

Health Impact Assessment

SB 731: Zoning/Design and Aesthetic Controls

A Health Impact Assessment detailing the potential health impacts of North Carolina's proposed legislation to reduce municipal authority concerning design regulations in low density, single family residential neighborhoods.

November 2012



A project of Davidson Design for Life in collaboration with a Regional Advisory Commission and funded through the Centers for Disease Control and Prevention's Healthy Community Design Initiative.



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Acknowledgements

Davidson Design for Life would like to thank everyone who has participated in this Health Impact Assessment process including members of our community who provided information through a neighborhood survey, the Davidson: Design for Life Committee, and the Davidson: Design for Life Regional Advisory Commission. We would especially like to recognize the contributions of Kristie Foley with Davidson College Department of Medical Humanities, Lori Rhew and Jenni Albright with the NC Division of Public Health, and David W. Owens with the University of North Carolina at Chapel Hill School of Government. Collectively these individuals' expertise on epidemiology, public health, and zoning and design ordinances in North Carolina shaped the information we could provide to North Carolina legislators concerning SB 731.

This project was supported by a grant from the Centers for Disease Control and Prevention: Healthy Community Design Initiative. The opinions are those of the authors and do not necessarily reflect the views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

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Executive Summary

The way our communities and neighborhoods are designed can have an immense impact on our physical, mental, and social health. The Town of Davidson, a small community located 20 miles north of Charlotte, has come to recognize this fact and over the last 20 years has implemented health-promoting community design principles including smart growth, main-street protection, complete street policies, form based code, and new urbanism.

As part of the town’s goal to promote the health of its residents, in 2011 Davidson applied for and received a grant from the Centers for Disease Control and Prevention: Healthy Community Design Initiative in order to develop an initiative to conduct health impact assessments (HIAs) and incorporate innovative design principles into its planning processes. Davidson Design for Life (DD4L) was created to carry out this initiative, with the mission **“to help Davidson be a community that is healthy today and even healthier tomorrow while serving as a model for other small towns by implementing healthy design.”**

On May 17, 2011, Senate Bill 731 entitled Zoning/Design and Aesthetic Controls was passed by the North Carolina Senate. SB 731, which if passed would amend existing zoning legislation granting municipal and county governments the ability to regulate certain “building design elements” in low density (fiver or fewer units) residential neighborhoods, was assigned to the House Committee of Commerce and Job Development. As of the conclusion of the legislative short session (July 3, 2012), no decision has been made on SB731 from the committee or the House of Representatives.

Key Findings

1. There exists a legislative precedence to consider health implications in granting municipal authority to zone and implement design standards in NC.
2. Neighborhood design components such as garage door placement and porches can either encourage or discourage residents to walk or bike.
3. Front porches can enhance interactions with neighbors leading to increased social cohesion.
4. Crime can be prevented through additional natural surveillance of homes by neighbors.
5. Davidson can serve as a local model of the possible health benefits of implementing certain design standards.
6. Homebuilders support the outcomes of enforcing standards including walkable, safer, and healthier neighborhoods.

“Building Design Elements” as Defined by SB731

- Exterior building color and type or style of exterior cladding material
- Style or materials of roof structures or *porches*
- Exterior nonstructural architectural ornamentation
- Number, types, and interior layout of rooms
- *Location or architectural styling of windows and doors, including garage doors*

Emphasis added to elements examined in HIA.

In December of 2011, Davidson Design for Life collaborated with multiple stakeholders to conduct an HIA to examine the potential health impacts on residents of North Carolina if SB731 became law. This report summarizes the findings and recommendations of that assessment and includes a number of the tools and forms of communication used during the assessment in order to serve as a model for what other organizations working on an HIA could use.

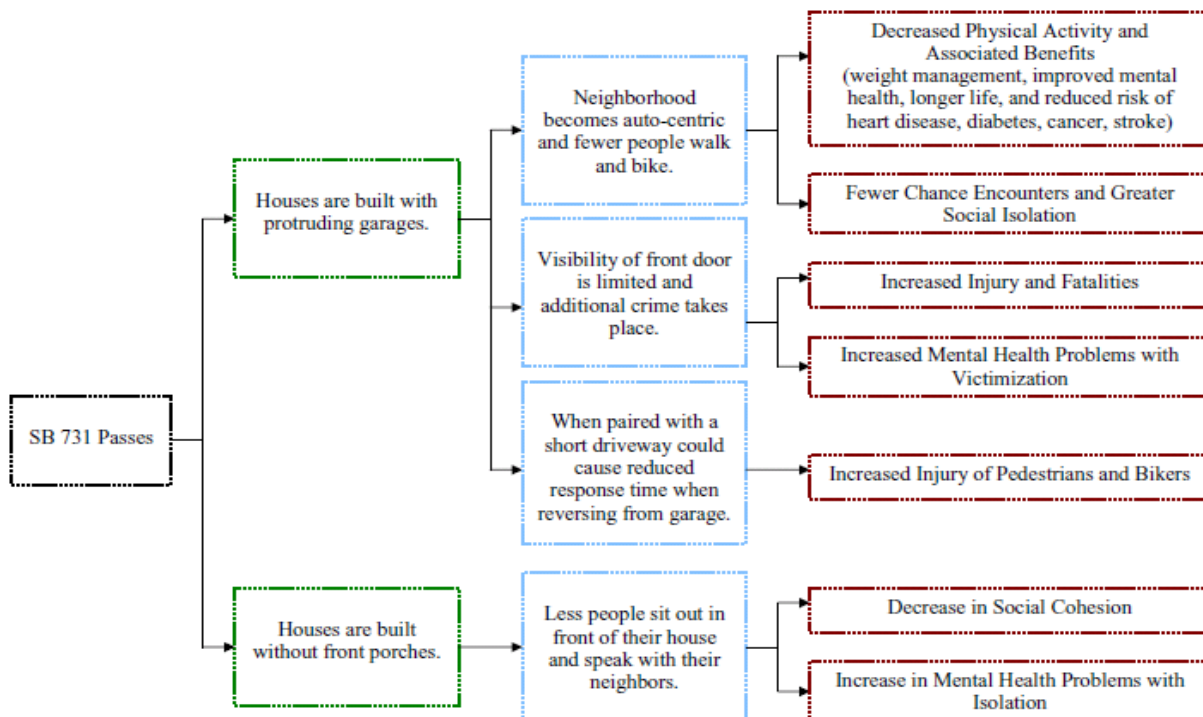
Funding for the HIA was provided by the Centers for Disease Control and Prevention: Healthy Community Design Initiative cooperative agreement number 1UE1EH000897-01.

Definition of Health Impact Assessment

The purpose of an HIA is to provide information about the potential health implications of a decision being made outside of the health sector to decision makers, stakeholders, and the community affected in the hopes that health will be taken into consideration.

According to the National Research Council HIA is a “systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population. HIA provides recommendations on monitoring and managing those effects.”

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E.S. Figure 1: Logic model of health impacts of SB731

Current NC Health Conditions

- 64% of adults in NC do not meet recommended physical activity guidelines.
- 74% of youths in NC do not meet recommended physical activity guidelines and 15% are completely sedentary.
- NC has the 12th highest percentage of obese adults and the 14th highest percentage of obese and overweight children in the United States.
- The top two leading causes of death in NC- cancer and cardiovascular disease- can be prevented by regular physical activity (35,000 deaths annually).
- 9.6% of the adult population has diabetes and another 7% has pre-diabetes.
- 1/3 of adults had poor mental health one or more days in the past month.
- 5% of teens have attempted suicide.
- In 2008, 169 pedestrians and 25 bicyclists were killed in a crash.
- In 2009, NC's crime rate was higher than the national average with 562 homicides, 22,586 assaults, and 2,230 rapes.

Potential Health Impacts if Passed

- Houses are built with protruding garages which create an auto-centric environment. This discourages people from walking and biking, making it more difficult for them to get their recommended levels of physical activity.
- When people do not get their recommended levels of physical activity, it is harder for them to maintain a healthy weight.
- People who are inactive and obese are more likely to die of chronic diseases such as cancer and cardiovascular disease. They are also more likely to be diagnosed with diabetes.
- Physical activity and social interaction that can be created by the presence of front porches as well as chance encounters when walking, help prevent and identify mental health problems such as depression, anxiety, and social isolation.
- Auto-centric neighborhoods make it more dangerous to bike or walk and can result in greater injuries and fatalities.
- Protruding garages can limit visibility of a house reducing natural surveillance and increasing the potential for crime.

Recommendations for SB731: Actions to Improve Health

1. Learn more about the connection between neighborhood design and public health by reading this report and following up with staff.
2. Consider the health implications of SB731 when voting.
3. Request additional information on existing design standards/ regulations in NC municipalities.
4. Ask if the interests of the different stakeholders can be met without changing legislation.
5. Amend the legislation to remove any language about garage door placement and/or porch design.

1. Introduction

This Health Impact Assessment (HIA) examines the potential health impacts of Senate Bill 731(SB731), the Zoning/Design and Aesthetic Controls legislation, as passed by the North Carolina Senate on May 17, 2011.¹ HIA is a process that can be used to gather information and provide recommendations to decision makers so that they can consider the health implications of the proposed legislation and make an informed decision. The information gathered and recommendations formed as part of this HIA were shared with stakeholders identified within the scoping process and members of the North Carolina House of Representatives; particularly those serving on the Committee on Commerce and Job Development where the bill was transferred after passing in the Senate.

1.1 History of Zoning in North Carolina

Legislation enabling municipal zoning, a land use regulation based on the practice of designating permitted uses of land according to mapped zones and separating the land uses from another, was accepted in North Carolina in 1923 through General Statute 160A-381.² Counties in North Carolina can also adopt zoning and planning regulations in accordance with G.S. 153A-340, adopted in 1959.³ In both cases the power to zone was granted for the purpose of “promoting health, safety, morals, or the general welfare of the community.”^{2,3} In order to do this, local governments can “regulate and restrict the height, number of stories and size of buildings and other structures, the percentage of lots that may be occupied, the size of yards, courts and other open spaces, the density of population, the location and use of buildings, structures and land.”²

In 2012, a survey was conducted by the UNC School of Government to collect information about the administration of zoning, use of design standards, and standards for alternative energy facilities. The survey found that 87% of the state’s 550 cities and 79% of the 100 counties have adopted zoning ordinances or zoning provisions within its development ordinance (See Figure 1). It also estimated that 91% of the state’s 9.6 million residents live in areas subject to zoning.⁴

When zoning was first established, cities were typically divided into the three zones or districts- residential, commercial, and industrial.⁵ Starting in the 1950s, zoning in North Carolina became more complex with many of the larger cities increasing the number of zones and diversity of regulations found in each zone. Charlotte’s zoning ordinance, for example, grew from five districts to sixty between 1952 and 1992.⁵ Extra levels of complexity were introduced with the inclusion of design regulations and community appearance commissions in the early 1970s and the growth of modern form-based codes in the 1980s and 1990s as part of the larger New Urbanism movement.⁶

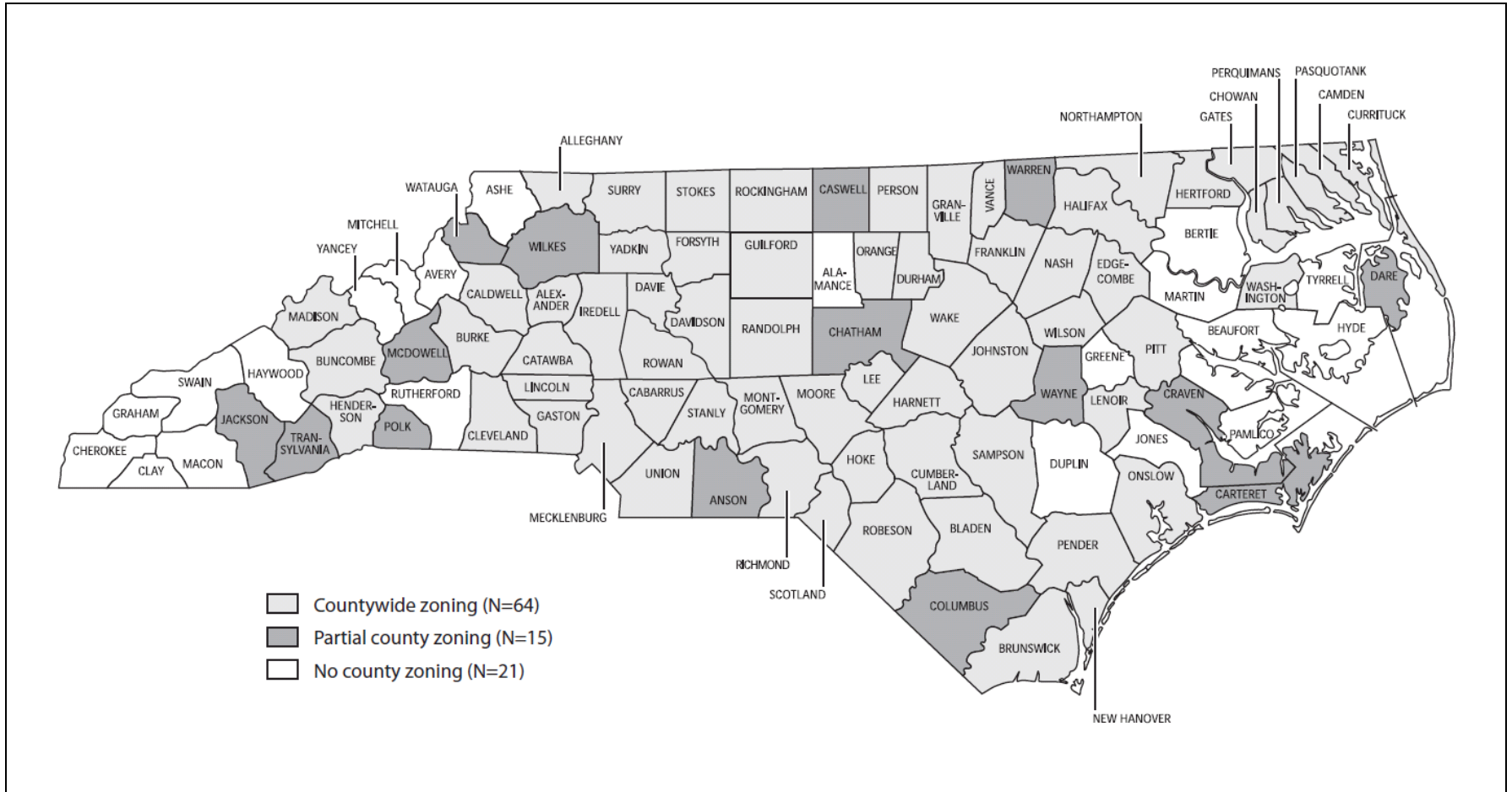


Figure 1: Zoning in North Carolina⁴

Form-based codes, an alternative to traditional zoning, are regulations that focus on the physical form or appearance of a structure rather than the use of the building as the organizing principle for the code.⁷ Attributes considered within form-based codes include the relationship between the building and roadway or walkway (public realm) in front of the building, how a building relates to surrounding buildings in size and design, and the scale and types of streets and blocks on which that type of structure can be built. The introduction of form-based codes added an increased level of importance on the way buildings are designed and how a building contributes to the larger appearance of a neighborhood or community.

As of 2007, nine municipalities in North Carolina had adopted form-based codes: Belmont (1993), Davidson (1995), Cornelius (1996), Huntersville (1996), Catawba (2003), Conover (1999), Mooresville (2005), Waynesville (2005), and Knightdale (2005).⁸ A commonly expressed intent of adopting form-based codes was the preservation of small-town atmospheres in localities that were facing rapid population growth primarily due to scheduled upgrades in regional transportation systems linking the municipality to larger cities.⁸ It is the hope of these municipalities that form-based codes can be used to develop compact, mixed-use, and walkable communities that focus on human-scale growth patterns (similar to those found in historic southern cities such as Savannah and Charleston) instead of the car-oriented patterns that dominated the latter half of the 20th century.

In Davidson, the adoption of form-based code has allowed the Town to plan mixed-use development around the Circles at 30, preserve the design and small-town charm of Downtown Davidson, and approve the designs of unique neighborhoods such as New Neighborhood in Old Davidson developed around St. Albans Episcopal Church.



In addition to form-based codes, mandatory regulatory design standards are frequently used in larger municipalities in North Carolina and are primarily associated with historic and commercial districts.⁵ Of those municipalities responding to the UNC School of Government survey in 2012, only 4% of the jurisdictions provide for the review of single-family residences by a design review board and 15% or fewer have specific design standards that apply to residential units (See Table 1).⁴ Ordinances that allow traditional neighborhood design, which exhibits similar growth principles of form-based codes, are found within 78% of municipalities with a population greater than 10,000 people.⁵

Table 1: Type of Design Standards Found on Residential Structures in North Carolina⁴

	Number of Jurisdictions	Percentage of Jurisdictions
Height of structure	44	15%
Location and design of accessory buildings	40	14%
Location of structure on lot	37	13%
Fence location or materials	33	11%
Landscaping	30	10%
Orientation of structure on lot	29	10%
Type or style of exterior cladding	26	9%
Architectural style	24	8%
Style or materials of roof	22	7%
Location or design of parking	21	7%
Front porch requirement	17	6%
Location or style of garage doors	16	5%
Exterior architectural ornamentation	13	4%
Location or style of windows or doors	11	4%
Minimum area of structure	10	3%
Limit on repetitive design relative to nearby structures	9	3%
Exterior building color	8	3%
Maximum area of structure	8	3%
Limit on excess difference relative to nearby structures	7	2%
Other	6	2%
Number and type of rooms	2	1%
Interior layout of rooms	0	0%

Examples of traditional neighborhood design (TND) neighborhoods in North Carolina include:

- Afton Village, Concord (aftonvillage.com)
- Antiquity, Cornelius (antiquitync.com)
- Birkdale Village (www.birkdalevillage.net/concept.htm)
- Carpenter Village, Cary (www.carpentervillagehomes.com/sitemap.php)
- Cheshire, Black Mountain (villageofcheshire.com)
- Cline Village, Conover (clinevillage.com)
- Cornelius Town Center, Cornelius (dpz.com)
- Devaun Park, Calabash (devaunpark.com)
- First Ward, Charlotte (urbandesignassociates.com)
- Meadowmont, Chapel Hill (www.meadowmont.com)
- New Neighborhood in Old Davidson, Davidson (doverkohl.com)
- Southern Village, Chapel Hill (southernvillage.com)
- Stowe Manor, Belmont (stowemanor.com)
- Vermillion, Huntersville (newvermillion.com)
- Woodson, Shallotte (villageofwoodsong.com)



Figure 3: New Neighborhood in Old Davidson, Davidson NC

1.2 SB 731 Zoning/Design and Aesthetic Controls

Short Title: Zoning/Design and Aesthetic Controls

Full Title: An act to clarify when a municipality or a county may enact zoning ordinances related to design and aesthetic controls

Sponsor: Senator Daniel G. Clodfelter (D)

Co-Sponsors: Senator Rick Gunn (R),
Senator Fletcher L. Hartsell, Jr. (R)

Filed: April 19, 2011

Passed in Senate: May 17, 2011

Related Legislation: G.S. 160A-381,
160A-383, 160A-451 and 452

SB 731 proposes amendments to G.S. 160A-381 to add a subsection that would exclude single family residential structures in zoning districts with densities of five or fewer dwelling units per acre from certain “building design elements.” Within SB 731, “building design elements” are defined as:

- exterior building color;
- type or style of exterior cladding material;
- style or materials of roof structures or porches;
- exterior nonstructural architectural ornamentation;
- location or architectural styling of windows and doors, including garage doors;
- the number and types of rooms; and,
- the interior layout of rooms.¹

This does not include: the height, bulk, orientation, or location of a structure on a zoning lot; the use of buffering or screening to minimize visual impacts, to mitigate the impacts of light and noise, and to protect the privacy of neighbors; features related to accessory buildings and parking and loading areas; or off-premises and on-premises signs.

Exceptions to this amended legislation would include:

- houses within historic districts, listed on the National Register of Historic Places, or historic landmarks;
- regulations directly and substantially related to the requirements of applicable fire and life safety codes;
- where regulations are imposed as part of conditions relating to density bonuses or modifications of open space, setbacks or required yards, lot coverage, lot size, buffering or screening regulations otherwise generally applicable in a zoning district; and,
- manufactured or modular housing.¹

If passed, this amended statute would apply to development approvals made on or after the date the legislation was accepted.

1.3 North Carolina Demographics and Housing Information

According to the 2010 US Census, North Carolina was the sixth fastest growing state in population from 2000 to 2010 with an increase of 1.5 million people. This increase in population moved North Carolina from the 11th largest state in 2000 to the 10th largest state in 2010. North Carolina also contains one of the fastest growing metropolitan statistical areas (MSA) with the Raleigh-Cary MSA growing by 41.8% and adding over 333,000 people from 2000-2010. The Town of Indian Trail, which is part of the Charlotte MSA, was considered one of the ten fastest growing incorporated areas with a 2000 population of 10,000 or more, with a percent of population change from 2000 to 2010 of 181.5%. North Carolina also has some of the most densely populated counties in the nation with 14 counties having a population density of 300 people per square mile or higher.⁹

Table 2: North Carolina Quick Facts¹⁰

Quick Facts	North Carolina	United States
Geography 2010		
Land area in square miles	48,617.91	3,531,905.43
Persons per square mile	196.1	87.4
Population		
Population, 2010	9,535,483	308,745,538
Population Change 2000-2010	18.5%	9.7%
Persons under 5, 2010	6.6%	6.5%
Persons under 18, 2010	23.9%	24.0%
Persons 65 years and over, 2010	12.9%	13.0%
Racial/ Ethnic Composition 2010		
White Persons	68.5%	72.4%
Black Persons	21.5%	12.6%
American Indian/ Alaska Native	1.3%	0.9%
Asian Persons	2.2%	4.8%
Native Hawaiian/ Pacific Islander	0.1%	0.2%
Two or More Races	2.2%	2.9%
Persons of Hispanic or Latino origin	8.4%	16.3%
White persons not Hispanic	65.3%	63.7%
Housing		
Housing units, 2010	4,327,528	131,704,730
Households, 2006-2010	3,626,179	114,235,996
Persons per household, 2006-2010	2.49	2.59
Housing units in multi-unit structures, 2006-2010	16.9%	25.9%
Living in same house 1 year & over, 2006-2010	83.4%	84.2%
Homeownership rate, 2006-2010	68.1%	66.6%
Median value of owner occupied housing units, 2006-2010	\$149,100	\$188,400
Income/Poverty		
Per capita money income in past 12 months (2010 dollars)	\$24,745	\$27,334
Median household income, 2006-2010	\$45,570	\$51,914
Persons below poverty level, 2006-2010	15.5%	13.8%

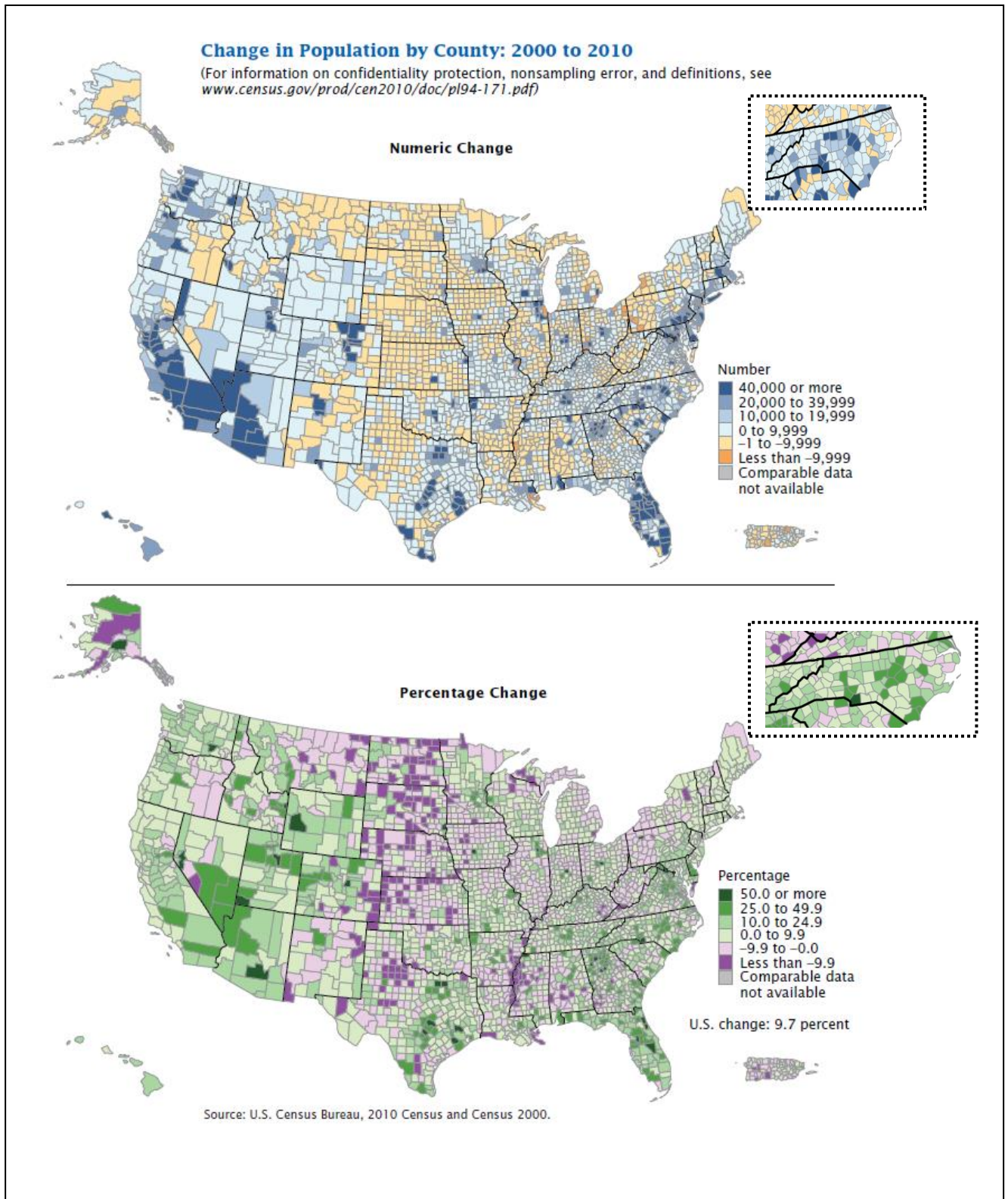


Figure 4: Census maps showing population change by county¹¹

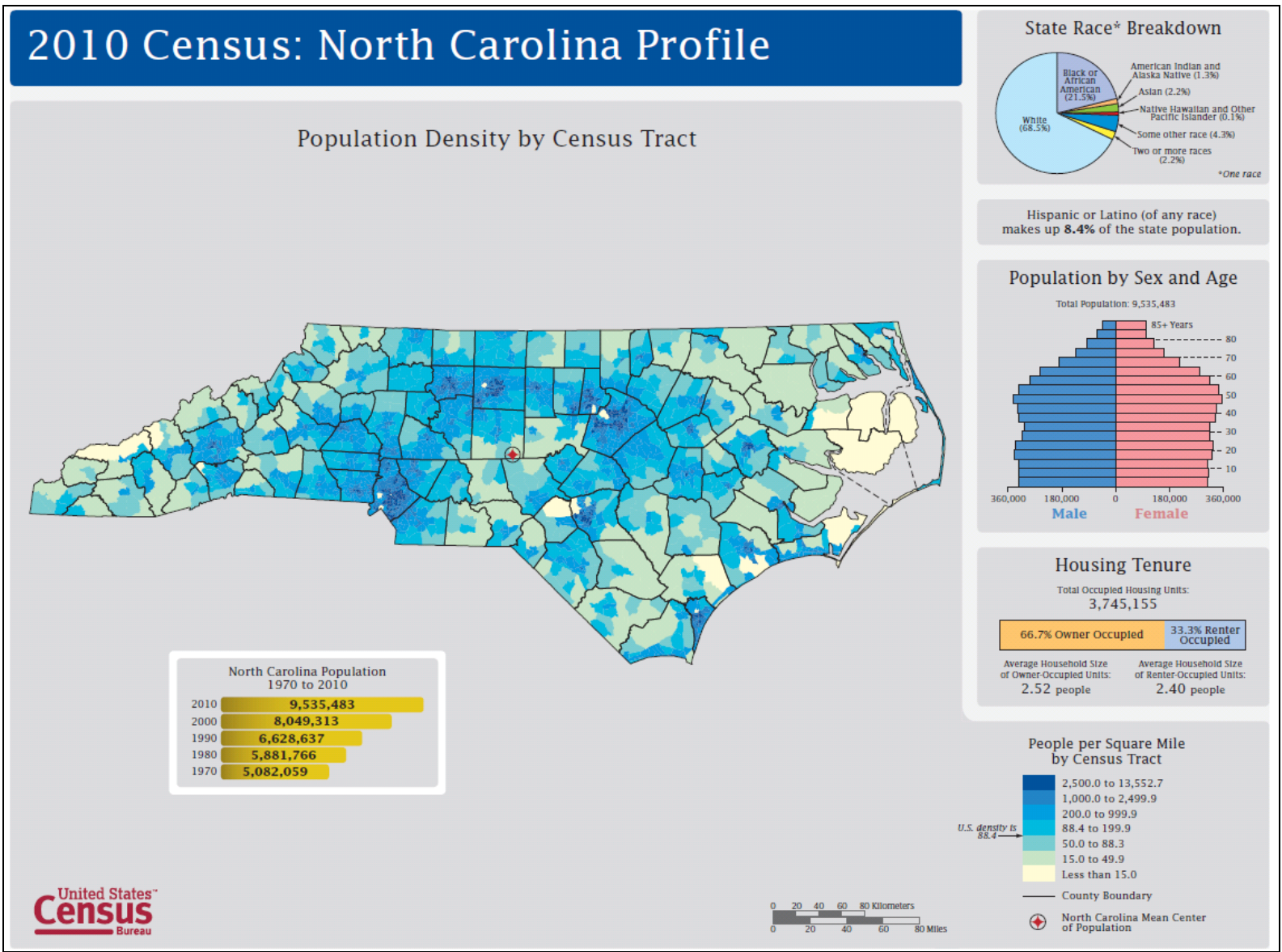


Figure 5: North Carolina profile map (2010) ¹²

With population growth there is typically an associated growth in number of housing units and residential construction. According to the 2010 Census, North Carolina ranked 9th in the nation for the number of housing units with over 4.3 million units. This is an increase of over 800,000 units or a 22.8% percent change in total housing units from 2000 to 2010.⁹ The residential permits issued in North Carolina from 2000-2010 reflect this growth in the number of housing units and provide further insight on what type of housing is being constructed.¹³

Table 3: North Carolina Residential Building Permits (2000-2010)¹³

Year	Total Building Permits	Single-Family Permits	Multi-Family Permits	Percent Multi-Family
2000	78,376	59,061	19,315	25%
2001	82,030	62,679	19,351	24%
2002	79,824	66,400	13,424	17%
2003	79,226	66,883	12,343	16%
2004	93,077	77,147	15,930	17%
2005	97,910	84,975	12,935	13%
2006	99,979	82,672	17,307	17%
2007	85,777	70,339	15,438	18%
2008	54,652	39,082	15,570	28%
2009	33,800	25,388	8,412	25%
2010	33,889	26,047	7,842	23%
Total	818,540	660,673	157,867	19%

Although North Carolina has a higher than average homeownership rate (69.5% in 2010 compared to the national average of 65.1%) it also had the 17th lowest owner occupied rate with only 66.7% of all housing units being owner occupied. There was also a 15% change in the number of owner occupied units, a 30% change in renter occupied units, and 48.6% change in the number of vacant units from 2000 to 2010.⁹

The average listing price of a home in North Carolina ranges from \$214,000 to \$261,000 and varies greatly from county to county with the most expensive housing being found in the mountainous and coastal counties.¹⁴ The median monthly cost for a homeowner with a mortgage is approximately \$1,244 and the median value of a home is \$149,100.¹⁵

According to Tyler Mulligan, an expert in community and economic development from UNC's School of Government, it is not uncommon for employees within the service sector and public sector (for example retail workers, police and teachers) to spend over 50% of their income on housing expenses. Workforce housing is housing provided at lower price points so that those earning less than the median wage can afford to own or rent their home. Inclusionary zoning, which uses a local government's zoning power to encourage private developers to construct workforce housing, can be voluntary, conditional, or mandatory. Dare County, Chapel Hill, and the Town of Davidson have

inclusionary zoning programs (See Appendix 1 for Davidson's Inclusionary Zoning Policy).¹⁶

According to the Census, North Carolina's gross vacancy rate in 2010 was 13.5%. This was higher than the national average of 11.4%, the 16th highest gross vacancy rate in the nation and the fourth highest in the South following Florida (17.5%), South Carolina (15.7%), and Delaware (15.7%). Of the ten states with the largest percent increases in total housing units from 2000 to 2010, North Carolina had the fourth highest percentage-point increase in gross vacancy rates following South Carolina, Arizona, and Colorado. North Carolina also ranked within the top ten states for homeowner and rental vacancy rates with rates of 2.8 and 11.1 respectively (the national rates were 2.4 and 9.2 respectively).¹⁷

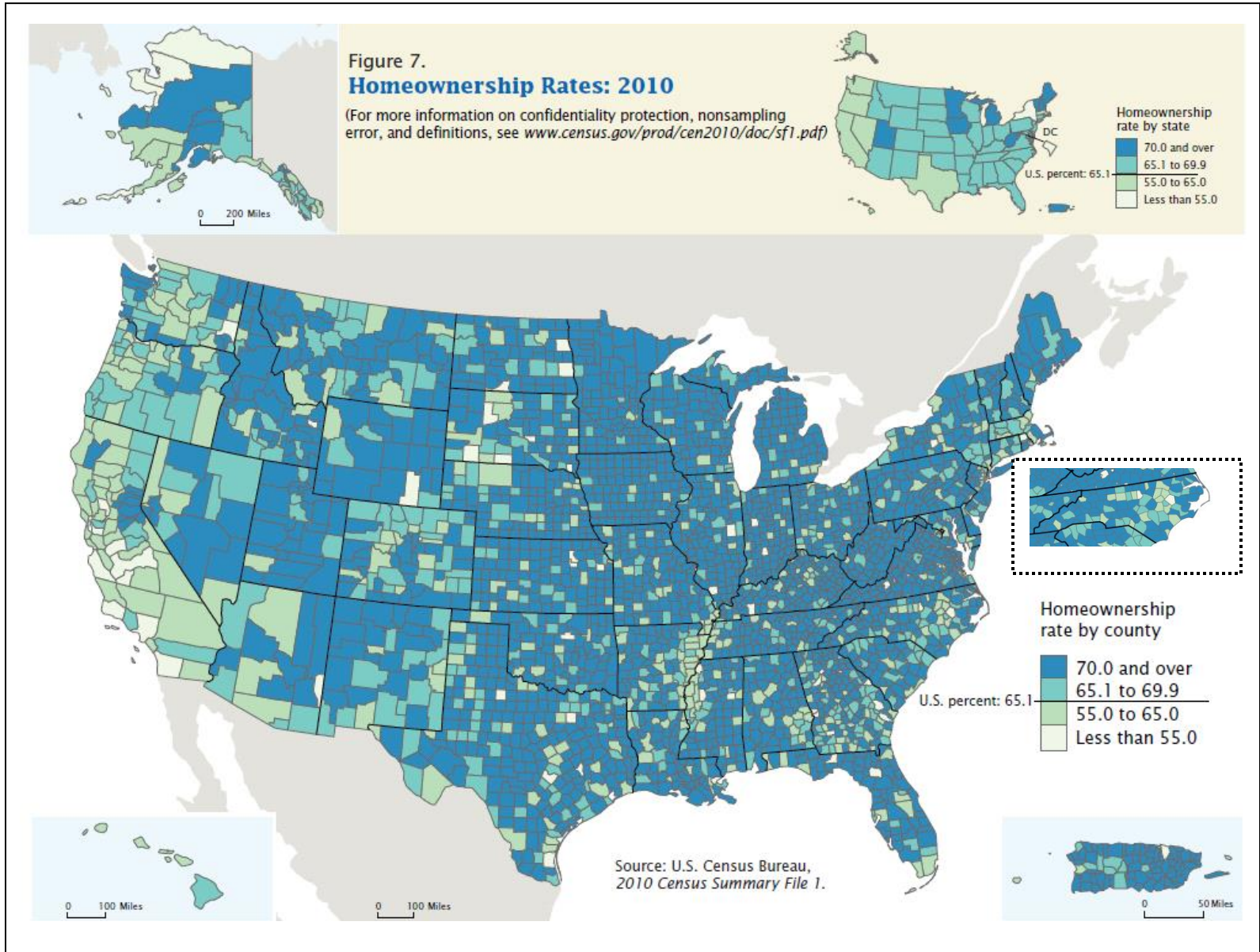


Figure 6: Homeownership rates (2010)⁹

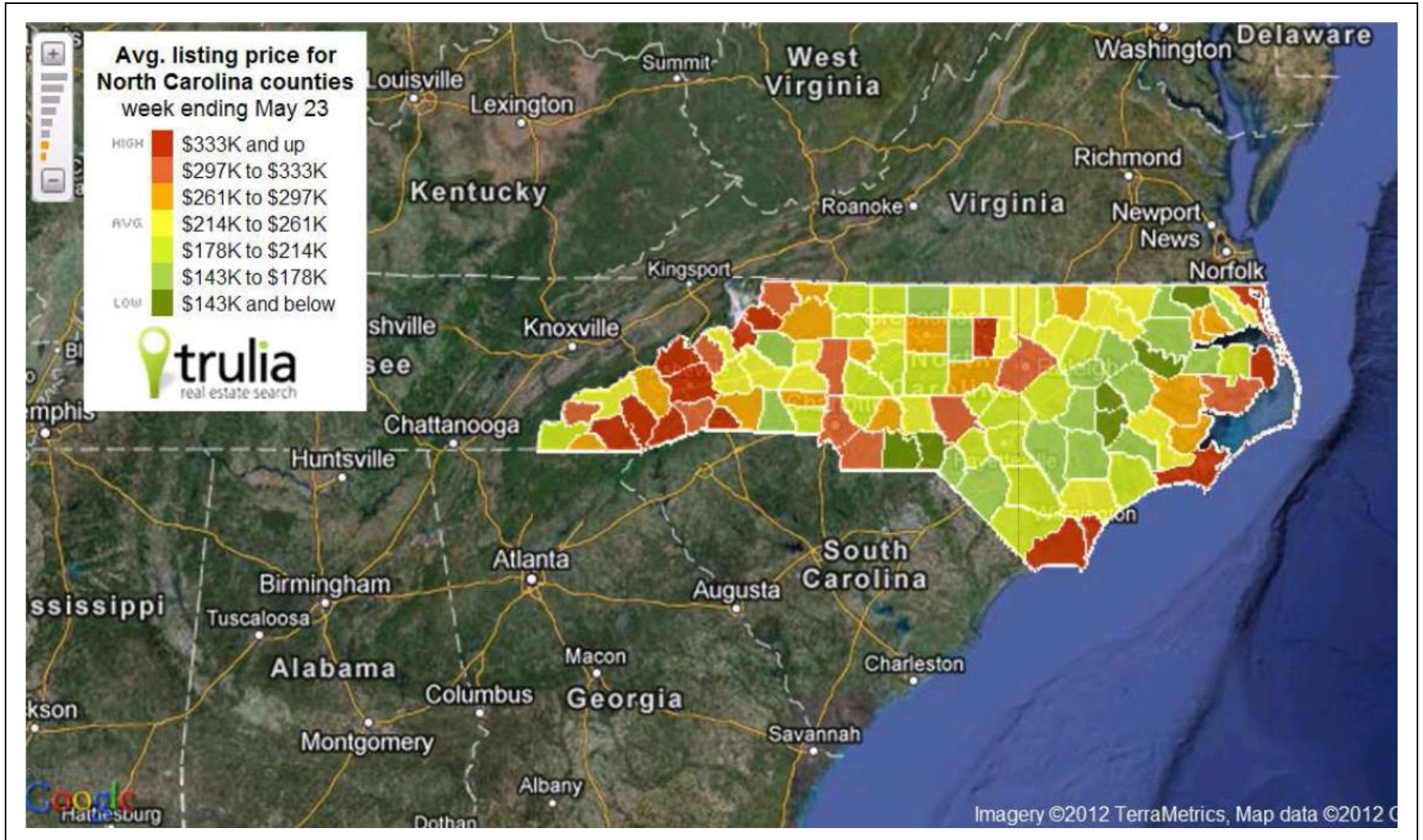


Figure 7: Average listing price for North Carolina counties (May 2012)¹⁴

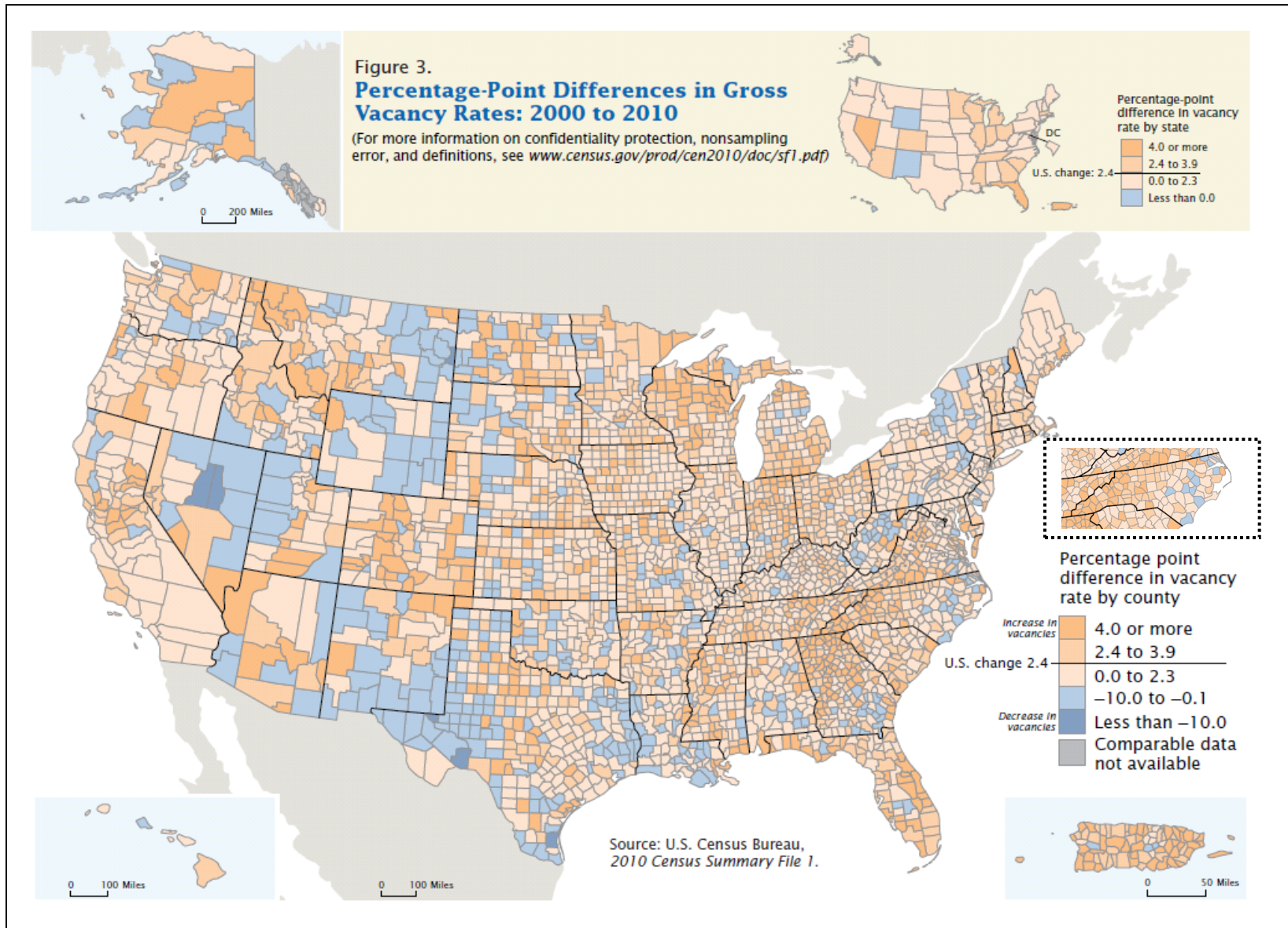


Figure 8: Census map of percentage-point differences in gross vacancy rates (2000-2010)¹⁷

1.4 A Health Impact Assessment of SB731

The National Research Council's Committee on Health Impact Assessment defines HIA as:

“a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population. HIA provides recommendations on monitoring and managing those effects.”¹⁸

An HIA is typically done prospectively or prior to the decision being made. It is used to inform the decision and provide recommendations to mitigate negative health outcomes and encourage health promoting aspects of the decision. Health outcomes are changes in the health status of an individual, group or population, which are attributable to a planned intervention or series of interventions (as opposed to incidental exposure to risk), regardless of whether such an intervention was intended to change health status.¹⁹ This HIA uses a broad definition of health as defined by the World Health Organization and considers the social determinants of health and health inequities that may be impacted by SB731.

The primary goal of this HIA is to inform North Carolina's legislative process of the long-term health impacts that passing SB731 and amending existing zoning legislation could have on current and future residents. This HIA seeks to add the dimension of public health to the discussion currently being had surrounding SB731, zoning, and design standards which has primarily been one of economics and local governance. Furthermore, this HIA will showcase the relationship between community design and health by:

- presenting relevant health information in regards to particular design components such as garage door placement and porches;
- linking design standards to the availability of affordable housing; and,
- summarizing the current health status of North Carolinians from urban, suburban, and rural settings.

Davidson Design for Life (DD4L) received a grant from the Centers for Disease Control and Prevention: Healthy Community Design Initiative in August 2011 to conduct this HIA. The screening stage of this HIA took place from October to November 2011. Originally this HIA included looking at Davidson's street design standards and considering the overall public realm associated with neighborhood design. However, due to the different geographic scales and decision-makers associated with the two topics of SB731 and Davidson's Street Design Standards Update, it was decided that two separate HIAs would be more appropriate.

Sections 2 through 7 of this report document the six-step process and findings of the HIA. Relevant research data and resources are listed in the Appendices; see Appendix 2 for the third edition of SB731 as passed by the NC Senate on May 17, 2011.

Glossary of Terms

Health: A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

Social Determinants of Health: The circumstances, in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics.

Health Inequities: Avoidable inequalities in health between groups of people within countries and between countries. These inequities arise from inequalities within and between societies. Social and economic conditions and their effects on people's lives determine their risk of illness and the actions taken to prevent them becoming ill or treat illness when it occurs.

Health in All Policies: An innovative approach to address complex health challenges and improve population health through designing healthier communities, integrating public health actions with primary care, and by pursuing healthy public policies across sectors.¹⁹

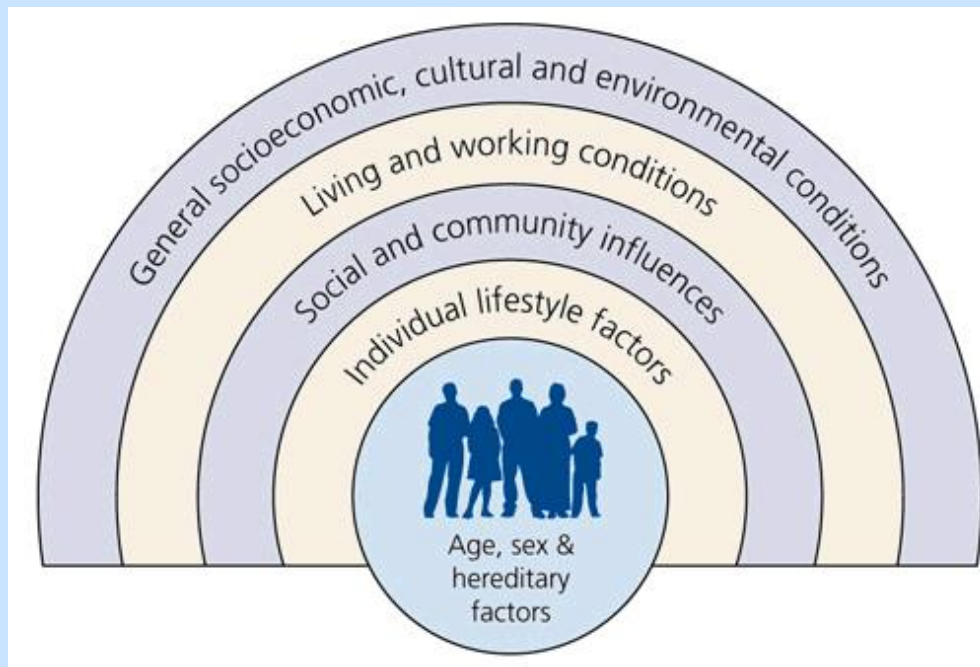


Figure 9: Social determinants of health²⁰

Section References

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2. Screening

Screening establishes the need for and value of conducting an HIA. Screening considers:

- whether a proposed policy, plan, project, or program will potentially have substantial adverse or beneficial health effects (even if there is a low likelihood);
- if the information from the HIA could alter a decision or help decision-makers choose between alternatives;
- if there could be a disproportionate burden placed on vulnerable populations;
- if there is public concern or controversy surrounding the policy or program;
- whether there is an opportunity to incorporate health information into the decision-making process that would otherwise not occur; and,
- if there is the ability to complete the assessment prior to the decision being made with available resources.¹

At the conclusion of the screening step, the HIA team should have:

- a complete description of the proposed policy, program, plan or project including a timeline for decision and the political and policy context;
- a preliminary opinion on the importance of the proposal for health and the opportunities for the HIA to inform the decision;
- a statement of why the proposal was selected for screening;
- an outline of expected resources needed to conduct the HIA; and,
- a recommendation on whether the HIA is warranted.¹

2.1 Screening Process Followed

The screening of this HIA took place from October to November 2011. After the Town of Davidson received the grant from the Centers for Disease Control and Prevention and DD4L became a formal entity, the committee met to discuss what would be the topics for the three HIAs in year 1. Originally SB731 was suggested by Lauren Blackburn, the Town's Planning Manager at the time, as being a piece of legislation that if passed would have multiple implications on the Town's ability to promote healthy community design. In particular garage placement and porch requirements were highlighted as two aspects of SB731 that would influence health. Because porches and garage doors both serve as components that link private households to the public realm, the initial idea was to look at the entire streetscape from the house front on one side of the street to the front of the house on the opposite side. This idea was entitled "Public Health and the Public Realm" and a project worksheet describing the project and timeline was prepared for the first Regional Advisory Commission (RAC) meeting held on November 15, 2011 (See Appendix 3).

After the RAC meeting, which was attended by Dr. Arthur Wendel of the CDC as well as Katherine Hebert, the soon to be DD4L Coordinator, the proposed HIA was vetted further. It was determined that "Public Health and the Public Realm" would have two

separate decision makers, the North Carolina House of Representatives on SB731 and Davidson's Town Board on the planning ordinance that determines how streets are designed, and therefore should be separated into two HIAs. This idea was accepted by the DD4L Committee and work on the two HIAs began in December.

2.2 Results of Screening

At the end of the screening step it was determined that an HIA on SB731 was warranted. Because the exact timeline for when SB731 would be brought to the floor by the House Committee on Commerce and Job Development was unknown, DD4L determined that it would be best to prepare an initial analysis by the end of February, prior to the NC legislature going into short session, and add to the analysis and reporting as time allowed.

Stakeholder Identification and Community Engagement

Stakeholder Identification: Because this HIA is on a statewide policy, it was difficult to determine who would be the stakeholders. Those in the North Carolina homebuilding industry, future homebuyers, and current residents of neighborhoods adjacent to future development were considered stakeholders in the decision being made. The North Carolina chapter of the American Planning Association and the North Carolina League of Municipalities were also contacted as representatives of the field of planning and local governments.

Community Engagement: Due to the broadness of the stakeholders, community engagement was challenging and DD4L focused on those working and living in Davidson. Homebuilders within the Town of Davidson were interviewed about their impressions on SB731 and what impact it would have if passed. Information on SB731 was included within Davidson's Hot Topic Newsletter on the Legislative Short Session (May 2012). A neighborhood survey was sent out to residents of Davidson asking questions about porches, social cohesion, garage door placement, and physical activity levels. A public presentation of the HIAs findings was given at the Board of Commissioners meeting held on April 10, 2012 in conjunction with a local resolution against the bill being passed. Information about SB731 and the HIA was also made available on DD4L's website (www.townofdavidson.org/DD4L).

Section References

1. *Improving Health in the United States: The Role of Health Impact Assessments*. (2011). Washington, DC: National Research Council.

3. Scoping

Scoping develops the work plan for conducting an HIA. Scoping considers:

- which potential health impacts will be analyzed within the HIA;
- what populations will be affected, the socioeconomic and health characteristics of those population groups, and if there are any particularly vulnerable subgroups;
- what research questions will be examined and what data and methodology will be used to answer those questions;
- who will be involved in the HIA process and what types of community or stakeholder engagement will be used;
- how information will be shared with stakeholders and decision-makers; and,
- how the HIA process will be evaluated.¹

At the conclusion of the scoping step, the HIA team should have:

- a list of team members and expected roles within the HIA;
- a diagram of potential health impacts to be analyzed within the HIA and what data, literature, or expert opinion is available to examine these impacts;
- a community profile of the geographic area and populations expected to be impacted by the decision;
- a list of key deadlines and activities that need to be completed; and
- plans for community engagement, communication of findings, and evaluation of the HIA process.¹

3.1 Scoping Process Followed

Once the decision was made to conduct an HIA on SB731, a scoping worksheet was filled out by DD4L Coordinator Katherine Hebert and approved by the DD4L Committee with additional edits (See Appendix 4). The scoping worksheet was also shared with the DD4L Regional Advisory Commission by email and discussed at their next meeting along with a progress report on the HIA efforts concerning SB731.

3.2 Potential Health Impacts

The potential health impacts that were identified within the scoping process and considered within the HIA include:

- A decrease in physical activity levels (and all associated health benefits of physical activity) as the pedestrian realm is negatively impacted by protruding garages;
- A decrease in social cohesion as fewer porches are built and the potential for interactions with neighbors is limited;
- A decrease in safety with limited visibility from the entrance of the house; and,
- A greater potential for injury if protruding garages are paired with shorter driveways as there is a shorter response time for those pulling out of the garage to stop for a pedestrian crossing behind them.

Additional potential health impacts mentioned within the scoping process (See Figure 10) but not included in the HIA were not included because the causal relationship was too weak or additional legislation such as county building codes would supersede any changes made due to SB731. There was also no evidence that changes in the design standards associated with garage door location or porches would negatively affect housing affordability to a significant extent.

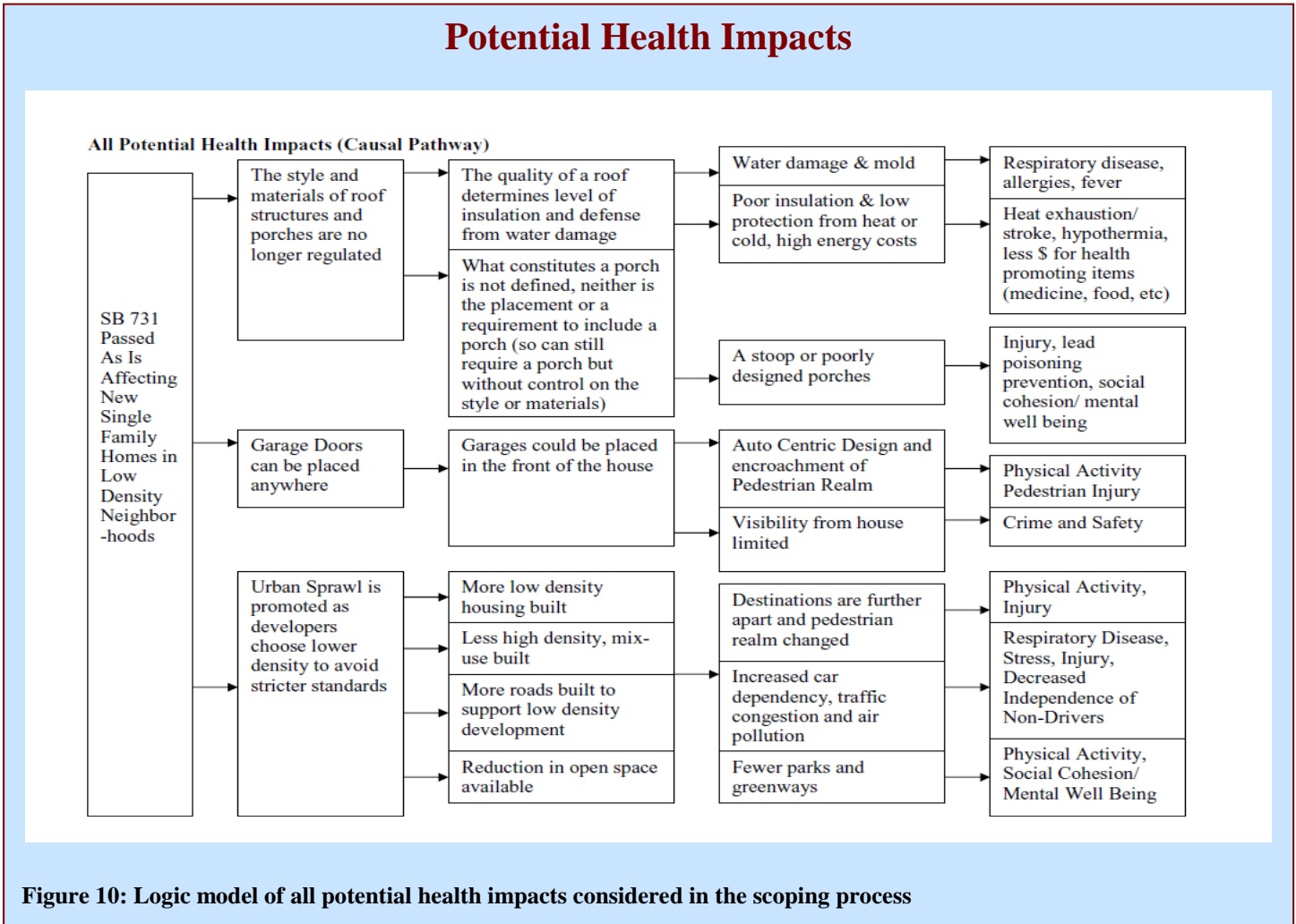


Figure 10: Logic model of all potential health impacts considered in the scoping process

3.3 North Carolina Health Profile

Chronic Disease

According to the Centers for Disease Control and Prevention, chronic diseases, such as heart disease, stroke, cancer, diabetes, and arthritis, are among the most common, costly, preventable and deadly health problems in the United States. Common causes of chronic disease include a lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption.²

Health Benefits of Physical Activity

The health benefits of meeting recommended physical activity levels include:

- Weight management,
- Reduced risk of cardiovascular disease,
- Reduced risk of type 2 diabetes and metabolic syndrome,
- Reduced risk of certain cancers,
- Stronger bones and muscles,
- Improved mental health and mood,
- Improved ability to do daily activities and prevent falls,
- Improved quality of life and length of life.



Figure 11: There are many health benefits to walking around the neighborhood!

In 2010, the leading cause of death in North Carolina was cancer (18,000 deaths) followed closely by heart disease (17,000 deaths).³ Diabetes, another chronic disease that can be prevented through proper diet and physical activity, was the 7th leading cause of death (2,000 deaths).³ Hospitalization expenses in North Carolina associated with cardiovascular, circulatory diseases, and diabetes totaled \$9.6 billion in 2009.⁴

Inactivity

Inactivity can lead to chronic disease. In North Carolina, 64% of adults do not meet recommended levels of physical activity defined as 2 hours and 30 minutes of moderate-intensity activity or 1 hour and 15 minutes of vigorous-intensity activity each week.⁵ Furthermore, 26% of adults in North Carolina reported participating in no physical activity over the last month.⁶

Inactivity is not limited to adults. As part of the Youth Risk Behavior Surveillance System, high school students in North Carolina were asked how often they participated in physical activity, and sedentary activities such as watching television or using a computer. The findings of this survey included:

- 15% of youth did not participate in the recommended 60 minutes of physical activity on any day;
- 74% were physically active at least 60 minutes per day on less than 7 days;
- 35% watched television 3 or more hours per day on an average school day; and,
- 28% used computers 3 or more hours per day on an average school day.⁷

Obesity and Overweight Designation

North Carolina has the 12th highest percentage of obese adults and the 14th highest percentage of obese and overweight children in the United States.⁸ As indicated in the 2010 Behavioral Risk Factor Surveillance System, 65% of adults are overweight or obese and adult obesity rates have doubled since 1990 from 13% to 30% in 2009.^{8,4} According to America's Health Rankings, North Carolina's obesity related healthcare cost are estimated to be an average of \$4.3 billion by 2013 (approximate \$620 annually per capita).⁴

As indicated in the North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS), obesity prevalence is also on the rise in children and young adults. In 2009, 15% of children ages 2-4, 26% of children ages 5-11, and 28% of children ages 12-18 were classified as obese based on their Body Mass Index (BMI). An additional 15 to 18 percent were considered overweight for their age-group.⁴ It is likely that the unhealthy habits learned in childhood will continue into adulthood and additional chronic diseases such as diabetes and cardiovascular disease will impact these children later in life.

Diabetes

According to the 2011 North Carolina Health Profile, "with a greater prevalence of obesity and an increasing elderly population, diabetes is approaching epidemic proportions in North Carolina."⁴ In 2009, 9.6% of the adult population had been diagnosed with diabetes (an increase of 50% since 1998). Another 7% of respondents indicated that they had been diagnosed with pre-diabetes and the actual prevalence may be twice as high given the estimate that there is an undiagnosed case of diabetes for every 2.7 cases that are diagnosed.⁴

In 2009, diabetes was the seventh leading cause of death in North Carolina (causing 2,100 deaths) and a large contributing factor to other leading causes of death such as heart disease, stroke, and kidney failure. Diabetes can also lead to amputations, kidney disease, and blindness. The total hospitalization costs associated with diabetes in 2009 were more than \$4.4 billion.⁴

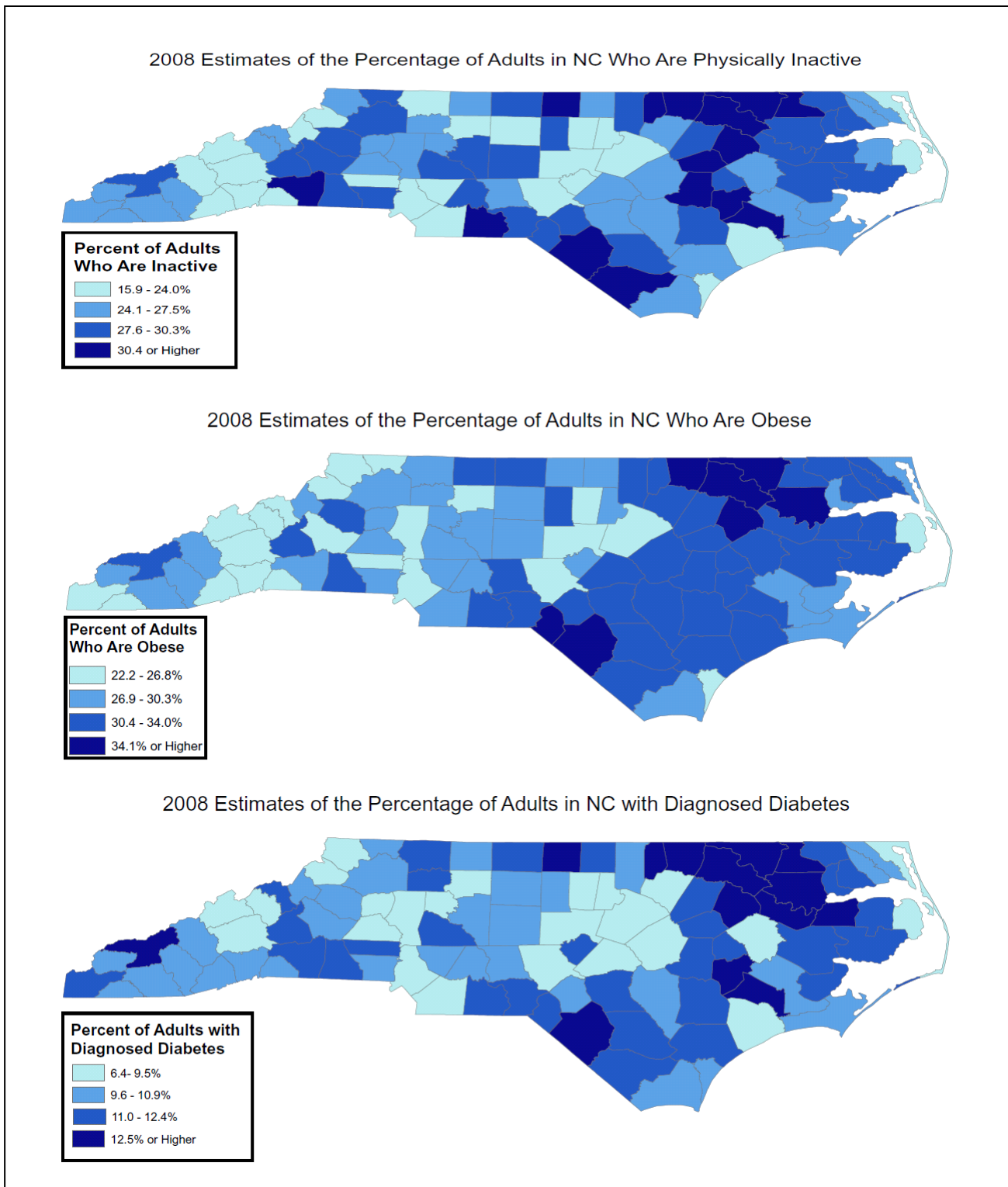


Figure 12: Rates of physical inactivity, obesity, and diabetes in North Carolina (2008)⁹

Cardiovascular Disease

In 2009, cardiovascular diseases, which include heart disease, stroke and atherosclerosis, were responsible for almost a third of all deaths in North Carolina. Resulting in over 17,000 deaths, cardiovascular disease was the second leading cause of death and the leading cause of hospitalization in 2009. Expenses associated with the approximately 160,000 hospitalizations for cardiovascular and circulatory diseases totaled over \$5.2 billion in 2009.⁴

According to the Kaiser Family Foundation, North Carolina has the seventh highest stroke death rate in the nation following Arkansas, Alabama, Tennessee, Oklahoma, South Carolina, and Mississippi. As part of the “Stroke Belt,” an area in the Southeastern part of the United States with the highest stroke rates, North Carolina has significantly higher death rates from stroke (age adjusted rate of 46.1 compared to the national rate of 38.9 in 2009).⁴

Although 8.7% of respondents to the Behavioral Risk Factor Surveillance System indicated a history of cardiovascular disease, only 22% of those responding were able to identify all the symptoms of a stroke and only 14% could identify the symptoms of a heart attack. Delay in receiving treatment for heart disease can greatly limit options for treating the disease and preventing future damage.⁴

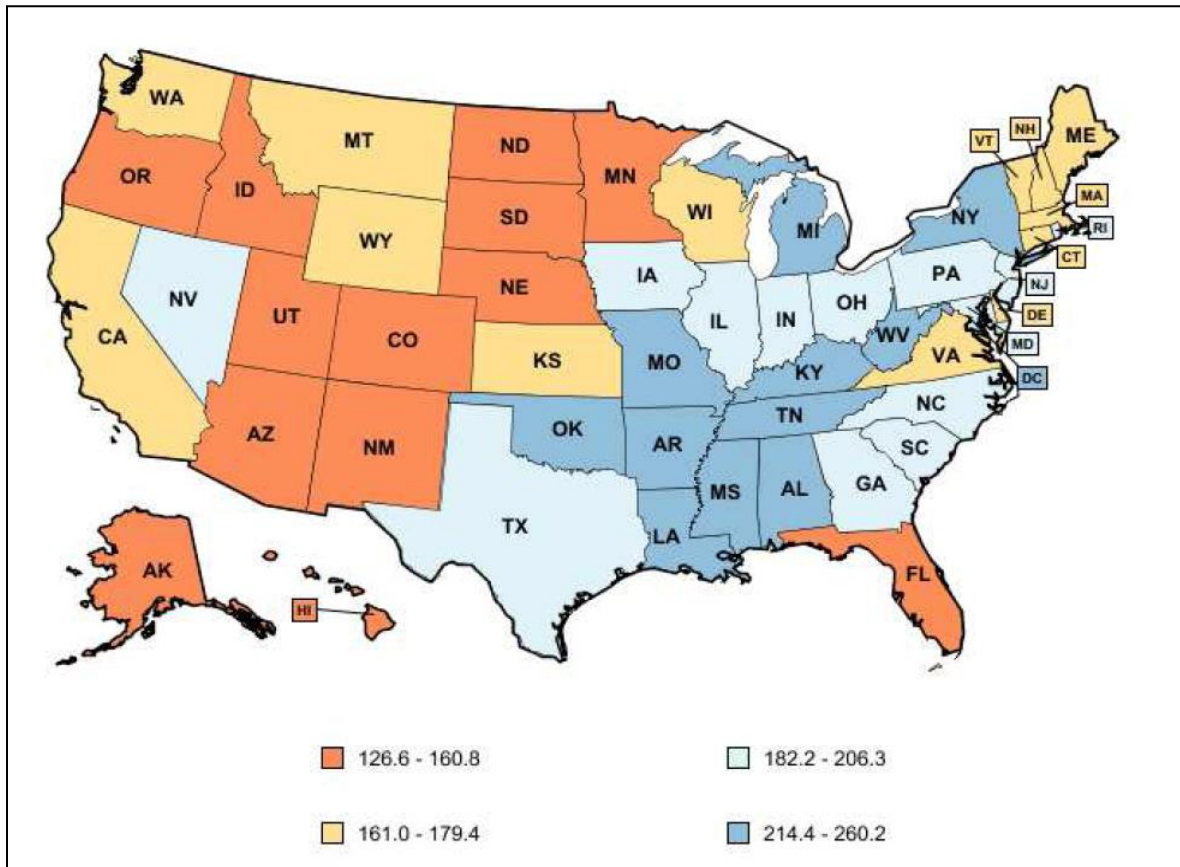


Figure 13: 2008 Heart disease death rate per 100,000¹⁰

Mental Health and Mental Illness

Being physically active on a daily basis and socially involved in a community can improve a person's mental health and sense of well being. Mental health is defined as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." Mental Illness is defined as "collectively all diagnosable mental disorders" or "health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning."¹¹

In 2009, nearly a third of North Carolina adults reported that there were one or more days in the past month where their mental health was not good due to stress, depression, or emotional problems, with 14% reporting poor mental health for more than 8 days during the past month. In the state fiscal year of 2010, over 7,000 people were served in state psychiatric hospitals and close to another 4,500 were served in North Carolina Alcohol and Drug Treatment Centers. Hospitalizations in non-federal hospitals within the state for mental illness totaled over 60,800 resulting in over \$653 million in hospital charges. Hospitalizations for alcohol or drug abuse were over 11,100 and totaled over \$108 million in hospital charges. In 2009, over 1,000 North Carolina residents committed suicide and there were over 10,800 emergency room visits in 2008 for self-inflicted injuries.⁴

Poor mental health is not limited to adults. Over 28% of high school students felt sad or hopeless almost every day for 2 or more weeks in a row, to the point that they stopped doing some usual activities during the 12 months prior to the Youth Risk Behavior Survey. One in seven seriously considered attempting suicide or made a plan about how they would attempt suicide. Twice the national average (5% compared to the national average of 2.4%) had a suicide attempt that resulted in injury, poisoning, or overdose that had to be treated by a doctor or nurse.¹²

The Youth Risk Behavior Survey also provides additional indicators for the causes of poor mental health including bullying (physical and electronic), domestic abuse, and sexual assault. In the month prior to the survey 6.8% of students did not attend school because they felt unsafe. In the year prior to the survey 20.5% of students had been bullied on school property, 9.1% had been threatened or injured with a weapon on school property, 15.7% had been electronically bullied, and 14.1% had suffered from domestic abuse. Additionally, 9.5% had been physically forced to have sexual intercourse at some time in their life.¹² Risky behaviors such as alcohol and drug abuse, unprotected sexual intercourse, and having multiple sexual partners are also indicators of poor self-esteem and mental health and are higher than the national average in North Carolina.

Injury

Overall, motor vehicle injuries are the 10th leading cause of death in the state and the leading cause of death for North Carolina youth ages 5 through 24 years.⁴ In 2009, motor vehicle injuries resulted in 1,394 deaths. Crash data available for pedestrians and pedalcyclists (defined as a road user traveling on a bicycle or a non-motorized vehicle with at least two wheels and pedals or hand-crank) indicate that 169 pedestrians and 25 pedalcyclists were killed by a crash in 2008 (See Table 4).^{13, 14} Twenty-three percent of these fatalities and 45% of injuries were among those aged 0 to 24 years old.¹⁴

Table 4: Age of Pedestrian and Pedalcyclist Casualty in North Carolina (2008)¹⁴

AGE	Pedestrians			Pedalcyclists		
	Total	Killed	Injured	Total	Killed	Injured
0 to 4	52	2	50	4	0	4
5 to 9	105	4	101	36	0	36
10 to 14	121	6	115	94	0	94
15 to 19	248	16	323	100	3	97
20 to 24	210	13	197	73	0	73
25 to 34	284	20	264	96	5	91
35 to 44	324	38	286	88	4	84
45 to 54	296	37	259	116	4	112
55 to 64	143	21	122	61	8	53
65 to 74	55	6	49	24	0	24
75- Older	41	6	35	6	1	5
Not Stated	11	0	11	3	0	3
Total	1,890	169	1,721	701	25	676

Violence and Crime

Violence and crime rates in North Carolina are higher than the national average per population (See Table 5).¹⁵ In 2009, there were 562 deaths by homicide, 22,586 cases of aggravated assault and 2,230 cases of rape reported in North Carolina.⁴

Table 5: 2010 Crime Rates in North Carolina Compared to the United States¹⁵

Locality	Total Population	Violent Crimes*	Property Crime*	Total	Crime Rate per Population
North Carolina	9,535,483	34,653	328,719	363,372	3.8%
United States	308,745,538	1,246,248	9,082,887	10,329,135	3.3%

*Violent crimes include murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault. Property crime includes burglary, larceny-theft, and motor vehicle theft.

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4. Assessment

Assessment is the actual analysis of the potential health impacts on the selected population and can take many forms depending on the subject of the HIA. Assessment considers:

- the literature and data available to suggest the likelihood of a particular health impact occurring, the severity of that impact, and the magnitude of the impact;
- expert opinions from those knowledgeable in the field relevant to the health impact being examined and the project, policy, plan, or program being analyzed;
- stakeholder concerns and local knowledge; and,
- the different potential impacts of multiple alternatives being considered within the HIA.¹

At the conclusion of the Assessment step, the HIA team should have:

- the baseline health status of the populations expected to be impacted;
- a description of the data and analytical methods used;
- findings from the literature review, quantitative modeling, interviews or focus groups with experts, or stakeholder engagement;
- a list of any limitations or assumptions made during the assessment; and,
- a summary of the findings of the assessment.¹

4.1 Legislative Review

A review of North Carolina legislation was conducted to determine if there is precedence for taking health considerations into account in legislative decisions surrounding zoning or design standards. At the conclusion of the legislative review, it was determined that there was precedence and legal grounds to consider health implications in zoning and design standards legislation considering that zoning legislation was put into place explicitly “for the purpose of promoting health, safety, morals, or the general welfare of the community.”² Furthermore, Community Appearance Commissions may be formed in order to make plans and carry out programs that “enhance and improve the visual quality and aesthetic characteristics of the municipality or county.”^{3, 4}

Relevant legislation includes:

- G.S. 160A-381 Article 19 Part 3
- G.S. 160A-383
- G.S. 160A-451 Part 7 Community Appearance Commissions
- G.S. 160A-452

Legislative Review Summary

1. Zoning was put in place to promote health.
 - a. “For the purpose of promoting health, safety, morals, or the general welfare of the community, any city may adopt zoning and development regulation ordinances.”²
 - b. “Zoning regulations shall be designed to promote the public health, safety, and general welfare. To that end, the regulations may address, among other things, the following public purposes: to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to lessen congestion in the streets; to secure safety from fire, panic, and dangers; and to facilitate the efficient and adequate provision of transportation, water, sewerage, schools, parks, and other public requirements. *The regulations shall be made with reasonable consideration, among other things, as to the character of the district and its peculiar suitability for particular uses, and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout such city.*”⁵

2. Citizens can be involved in the process and may benefit physically, socially, and mentally from having local control (autonomy) over the appearance of their community.
 - a. “Each municipality and county in the State may create a special commission, to be known as the official appearance commission for the city or county....Where possible, appointments shall be made in such a manner as to maintain on the commission at all times a majority of members who have had special training or experience in a design field, such as architecture, landscape design, horticulture, city planning, or a closely related field.”³
 - b. “The commission, upon its appointment, shall make careful study of the visual problems and needs of the municipality or county within its area of zoning jurisdiction, and shall make any plans and carry out any programs that will, in accordance with the powers herein granted, *enhance and improve the visual quality and aesthetic characteristics of the municipality or county.* To this end, the governing board may confer upon the appearance commission the following powers and duties:...
 - (3) To provide *leadership and guidance* in matters of area or community design and appearance to individuals, and to public and private organizations, and agencies;
 - (4) To make studies of the visual characteristics and problems of the municipality or county, including surveys and inventories of an appropriate nature, and to recommend standards and policies of design for the entire area, *any portion or neighborhood thereof*, or any project to be undertaken;
 - (5) To prepare both general and specific plans for the improved appearance of the municipality or county. These plans may include the entire area or any part thereof, and *may include private as well as public property.* The plans shall set forth desirable *standards and goals* for the aesthetic enhancement of the municipality or county or any part thereof within its area of planning and zoning jurisdiction, including public ways and areas, open spaces, and *public and private buildings* and projects;
 - (6) To participate, in any way deemed appropriate by the governing body of the municipality or county and specified in the ordinance establishing the commission, in the implementation of its plans. To this end, the governing body may include in the ordinance the following powers:...
 - (c) To formulate and recommend to the appropriate municipal planning or governing board the *adoption or amendment of ordinances* (including the zoning ordinance, subdivision regulations, and other local ordinances regulating the use of property) that will, in the opinion of the commission, serve to enhance the appearance of the municipality and its surrounding areas.”⁴

Within the national and state court system, the question of whether the regulation of aesthetics is a legitimate objective of land development regulation has been a controversial issue. Up until 1972, the North Carolina Supreme Court held that regulations could not be based solely on aesthetics so requirements to screen junkyards and regulate business signs were invalidated. Starting in the early 1970s and spanning into 1980s, a larger discussion was held over whether a municipality's authority of police power could justify a regulation based on aesthetics alone (primarily in regards to historically significant structures). Then in a 1982 case upholding a Buncombe County junkyard-screening requirement, the court ruled in favor of zoning based on aesthetic concerns alone. In the ruling the court noted that aesthetic regulations were a legitimate government objective in that they provide benefits to the community including "protection of property values, promotion of tourism, indirect protection of health and safety, preservation of the character and integrity of the community, and promotion of the comfort, happiness, and emotional stability of area residents."⁶

4.2 Literature Review

Housing and Health

Housing can affect health in many ways including:

- housing quality impacting physiological health, psychological health, and safety;
- unaffordable housing costs affecting health by reducing the income available for nutritious food and necessary health care expenses, as well as causing stress, instability, and crowding;
- physical neighborhood attributes affecting health by facilitating or impairing walkability/bikeability, proximity to traffic, and access to public transportation, parks, and nutritious food; and,
- social and community attributes, such as segregation and the concentration of poverty, have an impact on health.⁷

In 2011, the National Prevention, Health Promotion, and Public Health Council issued a National Prevention Strategy that identified Healthy and Safe Community Environments as one of its goals. The strategy states:

Living environments, including housing and institutional settings, can support health. Quality housing is associated with positive physical and mental well-being. How homes are designed, constructed, and maintained, their physical characteristics, and the presence or absence of safety devices have many effects on injury, illness, and mental health. Housing free of hazards, such as secondhand smoke, pests, carbon monoxide, allergens, lead, and toxic chemicals, helps prevent disease and other health problems. Housing that meets universal design standards allows people, including those with disabilities and older adults, to live safely in their homes.⁷

This strategy encompasses a health in all policies approach and commits the federal government to address housing conditions including health-related hazards and to use housing development subsidies to promote mixed-income neighborhoods and access to safe and healthy housing.⁷

Links between Physical Activity and Neighborhood Design (Particularly Garage Door Placement and Porches)

For decades, there has been a widespread belief that pedestrian activity (aka walking levels) is influenced by building characteristics and other neighborhood design elements such as the presence of sidewalks. Buildings that are massive and *featureless, designed with more regard for automobile than pedestrian access*, or removed from the streetscape (a street and its surroundings) entirely discourage pedestrian activity. “It is generally asserted that in order for a building to encourage pedestrian activity, it needs to sit close to the edge of the sidewalk, *have an interesting façade with design treatments that encourage interaction between the interior and exterior of the structure (such as doors, windows, stoops, porches, etc.)* and not be inordinately tall or wide.” In regards to multiple buildings along the street, “*architectural styles should be complementary but not uniform.*”⁸

Garage doors, “a large, featureless vertical slab on the front of the house,” became the dominant feature of the typical single family house during the course of the twentieth century. As a result the once quasi-public sphere created by porches, which fostered interaction and physical activity, has been replaced by an auto-centric design that discourages pedestrian activity. Garage doors that protrude further from the front of the house than the main pedestrian entrance (the front door), make the garage entrance the most dominant feature of the house and the house appear even more auto-centric. The more auto-centric a neighborhood, the less likely people are to walk for utilitarian or recreational purposes, hampering their ability to reach the recommended levels of physical activity.⁸

Visual Impact of Design Features: Porches and Recessed Garages



Figure 14: Which neighborhood would you prefer to walk in?

Links between Social Support/Cohesion and Neighborhood Design (Particularly Porches)

Front porches can encourage social activity and cohesion in two ways: they facilitate interaction between residents and passersby in the quasi-public space they provide, and their designs raise the detail level of a house's façade, encouraging additional pedestrian activity and opportunities for chance encounters.⁷ The frequency and quality of informal social contact among neighbors is critical to the formation of neighborhood social ties or social cohesion (bonds that bring people together in a given society) within a neighborhood. Relationships among neighbors grow primarily through short-duration outdoor talks and greetings.⁸

Architectural features such as porches, stoops, and windows can facilitate social interactions which also promote social support, on which certain populations, particularly elders, may be especially dependent.⁹ This social support is associated with multiple positive health outcomes including a reduction in depression, sense of isolation, and anxiety. Elderly individuals with strong social connections have "lower levels of mortality, reduced suicide rates, less fear of crime, and better physical health."¹⁰



Figure 15: Friends catching up on the front porch

Crime Prevention through Environmental Design and "Eyes on the Street"

Changes in the built environment can reduce crime rates and occurrences of violence. Crime prevention through environmental design (CPTED) incorporates three basic environmental design approaches to improve safety:

- Natural Surveillance- the use of design features that facilitate regular observation of areas such as sidewalks and lobbies for safety.
- Access Control- the use of design features that limit access to and escape routes from potential crime targets.
- Territoriality- the result of design features that establish a sense of ownership or belonging, distinguishing people who belong from trespassers or intruders.¹¹

Porches, door location (including garage door location), and window location can influence a neighbor's ability to promote natural surveillance of the entrances to surrounding homes, providing additional protection from intrusion. These features can also allow for additional surveillance of a front yard from within a house promoting safety and awareness of the activities going on outside the home.

4.3 Neighborhood Survey

In February 2012, a brief survey was mailed to 700 homes located in Davidson, North Carolina in order to receive local data concerning neighborhood choice, social cohesion, barriers to walking and biking, and physical activity levels (See Appendix 5). There was a response rate of 32% and a wide diversity of neighborhoods captured as part of the survey including older homes in downtown Davidson, new urbanist style homes in New Neighborhood in Old Davidson, upscale custom housing in River Run, as well as townhomes and affordable housing units found throughout Davidson. The findings of this survey were used to inform this HIA and were included within the policy brief distributed to the Davidson Board of Commissioners and members of the House Committee on Commerce and Job Development.

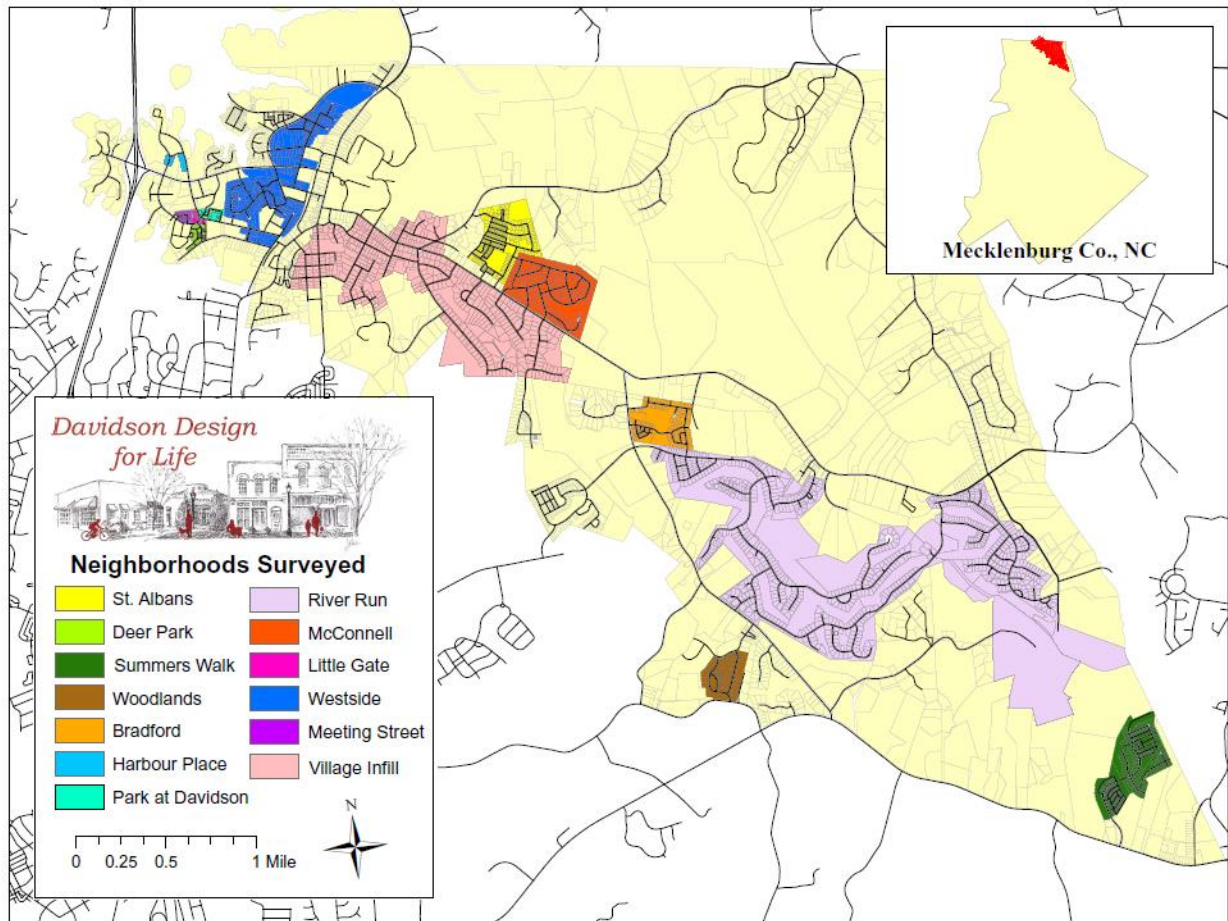


Figure 16: Neighborhoods surveyed in Davidson, North Carolina.

Garage Door Location and Housing Choice

Participants in the survey were asked where their garage door was located and if the location of the garage door affected their choice of house. Of the 109 respondents with a garage, 91% did not have a garage that protruded past the main entrance to their house. Additionally, 29% of those with a garage responded that the garage door location was a determining factor in their choice of house.

Garage Door Location and Physical Activity Levels

The majority of neighborhoods within Davidson do not have protruding garages due in part to (1) building codes adopted in Section 5 of the Davidson Planning Ordinance, which prohibit the placement of the garage in front of the main pedestrian entrance as well as (2) codes recommending the placement of garages or parking lots behind adjoined residential units such as townhomes. However, of those responding that they had a garage located closer to the road than the front door, only 53% reported that they walked or biked for recreational purposes 1-3 times a week or higher, compared to an average of 66% for the other three garage door locations.

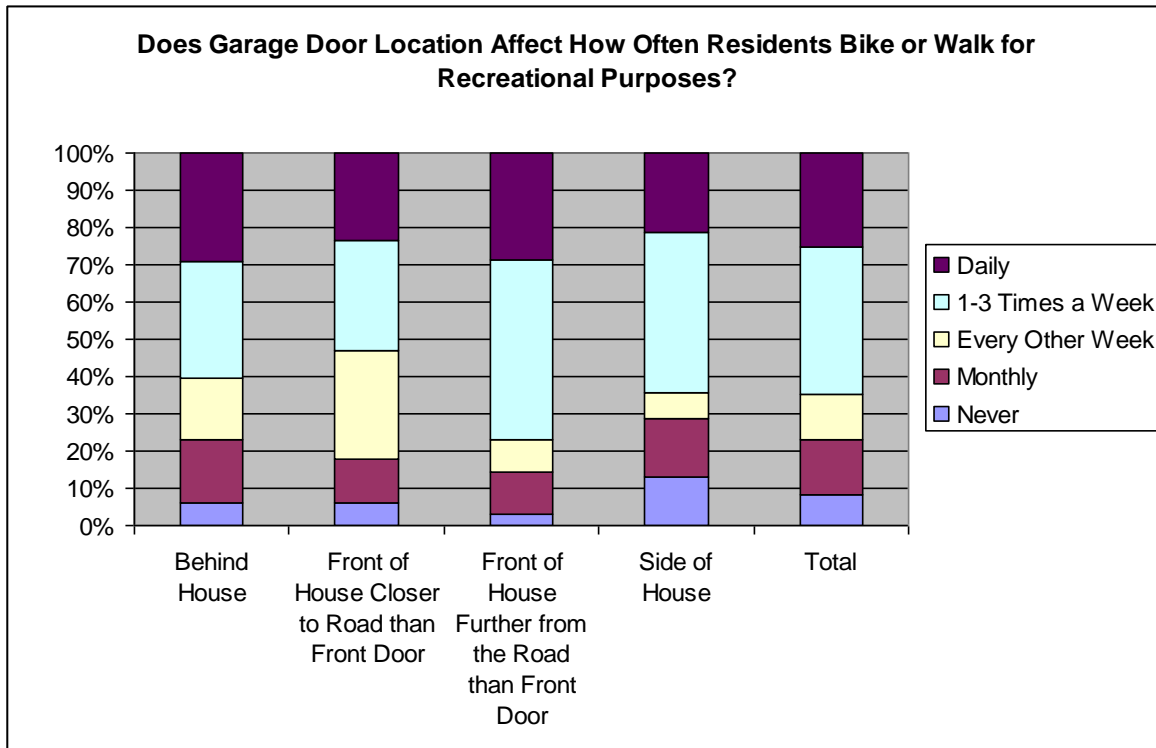


Figure 17: Garage door location could influence levels of physical activity.

Presence of Front Porch and Housing Choice

Survey participants were asked if the presence of a front porch, along with other neighborhood elements, was a deciding factor when they moved into their house and neighborhood. Twenty-seven percent of respondents indicated that a front porch was very important in their decision, with another 35% indicating that it was somewhat important. Of the 20 factors listed within the survey, the presence of front porches ranked 12th behind aspects such as: house design, house price, yard size, age of the house, low crime rates, quality of the school district, and proximity to common destinations (downtown, recreational facilities, retail, and work).

Porches and Social Cohesion

Seventy-five percent of those responding that they had a front porch knew half or more of their neighbors’ names, compared to 58% of those who did not have a front porch. Twenty-four percent of those who had porches knew all of their neighbors’ names. Survey participants that have a front porch were also asked how often they interacted with neighbors from their porch. Eighty-one percent reported interacting with neighbors at least weekly with 43% reporting that they interact with neighbors daily from their front porch.

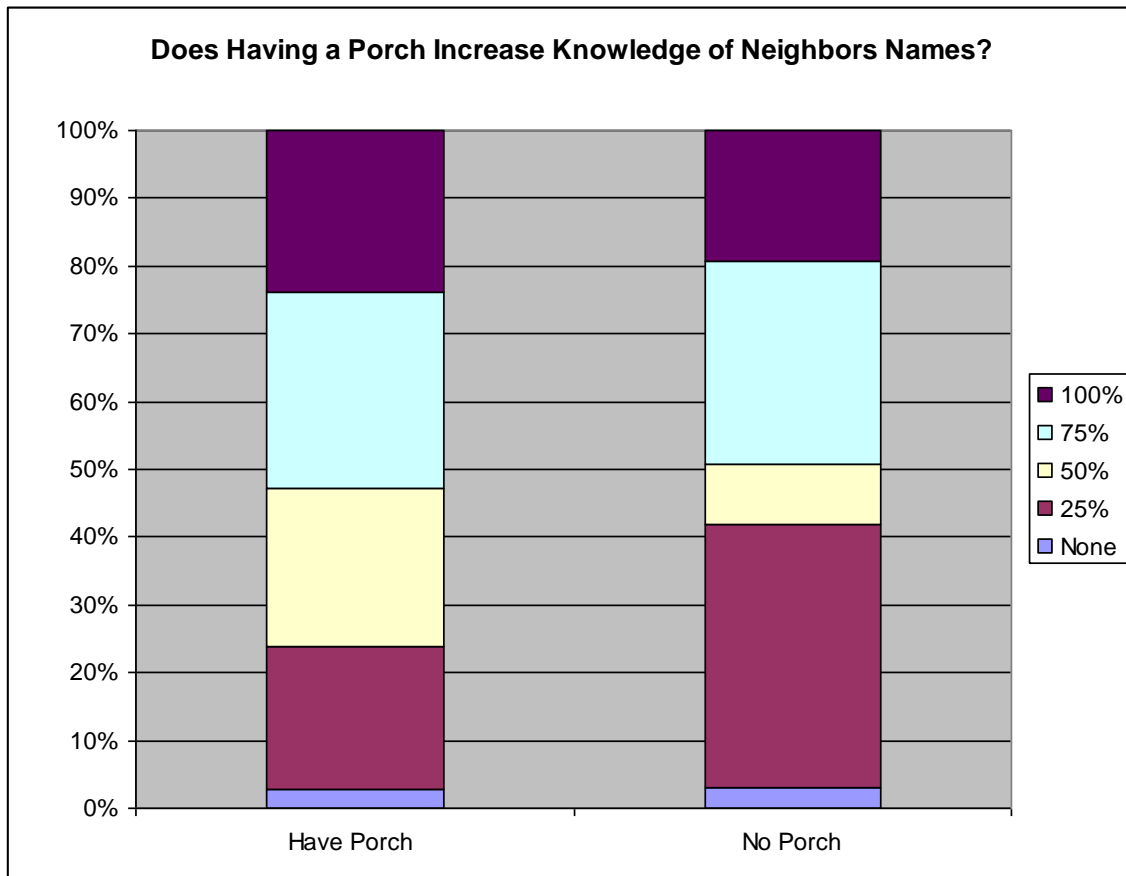


Figure 18: Having a front porch could increase social cohesion with neighbors

Social Cohesion and Physical Activity Levels

Survey participants were asked how often they walked or biked for recreational purposes and when they walked or biked how often they went with a friend, neighbor, or family member. Of those who said they walked or biked every other week, 83% stated that they often or always walk or bike with someone else, indicating that having someone to recreate with made a difference in whether or not they would bike or walk. On average, 77% of those who indicated that they biked or walked for recreational purposes at least 1-3 times a week walked or biked with others. The participants who indicated that they rarely walked or biked (never or monthly), also indicated that they rarely or never biked or walked with anyone else.

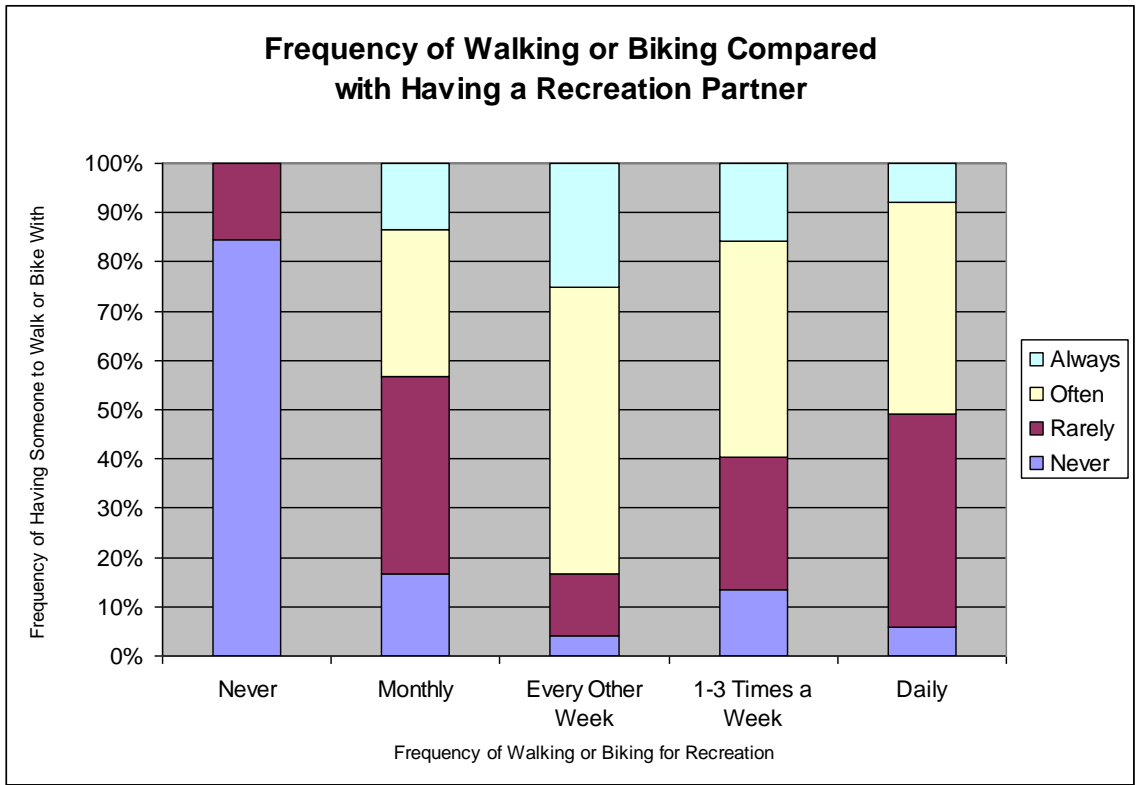


Figure 19: Having someone to bike or walk with could increase the frequency of physical activity

4.4 Stakeholder Interviews

As part of the assessment, three local homebuilders were interviewed to get their perspective on SB731. Key quotes from these interviews were included within the policy brief and are listed below. Overall, these homebuilders supported a municipality's ability to enforce design standards as long as the standards were justified and clearly stated at the beginning of the planning process. They also viewed the standards as a means of protecting their property values by keeping substandard housing from being built on the surrounding lots. Another key point that was identified by one of the builders was that when a protruding garage is paired with a short setback (the distance from the street to the front of the house) the likelihood of people parking in the driveway blocking the sidewalk or having difficulty backing out of their driveway is increased.

Comments made by these builders were taken into consideration when developing recommendations and providing information to decision makers concerning SB731 at the local and state level.

Quotes from Area Builders

“I think it would be unfortunate if Davidson lost its ability to prevent a ‘garage snout’ from sticking forward toward the street. It would surely hurt the appearance of a neighborhood and therefore the property values of a community.”

Jim Burbank, President JCB Urban, Chairman Saussy Burbank
www.jcburban.com

“There is a growing number of North Carolinians who prefer to live in a neighborhood where the pedestrian is not an afterthought, where the design encourages interaction with neighbors, and where garages are unobtrusively located behind each home. The type of architecture, planning, and streetscapes found in these new neighborhoods have endure for centuries elsewhere in the U.S. and abroad.”

Jos. (Joe) T. Roy, IV, Founder Meeting Street Homes and Communities
www.meetingstreet.net

“I think it very safe to say that a home in a walkable urban location such as downtown Davidson will be a better investment over the long term than a home in an auto-dependent neighborhood outside of town.”

Rodney Graham, Owner John Marshall Custom Homes
www.johnmarshallcustomhomes.com

4.5 Summary of Findings

There were 6 key findings from our assessment:

1. There is legislative precedence to consider health implications in granting municipal authority to zone and implement design standards included in North Carolina G.S. 160A-381 and G.S. 160A-451.
2. Neighborhood design components such as garage door location and the presence of front porches can either positively or negatively influence the pedestrian realm of a neighborhood and either encourage or discourage residents to walk or bike.
3. Front porches can enhance interactions with neighbors and can lead to social cohesion of the neighborhood and community.
4. Natural surveillance is improved by increased visibility from and of a house and can lead to crime prevention within the neighborhood.
5. A survey of residents in the Town of Davidson support that SB731 may negatively impact health. These findings and Davidson can serve as a local model of the possible health benefits of implementing certain design standards.
6. There are area homebuilders that support the outcomes of enforcing certain design standards including more walkable, safer, and healthier neighborhoods.

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Images

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5. Recommendations

The recommendations stage identifies alternatives to the proposal or actions that can be taken to minimize the negative health impacts and maximize positive health outcomes. This stage considers:

- community input in recommendation development to encourage solutions that will work in the local context;
- feedback from decision makers to ensure that the recommendations are feasible and within the legal and policy framework governing the decision; and,
- the development of a health management plan with indicators to monitor, a breakdown of who is responsible for each measure, and the procedure for monitoring each indicator.¹

At the conclusion of the recommendations step, the HIA team should have:

- a preferred alternative of those identified within the scoping stage or a list of actions to improve the proposal to promote positive impacts and minimize negative health impacts;
- a plan for who will be responsible for implementing and monitoring each recommendation; and,
- the initial comments from the decision making body on the feasibility of the draft recommendations.¹

5.1 Process Followed for HIA Recommendations

Recommendations were drafted by Davidson Design for Life Coordinator Katherine Hebert and vetted by the DD4L Team and Regional Advisory Commission. The recommendations were divided into two stages of the decision-making process- prior to the vote on SB731 and following SB731 becoming law. The following recommendations are for legislators, municipalities, homebuilders, and other relevant stakeholders.

5.2 Recommended Actions Prior to Voting on SB731

- **Learn More-** All stakeholders should learn more about the connection between neighborhood design and health by reading this report and following up with staff.
- **Consider Health Implications-** Zoning legislation was put into place to promote the health and well-being of residents of the state of North Carolina. Therefore, it stands to reason that health should be taken into consideration when proposing amendments to existing zoning legislation. It is recommended that decision-makers consider the health impacts and the findings of this report when discussing SB 731, and to weigh the potential health impacts along with other relevant factors of the bill.

- **Examine What’s Out There-** Very few municipalities in North Carolina have design regulations for low-density, residential neighborhoods. Fewer still have regulations regarding the elements described in the bill. A more extensive examination of the regulations in place would provide additional information regarding the impacts that the bill would have on the homebuilding industry.
- **Room for Compromise-** Discuss the interests that the Homebuilder Association and the North Carolina League of Municipalities and/or the North Carolina Planning Association have regarding amendments to the zoning legislation. What is each group trying to accomplish regarding changes to the legislation and is there a way all these interests can be met?
- **Amend the Legislation-** After taking into consideration the potential health impacts of specific components of the proposed legislation, remove any language about garage door location and porch design. This applies to lines 23-27 of the proposed legislation: “For purposes of this subsection, the phrase ‘building design elements’ means exterior building color, type or style of exterior cladding material, *style or materials of roof structures or porches*, exterior nonstructural architectural ornamentation, *location or architectural styling of windows and doors, including garage doors*, the number and types of rooms, and interior layout or rooms.”²

5.3 Recommendations if SB731 (As Written) Becomes Law

- **Examine Design Regulations-** Municipalities will need to examine their existing design regulations and make sure they abide by the new legislation. They should pay particular attention to the relationship between setback distance and potential garage placement to ensure that there will be an adequate distance to stop for pedestrians while backing out of a garage.
- **Reward Instead of Regulation-** Municipalities could consider offering rewards for construction that promotes healthy design components such as a faster review process or greater floor area ratio for residential developments that recess the garages as part of their site plan.
- **Rezoning-** Municipalities could rezone areas from low density to higher density residential or mixed use that they are particularly interested in maintaining as a walkable area (such as residential neighborhoods adjoining community centers, areas of infill, or neighborhoods along the border of the city limits).
- **Vote with Your Feet-** Homeowners continue to buy homes with recessed garages and front porches thus sustaining the market for homes with these features. Homebuilders respond to this demand and build homes with these features even if there are no requirements to do so.

Section References

1. *Improving Health in the United States: The Role of Health Impact Assessments*. (2011). Washington, DC: National Research Council.
2. North Carolina Senate. 2011 Session. “S.B. 731, Zoning/Design and Aesthetic Controls.” (Version: 3; Version Date: 5/17/2011). Available from: <http://www.ncleg.net/Sessions/2011/Bills/Senate/PDF/S731v3.pdf>

6. Reporting

Reporting is how the process, findings, and recommendations of the HIA are shared with stakeholders and decision makers. Reporting can take many forms and should consider:

- the attention span and preferred means of communication of the audience receiving the report;
- the content of the report including a description of the proposed policy, plan, project, or program, the data sources and methodology used during the HIA, a description of the process, and the findings and recommendations of the HIA; and,
- making the report publically available.¹

At the conclusion of the reporting stage, the HIA team should have:

- publically available forms of reporting such as presentations, policy briefs, executive summaries, and full reports;
- a plan for distributing the findings of the HIA;
- documentation of the HIA process; and,
- a record of the findings, proposed recommendations, and results of the HIA.¹

6.1 Forms of Reporting Used

There were multiple forms of reporting used during this HIA. Language about the health implications of the legislation was shared with the League of Municipalities, the American Planning Association, and surrounding municipalities during a meeting with Speaker Tillis on March 2, 2012. A PowerPoint presentation was presented to the Town of Davidson Board of Commissioners on April 10, 2012 and included a request to include health promoting language in a renewed referendum against SB731. A newsletter on the Legislative Short Session included information on SB731 and the HIA being conducted on the legislation and was distributed electronically and in hard copy to residents of Davidson in May of 2012 (See Appendix 6). A policy brief was prepared and distributed electronically to members of the House Committee on Commerce and Job Development on June 5, 2012. Regular updates on the progress of the HIA were also given at the DD4L Regional Advisory Commission and DD4L Committee meetings and included on the DD4L website.

6.2 Meeting/ Presentation Schedule

The North Carolina General Assembly is scheduled to reconvene on January 30, 2013. If SB731 remains on the docket for the House Committee on Commerce and Job Development, then additional meetings will be scheduled with Speaker Tillis, leaders from surrounding communities, the League of Municipalities, and key House Representatives.

Section References

1. *Improving Health in the United States: The Role of Health Impact Assessments*. (2011). Washington, DC: National Research Council.

7. Evaluation and Monitoring

The evaluation stage of the HIA consists of three types of evaluation- process, impact, and outcome evaluation. Monitoring is similar to evaluation but specifically involves the tracking of the adoption and implementation of recommendations suggested within the HIA, as well as changes in the health indicators identified within the HIA. Evaluation and monitoring considers:

- process evaluation, or how well the HIA was done and if there are ways that the process could be improved for future HIAs;
- impact evaluation, or whether or not the HIA influenced or informed the decision making process (were the recommendations accepted by the decision makers?); and,
- outcome evaluation, or if the implementation of the accepted recommendations has the intended health outcomes.¹

At the end of the evaluation and monitoring stage, the HIA team should have:

- an evaluation of the HIA process and guidance on how to improve the process for the next HIA;
- an indication of what recommendations were accepted by the decision makers and whether or not the HIA had an impact on their decision; and,
- plans for future outcome evaluation and monitoring of changes in health indicators.¹

7.1 Process Evaluation

Process evaluation will be completed once there is a decision made on SB731. See the Evaluation Plan as part of the Scoping Worksheet in Appendix 4.

7.2 Impact Evaluation

Impact evaluation will be completed once there is a decision made on SB731. See the Evaluation Plan as part of the Scoping Worksheet in Appendix 4.

7.3 Outcome Evaluation/ Monitoring Plan

Outcome evaluation will be completed once there is a decision made on SB731. See the Evaluation Plan as part of the Scoping Worksheet in Appendix 4.

Section References

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Appendix 1: Davidson's Inclusionary Zoning Policy- Planning Ordinance Section 6.3 Affordable Housing

6.3 Affordable Housing

6.3.1 General Goals

The section is hereby adopted consistent with the goals adopted by the Town Board as follows:

- A. At any point in time, a minimum of 12 ½% of the housing units in Davidson shall be affordable as defined by this Ordinance.
- B. The Town is will to assist in the provision of affordable housing in order to secure the benefits from a diverse housing stock.
- C. The owners/ occupants of such affordable housing will also participate in the provision of the affordable housing, although the means of that participation will vary with the method of its provision. For example, the property owner may accept less-than-market rate property appreciation or a tenant may accept fewer amenities.
- D. The Town, affordable housing providers, and developers will employ a variety of tools to meet the affordability goals, to match the characteristics of each project, to fulfill the town's housing needs, to maintain the Town's investment, and to eliminate substandard housing.
- E. Affordable housing will be dispersed throughout the Town.
- F. The location of affordable housing should be supported by pedestrian & bicycle facilities and public transit that connect the owners/occupants to activity centers that may include places for employment, shopping, recreation, and/or education. It is acknowledged that very low income individuals/families are statistically the most transit-dependent population.
- G. Affordable housing will be designed to be complementary to the neighborhood.
- H. The affordable housing program will acknowledge the value of homeownership; accommodate the need for rental housing; and direct development in order to maintain stable neighborhoods.

6.3.2 Covered Development Projects

The provisions of this ordinance apply to all new developments that result in or contain two (2) or more residential lots or dwelling units, which includes the subdivision of an existing lot which results in one or more lots.

- A. Development Options
 - There are two options for the provision of affordable housing based on the number of units proposed in the development that do not qualify as affordable units.
 - 1. Seven (7) or Fewer Units
 - Developments with 7 or fewer residential units must either provide one affordable unit or make a payment in lieu to the Town. The payment in

lieu must be paid at the time an application for a building permit on any of the lots or units is made. If the payment is in lieu of providing a fraction of one unit, the calculation shall be prorated as appropriate.

a. Subdivision to Evade Requirement Not Permitted
For purposes of determining whether an applicant may make a payment in lieu pursuant to this subsection, all adjacent parcels under common ownership shall be considered. Parcels shall not be subdivided in order to avoid compliance with this Section.

2. Eight (8) or More Units
Developments with 8 or more units shall provide all required affordable units in accordance with Section 6.3.2.
3. When the use of the property is for single-family residential and does not meet the definition of subdivision as described in Section 23, it is excluded from the provisions of Section 6.3.

B. Compliance with this requirement shall be demonstrated as follows:

1. Master Plan
The applicant shall include notes on the Master Plan showing compliance with the requirements of this section and indicating the total number and distribution of required affordable units in accordance with Section 6.3.2.B.
2. Site Construction Documents/Preliminary Plat
The submittal shall include either an affordable housing plan with the details described in Section 6.3.3.A or an agreement signed by the developer and the authorized representative of an approved affordable housing provider with the details described in Section 6.3.3.B.
3. Final Plat
The final plat, as defined in Section 8.10, shall indicate which lots or units are to be constructed as affordable units. Except as provided in Section 6.3.2.A.1, any payment in lieu fees shall be paid to the Town prior to each final plat approval, for the affordable units in that plat, unless otherwise specified in the affordable housing plan approved by the Town.

C. Percentage and Distribution of Affordable Units

1. General Requirement
Except as otherwise provided, 12.5% of the total number of residential units within any development shall be affordable housing units and shall be located on the site of the development.

2. Calculation

To calculate the number of affordable housing units, the total number of proposed units, including the affordable units, shall be multiplied by 12.5%. If the product contains a fraction, a fraction of .5 or more shall be rounded up, and a fraction of less than .5 shall be rounded down, except as provided in Section 6.3.2.A.1.

3. Distribution

Affordable housing units shall be distributed as follows below:

% of Area Median Income (AMI)	Percentage
Total Required Amount	12.5%
Very Low Income (Less than 50% of AMI)	30%-100%
Low Income* (between 50% and 80% of AMI)	0-70%
Moderate Income (Between 80% and 120% of AMI)	0-20%

** PIL Option: Payment in Lieu Option available for the minimum required percentage at the discretion of the developer.

* Income limits can be exceeded by 10% upon approval of the Town Manager.

A copy of the Adjusted Median Income by Income Status, revised annually, is available upon request from the Planning Director or any Approved Affordable Housing Provider.

Example: A development with a total of 125 proposed units shall ensure that 16 of the 125 are affordable units ($125 \times .125=16$). In this example; no more than 109 units shall be market rate ($109 + 16= 125$) (Affordable units do not count towards Adequate Public Facility requirements in Section 18 or maximum density standards in Section 4). An example of possible distribution of these units:

- Required number of Affordable Units: 16
- Very Low Income Units: $30\% \times 16= 4.8$ rounded to 5
- Low Income Units: $50\% \times 16= 8$
- Moderate Income Units: $20\% \times 16= 3.2$ rounded to 3

D. Payment in Lieu (PIL)

Where permitted by this ordinance, the applicant may make a cash payment in lieu of providing some or all of the required affordable housing units. The Town shall establish the in-lieu per-unit cash payment on written recommendation of the Town Manager and adopt it as part of the Town’s fee schedule. The per unit amount shall be based on the sales price of an

affordable housing unit which is affordable to a household of four whose income does not exceed fifty percent (50%) of the Area Median Income (AMI), as published by the Department of Housing and Urban Development (HUD). At least once every three years, the Town Board shall, with the written recommendation of the Town Manager, review the per unit payment and, if necessary, amend the fees.

E. Town Reservation of Funds

The Town shall receive payments in lieu and place them in a separate fund that shall be used solely and exclusively for affordable housing activities including the acquisition of land for, or the construction and marketing of, affordable dwelling units.

These funds shall not be commingled with the Town's General Fund.

6.3.3 Affordable Housing Plan

The developer shall provide an affordable housing plan either as a private transaction or as a contract with an approved affordable housing provider to be approved by the Town Board prior to the release of the Preliminary Plat.

A. Private Plan

If provided as a private plan, the plan shall contain the following:

1. A general description of the development, including whether the development will contain rental units or individually owned units, or both.
2. The total number of market rate units and affordable units in the development.
3. The number of bedrooms in each affordable unit. The bedroom mix of affordable units shall be in equal proportion to the bedroom mix of the market rate units.
4. The square footage of each affordable unit.
5. The location within any multiple-family residential structure and any single-family residential development of each market rate unit and each affordable unit. Affordable housing units shall not be segregated and should be interspersed among the market rate units throughout the development.
6. The pricing for each affordable unit and the income classes served. Pricing of units shall comply with the following:
 - a. Pricing Schedule. The Town, through the Town Manager, shall publish a pricing schedule of rental and sales prices for affordable units in

accordance with the following provision that shall be updated annually:

- i. In calculating the rental and sales prices of affordable units, the following relationship between unit size and household size shall apply:
 - Efficiency units: 1-person
 - One-bedroom units: 2-person
 - Two bedroom units: 3-person
 - Three bedroom units: 4-person
 - Four bedroom and larger units: 5-person
 - ii. With respect to affordable units offered for sale, prices will be calculated on the basis of:
 - An available fixed rate thirty year mortgage, consistent with the average rate published from time to time by Freddie Mac;
 - A down payment of no more than 5 percent of the purchase price;
 - A calculation of property taxes;
 - A calculation of homeowner insurance;
 - A calculation of condominium or homeowner association fees.
 - iii. With respect to affordable units offered for rent, rental prices will be calculated on the basis of 30 percent of gross monthly income, adjusted for household size, minus a utility allowance. The rental amount shall be determined on an annual basis and shall be in accordance with the rental schedule published by the Department of Housing and Urban Development (HUD) and incorporated herein by reference.
7. The phasing and construction schedule for each market rate unit and each affordable unit and each affordable unit. The phasing of the affordable units should be proportional to the market rate units and the certificates of occupancy (CO) for the last 20% of the market rate units will not be issued until the CO's have been issued for all of the affordable units. The phasing plan shall also provide that the affordable units shall not be the last units to be built in the development.
 8. A description of how the affordable housing will be designed to be complementary to the neighborhood.
 9. A description of the marketing plan that the applicant proposes to utilize and implement to promote the sale or rental of the affordable units within the development.
 10. The total amount of the payment in lieu, if any and the estimated date the payment will be made.

11. Deed restrictions that ensure that the affordable units are and remain available for occupancy by eligible households for a minimum of 99 years. The deed to the property shall state that the property is income and price restricted.

12. The restrictive covenants for the subdivision should include language that provides for reduction of homeowners dues in order to comply with the definition of affordable housing. Capital assessments shall be paid by the developer.

B. Contract with Approved Affordable Housing Provider. The following components will be required in the agreement between the developer and the Approved Affordable Housing Provider:

1. Provider to Assume Ordinance Obligations

The Approved Affordable Housing Provider agrees to assume the obligations of the developer to provide affordable housing under this ordinance.

2. Financial Arrangement

The terms of financial arrangement shall be disclosed to ensure that the Developer will compensate the Provider adequately for meeting those obligations including but not limited to property acquisition, unit construction, unit subsidy, marketing expenses, and homeowner education.

3. Penalty for Failure to Perform

Upon the determination that the Developer has failed to fulfill the agreement with the Provider, in addition to any other legal consequences, the Town has the right to deny issuance of building permits or revoke certificates of occupancy for any unoccupied units. The Planning Director for the Town may determine whether the Developer has failed to comply with this section.

C. Completeness Review

Neither the affordable housing plan or the contract with an affordable housing provider shall be accepted by the Planning Director unless it contains all of the information that is necessary for the Town to determine whether or not the development, if completed as proposed, will comply with all of the requirements of this section.

6.3.4 Approved Affordable Housing Providers

Non-profit organizations, governmental agencies, or quasi-governmental agencies may be certified by the Town Board as an “Approved Affordable Housing Provider” subject to the following provisions:

- A. They shall be a non-profit organization under section 501(c)(3) of the US Tax Code or shall be a directly funded agency of a unit of government; and
- B. They shall present a plan indicating how the organization will participate in meeting the Town's affordable housing goals as stated in Section 6.1 above; and
- C. On an annual basis, they shall report to the Town Board their progress in meeting the plan in (b) above as well as its progress in fulfilling the obligations it has undertaken under contracts with developers under Section 6.3.3.

6.3.5 General Provisions

These provisions are applicable to affordable units provided under an affordable housing private plan.

A. Minimum Standards for Affordable Units

1. Functionally Equivalent

Affordable units shall be "functionally equivalent" to market rate units. This means that when features are included in market rate units, such as kitchen cabinets, countertops, dishwasher, etc., then equivalent features are included in the permanently affordable units.

2. Affordable Housing Guidelines and Standards

The Town shall adopt written guidelines and standards from time to time in order to provide objective, enforceable construction requirements for affordable units. The Affordable Guidelines and Standards, adopted by the Town Board, are hereby incorporated by this reference.

B. Affordable Units for Eligible Households Only

No person shall sell, rent, purchase, or lease an affordable unit created pursuant to this Ordinance except to eligible households and in compliance with the provisions of this Ordinance. The Town shall adopt and review, at the least every three years, asset limitations.

- 1. A "certificate of qualification" must be provided to the Town of Davidson confirming that eligibility guidelines have been met.
- 2. Priority will be given to households in which the head of the household or the spouse or domestic partner is a former Davidson resident, or who works, lives or has relatives in Davidson.
- 3. A developer or owner may select a low income purchaser after completing a good faith marketing and selection process approved by the Town

Manager. Upon request, the Town may provide the developer or owner of an affordable unit with a list of households certified by the Town as eligible to purchase the unit. However, a developer or property owner may select a low-income purchaser who is not on a furnished list so long as the Town can verify that eligibility guidelines have been met, as evidenced by the certificate of qualification, and that the unit is sold at an affordable price as described in this Ordinance.

4. A non-eligible household may occupy an affordable unit if an eligible household is not available to purchase or rent the unit on the date which is the later of 120 days after the Town's receipt of the Notice of Availability or 60 days after the issuance of the Certificate of Occupancy on the unit or if the unit is being resold, within 90 days after the Town's receipt of the Resale Notice or if the unit is being offered for lease, within 60 days of the Town's receipt of the Release Notice.
5. A homebuyer education and counseling fee shall be paid by the developer to the Town at the time of the closing of each affordable unit if the purchaser of the unit is required to participate in homebuyer education and counseling services provided through the Town's approved non-profit affordable housing provider.

C. Rental Restrictions for Affordable Units

No person shall rent an affordable unit, except as follows:

1. Notice
The owner shall provide notice to the Town prior to renting of the affordable unit of its intent to rent the unit.
2. Lease Documentation
Any lease or rental agreement for the lease or rental of an affordable unit pursuant to this Section shall be in writing. The lease or rental agreement shall state the monthly rent charged.
3. Prior Approval
Before the date upon which it becomes effective, a copy of any lease or rental agreement for an affordable unit shall be provided to the Town, along with those documents which the Town finds to be reasonably necessary in order to determine compliance with this Section.
4. Rental Rates
Rents charged for an affordable unit must not exceed the rental rate limitations published annually by HUD for the Charlotte-Gastonia-Concord NC-SC HUD Metro FMR Area.

5. Maximum Income for Tenants

Except as otherwise provided in this Ordinance, a household renting an affordable unit shall not have an income which exceeds 80% of the Area Median Income. A “certificate of qualification” must be provided to the Town confirming that eligibility guidelines have been met.

6. Scope

The provisions of this Section shall apply to all rental or lease arrangements under which any person, other than the owner, his or her spouse, his or her domestic partner and dependent children or parents, occupies any part of the property for any period of time.

D. Affordability Controls

1. For Sale Affordable Housing Units

a. Town of Davidson Purchases

The Town, or a not-for-profit agency designated by the Town, shall have the preemptive option and right, but not an obligation, to purchase each of the for-sale affordable housing units prior to any sale of any such unit. If the Town, or the designated not-for-profit, exercises the option and purchases the affordable housing unit, the affordable housing unit shall be subject to such documents deemed necessary by the Town, including without limitation, restrictive covenants and other related instruments, to ensure the continued affordability of the affordable housing units in accordance with this Ordinance.

b. Private Party Purchases

In all other sales of for-sale affordable housing units, the parties to the transaction shall execute and record such documentation as required by Section 6.3.5.F to ensure the provision and continuous maintenance of the affordable housing units. The affordable housing unit shall be available for sale to an eligible household.

2. Rental Affordable Units

a. For developments that contain affordable rental units, the owner of the development shall execute and record such documentation as required by this Ordinance to ensure the provision and continuous maintenance of the affordable housing units. The affordable rental units must be leased and occupied by eligible households. Subleasing of affordable units shall not be permitted without the express written consent of the Town Manager area median income over the term of ownership.

3. The Town desires to encourage homeowners to improve and update the affordable housing units while, concurrently, the Town recognizes the need to retain affordability of the homes. Therefore, the Town shall adopt a written policy to provide a means for homeowners to improve and update an affordable housing unit. As set forth in the deed restrictions, only those capital improvements that have been previously approved by the Town may be included in the resale price. Capital updates must also be pre-approved by the Town for inclusion in a resale price. The Affordable Housing Capital Improvement and Update Policy, adopted by the Town Board, is incorporated by reference.

E. Resale Price for Affordable Units

The resale price of any affordable unit shall not exceed the purchase price paid by the owner of that unit with the following additions:

1. Customary closing costs and costs of sale initially paid by the buyer (now seller) of the unit;
2. Costs of real estate commissions paid by the seller if a licensed real estate agent is employed and if that agent charges commissions at a rate customary in Mecklenburg County;
3. Cost of permanent capital improvements installed by the seller and previously approved by the Town Manager; and
4. An inflationary factor equal to the percentage increase in the area median income over the term of ownership.

F. Deed Restriction Required

Every person selling an affordable unit shall reference in the Deed conveying title to any such unit, and record with the county recorder, a Covenant or Declaration of Restrictions in a form approved by the Town. Such Covenant or Declaration of Restrictions shall reference applicable contractual arrangements, restrictive covenants, and resale restrictions as are necessary to carry out the purposes of this chapter. The Deed shall state that the property is income and price restricted.

G. Monitoring of Resale

The resale of an affordable unit shall be monitored by the Town to ensure compliance with the provisions of this chapter and the deed restrictions.

Appendix 2: Senate Bill 731 Zoning/Design and Aesthetic Controls

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2011

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SENATE BILL 731
Commerce Committee Substitute Adopted 5/10/11
Third Edition Engrossed 5/17/11

Short Title: Zoning/Design and Aesthetic Controls. (Public)

Sponsors:

Referred to:

April 20, 2011

1 A BILL TO BE ENTITLED
2 AN ACT TO CLARIFY WHEN A MUNICIPALITY OR A COUNTY MAY ENACT
3 ZONING ORDINANCES RELATED TO DESIGN AND AESTHETIC CONTROLS.

4 The General Assembly of North Carolina enacts:

5 SECTION 1. G.S. 160A-381 is amended by adding a new subsection to read:

6 "(g) Regulations relating to building design elements adopted under Parts 2 and 3 of
7 Article 19 of this Chapter, or adopted pursuant to any recommendation made under
8 G.S. 160A-452(6)c., may not be applied to single family residential structures in zoning
9 districts with densities of five or fewer dwelling units per acre, except under the following
10 circumstances:

- 11 (1) In areas designated as local historic districts pursuant to G.S. 160A-400.4.
- 12 (2) In areas listed on the National Register of Historic Places.
- 13 (3) To individually designated local, State, or national historic landmarks.
- 14 (4) The regulations are directly and substantially related to the requirements of
15 applicable fire and life safety codes adopted under G.S. 143-138.
- 16 (5) Where such regulations are imposed as conditions relating to the allowance
17 of density bonuses or modifications of open space, setbacks or required
18 yards, lot coverage, lot size, buffering or screening regulations otherwise
19 generally applicable in a zoning district.
- 20 (6) Where applied to manufactured or modular housing in a manner consistent
21 with G.S. 160A-383.1 and federal law.

22 Regulations prohibited by this section may not be applied either in traditional zoning districts
23 or through districts designated as parallel conditional districts. For purposes of this subsection,
24 the phrase "building design elements" means exterior building color, type or style of exterior
25 cladding material, style or materials of roof structures or porches, exterior nonstructural
26 architectural ornamentation, location or architectural styling of windows and doors, including
27 garage doors, the number and types of rooms, and interior layout of rooms. The phrase does not
28 include: (i) the height, bulk, orientation, or location of a structure on a zoning lot; (ii) the use of
29 buffering or screening to minimize visual impacts, to mitigate the impacts of light and noise,
30 and to protect the privacy of neighbors; (iii) features related to accessory buildings and parking
31 and loading areas; and (iv) off-premises and on-premises signs."

32 SECTION 2. G.S. 153A-340 is amended by adding a new subsection to read:

33 "(i) Regulations relating to building design elements adopted under Parts 2 and 3 of
34 Article 18 of this Chapter, or pursuant to any recommendation made pursuant to
35 G.S. 160A-452(6)c., may not be applied to single family residential structures in zoning



General Assembly Of North Carolina

Session 2011

1 districts with densities of five or fewer dwelling units per acre, except under the following
2 circumstances:

- 3 (1) In areas designated as local historic districts.
4 (2) In areas listed on the National Register of Historic Places.
5 (3) To individually designated local, State, or national historic landmarks.
6 (4) The regulations are directly and substantially related to the requirements of
7 applicable fire and life safety codes adopted under G.S. 143-138.
8 (5) Where such regulations are imposed as conditions relating to the allowance
9 of density bonuses or modifications of open space, setbacks or required
10 yards, lot coverage, lot size, buffering or screening regulations otherwise
11 generally applicable in a zoning district.
12 (6) Where applied to manufactured or modular housing in a manner consistent
13 with G.S. 153A-341.1 and federal law.

14 Regulations prohibited by this section may not be applied either in traditional zoning districts
15 or through districts designated as parallel conditional districts. For purposes of this subsection,
16 the phrase "building design elements" means exterior building color, type or style of exterior
17 cladding material, style or materials of roof structures or porches, exterior nonstructural
18 architectural ornamentation, location or architectural styling of windows and doors, including
19 garage doors, the number and types of rooms, and interior layout of rooms. The phrase does not
20 include: (i) the height, bulk, orientation, or location of a structure on a zoning lot; (ii) the use
21 of buffering or screening to minimize visual impacts, to mitigate the impacts of light and noise,
22 and to protect the privacy of neighbors; (iii) features related to accessory buildings and parking
23 and loading areas; and (iv) off-premises and on-premises signs."

24 **SECTION 3.** This act is effective when it becomes law and applies to development
25 approvals made on or after the effective date.

Appendix 3: Screening Worksheet

HIA #1: Public Health and the Public Realm

How the Design of Residential Neighborhood Streetscapes Affects Public Health

HIA Coordinator: Town of Davidson, North Carolina
Katherine Hebert, DD4L Coordinator
khebert@ci.davidson.nc.us

Background:

Beginning in the early 1990s, communities across the United States were exploring “new urbanism” and “neo traditional development” as planning concepts for new neighborhoods. These concepts model residential design standards after the development patterns in America’s historic urban neighborhoods (typically dating pre 1945). New urbanist residential design standards call for narrow streets, on-street parking, wide planting strips and sidewalks, and front setbacks placed much closer to the street than found in typical suburban neighborhoods. New urbanist, or neo-traditional, development also calls for modifications to the front façade of the home to be more sensitive to the public realm, including features such as front porches and garage entries set back behind the front of the living space.

In North Carolina, this development model was explored with great intensity in the three towns comprising the Northern Mecklenburg County region (Huntersville, Cornelius and Davidson) in the mid 1990s. The three towns revised their local development ordinances to require elements of new urbanist or neo-traditional design. From 1990-2010, the Northern Mecklenburg region added ____ new households, ____% located in neighborhoods that replicate the new urbanist model. Property values in these new urbanist and historic neighborhoods demonstrated the strongest retention and/or growth between the 2004 and 2011 Mecklenburg County property revaluation of all neighborhoods in Northern Mecklenburg County.

Since the initial practice and implementation of new urbanism, technical understanding of how streets are best designed to respond to adjacent land uses and multi-modal safety has been vastly improved. In particular, the emergence of the “complete streets” movement in transportation planning has driven the study of design of pedestrian and bicycle facilities as part of or separate from motor vehicle systems. These studies have revealed that not all streets are equal, but all streets should respond to the land use context. For example, a residential street may not include bike lanes, but the design speed of motor vehicle traffic and placement of sidewalks will be equally conducive to bicycle travel through neighborhoods. The complete streets movement has also spurred the “green streets” concept, directing attention also to the design of planting areas and health of urban forests.

The Davidson Planning Ordinance was adopted in 2001, following six years of planning and study by various stakeholders and citizen groups. The Davidson Planning Ordinance embraced new urbanism and complete streets, as best understood in the late 1990s. However, as technical knowledge of the design of residential streets has evolved, so should the Davidson Planning Ordinance where it addresses streets and off-road multi-modal transportation systems (i.e. greenways and trails).

In 2010, the Town of Davidson Board of Commissioners adopted a goal “to enhance the physical, mental and emotional well being of our residents.” The Town of Davidson secured grant funding in 2011 from the Centers for Disease Control and Prevention (CDC)’s Healthy Community Design Initiative (HCDI) to conduct a series of Health Impact Assessments (HIA) in order to work toward this goal. The Town of Davidson will conduct a Health Impact Assessment on the design of the public realm in residential neighborhoods (the space between the front doors of homes across a public street) in order to address two key areas of concern:

Project Workheet

10/20/2011

1. Understanding that current technical expertise in transportation planning and green infrastructure may call for different street design standards as compared with those in the Davidson Planning Ordinance, the town will compare the health impacts of current **street design standards** with those recommended by national best practices and knowledge of innovative transportation planning practitioners. If warranted, the findings of this HIA will be used to draft new ordinance language and street cross sections to be presented to the Town of Davidson Board of Commissioners.

2. In 2011, the North Carolina Senate passed SB 731 entitled “Zoning/Design and Aesthetic Controls”, which if passed by the NC House of Representatives will limit a local jurisdiction’s ability to adopt and enforce local design controls in low-density residential areas (less than 5 housing units per acre). Design controls or “building design elements” mentioned in the proposed bill include “exterior building color, type or style of exterior cladding material, style or materials of roof structures or porches, exterior nonstructural architectural ornamentation, location or architectural styling of windows and doors, including garage doors, the number and types of rooms, and interior layout of rooms.” The HIA will compare the health impacts of maintaining locally adopted **design controls** in residential areas in Davidson, as specifically defined in the bill, with the likely health impacts of removing these controls. The two design elements of specific interest to this HIA will be porches and location of windows and doors. The HIA will also consider the likely impacts of increased urban sprawl due to weaker design restrictions in low density residential developments as compared to high density or mixed use developments.

Proposed Project Timeline:

October 2011	Town of Davidson staff contact stakeholders of interest and form Advisory Committee on HIAs Town of Davidson hires consultants for deliverables and presentations on street design standards and impacts of aesthetic controls
November 2011	Hold kick-off stakeholder committee meeting to create a scope of work for the HIA (including consultant presentation by Deb Ryan)
December 2011	Survey developed to collect neighborhood perceptions on aesthetic elements and street design. Town of Davidson staff interviews specific stakeholders to collect information on street designs and aesthetic controls
	Town of Davidson designs alternative policies (street standards) based on best practices, transportation plans, research and interviews, and audit of current policies
January 2012	Analyze surveys and interviews collected as part of the aesthetic controls HIA. Prepare draft policy brief for NC House on SB 731 Town of Davidson staff presents draft policy brief and street standards to stakeholder committee for review and comment
February 2012	Town of Davidson staff revises materials based on comments and begins writing

	draft of the full HIA report
March 2012	Town of Davidson staff presents policy brief to NC House committee reviewing SB731
	Town of Davidson staff holds public hearing for street design standards
April 2012	Town of Davidson Board of Commissioners consider adopting revised recommended street design standards
May 2012	Conduct evaluation of HIA process and outcomes.
June 2012	Finish draft of HIA report and send out for comments by advisory committee.

Potential Health Impacts:

- SB 731
 - Porches-
 - increase social interaction which improves social cohesion and mental health and well being
 - improved visibility from house which provides more “eyes on the street” and reduces crime
 - Garage on Side versus Front-
 - Improved pedestrian realm (less likely to block sidewalk and less auto-centric environment) which increases physical activity
 - Improved visibility from house which increases “eyes on the street” and reduces crime
 - Increased opportunities for children to play in driveway if driveway is longer to get to the side of the house which increases physical activity and social interactions
 - Increased Sprawl with Looser Aesthetic Controls in Low Density Areas
 - Increased traffic congestion and highway construction:
 - Increasing air pollution and respiratory disease and attacks
 - Increasing water pollution with more vehicle miles traveled reducing potable water sources and increasing environmental degradation
 - Increasing commute times and traffic speeds resulting in greater injuries to drivers
 - Increasing stress, road rage, and mental illness
 - Decreasing social cohesion
 - Decreased Pedestrian Realm Around Street
 - Fewer destinations within walking or biking distance resulting in lower amounts of physical activity
 - A less safe public/ pedestrian realm resulting in more injuries to bikers and walkers
 - Increased Impact on Vulnerable Populations
 - Greater impact on those who cannot afford a car
 - Greater impact on women who are typically the caregiver for children or older adults

- Street Standards
 - Increasing infrastructure for pedestrian realm resulting in increased pedestrian safety, fewer injuries, and increased physical activity
 - Increasing infrastructure for bicyclists resulting in increased biker safety, fewer injuries, and increased physical activity
 - Increasing the width of planting strips resulting in larger trees and more shade improving the pedestrian realm- concern over driver visibility
 - Decreasing the width of carriage ways/ road width resulting in lower speeds, smaller crossing lengths for pedestrians, fewer accidents and less severe injuries.

Stakeholders:

- SB 731
 - NCAPA, NC-AIA, other opponents of SB 731
 - Sample of residents of neighborhoods approved post 2001 ordinance + 1 area in Village Infill
 - Local and regional homebuilders affiliated with post 2001 development projects
 - Real Estate Agents
 - Banks providing funding for homebuilders
- Street Design Standards
 - Davidson Planning Board
 - Davidson Design Review Board
 - Local and regional cycling and pedestrian advocates and experts (KT, Shireen Campbell, etc)
 - Davidson Livability Committee
 - North Carolina Urban Forestry Council
 - Davidson Public Works department
 - Public Safety Departments (fire, police, rescue)

Decision Makers:

- SB 731- NC House of Representatives
- Street Design Standards- Davidson Board of Commissioners
-

Deliverables:

- HIA report documenting the findings, recommendations, and outcomes of both SB 731 and the updated street design standards.
- SB 731 policy brief and testimony/ presentation.
- Documentary video (*Healthy Communities, Healthy People*): Interviews with residents, videography capturing the Town of Davidson's neighborhood streets and planning philosophy
- Davidson Planning Ordinance Section 11, Streets and Greenways, revisions including cross section graphics and text amendments.

Partners/Consultants:

- Nancy Fairley, Davidson College Film and Media Studies (assistance with the documentary)
- Deb Ryan, UNC Charlotte School of Architecture (assistance with the street design standards and audits of current street conditions)
- John Cock, Alta Planning and Design (assistance with the street design ordinance audit)

Project Budget:

Project Workheet

10/20/2011

Item	Cost
Stakeholder Committee (refreshments, reproduction of materials)	\$250
Documentary	\$5000
Street design cross section drawings (UNCC)	\$2000
Audit of Section 11 ordinance (Alta)	\$2000
Consultant fees (presentation, travel)	\$1000
TOTAL	\$10,250

Appendix 4: Scoping Worksheet

Health Impact Assessment (HIA) Scoping Worksheet

Title of the Proposed HIA: A HIA of Senate Bill 731 “Zoning/Design and Aesthetic Controls”: Public Health and Neighborhood Design

Members of the Scoping Team: Katherine Hebert, Lauren Blackburn, Kristie Foley

Key Details of the Proposal being Assessed	
Decision-Maker(s)	NC House of Representatives
Expected Date of Decision	As Early as February 2012, Expected in March/April
Summary of the Proposal	<p>In April/May of 2012, Senate Bill 731 entitled “Zoning/Design and Aesthetic Controls” was introduced and adopted by the North Carolina Senate*. SB 731 applies to new houses built in low-density neighborhoods (five or fewer housing units on an acre of land) and not designated as being located within a historic district, a conditional use zoning district, or a zoning district that allows modular or manufactured homes.</p> <p>If passed by the NC House of Representatives, this law would limit a municipality’s (both cities and counties) ability to maintain locally adopted design controls in residential areas, as specifically cited in the bill. Design controls or “building design elements” mentioned in the proposed bill include “exterior building color, type or style of exterior cladding material, style or materials of roof structures or porches, exterior nonstructural architectural ornamentation, location or architectural styling of windows and doors, including garage doors, the number and types of rooms, and interior layout of rooms.”</p> <p>*Introduced by Senator Daniel Clodfelter (D, District 37); Sponsored by Rick Gun (R, District 24) and Fletcher L Hartsell Jr. (R, District 36)</p>
Geographic Boundary	State of North Carolina
Non-negotiable Aspects of Proposal	None that we know of.
Stakeholders	Developers, Planners, Architects, Property Owners, Bankers, High-End Building Material Suppliers, Realtors, Neighborhood Associations, Local Governments, Citizens, Affordable Housing Advocates, Bike/Pedestrian Advocates/ Safe Routes to School
Key Gatekeepers	Thom Tillis Speaker of the House (R), Committee on Commerce and Job Development, the Leadership of Associations of the different Stakeholders

Health Impact Assessment (HIA) Scoping Worksheet

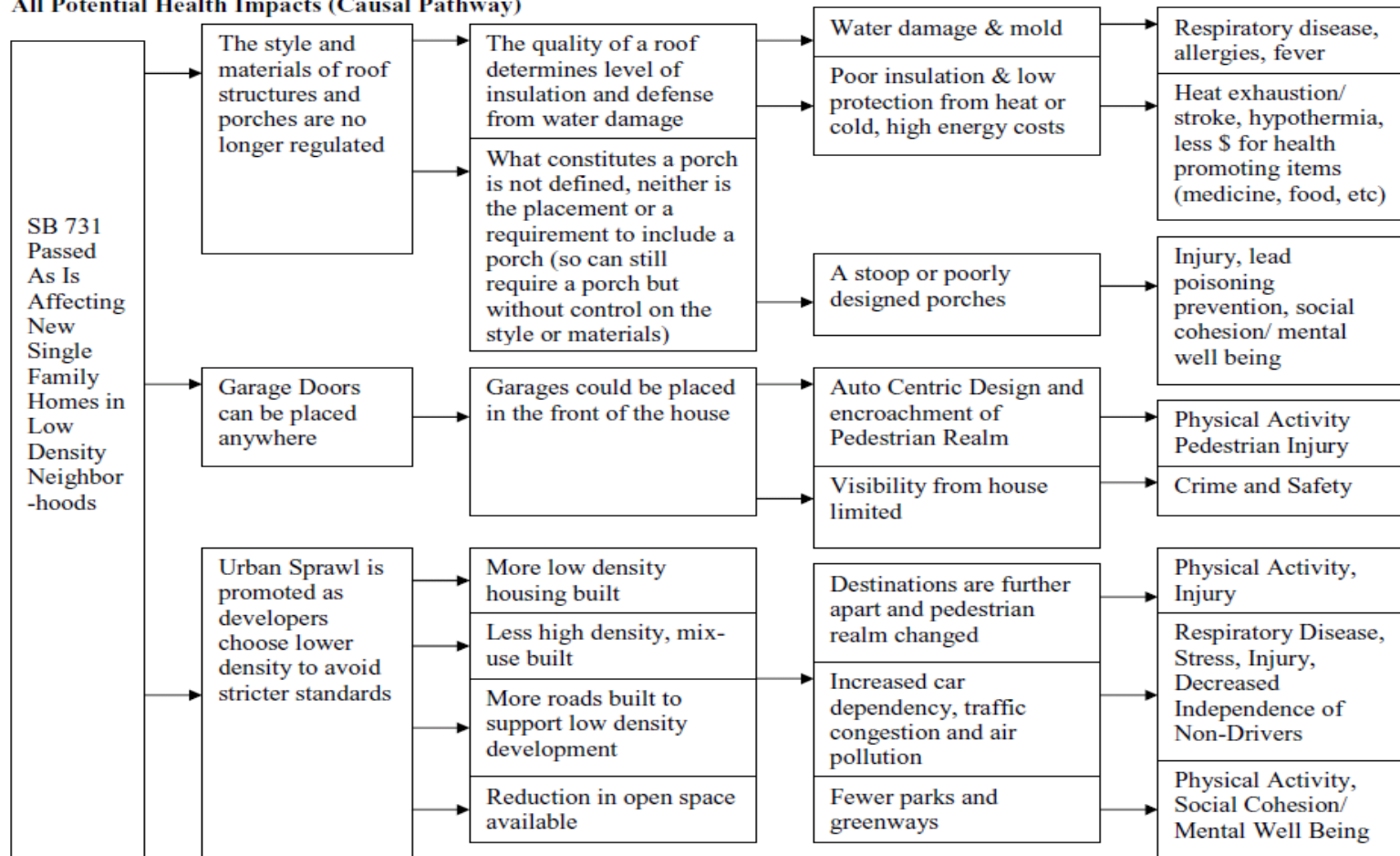
Key Details of the HIA/ HIA Process	
Members of the HIA Team	Katherine Hebert, Lauren Blackburn, Leslie Willis, Commissioner Connie Wessner, Megan Davis, Deb Ryan, Dr. Kristie Foley, Lori Rhew, Mitch Silver, Jim Burbank, Joe Roy
Key Deadlines (2012)	1/18-19: Policy Brief Draft and Review by DD4L 2/1: Final Policy Brief Done March-April: Expected Meeting with Speaker Tillis and Committee May: Decision by House of Representatives May-August: Drafting and Reviewing Full Report including Process and Outcome Evaluation 8/30- Full HIA Report Due to CDC
Aims and Objectives of the HIA	<ul style="list-style-type: none"> • To provide information on potential health impacts of the proposed bill to the NC House of Representatives, Committee on Commerce and Job Development as part of a collaborative discussion of the overarching implications of SB 731. • To identify partners with an interest in maintaining design control standards especially developers and large property owners who value such standards. • To provide recommendations on ways to improve the bill if it cannot be stopped. • To begin the discussion on and public education on what are the health implication of design standards in Davidson and similar communities. • To share Davidson as a case study of what design standards can contribute to overall community health and well-being and our efforts to serve as a model community.
Principles of HIA	<ul style="list-style-type: none"> • Democracy- the HIA is being done to inform elected decision makers and gather input from a range of stakeholders and associations representing stakeholders. • Equity- considering the implications of the bill on affordable housing and operating under the premises that everyone is entitled to healthy and affordable housing and a neighborhood that supports healthy design. • Sustainable Development- housing design standards and the resulting shift to lower density housing to avoid stricter standards (if the bill is passed) have very long-term impacts and shape development patterns (sprawl versus smart growth) for centuries after the policy is past.

Health Impact Assessment (HIA) Scoping Worksheet

	<ul style="list-style-type: none"> • Ethical Use of Evidence- the HIA will use the best available evidence and be as rigorous, inclusive, and transparent as time allows. • Comprehensive Approach to Health- using the wider determinants of health to consider health implications of the bill (especially in consideration of porches and garage door placement and implications on social cohesion, physical activity, and pedestrian safety).
Temporal Boundaries	Single family residential neighborhoods constructed after the bill is passed projected out to 2030, 2050
Geographic Boundaries	State of North Carolina (broken down into counties and cities as much as possible), Case study of Davidson and conditions of two neighborhoods (one pre and one post acceptance of current planning ordinances)
Population Assessed	Residents of neighborhoods without design standards, especially vulnerable populations (low income, children, elderly, disabled)
Scenarios Considered	Pass bill, Don't Pass bill, Major alternative drafts of bill (application to all residential structures not just low-density)
Forms of Community Engagement	Report made publically available on website, interviews with key stakeholders, survey of residents in two neighborhoods, presentation to Livability Commission members
Types of Assessment	Review of Existing HIAs and similar policy briefs, Research on Decision-makers, Literature Review, Interviews, Survey of Residents, Mapping of Design Ordinances, Demographics, and Health Data
How will Recommendations be formed, prioritized, approved for inclusion?	Recommendations will be suggested within the policy brief development, discussed as part of the review of the policy brief by DD4L for inclusion, and could include conducting more research on the topic or additional action steps to promote greater community involvement, recommendations will also be discussed with key stakeholders before presenting information to Speaker Tellis et.al.
Forms of Reporting	Policy Brief, Full Report, Updates on Website and to DD4L/HIA team
Timeframe of Evaluation	Process and Outcome evaluation in the Summer of 2012, Due to the nature of the HIA being on a state policy and having primarily long term impacts will probably not be able to do Impact evaluation

Health Impact Assessment (HIA) Scoping Worksheet

All Potential Health Impacts (Causal Pathway)



Notes: Consider adding: materials (particularly vinyl siding as an increased fire-hazard), social cohesion decreased as a result of houses being so far apart, loss of well being as a result of losing self governance/ autonomy (power being taken away from local government who are most directly elected/ answerable to citizens)

Health Impact Assessment (HIA) Scoping Worksheet

Potential Health Impacts Not Considered in HIA

Potential Impact	Why Not Included	Approved by Team?
Water Damage and Mold from Roof Design	County level building codes and the issuance of occupancy permits would regulate this	Yes
Impacts Associated with Insulation	County level building codes and the issuance of occupancy permits would regulate this	Yes
Lead Poisoning Prevention on Porches	Other regulations in place to prevent lead poisoning and the use of lead in paints	Yes
Injury on Porches	Other building codes protecting from injury	Yes
Main Focus will be on Garage Door Placement and Porches within the Policy Brief with a foreshadowing of potential health impacts of urban sprawl. Definitely narrow down points for Policy Brief and keep brief and easy to read.		

Prioritized Potential Health Impacts with Details for Conducting the HIA

Potential Health Impact (if SB731 is Passed)	Specific Population Affected (vulnerable group, geographic boundaries, etc.)	Sources of Data/ Literature/ Method	Information Source/ Stakeholders/ Focus Group
Decrease in Social Cohesion and Mental Well Being due to Fewer Porches	Residents in neighborhood (particularly elderly)	<ul style="list-style-type: none"> • Brown et al. 2009 • Kuo et al. 1998 • Kweon, Sullivan, and Wiley 1998 • Plas and Lewis 1996 • Frank, Engelke, Schmid: Health and Community Design pages 171-176 • Dannenberg, Frumkin, Jackson: Making Healthy 	Deb Ryan, John Hesser

Health Impact Assessment (HIA) Scoping Worksheet

		Places pages 107-115, 122, 124-125	
Decrease in Social Cohesion and Mental Well Being due to Fewer Parks	People who would use park (especially youth)	<ul style="list-style-type: none"> • Dannenberg, Frumkin, Jackson: Making Healthy Places pages 107-115, 122-123, 237-240 • Orsega-Smith et al. 2004 • Nielsen and Hansen 2007 • Grahn and Stigsdotter 2003 • Evans et al. 2001 • Martensson et al. 2009 	Dee Merriam, Kathryn Spatz
Decrease Physical Activity due to Garage Placement in Front of Houses	Residents in neighborhood	<ul style="list-style-type: none"> • Frank, Engelke, Schmid: Health and Community Design pages 171-176 	Daniel Rodriguez, Mark Fenton, Andy Dannenberg
Decrease Physical Activity due to Separation of Destinations	Residents in neighborhood	<ul style="list-style-type: none"> • Dannenberg, Frumkin, Jackson: Making Healthy Places pages 35-39, 155 • Bauman and Bull 2007 • Gebel, Bauman and Petticrew 2007 	Daniel Rodriguez, Mark Fenton, Andy Dannenberg
Decrease Physical Activity due to Fewer Parks	People who would use park	<ul style="list-style-type: none"> • Bauman and Bull 2007 • Kaczynski and Henderson 2007 • Saelens and Handy 2008 • Cohen et al. 2007 • Davison and Lawson 2006 • Dannenberg, Frumkin, Jackson: Making Healthy 	Dee Merriam, Kathryn Spatz

Health Impact Assessment (HIA) Scoping Worksheet

		<p>Places pages 40-43</p> <ul style="list-style-type: none"> • Frank, Engelke, Schmid: Health and Community Design pages 180-181, 57-58. 237-240 	
Increase in Injury and Crime due to Limited Visibility	Residents in neighborhood (particularly youth)	<ul style="list-style-type: none"> • FBI Unified Crime Reports • Crime Prevention Through Environmental Design • Jane Jacobs, Death and Life of Great American Cities • Dannenberg, Frumkin, Jackson: Making Healthy Places page 38, 87, 112-114 • Cozens 2007 	Police Department, Neighborhood Watch Groups
Increase in Respiratory Disease due to Poor Air Quality	Entire community/region (particularly those with asthma, youth and elderly)	<ul style="list-style-type: none"> • Atlanta Olympics Study • Air Quality and Respiratory Health Branch Resources • Dannenberg, Frumkin, Jackson: Making Healthy Places pages 63-75 • Health Effects Institute 2010 • Frumkin, Frank, and Jackson 2004 • Srinivasan, O'Fallon and Dearth 2003 • Pope et al. 2002 	Clean Air Carolina Group, Air Quality and Respiratory Health Branch at CDC

Health Impact Assessment (HIA) Scoping Worksheet

		<ul style="list-style-type: none"> • Pope, Ezzati, and Dockery 2009 	
Increase in Injury due to Garage Placement	Residents in neighborhood (particularly youth)	<ul style="list-style-type: none"> • Dannenberg, Frumkin, Jackson: Making Healthy Places pages 77-90 	Daniel Rodriguez, Mark Fenton, Andy Dannenberg, Ben Gehardstein
Increase in Injury due to Pedestrian Realm Change/ Separation of Destinations	Entire community (particularly low-income)	<ul style="list-style-type: none"> • Dannenberg, Frumkin, Jackson: Making Healthy Places pages 77-90, 158 	Daniel Rodriguez, Mark Fenton, Andy Dannenberg, Ben Gehardstein
Increase in Injury due to Increased Traffic/ Automobile Accidents	Entire community	<ul style="list-style-type: none"> • Dannenberg, Frumkin, Jackson: Making Healthy Places pages 77-90, 158 • CDC National Center for Injury Prevention and Control 2011 	Local Police, Daniel Rodriguez, Mark Fenton, Andy Dannenberg, Ben Gehardstein
Decrease in Independence due to Separation of Destinations	Entire community (particularly those who cannot drive- youth, elderly, low income, disabled)	<ul style="list-style-type: none"> • Dannenberg, Frumkin, Jackson: Making Healthy Places pages 133-134 • Aging in Place 	Area Agencies on Aging, Ada Jenkins Center, Charlotte-Mecklenburg School System/ other schools, Safe Routes to School

Health Impact Assessment (HIA) Scoping Worksheet

Timeline of Activities and Responsibilities

Activity	Deadline	Who is Responsible?	Who will Help/ Review?
Baseline Health Data (State Level)	1/18	Katherine	Lori Rhew
Literature Review	1/18	Katherine	Kristie Foley, Deb Ryan, John Hesser, Mark Fenton,
Mapping (places with aesthetic control ordinances, socio economic factors, density/ growth patterns, county level health data)	1/18	Katherine	UNC School of Government, NC Department of Health (Health Statistics Branch)
Draft of Policy Brief	1/18	Katherine	DD4L (in particular Megan, Lauren), Connie Wessner
Final Policy Brief	2/1	Katherine	DD4L (in particular Megan, Lauren), Connie Wessner
Report on Citizen Survey	February	Katherine	DD4L (in particular Megan, Leslie, Sandy) Wessner
Coordination of Stakeholders	February-April	Lauren and Katherine	Other Stakeholders (developers, League of Municipalities, NC Health Department, NC American Planning Association, etc.)
Meeting with Speaker Tillis	February-April	Lauren and Katherine	Other Stakeholders (developers, League of Municipalities, NC Health Department, NC American Planning Association, etc.)
Following Decision and Follow up	February-May	Katherine	Lauren
Process and Outcome Evaluation	May-June	Katherine	Kristie Foley
Draft Full HIA Report	May-June	Katherine	DD4L (in particular Megan and Lauren), External Reviewers
Final HIA Report	6/29	Katherine	DD4L, RAC, CDC

Health Impact Assessment (HIA) Scoping Worksheet

Communication/Reporting Plan

When Report?	Who Receives Report?	Who is Submitting the Report/ Leading the Conversation?	Type of Report	Main Message(s)
As early as February 2012	Speaker Tillis, Committee on Commerce and Job Development	Chosen Developers, Partners (APA, Architects, NC Department of Public Health)	Policy Brief and Presentation	<ul style="list-style-type: none"> • SB 731 will have multiple long term impacts on the design of communities and the health of residents • Design standards can be used to promote health and community well-being. • There are areas where clarification is needed on the bill. • Provide recommendations to either not pass or to improve the bill.
Ongoing Updates	DD4L, RAC, Stakeholders	Katherine	Emails	<ul style="list-style-type: none"> • Update on process/initial findings/decision
By August 2012	CDC, Placed on website, Stakeholders	Katherine, DD4L	Full Report	<ul style="list-style-type: none"> • Executive Summary • Background information on policy and HIA • Process followed • Participants and roles • Findings and Methods of Assessment • Recommendations • Process and Outcome Evaluation

Health Impact Assessment (HIA) Scoping Worksheet

Evaluation Plan

Form of Evaluation	Method	Key Indicators	Timeframe	Person Responsible	Resources
Process	Interview or survey of members of DD4L team, HIA team, stakeholders, and decision-makers	What went well, What could be improved, Did the HIA affect your decision, What were the benefits of the overall process (increased understanding, partnerships, etc.)	Within a month of the decision being made	Katherine	Survey Monkey, phone calls
Impact	Following the Bill online, in newspaper	Was the bill passed?, Were there any changes to the bill incorporating our recommendations?, Was a discussion had about health that would not have otherwise been held?	Within a month of the decision being made	Katherine	My Gov 365, Charlotte Observer
Outcome (Not Likely) If Bill Passes	Observations and discussions with stakeholders	Reactions of Planning Departments, Development Patterns, health measures of physical activity and injury statistics	Within Year to 10 years out		Changes in Land Use Ordinances, Land Development Maps, Behavioral Risk Factor Surveillance System, Accident Reports

Appendix 5: Neighborhood Survey

What Do You Like About Your Neighborhood?

People choose to live in a neighborhood for many reasons and where you live can affect your well-being. As part of a grant that the Town of Davidson was awarded from the Centers for Disease Control and Prevention, the Davidson: Design for Life program is looking at the relationship between neighborhood design components and overall quality of life. This questionnaire will take about 10 minutes to complete and will inform an assessment of how Davidson’s design standards have shaped the character and well being of Davidson. Please answer the following questions and return to the Town of Davidson in the enclosed envelope by **February 17, 2012**. Thank you!

1. When moving into your home, why did you choose that neighborhood? (please rank the following options 0-2 with 0= Did not consider, 1= Somewhat important, 2= Very important)

- | | |
|-----------------------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> Price of houses | <input type="checkbox"/> Size of houses |
| <input type="checkbox"/> Age of houses | <input type="checkbox"/> Design of houses |
| <input type="checkbox"/> Proximity to work | <input type="checkbox"/> Mixture of housing |
| <input type="checkbox"/> Quality of school district | <input type="checkbox"/> Diversity of neighbors |
| <input type="checkbox"/> Along CATS bus route | <input type="checkbox"/> Low crime rates |
| <input type="checkbox"/> Proximity to retail/ restaurants | <input type="checkbox"/> Recreation facilities |
| <input type="checkbox"/> Proximity to major thoroughfares | <input type="checkbox"/> Large yard |
| <input type="checkbox"/> Community gardens | <input type="checkbox"/> Sidewalks |
| <input type="checkbox"/> Presence of front porches | <input type="checkbox"/> Bike lanes |
| <input type="checkbox"/> Availability of parking | <input type="checkbox"/> Proximity to Downtown |
| <input type="checkbox"/> Other _____ | |

2. Complete the following sentence: I know the names of _____ of my neighbors (defined as those living within a block of your house).

None 25% Half 75% All

3. On average, how often do you talk with or greet a neighbor?

Never Monthly Every other week 1- 3 times a week Daily

4. Do you have a front porch? (do not include a stoop)

Yes No

5. If you have a front porch, how often do you interact with neighbors from your porch?

Never Monthly Every other week 1- 3 times a week Daily

6. Where is your garage door located?

- Don't have a garage
- In front of the house, closer to the road than the house's front door
- In front of the house, further from the road than the house's front door
- To the side of the house
- Behind the house

7. Did the location of your garage affect your choice of houses?
 Yes No Don't have a garage
8. Do you walk or bike to the following locations? (check all that apply)
- | | |
|----------------------------------------------------|-----------------------------------------------------|
| <input type="checkbox"/> Your workplace | <input type="checkbox"/> Public transit |
| <input type="checkbox"/> Your child's school | <input type="checkbox"/> Grocery store/ food market |
| <input type="checkbox"/> Your place of worship | <input type="checkbox"/> Downtown |
| <input type="checkbox"/> Greenway/trail | <input type="checkbox"/> Shops |
| <input type="checkbox"/> Park or recreation center | <input type="checkbox"/> Pharmacy |
9. On average, how often do you walk or bike for transportation purposes?
 Never Monthly Every other week 1- 3 times a week Daily
10. What are the barriers to walking or biking to the locations listed in question 8? (check all that apply)
- | | |
|-------------------------------------------------------------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> Distance | <input type="checkbox"/> Lack of sidewalk/ bike lane |
| <input type="checkbox"/> Poor lighting | <input type="checkbox"/> Traffic on the road |
| <input type="checkbox"/> No one to walk/bike with | <input type="checkbox"/> Fear of crime |
| <input type="checkbox"/> Physical disability | <input type="checkbox"/> Increased travel time |
| <input type="checkbox"/> Lack of showering facilities/ bike racks/ lockers at destination | |
| <input type="checkbox"/> Other _____ | |
11. On an average day, how much time do you spend commuting to work (one way)?
- | |
|------------------------------------------------|
| <input type="checkbox"/> Less than 15 minutes |
| <input type="checkbox"/> 15 minutes-30 minutes |
| <input type="checkbox"/> 30 minutes- 1 hour |
| <input type="checkbox"/> More than 1 hour |
12. How do you typically get to work?
- | | |
|-------------------------------------------|--------------------------------------|
| <input type="checkbox"/> Personal Vehicle | <input type="checkbox"/> Bicycle |
| <input type="checkbox"/> Carpool | <input type="checkbox"/> Walking |
| <input type="checkbox"/> Transit | <input type="checkbox"/> Other _____ |
13. Do you often feel stressed during your commute?
 Yes No
14. On average, how often do you walk or bike for recreational purposes?
 Never Monthly Every other week 1- 3 times a week Daily
15. When you walk or bike, how often do you go with a friend, neighbor, or family member?
 Never Rarely Often Always
16. How long have you lived in the Town of Davidson?
 Less than 1 year 1-5 Years 5-10 Years More than 10 Year
17. What is your neighborhood? _____

Appendix 6: Davidson's Hot Topic Newsletter on Legislative Session



News from the Town of Davidson, NC May 2012

Davidson's Legislative Agenda

In March 2012, the Town of Davidson Board of Commissioners passed a legislative agenda that includes items that the town feels are important to support and promote on a state level.

This legislative agenda is comprised of concepts that the town will work to promote during the upcoming legislative short session, which begins on May 16. The town feels it is very important for citizens to know and understand what the town is promoting on behalf of its residents, so here is the full list:

- Continue to seek legislation authorizing the use of electronic media to meet public notice requirements.
- Continue to seek legislation authorizing police departments to enforce the traffic code on streets recorded as public and to be maintained by a municipality.
- Seek legislation authorizing local governments to require sprinklers in new residential construction.
- Seek local legislation to ensure interlocal entities are reimbursed sales taxes.
- Seek local legislation allowing MI-Connection to protect certain proprietary information and the MI-Connection Board to discuss the proprietary information in closed session.
- Seek legislation eliminating territory restrictions on MI-Connection .
- Support legislation that grants greater flexibility to municipalities.
- Oppose legislation that restricts municipal flexibility .
- Oppose legislation that creates unfunded mandates to municipalities.
- Oppose legislation that shifts costs from state to municipal government .



One of the principles that the Board of Commissioners supports is the right of a municipality to set its own design controls, which affect projects like the Bungalows (see "In Focus," page 2).

What's Hot This Legislative Session?

The North Carolina League of Municipalities, whose focus is advocating for the needs of cities and towns, has identified several issues that could come up this legislative session and could affect how towns and cities govern themselves. These include:

- **Annexation:** Bills passed last year to suspend or restrict annexation statewide could come up again.
- **ETJ Authority:** Legislation to transfer ETJ control to counties and restrict a

- municipality's ability to manage land use around its borders will be considered.
- **Local Design Controls:** An amendment that would restrict a municipality's ability to set certain design standards in residential neighborhoods (see "In Focus," page 2).
- **Eminent Domain:** A bill that would limit eminent domain without limiting a property owner's ability to utilize town water and sewer connections could also make another appearance.

Sound Off: Contact Your Legislators!

The Town of Davidson is situated in the 98th House District and the 40th Senate District. Your Representative is Thom Tillis, and your Senator is Malcolm Graham. If you'd like to contact your legislators to let them know how you feel about upcoming legislation, you'll find their contact information below:

- **Thom Tillis:** 919-733-3451 or Thom.Tillis@ncleg.net. View his full history, including bills introduced, votes, committees and member reports at <http://www.ncga.state.nc.us/gascripts/members/viewMember.pl?sChamber=H&nUserID=565>
- **Malcolm Graham:** 919-733-5650 or Malcolm.Graham@ncleg.net. View his full history, including bills introduced, votes, committees and member reports at <http://www.ncga.state.nc.us/gascripts/members/viewMember.pl?sChamber=S&nUserID=192>

Why is Citizen Involvement So Important?

All residents of Davidson are represented at the local level by the Mayor and the Board of Commissioners. Your elected officials work every day with town staff to put forward the policies and projects that they feel are in keeping with the vision that citizens have for the Davidson community.

Although the town has organizations like the N.C. League of Municipalities to advocate at the state level on its behalf, as individuals, the Mayor and the Board are similar to all citizens: They can advocate for change and for the needs and desires of their community, but they are each one voice in a chorus of voices petitioning legislators for change.

As a result, it is imperative that citizens get involved and make their voices heard on the state level. You can contact your legislators directly when you want to sound off on issues of statewide importance. Part of the reason for

that imperative is also because legislators see local officials as advocates for municipalities as a whole, whose desires they sometimes see as in conflict with the state's. Each individual citizen who contacts them, on the other hand, is seen as an individual voter, someone who is representing no interest but their own, and someone who is likely to interpret and understand how particular legislation will have a direct impact on their environment and their daily life.

So, while your elected officials and your town staff will work as hard as possible to promote and support what is in Davidson's best interests, the ultimate power to change at the state level really lies with you. Each one of you who calls Representative Tillis or Senator Graham has the ability to enact change. That experience can be both energizing and empowering, and it will also serve as an embodiment of the intelligence, passion and engagement of Davidson's citizens.

Get Educated and Get Involved!

Below are a few links that will provide you with some valuable information about legislation in the state of North Carolina. We hope you'll read it and then take action!

- <http://www.ncga.state.nc.us/> - The North Carolina General Assembly's (NCGA) website, where you can track bills, view the legislative calendar, look up information about your representatives, and more.
- <http://www.ncga.state.nc.us/CitizenGuide/CitizenGuide.html> - A Citizen Guide with useful links.
- <http://www.ncga.state.nc.us/representation/WhoRepresentsMe.html> - The NCGA's "Who Represents Me" page, where you can find out not just your state representation, but also your federal Congressional representation by district, county or zipcode.
- <http://www.nclm.org/pages/default.aspx> - The N.C. League of Municipalities website, where you can learn more about issues that are important to North Carolina towns and cities.
- http://www.ncleg.net/documentsites/legislativepublications/Research%20Division/Crossover/Crossover%20List%202011.pdf?cm_mid=1363960&cm_crmid=%7B672F601A-A6A5-DE11-830F-005056A07B49%7D&cm_medium=email - A list of 2011 bills eligible during the 2012 short session.
- <http://www.ncga.state.nc.us/gascripts/BillLookUp/BillLookUp.pl?Session=2011&BillID=SB+731&submitButton=Go> - The NCGA's information page on Senate Bill 731, which includes the bill's history and previous and current bill editions.
- <http://www.townofdavidson.org/DD4L> - the webpage for the town's Davidson Design for Life committee, which features information on healthy community design and on Senate Bill 731.

In Focus: Senate Bill 731

Short Title: Zoning/Design and Aesthetic Controls

Sponsor: Sen. Daniel G. Clodfelter (D)

Co-Sponsors: Sen. Rick Gunn (R), Sen. Fletcher L. Hartsell, Jr. (R)

Filed: April 19, 2011

Passed in Senate: May 17, 2011

Related Statutes: 160A-381, 160A-452, and 153A-340

N.C. Senate Bill (SB) 731 is just one of the bills that will be considered in the short session that the Town of Davidson considers very important for officials and citizens alike to be aware of. If passed, the bill would greatly limit a municipality's ability to set design standards in low-density (5 units per acre or less) residential neighborhoods.

Currently, new residential construction must comply with design regulations in our Planning Ordinance. That would be struck down by SB 731. For example, we don't allow garages to be placed in front of homes – for aesthetic and safety reasons – but this bill specifically names garage door location, i.e. garage placement, as a design feature we would be unable to restrict in any way.

If passed, this legislation would have a significant impact on how N.C. neighborhoods are designed and the health and well-being of residents. For example, a house with a protruding garage in particular would decrease the likelihood of walking, limit visibility from the house and decrease social cohesion in the neighborhood.

Town officials believe it is very important for towns and cities - the government entities that are closest to their citizens - not the state, to have the final say over what types of houses are built within their boundaries. We feel that local control is critical to the town's overall health and sense of community. If you agree, please contact your legislators and let them know how you feel about SB 731.

Davidson Elected Officials

Mayor
John Woods
Commissioners
Jim Fuller
Rodney Graham
Brian Jenest
Laurie Venzon
Connie Wessner

Appendix 7: 2012 House Committee on Commerce & Job Development

Members of the 2012 North Carolina House Commerce and Job Development Committee

Chairman and Vice Chairmen

Chairman Daniel F. McComas

William Brawley

Craig Horn

Carolyn H. Justice

Tim D. Moffitt

Phil R. Shepard

Fred F. Steen II

Mike C. Stone

Members

Jerry C. Dockham

Ruth Samuelson

Alma Adams

Kelly M. Alexander Jr.

Marilyn Avila

Larry M. Bell

James L. Boles Jr.

Glen Bradley

Marcus Brandon

Larry R. Brown

Harold J. Brubaker

Becky Carney

Jeff Collins

Bill Cook

William A. Current

Nelson Dollar

Jean Farmer-Butterfield

Elmer Floyd

Dale R. Folwell

Phillip Frye

Ken Goodman

Charles Graham

Mike Hager

Susi H. Hamilton

Kelly E. Hastings

Dewey L. Hill

Bryan R. Holloway

Maggie Jeffus

Linda P. Johnson

Stephen A. LaRoque

David R. Lewis

Marvin W. Lucas

Darrell G. McCormick

Frank McGuirt

Marian N. McLawhorn

Rodney W. Moore

Tom Murry

Bill Owens

Diane Parfitt

Garland E. Pierce

Ray Rapp

Efton M. Sager

Norman W. Sanderson

Mitchell S. Setzer

Timothy L. Spear

Edgar V. Starnes

Joe P. Tolson

John A. Torbett

William L. Wainwright

Edith D. Warren

Harry Warren

Roger West

W.A. Wilkins

Larry Womble

Michael H. Wray