name, consider as friends, and would ask to borrow little things. Table 8 shows the means for each of the neighboring items. It is important to note that items 6-9 were open-ended. This resulted in many people responding with text instead of numeric values. For the purposes of this report, only numeric values were analyzed.

Results show that for items 1, 2, 4 and 5 the mean is between 2 and 3, which falls between the response options of “rarely” and “sometimes”. For item 3 the mean is between 3 and 4, which falls between the response options of “sometimes” and “often”. For “meet with my neighbors to spend some time doing things together” the most frequent response was “never.” However, for items 1, 2, and 5 the most frequent response was “sometimes.” For the item “stop and talk with people in my neighborhood” the most frequent response option was “often”.

Table 8. Neighboring Item Means

Items	Mean
1. I visit with my neighbors in their homes.	2.35
2. I have neighbors over to my house to visit.	2.38
3. I stop and talk with people in my neighborhood.	3.30
4. I meet with my neighbors to spend some time doing things together.	2.11
5. I exchange favors with my neighbors.	2.66
6. How many of your neighbors would you recognize if you saw them?	10.55
7. How many of your neighbors do you know by name?	8.52
8. How many of your neighbors do you consider as your friends?	4.41
9. How many of your neighbors would you have no problem asking to borrow little things?	4.17

The table below shows the results for percent of participants selecting each response option for each of the 5 close-ended items.

Table 9. Neighboring Item Responses

Items	Never	Rarely	Sometimes	Often	Everyday	Percent above 3 (sometimes)
1. I visit with my neighbors in their homes	27.5	25.5	32.2	14.1	.7	14.8
2. I have neighbors over to my house to visit	26.4	27.7	29.1	15.5	1.4	16.9
3. I stop and talk with people in my neighborhood	3.9	12.5	38.2	40.1	5.3	45.4
4. I meet with my neighbors to spend some time doing things together	35.1	28.5	27.8	7.9	.7	8.6
5. I exchange favors with my neighbors	22.4	17.8	34.2	22.4	3.3	25.7

The activity that takes the most amount of effort, “meet with my neighbors to spend some time doing things together” has the least amount of people doing this “often” or “everyday”. Visiting neighbors in their homes and in own home also had a low percentage of people doing it “often” or “everyday”. Stopping and talking with neighbors had the largest amount of people doing this

“often” or “everyday”. This could be the result of stopping and talking taking relatively little effort.

A composite score was computed for type of neighboring behavior by computing the mean for the first 5 items. The mean of the composite was found to be 2.57, which is fairly low falling between “rarely” and “sometimes”.

Items 6-9 asked participants to indicate the number of neighbors they would recognize if they saw them, the number of neighbors they know by name, the number of neighbors they consider as friends, and the number of neighbors they would have no problem asking to borrow little things. The mean for each is 10.55, 8.52, 4.41, and 4.17 respectively. The first two seem to be very high. For the items “number of neighbors consider as friends” and “number of neighbors they would have no problem asking to borrow little things” the number seems adequate; however, the most frequent response to both of these items was 0 and the median was only 2. This could be due to the fact that this activity takes more effort as well as more trust. Item 6 ranged from 0-50 people. Item 7 ranged from 0-50 people. Item 8 ranged from 0-25 and item 9 ranged from 0-30.

Comparison of A and B

The mean for each individual neighboring item was compared for the two groups. Results show that neighboring is higher in group B than in A. This difference is significant for all items except ‘have neighbors over to my house to visit.’ Table 10 shows the means for the 2 groups for each of the 9 neighboring items.

Table 10. Comparison of Block Groups for Neighboring

Items	Means	
	A	B
1. Visit with my neighbors in their homes*	2.08	2.53
2. Have neighbors over to my house to visit	2.20	2.51
3. Stop and talk with people in my neighborhood*	3.11	3.44
4. Meet with my neighbors to spend some time doing things together*	1.75	2.36
5. Exchange favors with my neighbors*	2.44	2.82
6. How many of your neighbors would you recognize if you saw them*	6.84	13.22
7. How many of your neighbors do you know by name*	5.41	10.84
8. How many of your neighbors do you consider as your friends*	2.62	5.71
9. How many of your neighbors would you have no problem asking to borrow little things*	2.65	5.23

*Significant at $\alpha=.05$

The overall level of type of neighboring behavior was also compared. The mean of the first 5 items measuring the frequency of neighboring behaviors was computed. Results show that incidence of neighboring was higher for B than for A and this difference was significant. The mean for B was 2.7 and the mean for A was 2.3. Both fall between the “rarely” and “sometimes” response options.

Results also show that the number of neighbors who residents interact with is higher in block group B than in A. For some items, it is quite a bit higher. For instance, on average, residents within block group A would recognize about 7 neighbors if they saw them. However, block group B residents would recognize almost twice as many. The same can be said for knowing neighbors by name, considering neighbors as friends, and borrowing little things from neighbors.

Citizen Participation

Overall Results

Participants were asked how often they participate in community discussions, community problem solving, and neighborhood related activities. Response options ranged from 1=never to 5=everyday.

The level of participation for each of these items was quite low. For each of the items, the means fall between the response options of “rarely” and “sometimes”. Table 11 lists the means for each of the items. For “participate in neighborhood related activities” and “personally participate in community problem solving” the most frequent response was “never”. For “informally talk with neighbors about a community problem” the most frequently cited response is “sometimes”.

Table 11. Citizen Participation Item Means

Item	Mean
1. Informally talk with neighbors about a community problem	2.44
2. Participate in neighborhood related activities	2.01
3. Personally participate in community problem solving	2.16

A composite score was computed for the three citizen participation items listed above. It was computed by averaging the three items. The mean of the composite score was 2.21, which falls between the response options of “rarely” and “sometimes”. So, on average, residents are not participating in community problem solving or neighborhood related activities at a very high level. Table 12 shows the percent of people responding with each of the response options for each of the items. Results show that very few residents are participating in the above items “often” or “everyday”.

Table 12. Citizen Participation Item Responses

Items	Never	Rarely	Sometimes	Often	Everyday	Percent above 3 (sometimes)
1. Informally talk with neighbors about a community problem	24.2	20.1	43.6	11.4	.7	12.1

2. Participate in neighborhood related activities	48.6	17.1	20.5	11.6	2.1	13.7
3. Personally participate in community problem solving when a problem arises	38.1	21.1	29.3	10.2	1.4	11.6

Participants were then asked in which community they participate in community problem solving. Areas of community problem solving included the block, neighborhood, town, and none. Results indicate that residents participate more frequently in community problem solving within their block than any other area. However, almost 40% responded that they participate in community problem solving in none of the areas listed.

Table 13. Community Problem Solving Reference Groups

Items	Percent
Within block	38.9
Within neighborhood	29.9
Within Town	24.3
None	39.6

In terms of homeowner’s associations within the neighborhoods, out of those who answered the question about 79% say that there is no homeowner’s association within their neighborhood. Another 15% don’t know, leaving only 6% responding that there is a homeowner’s association within their neighborhood. Out of those who stated that there is a homeowner’s association, the following names of HOA’s were given: Callan Park, Hunter Creek, Park Grove, and Waldo St Townhomes.

Six people added comments next to the question of whether there is an HOA or as a response to the question that asked why they are not involved stating that they do not want a homeowner’s association in their neighborhood. Specific comments included:

- “And we don’t want one! We bought here for that reason!”*
- “Would not live in a neighborhood with an association”*

Participants were also asked about their involvement in community groups. Table 14 shows the results for involvement in community groups. Participants were asked to indicate with which groups they are involved. The following options were available: Neighborhood groups/associations, town-wide community groups, informal neighborhood groups, homeowner’s association, and none. Approximately 72% of respondents indicated that they are not involved with any group. Out of those that stated that they are involved with at least one of the groups mentioned, a higher percentage indicated that they were involved with an informal neighborhood group than any other group listed.

Table 14. Group Involvement

Group	Frequency	Percentage
Homeowner’s association	6	4.3
Neighborhood groups/associations	11	7.8

Town-wide groups	15	10.6
Informal neighborhood groups	24	17

Residents were then asked to indicate why they are not involved with these groups. There were a variety of reasons listed. However, out of the 101 people who stated that they were not involved with any of the above groups, only 81 responded with an actual reason. For data analyses, each response was assigned a theme. A response was determined to be a theme if more than one person mentioned it. The reasons were grouped into 10 main themes, which are:

- New to the area: The resident has just moved to the area
- No groups: There are no groups within the neighborhood.
- No interest: The resident does not want to be involved with any of the groups
- No need: The neighborhood does not need any of these groups.
- Not aware: The resident is not aware of opportunities to be involved.
- Not approached: The resident has not been asked to be involved in any of these groups
- Other obligations/time: The resident is too busy with other obligations and/or does not have time to be involved.
- Resident differences: It is difficult to become involved because of the other residents. (language barrier, some have small children and some don't, cultural difference, people aren't friendly, renters treated differently than homeowners)
- Get together informally: The residents already get together informally.

The final item in the citizen participation section asked residents to indicate the names of groups that they are involved with. Out of the 56 who said that they were involved with one of the above-mentioned groups, only 12 people responded with a name of any actual group. The groups mentioned were:

- Kiwanis Club of Cary
- Rex Wellness Center
- Heart of Cary
- Downtown Cary Park (Old Cary School)
- Cary Town Center Review Commission
- TC Review Commission
- Precinct 1 Democratic Party
- Chamber of Commerce
- Down's Syndrome Association
- Progressive Dinner Club
- Heater Park Gatherings
- Page Walker Community Events
- Cary Dog Park Club
- Town of Morrisville Parks and Recreation
- Chix in Business
- BNI
- Triangle Homeworks
- National Association of Women in Construction

Others mentioned that they are part of a group but that it is informal and may not have a name. Out of the 23 people who attempted to answer the question, a total of 12 responded that at least one of the groups with which they are involved is informal. For example, one participant mentioned that they had come together to form a community watch yet had no name for the group. Another mentioned forming a neighborhood garden club yet had no name. Examples of specific responses include.

“informal neighborhood conversations-one on one concerns about up keep of the properties...”

“we have rotating dinner parties and cookouts. In the fall and summer we have block parties”

“groups of friends/neighbors-children attend the same schools...”

Comparison of A and B

There were higher levels of community problem solving and participating in neighborhood activities for block group B than for A. However, this difference was only significant for participating in neighborhood related activities. Table 15 shows the mean levels.

Table 15. Comparison of Block Groups for Citizen Participation

Items	Means	
	A	B
1. Informally talk with neighbors about a community problem	2.32	2.53
2. Participate in neighborhood related activities*	1.58	2.31
3. Personally participate in community problem solving	2.11	2.19

*Significant at $\alpha=.05$

Table 16 shows the percentage of residents who participate in community problem solving within each of the types of communities. More residents within block group A responded that they don't participate in community problem solving within any of the communities listed. However, in terms of responses to each of the options, block group A residents participate in more community problem solving within their block than B. Block group B participates in more community problem solving in the larger areas such as the neighborhood or the town than residents within A.

Table 16. Community Problem Solving Reference Group Comparison of Block Groups

Items	Percent	
	A	B
Within block	40.7	37.6
Within neighborhood	20.3	36.5
Within town	20.3	27.1
None	49.2	32.9

Table 17 shows the percentage of people involved in each of the community groups for both block groups. Results show that there are a higher percentage of people within A who do not

participate in any of the groups. Block group B has a higher percentage of people involved with neighborhood groups, town-wide groups, and informal groups. However, there is a higher percentage of people involved with homeowner’s associations within block group A.

Table 17. Comparison on Block Groups for Group Involvement

Items	Percent	
	A	B
Neighborhood groups/associations	3.3	11.25
Town-wide community groups	8.2	12.5
Informal neighborhood groups	8.2	23.75
Homeowner’s association	8.2	1.25
None	77.0	67.5

There were only four homeowner’s associations total. All were located in A. No one within block group B stated that there was a homeowner’s association. GIS data reveals that there is one HOA within A, Callan Park. And there are two within B, Krendle Woods and West Park Condominiums. Further analysis is needed to determine which data set is correct and what homeowner’s associations exist within the downtown area.

Needs/Assets

Overall Results

Participants were asked to identify any problems that they see with their neighborhood from a list of possible needs. Table 18 lists the results of this item.

Table 18. Needs

Need	Percentage
Graffiti	2.6
Burned down buildings	4.5
Vacant/Abandoned store fronts	4.5
Unemployed people hanging out	5.8
Drug Addicts	8.4
Curb and gutter in poor repair	9.7
Alcoholics and Public Drinking	9.7
Lack of common spaces	9.7
Inadequate sidewalks	12.3
Inadequate Parking	13.6
Lack of recreation facilities	13.0
Street pavement in poor repair	14.3
Lack of sidewalks	16.2
Noise	20.1
Litter/trash	27.3
Other	30.5
Traffic	39.6
Houses/Yards not well kept	39.6

Results show that the most frequently chosen needs are traffic and houses/yards not well kept. The average number of needs that any one respondent selected was 2.8 out of a possible 18, indicating that, on average, there aren't that many needs within the neighborhoods. Appendix D contains the responses to the "other" option. However, any mention of specific households was not included.

Similar to needs, participants were also asked to identify any assets they consider to be present in their neighborhood. Table 19 lists the results of this item. Results show that the most frequently chosen asset is close proximity to resources such as grocery store, laundromat, bank, library, etc. Appendix D contains the 33 responses to the "other" option.

Table 19. Assets

Asset	Percentage
Citizen/neighborhood associations	5.2
Other	16.2
Available recreation facilities	17.5
Cultural organizations/resources	22.7
Attractive Homes	36.4
Child Friendly	40.3
Religious Organizations/Resources	40.9
Attractive landscape	41.6
Historic Buildings	42.2
Large lot sizes	44.2
Locally owned businesses	47.4
Pedestrian Friendly	55.2
Close proximity to restaurants	59.7
Friendly people	65.6
Close proximity to resources	83.8

The average number of assets that any one respondent selected was 6.2 out of a possible 15. This indicates that the number of assets in the neighborhood far outweigh the needs of the neighborhood. At least for those needs and assets analyzed.

Comparison of A and B

The mean for total number of needs and total number of assets was compared across the two block groups. Results show that the mean number of needs selected was higher for A than for B, 3.5 and 2.3 respectively. This difference was significant. The mean number of assets selected was higher for B than for A, 7.1 and 4.9 respectively. This difference was also significant.

Table 20 shows the percentage of respondents who selected each of the needs listed for each of the block groups.

Table 20. Needs of Each Block Group

Need	A	B
Vacant/abandoned store fronts	1.6	6.7

Graffiti	6.3	0.0
Lack of common spaces	7.8	11.1
Curb and gutter in poor repair	7.8	11.1
Inadequate sidewalks	9.4	14.4
Burned down buildings	10.9	0.0
Unemployed people hanging out	14.1	0.0
Lack of recreation facilities	15.6	11.1
Inadequate parking	15.6	12.2
Alcoholics and public drinking	17.2	4.4
Drug addicts	20.3	0.0
Street pavement in poor repair	20.3	10.0
Noise	26.6	15.6
Lack of sidewalks	29.7	6.7
Litter/trash	34.4	22.2
Traffic	34.4	43.3
Other	35.9	26.7
Houses/yards not well kept	46.9	34.4

Table 21 shows the percentage of respondents who selected each of the assets listed for each of the block groups.

Table 21. Assets of Each Block Group

Asset	A	B
Citizen/neighborhood associations	1.6	7.8
Cultural organizations/resources	10.9	31.1
Other	17.2	15.6
Attractive homes	18.8	48.9
Available recreation facilities	20.3	15.6
Attractive landscape	26.6	52.2
Large lot sizes	28.1	55.6
Religious organizations/resources	29.7	48.9
Historic buildings	31.3	50.0
Child friendly	35.9	43.3
Locally owned businesses	37.5	54.4
Pedestrian friendly	43.8	63.3
Friendly people	53.1	74.4
Close proximity to restaurants	56.3	62.2
Close proximity to resources	78.1	87.8

Perception of Safety

Overall Results

Participants were asked to rate how strongly they agree or disagree with the following statements concerning safety, with response options ranging from 1=strongly disagree to 5= strongly agree.

- This neighborhood is more dangerous than other parts of the town.
- People are afraid to go out after dark in this neighborhood
- Friends/Relatives don't visit this neighborhood because of safety concerns
- This neighborhood had become more dangerous since I moved in.

Table 22 shows the means of each of the first four safety items. The last item, measuring overall safety, was left out of the chart since it was measured with different response options. Results show that in terms of these safety indicators, residents do feel safe. For example, the mean of each is quite low (approximately 2) which falls around the “disagree” response option.

Table 22. Safety Item Means

Items	Mean
1. The neighborhood is more dangerous than other parts of the town	2.26
2. People are afraid to go out after dark in this neighborhood	2.03
3. Friends/Relatives don't visit this neighborhood because of safety concerns	1.70
4. This neighborhood has become more dangerous since I moved in	2.21

The percent of participants selecting each response option is contained in Table 23.

Table 23. Safety Item Responses

Item	strongly disagree	disagree	neither	agree	strongly agree	Percent above 3 (neither agree/disagree)
1. This neighborhood is more dangerous than other parts of the town	29.3	36	17.3	14	3.3	17.3
2. People are afraid to go out after dark in this neighborhood	32.2	45	12.1	8.7	2	10.7
3. Friends/Relatives don't visit this neighborhood because of safety concerns	48.6	36.5	12.2	2	0.7	2.7
4. This neighborhood has become more dangerous since I moved in	32.2	36.9	14.1	11.4	5.4	16.8

Results show that on average residents disagree with the statement concerning friends/relatives avoiding visits because of safety concerns. The percentage of people who agree with the neighborhood being more dangerous than other parts of the town was the highest.

A composite score was computed in order to report an overall safety level for these four items. The composite was computed by taking the average of the above 4 items. Results of the

composite score show that overall safety concerns are low. The mean of the composite is approximately 2 corresponding to the "disagree" response option.

Another overall safety score was computed. A fifth item measured overall safety with the neighborhood with response options of 1=extremely unsafe, 5=average, and 9=extremely safe. The item was designed to correspond to the overall safety item in the 2006 Biennial Citizen Survey (Town of Cary, 2006^b). Table 24 shows the frequencies of each of the response options for the biennial survey and the present survey. The overall perception of safety found in this study was much lower than that found in the biennial survey. The mean of perception of safety within the neighborhood for the present study is 6.6, while it is 8.22 in the biennial survey. Another data source for safety concerns comes from a survey of 337 Cary residents conducted by the police department (Town of Cary, n.d.^c). The survey found that residents felt “very safe” in their neighborhood. However these results cannot be compared to the present study since the response format of the police department survey is not known.

Table 24. Comparison of Overall Safety Item to Biennial Survey

Survey	Reference Group (safety within neighborhood or town)	Mean	Extremely unsafe=1	2	3	4	Average=5	6	7	8	Extremely Safe=9	% above 5
Present	Neighborhood	6.6	2.1	2.1	5.6	6.3	14.6	6.9	20.1	25	17.4	69.4
Biennial	Neighborhood	8.22	.2	0	.2	1	1.5	1.5	13.2	33.1	49.3	97.1
Biennial	Cary	8.10	0	0	0	.5	2	2.2	17.3	38.6	39.4	97.5

Comparison of A and B

Mean levels of the safety items show that there are significant differences between the two census block groups for all of the items. Results show that perception of safety is higher for block group B. The difference was significant for each of the items. It is not unreasonable to find that perception of safety is higher for block group B than for block group A since more crimes occurred in block group A, at least between the months of January and May 2007 (Town of Cary, 2007^d).

Table 25. Comparison of Block Groups for Safety

Items	Means	
	A	B
The neighborhood is more dangerous than the other parts of the town*	2.58	2.03
People are afraid to go out after dark in this neighborhood*	2.39	1.78
Friends/Relatives don't visit this neighborhood because of safety concerns*	1.93	1.53
This neighborhood has become more dangerous since I moved in*	2.56	1.95

How safe do you feel in your neighborhood*	5.73	7.21
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*Significant at $\alpha=.05$

The item measuring overall safety is quite striking. The following table indicates the percentage of people who picked each of the response options for each of the census block groups. The table demonstrates that the residents' perception of safety within group B is higher than the perception of safety within group A. 51.66% of residents within group A responded with an option above 5 while 82.14% of participants within group B selected above a 5. The mean for block group A was 5.73 and the mean for B was 7.21, which was a significant difference.

Table 26. Comparison of Response Options of Overall Safety Items Across Block Groups

Response Options	Percentage	
	A	B
1	5.0	0.0
2	3.3	1.2
3	10.0	2.4
4	11.7	2.4
5	18.3	11.9
6	8.3	6.0
7	16.7	22.6
8	13.3	33.3
9	13.3	20.2

Open-Ended

There were 5 open-ended items added to the end of the survey in order to capture input from the residents without the constraints of close-ended response options. For each question, individual responses were assigned codes then codes were organized into themes.

Change one thing

The first question asked participants if they could change one thing about their neighborhood what would it be. The following themes emerged from the data: Appearance, Property Transition, Neighbor Interaction, Infrastructure, Traffic, and Nothing.

The Appearance theme consists of instances when respondents mentioned cleaning up the area in some way such as fixing up the houses or yards, adding streetlights or signage, cleaning up after pets, and revitalizing the area. Residents stated:

“Clean up the neighborhood”

“upgrading the in-filled multiple family dwellings”

“get everyone to clean up their yards and fix up their houses”

“People allowing their pets to mess in others yards and don't clean up after them”

The Property Transition theme consists of instances when respondents mentioned that they would like to change the housing composition within the neighborhood such as remove the rental properties and create more single family homes. For instance:

“not so many rental homes and duplexes. The run down duplexes need to be torn down and turned into single family homes”

“Transition rental houses to home owners interested in upgrading/maintaining properties”

“bring in more higher end housing”

The Neighbor Interaction theme consists of responses that make mention of having more neighbor interaction such as more activities for kids, more events, more recreation facilities and more visits with their neighbors. Residents stated:

“The neighborhood is very diversified...As such people tend to keep to their ethnic group. We smile and wave but don't really do things together. An occasional functional would be nice”

“scheduled events (pot-lucks, etc.) once in a while”

“playground at Heater Park”

The Infrastructure theme represents those responses that mention changing something about the utilities, sidewalks, or streets. Examples of responses include:

“Sidewalks to make more ped. Friendly”

“Bury power/telephone lines underground”

“streets too small”

The Traffic theme represents the responses that mention changing something about the speeding, people cutting through the neighborhood, dangerous intersections or pattern and flow. For instance:

“speed bumps to slow traffic”

“force traffic around rather than through the neighborhood”

“Slow down traffic on South Harrison Ave. Put speed bumps as in other neighborhoods”

“Slow cars down because of pets and children”

“traffic speed and pattern”

The Nothing theme was created for those residents who thought that nothing needed to change.

Best Aspect

The second question asked residents what the best aspect of the neighborhood is. The following themes emerged from the data: Atmosphere, Appearance, People, Convenience, and Organization.

The Atmosphere theme consists of responses that mention the feeling within the neighborhood such as it being safe, quiet, having great character, being established or historic, having a small town feel, etc. Residents stated:

“warm community, small town “feel””

“Quiet established neighborhood”

“Quiet, peaceful”

Appearance included any response that mentioned the physical appearance of the neighborhood such as the landscape, yards, and homes. For instance:

“unique homes”

“immediate area is very neat and well kept”

“Larger lots than most in Cary”

“trees-unlike newer neighborhoods, ours has been around for awhile the trees have grown back.”

The People theme was developed to encompass responses that concerned the people within the neighborhood. For example, this theme covered responses that mentioned how helpful neighbors are, how friendly people are in the neighborhood, the level of interaction within the neighborhood or the diversity in the neighborhood. Examples of responses include:

“We are basically friendly folks-somewhat like a Mayberry- if you are sitting on porch and a walker comes along - wants company-sit for awhile.”

“mix of older and younger families”

“The people. Most of my neighbors have lived in their homes for over 30 years. They are considerate and helpful and most of them maintain their homes and properties well.”

The Convenience theme consisted of responses that mentioned how convenient the neighborhood is to downtown resources, the location, the fact that they can walk to resources, the availability of recreation facilities and that it is pedestrian friendly. For instance:

“close proximity to library, groceries, shopping, downtown, etc.”

“dog walking friendly”

“convenient to shopping, I40, work”

The Organization of the neighborhood includes responses that mention having no HOA present in the neighborhood.

Increase Sense of Community

The third question asked residents what would increase their sense of community. The following themes emerged: Interaction, Public Spaces, and Change Neighborhood Composition.

Interaction includes responses that mention activities, events, neighbor interaction, or getting outdoors to see one another. For instance:

“get to meet neighbors”

“have a neighborhood social event (was done in the early years of this development)”

“If the elderly would do more to interact with the new residences”

“people spending more time outside”

Change Composition refers to responses that mention somehow changing the make-up of the neighborhood. Residents mentioned things like having more in common with their neighbors, having less rental properties, renovating the downtown area, and having less turnover in the neighborhood. Residents stated:

“younger population”

“More commonalities. Some folks here are old, some single, some with small families. And a busy street between us to keep up separate.”

“If not so many renters you could bond with people and build a sense of community - Can't do that with all the renters constantly moving in and out”

“Discourage rental property. The turn over and maintenance of the rental property never allows renters to become part of the community.”

The Public Spaces theme refers to responses concerning having more public spaces within the neighborhood. These could include anything from recreation facilities to common areas such as sidewalks. For instance:

“Green spaces as a place for people to gather and interact-prevent downtown Cary becoming a cement jungle”

“a public gathering space”

“A better neighborhood park or playground”

“more downtown eateries, etc.”

“Sidewalks on all streets”

Increase Neighbor Interaction

The fourth question asked residents to indicate what would increase their interaction with their neighbors. The following themes emerged: Interaction, Public Spaces, Time, Change Neighborhood Composition, Nothing.

The theme of Interaction encompassed any mention of interacting with neighbors such as having neighborhood events and activities, talking with neighbors more, and getting out more. For instance:

“more cultural events (i.e. like Lazy Daze)”

“more neighborhood activities. Also get outside more and make ourselves visible!”

“Block parties are held twice a year & we get an opportunity to meet everyone again & the new residence. If people made more effort.”

Public Spaces includes responses that mention increasing or enhancing the recreation facilities, sidewalks, or green spaces. Participants stated:

“cool things to walk to i.e. ice cream, parks, kid friendly restaurants”

“Town Center Park”

“Having sidewalks on all streets to encourage more walking”

Time had to do with simply having more time to spend interacting with neighbors. For example:

“Having time to devote to it. We all work and I'm usually the last one to come in. Most everybody else is inside getting ready for the next day”

Change Composition theme refers to changing the housing as well as the people. Residents mentioned having different neighbors, trusting neighbors more, overcoming the language barrier, having fewer rentals, less turnover, and cleaner homes. For instance:

“having more in common with my neighbors”

“Reduce the number of rental properties (homes being used by multiple dwellers not families)”

“Not so many renters need more homeowners”

“We have great interaction with our immediate neighbors that own their homes but with so many renters there is a constant change and little opportunity to interact. 9 times out of 10 the renters don't speak English so there is a language barrier.”

The Nothing theme was created to encompass those who responded that they already interact with their neighbors and don't need anything to increase their interaction. Others responded that they don't want to interact with their neighbors.

Source of Information

The final open-ended question asked residents where they obtain the majority of information about issues/events in their neighborhood. Table 27 presents the results of that question. Results indicate that neighbors are the most common source of information in the neighborhood.

Table 27. Sources of Information for Neighborhood Issues/Events

Code	Frequency	Percent
Channel 11	1	0.8
Church/School	1	0.8
WRAL	1	0.8
Reading	1	0.8
Ashworth	2	1.7
Library	2	1.7
Homeowner's Association	2	1.7
N&O	3	2.5
Other people (i.e. family, friends)	4	3.4
Nothing happens (there are no events in the neighborhood)	6	5.0
News	6	5.0

Internet	7	5.9
Fliers/postings	7	5.9
No formal channel (no particular source of information)	7	5.9
BUD	9	7.6
TV	9	7.6
Word of mouth	10	8.4
www.townofcary.org	11	9.2
Mailings	11	9.2
Coming from Town Hall	17	14.3
Cary news	18	15.1
Newspaper	20	16.8
Neighbors	30	25.2

CHAPTER 4: DISCUSSION

The present study was undertaken in order to assess the health of the downtown Cary area. The Town was interested in finding out residents' attitudes toward their neighborhoods, how to better reach residents for information flow to and from the neighborhoods, and what needs and assets are present in the neighborhoods. To do this, the Town implemented a survey that measured sense of community, neighbor interaction, citizen participation, needs, assets, safety, and demographic variables.

In terms of attitudes toward their neighborhood, results show that attitudes are fairly positive. Sense of community was about average. On a scale of 1 to 5, the mean sense of community score was 3.65. The perception of safety was high for individual items assessing the level of perceived danger in the neighborhood, the safety within the neighborhoods compared to other neighborhoods within Cary, and whether the neighborhood has become more dangerous over the years. However, overall perception of safety was quite low compared to past assessments of perception of safety within neighborhoods. On a scale of 1 to 9 the average overall safety score was 6.6. This was compared to the results of the biennial survey, which showed that, overall, Cary residents feel that their level of safety in their neighborhoods is well above average while within just the area surveyed in the present study, residents' level of safety within their neighborhoods is about average.

In terms of formal and informal networks for information flow within the neighborhood, results are not promising. Neighboring behaviors and citizen participation were both quite low. For the majority of neighboring behaviors, residents responded between "rarely" and "sometimes." Also, behaviors that take more effort such as being friends with neighbors or borrowing things from neighbors are done very infrequently. This lack of neighboring is reflective of the overall state of neighboring in America, which has been declining for single and married individuals over the last 30 years (Putnam, 2000). For citizen participation, residents responded that they were participating in neighborhood activities, informal discussions of community problems and community problem-solving at most "sometimes." They are also participating in both formal and informal groups at a very low rate. Only 28% of residents responded that they were involved with any of the following: homeowner's associations, neighborhood groups/associations, town-

wide groups, or informal neighborhood groups. In terms of reaching residents, there do not seem to be many formal channels available for information. Only 6% of respondents stated that there was a homeowner's association within their neighborhood. If there is no homeowner's association then one could possibly reach them through other groups in the neighborhood, but few people selected any of the other groups as well. Many residents also commented that they did not want an HOA in their neighborhood. A few speculations can be made about why people are not supportive of HOA's. These include the fact that HOA's have the ability to discriminate against certain individuals, their ability to control the appearance of homes and property, requiring fees and dues and requiring that all property owners within a neighborhood join the association (Nelson, 2004). However, there are upsides to having an association. They can provide a forum for discussion of neighborhood problems, provide a space for interaction with neighbors, and act as an information conduit from the municipality to residents and visa versa.

The survey, however, did indicate how large of an area to focus on for information flow. Results show that residents typically stick to their block or a few blocks surrounding their home. The average number of blocks that make up their neighborhood was 6 with the most frequently cited response being 3. Another indicator that residents are more focused on their block than other larger areas is the fact that the most frequent response to the question asking about where they participate in community problem solving was within their own block. These results indicate that when directing attention toward neighborhoods, the greatest response from residents may come when the reference group for efforts is small.

The survey was also implemented to determine the needs and assets of the downtown area. The average number of assets selected far outweigh the number of needs selected. Traffic and houses/yards not well kept were the top responses to the needs question, while close proximity to resources was the number one response to the assets question.

Finally, the survey contained open-ended questions that allowed residents to elaborate upon what they would change in the neighborhood and what would increase their sense of community and neighboring behavior. Open-ended results indicated that residents would like to change Appearance, Property, Neighbor Interaction, Infrastructure, and Traffic. They thought that the following would increase their sense of community and neighbor interaction: Change Composition of Neighborhood, Public Spaces, and Interaction. One of the most striking results that appeared while coding the data was the number of people that mentioned getting rid of rental property or renters within the neighborhood for each of the questions. There seems to be some tension between homeowners and renters, since almost 12% of respondents said that what they would change is to decrease the number or renters/rental properties within the neighborhood. However, there is no evidence that rental units are detrimental to a neighborhood. Are renters less friendly people, care less about the neighborhood, suffer from a lack of involvement? There is no evidence of this. The majority of those residents who stated that they would like to decrease the number of rental units did not provide an explanation. Past research has found that renters participate in more neighbor interaction than owners and are more active in the community than owners (Krueckeberg, 1999). The disdain may come from rental units being run-down. A few respondents indicated that the appearance of rental units should be improved. This could give the Town a focus for future programs in the neighborhood, revitalizing rental units with the cooperation of landlords.

Strengths

The biggest strength of this survey was that it allowed the Town of Cary to collect baseline data within the downtown area. As the Town Center Area Plan comes to fruition, it will be valuable to have baseline information upon which to compare future assessments of neighborhood characteristics to determine the impact implementation of the plan has had on residents. With multiple references to sense of community and neighborhoods within various Town documents, it was important to understand the current level of each of the neighborhood characteristics examined. Again, with baseline information, goals and objectives within each Town plan mentioning enhancement of neighborhood characteristics can be monitored. Another strength was the variety of variables examined. The survey as a whole provides a large breadth of information for planning and evaluation purposes. One last strength is that the majority of variables had at least a moderate reliability, indicating that the variables were measured with little error.

Limitations

One of the major problems with the measurement of sense of community is that sense of community may be completely different in one community than in another making comparisons between neighborhoods difficult (Hill, 1996). Another problem with the study was the representativeness of the participants to the population. According to census data, the demographics of the participants do not match the population (U.S. Census Bureau, 2000). One cause could be that the sampling procedures were not random. Because of the concern of a possible low response rate, the survey was sent to all households. Also, participants within households were not randomized. This could have introduced response bias. Another cause may be that the survey was not available in Spanish, which could have eliminated potential respondents. Another limitation concerned the coding of the open-ended comments. Only one person was coding the open-ended comments. So, reliability analyses cannot be performed. The coding of the responses can be influenced by the perceptions and experiences of the researcher. In the future, there should be more coders for the open-ended comments. Another limitation concerns the section on needs and assets. Participants were asked to check any problems they see with their neighborhood and any assets of the neighborhood. However, not checking a particular asset may not mean that it is not there; it may just mean that that person does not see that as an asset. For example, proximity to restaurants is listed as an asset. Consider a situation where there are many of restaurants in a particular neighborhood. However an individual who does not frequent restaurants may not see the proximity to eateries as an asset. One final limitation is that the research project was not participatory. However, the study was designed to quickly receive a wide breadth of information for future programs and research.

CHAPTER 5. DIRECTIONS FOR FUTURE RESEARCH AND INTERVENTION

Results indicate that residents are not that involved within their communities and do not interact much with neighbors. This section offers a sampling of possible future research and program endeavors based on these results. This list below is in no way comprehensive of all programs and research that could be implemented. It is not the aim of the researcher to suggest that the Town should take all the responsibility for all the programs listed below. The residents should have ownership in any neighborhood endeavors that the Town institutes.

Future Research

Continual Assessment of Neighborhood Characteristics

If the Town of Cary truly does want to increase or at least maintain sense of community, there will need to be continual measurement of the construct in order to determine if sense of community is indeed changing. Another reason for continual measurement concerns the downtown streetscape. The approved Town Center Area Plan includes a vision of a more pedestrian friendly town (Town of Cary, 2001^a). When towns are more pedestrian friendly, typically sense of community and neighbor interaction are increased. Future analyses of sense of community and neighboring behaviors can inform the Town if that vision has truly been achieved and made a difference in the lives of those that surround the downtown area. Continual assessment of various neighborhood characteristics is also important because of the ever-changing nature of neighborhoods. Many item responses alluded to the fact that both neighborhoods are changing. Older residents are being replaced by younger ones and residents who have been in the neighborhood for quite some time are being replaced by those who are new to the neighborhood. Because of this constant ebb and flow, it is important to understand the neighborhood characteristics as the population changes. Because of the high reliability of the sense of community scale piloted in this study it seems plausible that a study could be done of sense of community across the entire town. Other research could also uncover not only how residents act toward others in their neighborhood but also how neighborhoods perceive one another across the entire town.

Network Analysis

Another potential research project is a network analysis. In order for the Town of Cary to increase its flow of information to residents and to market programs, they must first identify how information flow works within the neighborhoods. The current study attempted to identify more formal channels of information by assessing residents' citizen participation. One way this was done was by asking residents whether there is a homeowner's association within their neighborhood, a traditional vehicle for neighborhood information. Almost 79% reported that there is no homeowner's association within their neighborhood. Another 15% responded that they didn't know if there was a homeowner's association. Not only were residents asked whether there is a homeowner's association within the neighborhood, they were also asked whether they are involved in a homeowner's association. Only 4.3% reported involvement with a homeowner's association. Participants were also asked about their involvement with other groups such as neighborhood groups/associations, town-wide groups, and informal groups. Results indicate that 72% of residents are not involved with any of the groups that were listed. So, it is unlikely that information is flowing through neighborhood groups to the residents. However, it seems that more informal channels are in place. Out of those who responded to the last question asking where they receive the majority of their information about neighborhood events approximately 25% responded with "neighbors," approximately 3.4% responded with other people such as family or friends, and approximately 8.4% said word of mouth. Only 1.7% said that their source of information is an association. So, if there is indeed information flow within the neighborhood it is through more informal means such as neighbors. Since there doesn't seem to be many groups or associations providing residents with information about the neighborhood, it is important to understand how the informal channels operate within the neighborhood. In order for the Town to reach residents in the most cost efficient and effective way possible, they must know whom to reach in the neighborhood. One way to do this is through

a network analysis. This type of analysis would also accomplish the task of identifying gatekeepers to the neighborhood.

Photovoice

One subpopulation missing from this analysis is children. A potential follow-up to this study could be a qualitative analysis of how children view their neighborhood. One way to do this is through photovoice. In order to keep research fun and interesting for them, you could distribute disposable cameras to a random sample of children within particular neighborhoods. They would be asked to take pictures of things that represent their sense of community, assets within the neighborhood, what they don't like about the neighborhood, or any variety of other neighborhood characteristics. Each picture's content would then be coded. The Town could then display the pictures throughout the neighborhoods to foster a sense of pride and sense of community within the neighborhood. The process of taking the pictures could increase children's awareness of their neighborhood and could foster a sense of empowerment and accomplishment when the pictures are displayed. This process could also be utilized with an adult population. Photovoice has been used in numerous settings with a variety of populations. Its draw as a research technique comes from the fact that it provides more in depth information for evaluation and program development (Wang & Burris, 1997). Photovoice allows the participants to elaborate upon their own experiences in their neighborhoods, is a more participatory approach to research that takes the perspective of the neighborhood out of the hands of the researcher, brings people together to discuss their experiences, and provides powerful images for policymakers (Wang & Burris, 1997; Wang, Morrel-Samuels, Hutchison, Bell, Pestronk, 2004; Nowell, Berkowitz, Deacon, & Foster-Fishman, 2006).

Other Qualitative Research Methods

One direction for future research is the use of more qualitative methods. A survey was utilized in this study to decrease costs and time demands. However, further analyses with qualitative methods such as participant observation, focus groups, or interviews would be beneficial. Quantitative surveys can only gather so much information. However, when teamed with qualitative methods, a large breadth and depth of information can be examined. Qualitative methods also allow the researcher to gain clarity to ambiguous answers (Caldwell, Jackson, Tucker, & Bowman, 1999). For example, participant observation could be used to further understand how residents interact with one another or how they utilize open or common spaces. Another example concerns the nature of sense of community. Sense of community has been found to vary across settings, so it may be wise to use qualitative methods such as interviews or focus groups to truly understand how residents think about their sense of community (Hill, 1996). It is also apparent from this survey that residents have more information to provide than what can be contained within survey responses, since many participants provided extra comments with their quantitative responses. Qualitative methods are also beneficial to the participants, by giving voice to marginalized groups or illuminating the perspective of dominant groups (Stein & Mankowski, 2004).

Neighborhood Indicators Partnership

Another direction for future research is exploration of the Neighborhood Indicators Partnership. The partnership is a collection of local agencies that collect data within their municipalities. The Urban Institute, the sponsoring organization, provides assistance with developing the information

system and networking opportunities for partners to help one another. As a partner, an agency develops an information system that compiles existing data as well as collects new data. The data can then be used for baseline data, program development, community building, policy making, evaluation, or shared across municipalities. However, before starting to collect data there needs to be a feasibility study of sorts conducted. The Town will need to gather some background information first. Specifically what will the indicators be used for, who wants access, what data do people want to collect, what data do we already have, how will reference groups be defined, how will data be matched, and data management. There are currently no partners within North Carolina (Urban Institute, n.d.).

Traffic Pattern Studies

When asked what is one thing that you would change about your neighborhood, many residents indicated that there are traffic problems within the neighborhood. Since this seems to be a major concern of residents maybe the town should contract with DOT to do traffic pattern studies in the downtown area. Many residents listed ways that the traffic problems could be avoided. Their solutions included speed bumps, stop signs and stoplights in various locations. Traffic problems were also found to be a major concern in the community survey conducted by the police department (Town of Cary, n.d.⁹). Any traffic studies done need to consider the residents' opinions on both problems and solutions. However, some of the traffic problems may be resolved after the downtown revitalization is completed.

Evaluation and Enhancement of Healthy Neighborhoods Initiative

The Town currently has a major program focused on neighborhoods, the Healthy Neighborhoods Initiative. It consists of 4 subprograms; Neighbor to Neighbor, Housing Rehabilitation Program, Neighborhood Improvement Matching Grant, and Facade Improvement Program. These programs have great potential for addressing some of the concerns of the neighborhoods. For example, one of the main concerns of residents was houses and yards not being well kept. The Neighbor to Neighbor program connects volunteers to residents who need home repairs. However, residents may not know of this program or not understand how to connect to it. In order to determine if these programs are effective and whether citizens understand, know about, and utilize the resources available to them there should be a comprehensive evaluation of these programs. Evaluation can inform program effectiveness, improvements and future marketing strategies. The Healthy Neighborhood Initiative could also be expanded to include other Town sponsored programs in order to combat the problem of houses and yards not being well kept. For example, expanding the housing rehabilitation program to include owners of rental properties or organized neighborhood clean-ups.

Future Programs

Involving Youth

Neighborhoods are an important part of children's lives. It is a social setting where they can experience diversity, develop networks of social support, gain experience in civic engagement (Sutton & Kemp, 2002). There is a multitude of ways to attract youth to involvement within their neighborhood. One activity is a Saturday program for youth and their families to discover their neighborhoods coordinated possibly through the local community centers or Parks, Recreation, and Cultural Resources Department. For example, one Saturday could encompass a walking tour of their neighborhood, highlighting unique or interesting characteristics. One Saturday could be

spent with the children making a map of their neighborhood. Another could explore backyard habitats. This program would increase awareness of the neighborhood and what it means for them. It also has the potential for increasing future involvement in neighborhood activities. Another program could involve teaching children about plant growth and agriculture while also involving them in the neighborhood. The Town could work with neighborhood schools to develop a garden within the neighborhood for science classes to use. Another program could be a children's neighborhood art program. In coordination with the Department of Parks, Recreation and Cultural Resources' Public Art program, Cary Schools, and area newspapers youth could create public art for their neighborhoods. For example, each art class could be assigned a few News and Observer, Independent Weekly, or Cary News paper boxes to paint. With the supervision of an art teacher, children could develop their own designs for the boxes and paint them themselves. Art classes could also design art specific to their neighborhood. This activity has the potential for fostering a sense of pride in their neighborhoods as well as increasing the level of involvement in other community activities. Fostering neighborhood identity through the use of public art is currently one of the recommendations in the Public Art Master Plan (Town of Cary, 2001^b).

Increasing Neighboring and Sense of Community

Results indicate that overall the level of neighboring within both of the neighborhoods was low. Results also imply a tension between residents within the neighborhoods especially between renters and owners, making neighbor interaction and sense of community that much more valuable in order to decrease this tension. There are a variety of programs or activities that could be implemented to increase neighbor interaction. The activities mentioned below are just a sampling. In order to increase neighbor interaction one must first bring the residents together.

Meet and Greets:

To increase neighboring, residents need a venue to meet one another. This could be done through neighborhood block parties, neighborhood pot-lucks, movie nights, community gardens, neighborhood games, or garage sales. Garage Sales provide residents from a wide variety of backgrounds with a venue for interacting with one another as well as facilitating the formation of community identity both internally and externally (Herrmann, 2006). Neighborhood Games are another way for residents to get to know one another in fun and innovative ways that build trust within the community. One researcher reported on two different neighborhood games. One was a neighborhood hunt similar to a treasure hunt where teams of residents were given clues to take them around the neighborhood and answer questions about the neighborhood's history. Another game consisted of residents trying to meet and get to know the largest number of residents to win a prize. An informal evaluation of the games resulted in many positive comments included on the forms turned in as part of the games, a large number of people participating, and the researcher observing neighbors interacting with one another (Berkowitz, 2003). Community Gardens are another way in which residents can interact with one another. A community garden can provide those without their own yard or large enough plots of land with a food source as well as bring people together. It is also a way residents can express their culture. In an analysis of Latino gardens in New York, researchers found that residents planted plants that were from their country of origin. They also found that seniors were using the gardens the most. So this may be a way to keep seniors connected to other residents in the neighborhood. Finally, researchers found that the gardens were used as community centers where people come together to socialize as well

as for social events (Saldivar-Tanaka & Krasny, 2004). As part of the present study, residents were asked to identify what would increase their sense of community and neighbor interaction. Many people mentioned neighborhood events/activities as something that would increase their sense of community and neighbor interaction as well as something that they would like to change in the neighborhood. Examples of events included:

- Potlucks
- Cookouts
- Dinners/meals
- Block Parties
- Occasional Functions
- Evening Activities
- Meet and Greet
- Street fairs
- Park events
- Senior citizen events
- Community watch
- Yardwork in Heater Park
- Cultural events
- Community yard sale
- Summer party
- Phone tree

Time Banks:

Once residents have a chance to meet and get to know one another they may be more inclined to help one another. One formal process of residents providing assistance to one another is through Time Banks. The concept behind time banks is basically a bartering system. When an individual helps another he/she earns 1 time dollar per hour of service. That individual can then trade his/her time dollar for services from another. There are a wide variety of services this could encompass. Examples include helping a neighbor with planting, house repairs, transportation or child-care. Time banks as formal systems of interaction show residents that they are more than their needs, that they also have valuable resources to offer others. It is a way to address needs through the assets already present in the community as well as facilitate social inclusion since everyone has something to offer (Seyfang, 2004; Seyfang, 2003). Time banks can empower citizens (Seyfang, 2006), increase self-esteem and confidence, foster friendships, and increase involvement of other community groups (Seyfang, 2003). However, one of the limitations of working with a low-income community is the level of trust that people have in the institutions in the community. Lack of trust could pose a problem when instituting a program such as this. So, before a time bank could be instituted, a feasibility study would need to be conducted to determine if a time bank would be used by residents, how problems of trust could be overcome, and any other concerns residents may have about a program such as this.

Overcoming Individual Differences

When asked what is one thing that you would change about your neighborhood, many residents indicated that they would decrease the number of rental properties and replace them with single-family owner occupied housing. However, doing so will decrease the diversity of the neighborhood by excluding residents from moving in as well as excluding those renters already living within the neighborhood. Residents also responded that they would like to change the composition of the neighborhood such as having more in common with neighbors in order to increase sense of community and neighbor interaction. These responses indicate a need for residents to overcome individual differences to decrease tensions between neighbors. Also indicative of the need for understanding individual difference comes from the fact that both neighborhoods have undergone tremendous change in terms of diversity. Comparison of 1990 and 2000 census data shows that both neighborhoods have become more diverse. According to the census there is now a larger percentage of individuals from minority groups than there were

in 1990. There has also been a shift in the number of owners versus renters within the two neighborhoods. In block group B, the ratio of owners to renters has neared closer to 1 from 1990 to 2000 (U.S. Census Bureau, 2000). One way is to celebrate cultural differences through neighborhood cultural festivals. Such events could celebrate the diversity within a neighborhood. Residents from different cultural backgrounds could display exhibits, provide food, art, etc. Events such as the meet and greets mentioned above could also help to relieve tensions between owners and renters. If the concern of having rental units stems from a perception that renters are not as involved or do not care about the neighborhood, neighbor packets for new residents may be beneficial to both owners and renters. The town along with residents could put together a packet of information about the neighborhood for new residents. The packets could contain information about neighborhood events, neighborhood assets and resources. Packets could be given to real estate agents and rental property owners to be given to new residents.

Increasing Citizen Participation

Results of the present study indicate that citizen participation is low. Few people are involved with community problem solving, neighborhood events, and community and neighborhood groups. One way to increase formal citizen participation could be to increase a slightly more informal version of participation. Study circles centered within neighborhoods may provide that participation. Study Circles are basically discussion groups where residents from a wide variety of backgrounds come together to share personal stories, talk about community problems, and develop a plan for community change (Study Circles Resource Center, n.d.). It wouldn't necessarily need to be a formal group but merely scheduled discussions that anyone may attend.

Fostering Neighborhood Pride

Other possible neighborhood interventions concern building community pride. This could be done through a variety of programs such as neighborhood awards, landscaping contests, neighborhood newsletters, or developing a neighborhood history. First, the Town could recognize neighborhood achievements based on sense of community, social inclusion, neighboring, revitalization efforts, etc. Second, the Town could also sponsor a landscaping contest where entire neighborhoods would compete with one another. Neighbors within each neighborhood could band together to win the contest for their neighborhood. A limited amount of funding could be available for each neighborhood for plants, soil, tools, etc. Third, neighborhood newsletters could be started to publicize neighborhood events, information about new residents, or neighborhood news. Finally, the Town could connect with a history class at NC State to conduct an analysis of the history of the two neighborhoods or even of the downtown area as a whole. Residents mentioned a transition happening within the neighborhoods where older residents are being replaced with younger ones that are new to the area. Communicating the history would be a great opportunity to connect the new residents to the vision of the area.

Addressing Concerns

Another program area involves residents being able to have their concerns addressed. Based on how people placed comments on the survey form, there needs to be some sort of public comment space for citizens. Some used the survey as a forum to air grievances that they have regarding past interactions with the Town leadership or other residents. Some placed comments next to quantitative questions in order to elaborate. For example, there could be space on the Neighborhood America website for people to make comments. The Guide to Citizen Services

states that 94% has internet access either at home or at work (Town of Cary, 2007^c). However, very few completed the survey online. The block groups examined may encompass the 6% that do not have internet access or they may choose not to use it as a feedback mechanism. There could be comment boxes placed around the Town. For those who do not have internet access, don't have the knowledge to use the internet, or do not find it a useful feedback mechanism, comment boxes may provide them with a better way to reach the Town.

Evaluation and Participation

Whatever future programs are developed, it should be noted that those programs need to be evaluated. Without evaluation program leaders/developers have no idea whether the programs are effective as well as what needs to be changed. Any evaluation or further research should be done in a participatory action research design. Residents need to take part in the research design and implementation. Participatory action research empowers program participants by increasing their control over the program. Participants and stakeholders can serve as co-evaluators enhancing the "do with" philosophy. It also gives participants a voice in decisions that affect them (Folkman & Rai, 1997). Using this method can facilitate community support for research, develop research agendas and interventions relevant to resident concerns, increase sustainability of long term research and programs, and aid residents in taking ownership of programs (Altman, 1995). Participatory research could also enhance the trust between sponsoring agency, stakeholders, and participants. If residents are not involved in the development, they will not be involved in the actual program. In order to obtain community buy-in any program has to be developed, implemented, and evaluated in collaboration with residents.

Conclusion

The present study was undertaken in order to determine the health of two neighborhoods within the downtown Cary area. A variety of variables were measured including neighborhood definition, sense of community, neighboring, citizen participation, needs, assets, and perception of safety. Overall, results show that the neighborhoods were lacking especially when it came to neighboring and citizen participation. There were also a variety of concerns within the two neighborhoods. With careful planning and program implementation, the Town can help the residents begin to connect with one another to solve neighborhood problems.

However, it is not the intent of this study to only highlight what is missing or needed in the two neighborhoods. Any neighborhood can have issues that need to be resolved or an aspect that is lacking. It is important to also highlight and appreciate the assets of the neighborhood or what residents like about where they live. In this study, residents were asked to indicate the one best aspect of their neighborhood. Results (shown above) indicate that the downtown area has a great atmosphere, is an attractive place to live, has friendly people, and is convenient to local resources. Overall results of the assets item found that the downtown area is pedestrian friendly, is within close proximity to restaurants, has friendly people, and is within close proximity to resources such as grocery store, laundromat, bank, and library. Even though each of these neighborhoods may have needs, they still have assets that should be recognized and celebrated.

CHAPTER 6: REFERENCES

- Altman, D.G. (1995). Sustaining interventions in community systems: On the relationship between researchers and communities. *Health Psychology, 14*, 526-536.
- Berkowitz, B. (2003). Neighborhood games as a community building strategy. *Journal of Community Practice, 11*, 35-52.
- Bolland, J.M. & McCallum, D.M. (2002). Neighboring and community mobilization in high poverty inner-city neighborhoods. *Urban Affairs Review, 38*, 42-69.
- Bronfenbrenner, U. (1984). The changing family in a changing world: America first? *Peabody Journal of Education, 61*, 52-70.
- Brown, B., Perkins, D.D., & Brown, G. (2003). Place attachment in a revitalizing neighborhood: Individual and block levels of analysis. *Journal of Environmental Psychology, 23*, 259-271.
- Byrd, T.M. (1994). *Around and about Cary*. Ann Arbor, MI: Edwards Brothers, Inc.
- Caldwell, C.H., Jackson, J.S., Tucker, M.B., & Bowman, P.J. (1999). Culturally-competent research methods in African American communities: An update. In R.L. Jones (Eds.), *Advances in African American Psychology: Theory, Paradigms, Methodology, and Reviews*. Hampton, VA: Cobb and Henry Publishers.
- Chaskin, R.J. (1997). Perspectives on neighborhood and community: A review of the literature. *Social Service Review, 71*, 521-547.
- Dalton, J.H., Elias, M.J., & Wandersman, A. (2001). *Community psychology: Linking individuals and communities*. Stamford, CT: Thomson Learning.
- Davidson, W.B. & Cotter, P.R. (1991). The relationship between sense of community and subjective well-being: A first look. *Journal of Community Psychology, 19*, 246-253.
- Denhardt, R.B. & Glaser, M.A. (1999). Communities at risk: A community perspective on urban social problems. *National Civic Review, 88*, 145-153.
- Dillman, D.A. (2000). *Mail and internet surveys: The tailored design method*. New York: John Wiley & Sons, Inc.
- Dolan, P. & Peasgood, T. (2006). Estimating the economic and social costs of the fear of crime. *British Journal of Criminology, 47*, 121-132.
- Farrell, S.J., Aubry, T., Coulombe, D. (2004). Neighborhoods and neighbors: Do they contribute to personal well-being? *Journal of Community Psychology, 32*, 9-25.

- Folkman, D.V. & Rai, K. (1997). Reflections on facilitating a participatory community self-evaluation. *Evaluation and Program Planning*, 20, 455-465.
- Foster-Fishman, P., Nowell, B., Deacon, Z., Nievar, M.A., & McCann, P. (2005). Using methods that matter: The impact of reflection, dialogue, and voice. *American Journal of Community Psychology*, 36, 275-291.
- Gibbs, J.J., Puzzanchera, C.M., Hanrahan, K.J., & Giever, D. (1998). The influence of personal safety and other environmental concerns on sense of control and emotional well-being. *Criminal Justice and Behavior*, 25, 403-425.
- Gosling, S.D., Vazire, S., Srivastava, S., & John, O.P. (2004). Should we trust web-based studies? A comparative analysis of six preconceptions about internet questionnaires. *American Psychologist*, 59, 93-104.
- Granovetter, M.S. (1973). The strength of weak ties. *The American Journal of Sociology*, 78, 1360-1380.
- Hill, J.L. (1996). Psychological sense of community: Suggestions for future research. *Journal of Community Psychology*, 24, 431-438.
- Herrmann, G.M. (2006). Garage sales make good neighbors: Building community through neighborhood sales. *Human Organization*, 65, 181-191.
- Jasek-Rysdahl, K. (2001). Applying Sen's capabilities framework to neighborhoods: Using local asset maps to deepen our understanding of well-being. *Review of Social Economy*, 59, 313-329.
- Kretzmann, J.P. & McKnight, J.L. (1993). *Building communities from the inside out: A path toward finding and mobilizing a community's assets*. Chicago, IL: ACTA Publications.
- Krueckeberg, D.A. (1999). The grapes of rent: A history of renting in a country of owners. *Housing Policy Debate*, 10, 9-30.
- Lee, B.A. & Campbell, K.E. (1997). Common ground? Urban neighborhoods as survey respondents see them. *Social Science Quarterly*, 78, 922-936.
- Manzo, L.C. & Perkins, D.D. (2006). Finding common ground: The importance of place attachment to community participation and planning. *Journal of Planning Literature*, 20, 335-350.
- Martinez, M.L., Black, M., & Starr, R.H. (2002). Factorial structure of the perceived neighborhood scale (PNS): A test of longitudinal invariance. *Journal of Community Psychology*, 30, 23-43.
- Maton, K.I. (2000). Making a difference: The social ecology of social transformation. *American Journal of Community Psychology*, 28, 25-57.

- McCamant, K. & Durrett, C. (1988). *Cohousing: A contemporary approach to housing ourselves*. Berkeley, CA: Ten Speed Press.
- McGuire, J.B. (1997). The reliability and validity of a questionnaire describing neighborhood characteristics relevant to families and young children living in urban areas. *Journal of Community Psychology*, 25, 551-566.
- McMillan, D.W., & Chavis, D.M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14, 6-23.
- Murphy, P.W. and Cunningham, J.V. (2003). *Organizing for community controlled development: renewing civil society*. Thousand Oaks, CA: Sage Publications, Inc.
- Nalbandian, J. (1999). Facilitating community, enabling democracy: New roles for local government managers. *Public Administration Review*, 59, 187-197.
- Nalbandian, J. & Oliver, J. (1999). City and county management as community building. *Public Management*, 81, 20-22.
- Nelson, R.H. (2004). The private neighborhood. *Regulation*, 27, 40-46.
- Nowell, B.L., Berkowitz, S.L., Deacon, Z., & Foster-Fishman, P. (2006). Revealing the cues within community places: Stories of identity, history, and possibility. *American Journal of Community Psychology*, 37, 29-45.
- Prezza, M., Amici, M., Roberti, T., & Tedeschi, G. (2001). *Journal of Community Psychology*, 29, 29-52.
- Putnam, R.D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.
- Saldivar-Tanaka, L. & Krasny, M.E. (2004). Culturing community development, neighborhood open space, and civic agriculture: The case of Latino community gardens in New York City. *Agriculture and Human Values*, 21, 399-412.
- Seyfang, G. (2003). Growing cohesive communities one favour at a time: Social exclusion, active citizenship and time banks. *International Journal of Urban and Regional Research*, 27.3, 699-706.
- Seyfang, G. (2004). Time banks: rewarding community self-help in the inner city? *Community Development Journal*, 39, 62-71.
- Seyfang, G. (2006). Sustainable consumption, the new economics and community currencies: Developing new institutions for environmental governance. *Regional Studies*, 40.7, 781-791.
- Shenassa, E.D., Liebhaber, A., & Ezeamama, A. (2006). Perceived safety of area of residence and exercise: A Pan-European study. *American Journal of Epidemiology*, 163, 1012-1017.

- Sinclair, T.A.P. (2002). From community building to governing strangers: Reconceptualizing institutional relationships among governments, community organizations, and individuals. *The American Review of Public Administration*, 32, 312-325.
- Stein, C.H. & Mankowski, E.S. (2004). Asking, witnessing, interpreting, knowing: Conducting qualitative research in community psychology. *American Journal of Community Psychology*, 33, 21-35.
- Study Circles Resource Center (n.d.). *What is a study circle*. Retrieved June 26, 2007, from <http://www.studycircles.org/en/Page.WhatIsAStudyCircle.aspx>.
- Sutton, S.E. & Kemp, S.P. (2002). Children as partners in neighborhood placemaking: Lessons from intergenerational design charrettes. *Journal of Environmental Psychology*, 22, 171-189.
- Town of Cary (2001^a). *Town center area plan*. Retrieved April 23, 2007, from <http://www.townofcary.org/depts/dsdept/P&Z/tcap/tcapoverview.htm>
- Town of Cary (2001^b). *Art of the triangle: A CitiArts and Town of Cary, NC public art master plan*. Retrieved April 23, 2007, from <http://www.townofcary.org/depts/prdept/cultural/pubart/pubart.htm>
- Town of Cary (2003). *Town of Cary land use plan*. Retrieved April 23, 2007, from <http://www.townofcary.org/depts/dsdept/P&Z/landuseplan/landuseplan.htm>
- Town of Cary (2004). *Town of Cary consolidated housing and community development plan: FY2005-FY2009*. Retrieved June 26, 2007, from <http://www.townofcary.org/depts/dsdept/P&Z/affordablehousing/chcdplan.pdf>.
- Town of Cary (2006^a). *Cary Town Council minutes: Quality of Life Work Session*. Retrieved April 23, 2007, from <http://www.townofcary.org/agenda/councilmin06/ws071706.htm>.
- Town of Cary (2006^b). *2006 Biennial citizen survey*. Retrieved April 23, 2007, from <http://www.townofcary.org/depts/pio/surveysresearch/surveyoverview.htm>.
- Town of Cary (2007^a). *State of the Town Address*. Retrieved April 23, 2007, from <http://www.townofcary.org/council/stateofthetown.htm>.
- Town of Cary (2007^b). *Cary comprehensive pedestrian plan*. Retrieved April 23, 2007, from <http://www.townofcary.org/depts/planning/pedestrian/draftpedestrianplan.htm>.
- Town of Cary (2007^c). *Town of Cary citizen's guide to services: 2007-2009*. Cary, NC: Author.
- Town of Cary (2007^d). *Crime report: Jan-May 2007*.
- Town of Cary (n.d.^a) *Town of Cary quality of life guiding principles*. Retrieved April 23, 2007, from <http://www.townofcary.org/depts/budget/fy2008/005-townofcarygoalsandinitiatives.pdf>.

Town of Cary (n.d.^b). *National Register of Historic Places nomination application*.

Town of Cary (n.d.^c). *C-PASS community survey*.

Unger, D.G. & Wandersman, A. (1985). The importance of neighbors: The social, cognitive, and affective components of neighboring. *American Journal of Community Psychology*, *13*, 139-169.

Urban Institute (n.d.). National neighborhood indicators partnership: The NNIP concept. Retrieved June 27, 2007 from <http://www2.urban.org/nnip/concept.html>.

US Census Bureau (2000). *Census 2000 summary file: Detailed tables*. Retrieved May 14, 2007, from http://factfinder.census.gov/home/saff/main.html?_lang=en.

Wang, C. & Burris, M.A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior*, *24*, 369-387.

Wang, C.C., Morrel-Samuels, S., Hutchison, P.M., Bell, L., & Pestronk, R.M. (2004). Flint photovoice: Community building among youths, adults, and policymakers. *American Journal of Public Health*, *94*, 911-913.

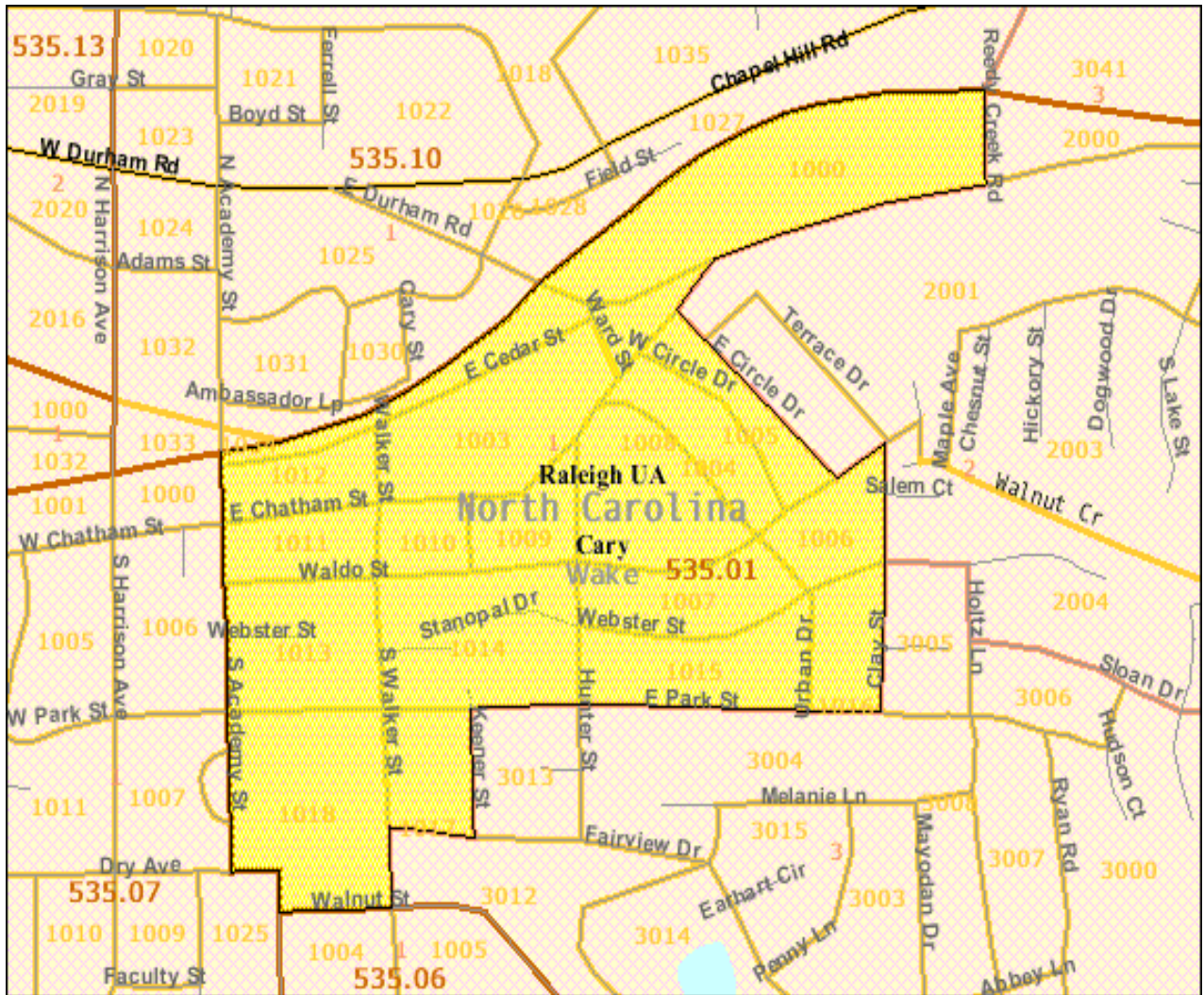
Witkin, B.R. & Altschuld, J.W. (1995). *Planning and conducting needs assessments: A practical guide*. Thousand Oaks, CA: Sage Publications, Inc.

Appendix A: Population characteristics of area surveyed

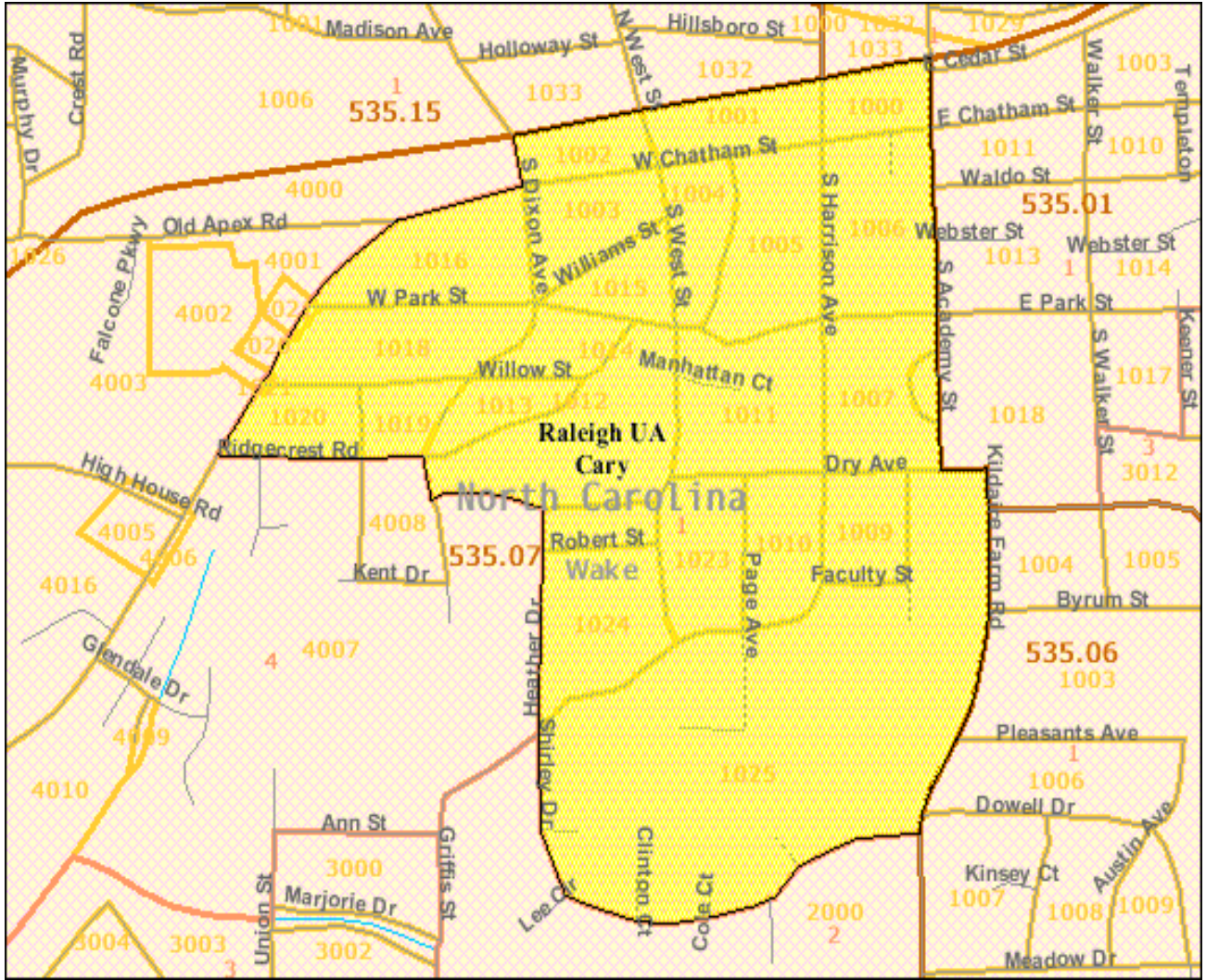
Variables	Response Options	Survey Area	Total Town
Race	Caucasian	71.9	79.6
	African-American	14.5	6.1
	American Indian	.1	.2
	Asian or Pacific	1.5	8.1
	Hispanic	10.8	4.3
	Other	1.2	1.7
Gender	Male	49.3	49.8
	Female	50.7	50.2
Homeownership	Rent	50.2	27.2
	Own	49.8	72.8
Children present	Yes	25.8	42.9
	No	74.2	57.1

Appendix B: Census Block Group Maps

A (535.01-1)



B (535.07-1)





TOWN of CARY
Neighborhood Survey

B

I. NEIGHBORHOOD

1. In your opinion, what 4 streets serve as boundaries to your neighborhood?

Street A:

Street B:

Street C:

Street D:

2. Does your neighborhood have a name? **YES** **NO** **DON'T KNOW**

3. **IF YES**, what is it? _____

II. SENSE OF COMMUNITY

Please rate your level of agreement or disagreement with the following statements by circling the appropriate number:

	strongly disagree	disagree	neither agree/ disagree	agree	strongly agree
	1	2	3	4	5
1. There are people I can rely on among my neighbors	1	2	3	4	5
2. People trust each other in my neighborhood.	1	2	3	4	5
3. I feel I belong in my neighborhood.	1	2	3	4	5
4. I care about what my neighbors think of my actions (e.g., how I dress, how I treat my child)	1	2	3	4	5
5. I feel close to some of my neighbors.	1	2	3	4	5
6. People in my neighborhood are usually warm and friendly	1	2	3	4	5
7. We help each other out in my neighborhood.	1	2	3	4	5

III. NEIGHBORING

Please rate how often you participate in the following behaviors by circling the appropriate number:

	never	rarely	sometimes	often	everyday
	1	2	3	4	5
1. I visit with my neighbors in their homes	1	2	3	4	5
2. I have neighbors over to my house to visit	1	2	3	4	5
3. I stop and talk with people in my neighborhood	1	2	3	4	5
4. I meet with my neighbors to spend some time doing things together	1	2	3	4	5
5. I exchange favors with my neighbors	1	2	3	4	5

6. How many of your neighbors would you recognize if you saw them? _____

7. How many of your neighbors do you know by name? _____
8. How many of your neighbors do you consider as your friends? _____
9. How many of your neighbors would you have no problem asking to borrow little things? _____

IV. CITIZEN PARTICIPATION

Please rate how often you participate in the following behaviors by circling the appropriate number:

	never	rarely	sometimes	often	everyday
	1	2	3	4	5
1. Informally talk with neighbors about a community problem	1	2	3	4	5
2. Participate in neighborhood related activities (e.g. neighborhood dinners, festivals, etc.)	1	2	3	4	5
3. Personally participate in community problem solving when a problem arises	1	2	3	4	5

4. In which type of community do you participate in community problem solving? PLEASE CHECK ALL THAT APPLY.

Within your block **Within your neighborhood** **Within your town** **None**

5. To your knowledge, is there a Homeowners Association in your neighborhood?

YES **NO** **DON'T KNOW**

6. **If YES**, what is the name of the association? _____

7. Are you involved with any of the following? PLEASE CHECK ALL THAT APPLY.

- Neighborhood groups/associations
- Town-wide community groups
- Informal neighborhood groups
- Homeowners associations
- None

8. If you **ARE NOT** involved, is there a particular reason you are not involved with these groups?

9. If you **ARE** involved with one or more of the groups, please give the name(s) of the group(s):

V. NEEDS AND ASSETS OF THE NEIGHBORHOOD

1. Do you see any problems with you neighborhood? PLEASE CHECK ALL THAT APPLY.

- | | |
|--|---|
| <input type="checkbox"/> Litter/Trash | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Graffiti | <input type="checkbox"/> Houses/yards not well kept |
| <input type="checkbox"/> Drug addicts | <input type="checkbox"/> Lack of common spaces |
| <input type="checkbox"/> Alcoholics & Public Drinking | <input type="checkbox"/> Lack of recreation facilities |
| <input type="checkbox"/> Vacant/Abandoned store fronts | <input type="checkbox"/> Lack of sidewalks |
| <input type="checkbox"/> Burned down buildings | <input type="checkbox"/> Inadequate sidewalks |
| <input type="checkbox"/> Unemployed people hanging out | <input type="checkbox"/> Street pavement in poor repair |
| <input type="checkbox"/> Traffic | <input type="checkbox"/> Curb and gutter in poor repair |
| <input type="checkbox"/> Inadequate parking | <input type="checkbox"/> Other |

If OTHER, Please Explain: _____

2. What are the assets of your neighborhood? PLEASE CHECK ALL THAT APPLY.

- | | |
|---|--|
| <input type="checkbox"/> Large lot sizes | <input type="checkbox"/> Religious organizations/resources |
| <input type="checkbox"/> Friendly people | <input type="checkbox"/> Cultural organizations/resources |
| <input type="checkbox"/> Pedestrian friendly | <input type="checkbox"/> Close proximity to restaurants |
| <input type="checkbox"/> Child-friendly | <input type="checkbox"/> Citizen/neighborhood associations |
| <input type="checkbox"/> Attractive landscape | <input type="checkbox"/> Historic buildings |
| <input type="checkbox"/> Available recreational facilities | <input type="checkbox"/> Attractive homes |
| <input type="checkbox"/> Close proximity to resources (e.g. grocery store, laundromat, bank, library, etc.) | <input type="checkbox"/> Other |
| <input type="checkbox"/> Locally owned businesses | |

If OTHER, Please Explain: _____

VI. SAFETY

Please rate your level of agreement or disagreement with the following statements by circling the appropriate number:

	strongly disagree 1	disagree 2	neither agree/ disagree 3	agree 4	strongly agree 5
1. This neighborhood is more dangerous than other parts of the town.	1	2	3	4	5
2. People are afraid to go out after dark in this neighborhood.	1	2	3	4	5
3. Friends/Relatives don't visit this neighborhood because of safety concerns.	1	2	3	4	5
4. This neighborhood has become more dangerous since I moved in.	1	2	3	4	5

5. Please tell us how safe you feel in your neighborhood? Circle the appropriate number using a 9-point scale where 1 is extremely unsafe and 9 is extremely safe, 5 is average.

Extremely Unsafe				Average					Extremely Safe
1	2	3	4	5	6	7	8	9	

VII. DEMOGRAPHICS

1. May I ask your race?
 European American/Caucasian/White
 African-American/Black
 Native American or Alaskan
 Hispanic
 Asian or Pacific Islander
 Other: Please Specify: _____

2. May I ask your household income?
 0-\$20,000
 \$20,001-\$30,000
 \$30,001-\$50,000
 \$50,001-\$70,000
 \$70,001-\$100,000
 \$100,001-\$120,000
 \$120,001-\$140,000
 \$140,001-\$160,000
 Over \$160,000

3. What is the highest level of school you completed?
 High School/Equivalent or Less
 Some College or Technical
 College Degree
 Graduate Degree

4. What is your gender? Female Male

5. What is your age? _____ Years

6. Do you rent or own your home? Rent Own

7. How long have you lived in your neighborhood? _____ Years _____ Months

8. How long have you lived in Cary? _____ Years _____ Months

9. How long would you say most of your neighbors have lived in the neighborhood?
_____ Years _____ Months

10. How long would you say most of your neighbors have lived in Cary?
_____ Years _____ Months

11. What best describes your living situation (excluding children)? PLEASE CHOOSE ONLY ONE.

- Live Alone or Widow/Widower
- Live with Roommate (non-relative)
- Live with Relative (e.g. sibling, cousin, mother, father)
- Live with Significant Other or Married
- Other: Please Specify: _____

12. Do you have children under the age of 18 living in your household? Yes No

13. If **YES**, how many children under the age of 18 live in your household? _____

VIII. OPEN-ENDED:

If you need more space to answer, please use the back of this sheet.

1. If you could change **ONE** thing about your neighborhood, what would it be?

2. What is the **ONE** best aspect of your neighborhood?

3. What is **ONE** thing that could increase your sense of community with your neighborhood?

4. What is **ONE** thing that could increase your level of interaction with your neighbors?

5. Where do you obtain the majority of information about issues/events in your neighborhood?

Appendix D: Responses to Other Options for Needs and Assets

Needs:

- sometimes music too loud
- Too many illegal aliens. Need to deport.
- bad neighborhood, will move out soon.
- No parking spots
- Kingston Ridge exit on Walnut. Making left turn is hazardous. Lawrence/Walnut traffic light is unprotected left turn. Accident ready to happen.
- church people parking in post office lot and in 15 min spaces on Sunday. Yellow curbs on Academy St need repainted. Cars are parked too close to corners and driveways. Town required parking lot plants died and not replaced
- transient/pass-thru traffic
- during one month period last year there were 4 accidents on S. Harrison - 3 Mexican or S. American 1 hit and run - usually quiet though
- speeding on dry
- The town wants to level my apartment so they can build another park and one already exists 1/4 mile from here!
- 3. Town of Cary does not sweep circles 4. few owners rent out rooms
- barking dogs, loud car radios
- We are sick of Dept of Motor Vehicles doing the driving test on S. West St. It is a hill & too dangerous. I have to wait to get out of my own driveway. It needs to be stopped.
- Older neighbors need help in upkeep of their homes. Some rental property is not kept up. Motels used as rentals!!
- Webster Street feels unsafe. We avoid because it feels ghetto like
- Increase in major stream flood over past 15 years. Lack of major concern by Town due to old part of Town and low tax base
- Rental Property
- 5 way intersection that nobody stops at!! S. Dixon, West Park, Williams St.
- Speeding on Dry Avenue. No police presence. Unsafe for a downtown community
- Vacant home with trash and abandoned car
- Lots of rental property, people drive too fast, speed limit should be reduced or speed bumps
- Many stray cats that animal control won't pick up
- Illegal aliens living w/20 people in small rented houses; constant utility repairs or outages; no street lights
- Cars not obeying speed limit
- We need more street lights-please; on our end of Willow St the pavement is too high-it needs to match the other part of the street- when we pull out of our drive, we drag if you're not very careful

- Speeding
- flooding Creek
- see attached memo to Mayor and Councilwoman
- Houses used for Business & Parking; Business vehicles, poorly maintained rentals, stream degradation and flooding
- Traffic on S. Harrison too fast for neighborhood
- Speeding
- speeders
- landlords don't take care of rental property. Too many tenants in 1 house-use bathroom in back yard
- illegal mexicans taking over
- Poor People-Domestic Problems. Some housing is paid by Wake Cty and/or Church for families that "need to get on their feet" (each family has 4 months to do so in these apartments-then they move away-have to leave)
- home asst. no good work
- No street lights and Mexicans walking all night sometimes
- above ground utility lines, more street lights
- too many rental properties, with high turnover. Speeding thru-traffic
- fast traffic! Cut through traffic to get to Kildaire Farm Rd down Dry Ave - too fast for Park area!
- weeds and brush in vacant lot across street
- Considering free speech that is a right in this country-I think yard signs should be respected instead of stolen
- too many duplexes and rental homes
- dog poop in my yard-need poop stations
- webster street is completely tore up!!
- Cars speeding
- too many rentals don't keep up with property
- too many landlords that barely keep their properties presentable
- Flooding/Stream Problems
- Some rental property is poorly maintained.

Assets:

- Convenient to traveling around Cary.
- Culture of the old part of Cary.
- We need the neighborhood clean-up
- location to downtown
- near family
- affordable housing so close to work

- There are many stores and business close by and their appearance is very shabby-it sets a bad example for our town and surrounding neighborhoods (downtown Cary)
- Downtown Cary is the closest thing the town has to a cultural center. What else is Cary but a bunch of big houses and strip malls!?
- Quiet part of town
- The wonderful drug store!
- Park nearby-Heaters
- within walking distance of downtown Cary
- nice atmosphere (trees etc)
- Art resources nearby
- Walking distance to schools, downtown
- Cary Band Day, 49 years 2007
- wooded lots
- close to schools
- We greatly appreciate the new culvert on E. park St
- me
- rent is relatively low
- six miles from work
- library
- Want to keep the downtown charm and feel-even with proposed changes-please don't ruin this
- older well kept homes
- downtown close
- population is diverse
- sidewalks!
- good diverse folks-again issue is that neighborhood is rental district
- convenient to RTP and Raleigh and Apex Jordan Lake
- TTA bus route
- close to work is about all
- Family are my neighbors