

Sustainability and Social Justice: Urban Urgencies in Compact Neighborhood Planning

By

Chandra Christmas-Rouse

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Abstract

Social justice and sustainability are two concepts that have evolved in the past two decades to create challenging directions for the field of urban planning. While planners describe sustainability as including environmental, economic and social concerns in theory, numerous studies cite that social justice often gets undercut in practice and that sustainability is implemented to address environmental concerns. This research focuses on sustainability and social justice in order to understand how compact land use planning can advance both.

The intent of this research is to explore the relationship between sustainability and social justice and how to advance social justice through compact land use planning. This thesis examines whether or not sustainability includes social justice and how sustainability interacts with social justice in addition to identifying obstacles to advancing social justice through compact land use planning. The recommendations presented will contribute to efforts to identify opportunities that planners can use to advance a sustainability strategy that is inclusive of social justice and complements social justice goals.

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Introduction

Over the past two decades, sustainability has achieved prominence among urban planners and policy makers. The terms, “sustainability” and “sustainable development,” were popularized at the Rio Summit in 1992 with the development of Local Agenda 21. Agenda 21 details a community-led plan for local sustainability with the aim of tackling global environmental, social and economic problems. The global trend toward more megacities and the rapid rate of urbanization underscores the need for a sustainable approach to urban planning. Urban planning activities present opportunities to reinvent the kinds of places that will sustain the planet, the economy and people. Planners have begun to exhibit leadership in the sustainability realm by designing plans and programs to advance sustainability as evidenced by initiatives such as the sustainability-indicators program in Santa Monica, California and the local comprehensive plans for Cambridge, Massachusetts and Seattle, Washington (Berke 2002 30). However, in practice, the sustainability discourse in planning continues to be dominated by an environmental focus rather than a more holistic conception of sustainability that sees social justice (Agyeman 2005 8). Planners cannot build the foundation for long-term viability without a strong commitment to social justice. The urban priorities of sustainability and social justice will continue to compete for the attention of planners and policy makers. Planners must commit to pursuing options that maximize both by pioneering new approaches to sustainable urban management that includes social justice.

This research seeks to clarify how the terms, sustainability and social justice, are used in contemporary planning practices. I examine the relationship between these two priorities in order to understand how cities can advance them both. My preliminary research questions are: *What is the relationship between sustainability and social justice? Is sustainability socially just? Is social*

justice sustainable? Can we advance both? My central question was *Can compact land use planning advance both social justice and sustainability?* I use the plan and the planning process for the Alston Avenue Compact Neighborhood in Durham, North Carolina, which is outlined in the Alston Avenue Compact Neighborhood Report to answer my central question.

Using the plan for the Alston Avenue Compact Neighborhood as a case study, I examine (1) the relationship between sustainability and social justice and (2) how social justice can be advanced through compact land use planning in order to answer my research question.

Additionally, a question regarding the relationship between sustainability goals and social justice goals that I explored in this research is: *Does the use of compact land use planning as a means of achieving sustainability goals undermine social justice goals?* Mainstream environmentalists do assert the universality of sustainability: that it should be applicable to all members of a community. Yet this stated universality is often undercut by on-the-ground practices: *What is to be sustained, and for whom?* This differentiation is central to understanding how sustainability and social justice interact in compact land use planning.

Literature Review

Introduction

My literature review consisted of reviewing planning literature related to the sustainability and social justice; pattern recognition and identification of the key concepts of sustainability and social justice in the literature; and finding the types of relationships that exist between social justice and sustainability. I explored the question of whether and how sustainability includes social justice using a number of studies. This question became further complicated by the question of how to define the terms. I developed conclusions of my research based on the definitions of sustainability and social justice that I identified in my literature review. Another important factor of my research was scale. My research was concerned with how planners in a local governance regime define sustainability and social justice and their understanding of planning for sustainable and just neighborhoods as a city-wide strategy rather than a regional or national scale. I used the literature review to develop an original typology about my hypothesized relationships between each concept. This typology served as the organizing framework for my analysis of the interview data.

The first objective of the literature review was to identify the most commonly used definitions of sustainability and social justice in the planning field. I started by reviewing theoretical texts to develop an understanding of the terms. Next, I reviewed empirical studies about how planners understand and apply these theories. The studies also outlined the sustainability activities and social justice activities that local governments are pursuing as a part of their comprehensive plans.

Sustainability Concepts and Definitions

Definitions of sustainability often refer to the “three E’s” which are environment, economy, and equity. However, observations of sustainability plans in U.S. cities and studies of program implementation demonstrate that, in practice, sustainability often means primarily environmental protection (Feiock and Coutts 2013). These studies indicated that sustainability is still largely perceived as an approach to addressing environmental concerns and neglects the equity dimension (Svara 2014 9). Based on these observations, I examined whether and how the social justice dimension of sustainability gets undercut when planning emphasizes the environmental dimension. I explored the concept of sustainability and the extent to which social justice activities were included within sustainability in contemporary planning practices.

Social Justice Concepts and Definitions

Generally, social justice is most often defined as the distribution of benefits and burdens in a political community (Dobson 1998 199). Planners define and apply social justice as a process and as an outcome. The process dimension is defined as enhancing avenues of public participation and the outcome dimension is defined as a conscious attempt to devise redistributive policies in favor of the least powerful (Krumholz 1994 1). Social justice in planning also stresses fairness and equality in addition to addressing disparities in conditions and outcomes. It includes restoring equality through the provision of amenities to residents who have been historically disproportionately burdened with hazards and working toward equal protection from hazards (Svara 2014 6). I defined social justice as the equitable distribution of assets/desirable conditions and burdens or undesirable conditions as well as the enhancement of avenues of participation.

Relationships between Sustainability and Social Justice

The second step of the literature review was to identify the types of relationships between social justice and sustainability. I identified two levels of the relationship. Level 1 describes whether or not the sustainability includes social justice. For this level, I described the relationship as “integration” if social justice was integrated into sustainability and I described the relationship as “non-integration” if social justice was not integrated into sustainability. Level 2 describes how sustainability interacts with social justice. As part of my literature review, I examined research that discussed how planners perceive sustainability as primarily environmental sustainability. As a result, the level 2 relationships that I identified in the literature reflect how sustainability emphasizes an environmental focus. For level 2 under the “integration” level, I identified one type of relationship. I described this relationship as complementary because sustainability and social justice were complementary. For level 1 under the “non-integration” level, I identified two types of relationships where sustainability and social justice are conflicting. I described these two conflicting relationships as the “trade-off” relationship and the “opposition” relationship. This creates a hierarchy where level 1 (top level) describes whether or not social justice is integrated into sustainability and level 2 (bottom level) describes how social justice interacts with sustainability. The following figure illustrates the relationships that I identified:

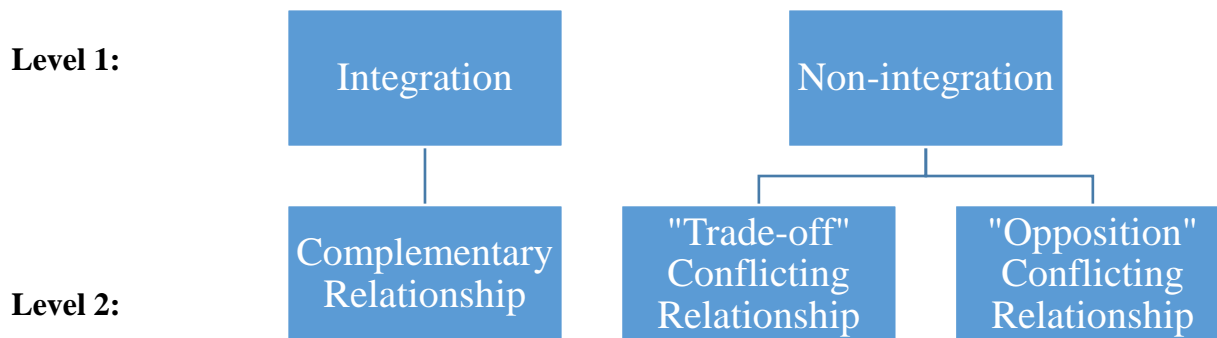


Figure 1: Levels of relationship between sustainability and social justice identified in the literature review

The following table details the level 2 relationships:

Level 1	Level 2	Title	Description	Key concepts
Integration	Complementary	Complementary	Improving one concept improves the other concept	Environmental justice
Non-integration	Conflicting	Trade-Off	The concepts cannot be improved together	Current residents vs. future residents
Non-integration	Conflicting	Opposition	Improving one concept worsens the other concept	Environmental injustice

Table 1: Description of level 2 relationships

Complementary Relationship

The integration relationship frames social justice as integral to sustainability. It stresses that social justice is advanced within a sustainability framework. In other words, all members of a community, not solely those of privilege along racial and class lines, need the opportunity to participate and thrive in order for that community to sustain itself indefinitely (Chapman 2014). I further explored how sustainability interacts with social justice and found that the "integration" relationship reflects a complementary relationship between sustainability and social justice (Berke 2002 31). This meant that advancing sustainability advances social justice. This relationship framed sustainability as revitalization and social justice as the equitable distribution

of the benefits of revitalization. Revitalization refers to activities that improve or restore the character of the ecological systems. It was evident from research on environmental justice that environmental disamenities that disproportionately burden minority and poor communities and these disamenities degrade the quality of the natural environment (Bullard 1990). The complementary relationship between sustainability and social justice ensures that the benefits of the improved environmental conditions were equitably distributed. Accordingly, planners identified existing and emerging needs and then they developed plans to assure that those needs will be met and address environmental inequalities (Berke 2000 22). This involved rectifying previous environmental injustices by restoring degraded environments and avoiding environmental injustices going forward. By this definition, the ecological imperative to protect the environment must be accountable to a social justice imperative to equitably distribute benefits of improved environment conditions (Beatley 1995 388). The key concept of this relationship is environmental justice.

Non-integration

The non-integration relationship frames social justice as a separate strategy from the objectives of sustainability strategy. This relationship stresses that social justice is advanced outside of the sustainability framework. After exploring how sustainability interacts with social justice within the non-integration relationship, I identified two relationships where sustainability and social justice were conflicting: “trade-off” and “opposition.” These conflicting relationships framed sustainability and social justice as divergent priorities of planning (Campbell 1996 298).

“Trade-off” Conflicting Relationship

The “trade-off” relationship described sustainability and social justice as trade-offs. This relationship framed future residents as the priority of sustainability and existing residents as the priority of social justice. While environmental advocates have concentrated on what Agyeman describes as the “futures” specifically in policy development and strategic planning, social justice advocates focus on addressing the effects of currently inadequate policies and strategies and dismantling the power asymmetries that undermine the quality of life of disproportionately burdened groups (Agyeman 2002 80). The environmental rationale for redevelopment implicitly focused on the benefits for future residents of redeveloped neighborhoods (Mueller 2008 201). Social justice advocates envision an alternative assessment of redevelopment plans that focuses on the lives of current residents and these advocates ask how the proposed redevelopment will impact existing households and environmental needs. Accordingly, planners cannot advance both sustainability and social justice because they must choose one concept to prioritize in their plans. By this definition, sustainability and social justice were trade-offs because they cannot be pursued together. The key concept of this relationship was that social justice focuses addressing current conditions of vulnerable populations and sustainability as addressing conditions for future residents.

“Opposition” Conflicting Relationship

The “opposition” relationship described sustainability and social justice as in opposition. This relationship framed increasing sustainability as decreasing social justice. It characterized sustainability as focused on protecting the environment in wealthy and white communities. This results in minority and poor communities receiving a disproportionate amount of environmental disamenities. This outcome creates environmental injustice that social justice advocates work to

rectify by ensuring environmental burdens and benefits are equally distributed across racial and class lines. This implies that the ability of the wealthy to prosper depends upon the restriction of minorities' rights to a healthy environment (Berke 2000 21). Campbell described this dynamic as the "development conflict." He argued that if environmental protection is a luxury of the wealthy then environmental racism is at the heart of this development conflict (Campbell 1996 299). Accordingly, planners created development plans to pursue sustainability goals and these plans had negative effects on poor and minority communities. By this definition, sustainability opposed social justice because advancing sustainability goals would lead to disparities. The key concept of this relationship was environmental injustice.

Compact Land Use Planning

The concept of the compact city has been extensively accepted as a tool of sustainable urban planning (Shi 2016 1). The higher sustainability of compact planning compared to other urban morphologies is attributed to how it addresses environmental, social and economic concerns. Dantzig first introduced the concept of a compact city in 1973 and he described it having three major characteristics that each promote environmental protection, economic development and social justice respectively: (1) high-density residential areas and reduced reliance on cars; (2) mixed land use and diversity of development; and (3) accessibility to opportunities and daily necessities (Shi 1 2016). Since then, numerous studies have cited compact planning as a strategy for sustainable urban development and most recently compact design has been promoted through the smart growth movement (Shi 2016 1; Neuman 2005 12). *Smart Growth America* lists compact design as one of the 10 principles of the foundation of smart growth (Smart Growth America 2016). This thesis focuses on advancing social justice and

sustainability as they relate to the implementation of compact planning projects with the plan for Alston Avenue Compact Neighborhood serving as a case study.

Case Study

I conducted a case study in order to examine the plan for the Alston Avenue Compact Neighborhood with regard to the concept of sustainability and social justice. This case study was used to understand the relationship between key concepts of sustainability and social justice in the practice of compact land use planning. Details of the case study are as follows:

When Durham elected officials adopted the 2005 Comprehensive Plan, they endorsed a new framework for growth described as Development Tiers. Recognizing the variety of landscapes and urban forms across Durham, Development Tiers are a basis for context-appropriate policy and regulation. One of the Development Tiers is the Compact Neighborhood Tier. The Compact Neighborhood Tier was created to promote “high density and intensity infill, redevelopment, and new development that integrates a mix of uses through an urban fabric,” and was applied on the Future Land Use Map to areas surrounding a proposed regional rail transit (Compact Neighborhoods: Introduction 2015 3).

The proposed amendments to the Future Land Use Map described in each of the five neighborhood reports representing each proposed rail stations are intended as an update to the boundaries of the Compact Neighborhood Tiers and to convert Suburban Transit Areas to Compact Neighborhoods to better align with the current light rail transit proposal. The Unified District Ordinance lays out the zoning rules for the physical development of property, and is created to result in a built environment that meets the goals of the Comprehensive Plan. The Compact Design (CD) zoning district was adopted in 2011, and was crafted to promote

appropriate density and pedestrian activity by focusing on the form of development and how it shapes the streetscape in areas surrounding future transit stations.

One of the five neighborhood reports is the Alston Ave Compact Neighborhood Report. This report describes the stages of planning process that have been completed and the current stage of the planning for the proposed changes to the Future Land Use Map for the area around the proposed Alston Avenue light rail station. The Future Land Use Map designates an area centered around the proposed Alston Avenue station as a 302-acre Compact Neighborhood. The original boundary adopted in 2005 extended south of the Durham Freeway and north to Taylor Street. Durham Department of Planning staff recommends three-part amendments to the Future Land Use Map: Development Tier, Future Land Use Designations and Technical Updates (Alston Avenue Compact Neighborhood Report 2015). The current stage of the plan development is that the planners are working on updating the Compact Neighborhood Tier with boundaries that they developed with the community. In January of 2017, they will begin working with the community to amend the future land use designations that they created. The next two stages of the planning process are updating the unified development ordinance and initiating the zoning map changes based on the future land map.

The following figure is the proposed future land use map for the Alston Avenue neighborhood and reflects the compact neighborhood tier:

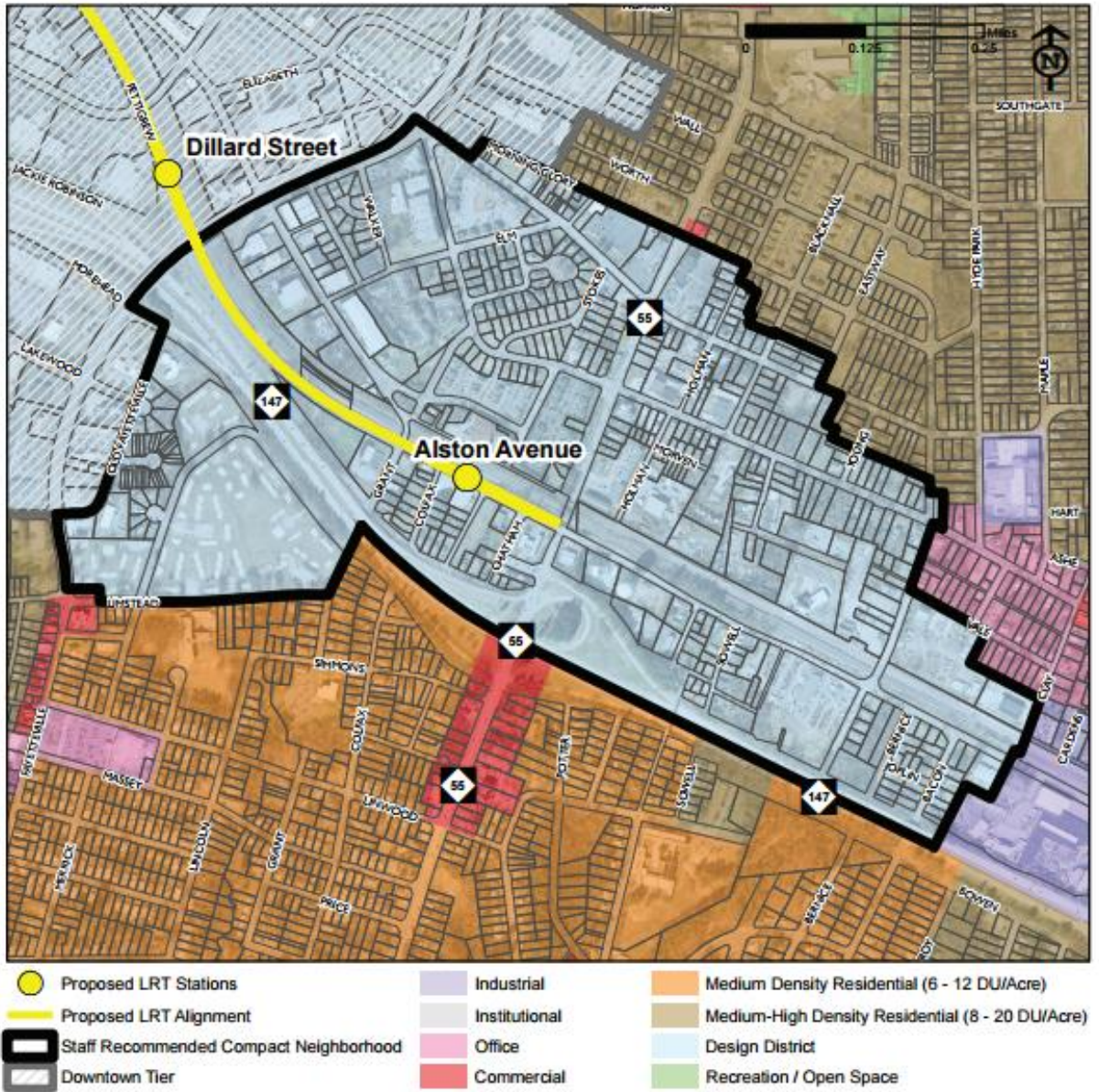


Figure 2: Proposed future land use map in the Alston Avenue Compact Neighborhood Report

The Context of the Alston Ave Neighborhood

Planning for sustainability and social justice are of particular urgency in Alston Avenue neighborhood following decades of industrial uses and disinvestment, which have left the current residents vulnerable to the disproportionate number of environmental burdens in the area.

Development of the Northeast Central Durham (NECD) area, in which the Alston Avenue

neighborhood is located, began in 1884 when Julian Carr built Durham's first textile mill and adjacent millworker housing. Former millworker housing in the East Durham neighborhood was converted to low-cost, rental housing following the decline of the textile industry in the 1930s. Residential areas north of NECD continued to prosper, but increasing numbers of wealthy families left the neighborhood in the 1940s and 1950s as part of the post-war suburbanization wave. The city's first public housing developments, Few Gardens and McDougald Terrace, were built following this wave. During the 1940 and 1950s, public housing tended to be mixed-income and socioeconomic diversity persisted.

The urban renewal movement of the 1960s marked the beginning of a decline for the neighborhood. Durham planners worked to eliminate slum housing and sustain the viability of downtown; however, their actions resulted in destruction of the nearby Hayti neighborhood. Numerous low-income black residents were displaced during this process and moved into the NECD. As the number of black residents in the area rose, whites and middle-class residents fled to the suburbs.

Also as part of urban renewal, planners sought to relieve pressure on the rapidly growing downtown by rerouting streets such as the construction of highway 147 through the center of the neighborhood and parking lots built throughout historic NECD neighborhoods. These developments devastated NECD resulting in many historic homes being demolished or converted into apartment buildings. By 1970, 3 of NECD's 4 neighborhoods had become predominantly black and low-income, and there was an increase in the number of residents receiving welfare (Durham Neighborhood Improvement Services Department 2016). Additionally, the area around the proposed Alston Avenue station consists of active and abandoned industrial businesses

located along or near the freight rail corridor, along with single-family houses, vacant lots, civic uses and numerous public housing developments.

Purpose of Research

The purpose of this research is to examine how key concepts from the body of planning literature concerning sustainability and social justice were perceived and prioritized by planners and community members in the compact neighborhood plan development, its planning process, and early implementation of the plan. First, I explored whether and to what extent the social justice dimension of sustainability gets undercut. Next, I explored how to advance social justice through compact land use planning. Focusing specifically on the plan for Alston Avenue Compact Neighborhood and the planning process so far, I aimed to understand about how planners articulated the relationship between social justice and sustainability as they begin to plan for future land use policies and projects. In order to accomplish these goals, I reviewed the Alston Avenue Compact Neighborhood Report and Compact Neighborhoods: Introduction documents and I utilized interviews with planners who developed the plan and community members involved in or affected by the plan's implementation. The interviews provided increased depth in examining perceptions of various groups involved in the planning and implementation process and in understanding the different goals and values held by these groups. They also provided specific information on the planning process and perceived possibilities for implementation not found in the planning documents itself. Specifically, I ask the questions:

What is the relationship between social justice and sustainability goals in the planning process and implementation of the plan?

How can social justice be advanced through compact land use planning?

Further, looking toward future planning efforts and opportunities, I ask:

What can be learned from successes and challenges for the planning process thus far?

What future opportunities for improvement exist in advancing a sustainability approach that includes social justice through compact neighborhood planning in Durham?

Methodology

Data Sources

In order to provide multiple perspectives on the plan, planning process and implementation, I conducted interviews with 7 individuals, including the planners who created the plan; a consultant for the city who provides recommendations on advancing the city's affordable housing strategy; and members of the community who are affected by the plan's implementation. Interviewees included planners Hannah Jacobson and Scott Whiteman who work as planners at the Durham Planning Department; affordable housing consultant Karen Lado who works at Enterprise Community Partners; community member, Jim Svara, who serves on the North East Central Durham Leadership Council; community member, Steven Hopkins, who serves as chair of Partnership Against Crime for the local district; community member, Ben Filippo, who directs Preservation Durham and community member, Michelle Evans, who works at the Holton Career Center which is located in the Alston Avenue neighborhood. In addition to interviews with these groups, I also will utilize information obtained directly from the planning documents in providing background information for examining the plan.

Category	Name	Title
Planner	Hannah Jacobson	Planner at the Durham Planning Department
Planner	Scott Whiteman	Planner at the Durham Planning Department
City consultant	Karen Lado	Affordable housing consultant at Enterprise Community Partners
Community member	Steve Hopkins	Chair of Partners Against Crime for District 1
Community member	Jim Svara	Member of North East Central Durham Leadership Council
Community member	Ben Filippo	Director of Preservation Durham
Community member	Michelle Evans	Cosmetology instructor at the Holton Career Center

Table 2: Description of interviewees

In collecting qualitative data, I used in-depth semi-structured individual interviews. In-depth or unstructured interviews are a primary method for data collection in qualitative research and are defined by structure and flexibility. I selected in-depth individual interviews in order to obtain a deeper understanding of responses through follow-up questions and the ability to explore reasons, opinions, and beliefs connected to individuals' responses.

Interviews with city planners and community and advocacy group members focused on the planning process, desired or perceived outcomes of the plan and potential for implementation of the plan's goals. Semi-structured interviews with open-ended questions allowed participants to convey complex responses and insights. The interview process was shaped by use of an interview guide in which I combine general questions with more specific follow-up questions in order to guide interview conversations. Follow-up questions were asked in order to obtain more

detailed information after general questions. General questions included prompts such as “Describe the planning process for the Alston Avenue compact neighborhood” and “What are the major obstacles to implementing aspects of the plan?” Follow-up questions, including prompts such as “Describe the public participation element of the plan,” allowed for more detailed responses concerning specific themes. The interview guide detailed specific questions used for interviews with different groups. For this research, I recorded and transcribed audio data from each of the interviewees.

Research Design

Qualitative Research. A qualitative approach was used for this research in order to fully explore participants’ experiences in the plan’s development and implementation of the compact land use planning. Using a qualitative method, information gathered through interviews could be examined through the lens of complementary and conflicting relationships found in planning literature. A qualitative approach was especially suited to this research because of the complex nature of the planning process. I used prior knowledge regarding sustainability, social justice and compact land use planning as a framework for exploration of the interview data. Using this qualitative research approach, I built a case study of the plan and process and applied thematic analysis in examining the presence of key concepts from the body of planning literature.

Thematic Analysis

I entered the transcriptions of each interview into NVivo to code them. My coding unit was a topic. A topic expresses a single idea. Topics could be a phrase or a cluster of sentences that express a single idea. Given the analytic objectives of the research, I utilized thematic analysis in identifying, analyzing, and reporting themes within literature concerning sustainability and social justice. Next, I used coding to characterize the planners’ and community

members' approach to sustainability based on the relationship themes that I identified. I also utilized thematic analysis in discovering themes regarding obstacles to advancing social justice. Thematic analysis is defined as "a method for identifying themes and patterns of meaning across a dataset in relation to a research question (Braun 2013 175)." Thematic analysis is a flexible research method that encodes qualitative information. There are three different ways to develop a thematic code: (a) theory driven, (b) prior research driven or (c) inductive or data driven follows (Boyatzis 1998 44). I used the prior research-driven method to understand the relationship between sustainability and social justice and a data-driven method to understand how to advance social justice. With the prior research approach, I built on prior research by identifying relationships using the existing literature to understand how the concept of sustainability interacts with the concept of social justice. I translated the literature that I reviewed into a set of relationships, which I describe as themes, with associated codes that represents my concepts of interest. I applied these themes in an examination of the interview data. The steps are as follows (Boyatzis 1998 44):

1. Generate themes from previous research
2. Apply themes to the raw information
3. Interpret results

With the data-driven approach, I developed themes and theme categories inductively from the interview data regarding obstacles to achieving social justice.

Coding Rules for Thematic Analysis

In order to identify social justice concerns, I identified common principles that planners pursue to promote social justice. These principles are adapted from the guiding principles for the work of the Partnership for Sustainable Communities which is an interagency coordination between DOT, HUD and EPA created in 2009. The partnership was formed to promote equitable

development (EPA 2013). I selected these terms because in my literature review because researchers like Birch described these principles as the first clear statement of the sustainability agenda that is inclusive of social justice in the United States (Birch et al. 2011). I searched for these concepts in the topics that I coded for. The principles are as follows:

- Provide more transportation choices
- Promote walkability
- Promote affordable housing
- Support existing communities
- Facilitate community engagement in planning and land use decisions
- Promote public health and a clean and safe environment
- Improve access to opportunities and daily necessities
- Preserve and build on the features that make a community distinctive.

For example, if I code “addressing environmental burdens” as a topic in the participant’s discussion of implementing sustainability, this indicated the social justice principle “promoting public health and a clean and safe environment” and therefore I listed it as a social justice concern.

In order to identify the non-integration conflicting relationships that I developed in my literature review, I identified key concepts that relate to each relationship. The following key concepts would indicate the “trade-off” conflicting relationship in which their understanding of sustainability would include the following as two different priorities that must be selected:

- Strengthen existing communities or future communities
- Provide housing choices or invest in high end housing/mixed use development
- Provide transit options or invest in high capacity/frequency transit

These key terms indicate that sustainability concerns and social justice concerns are trade-offs.

The following key concepts would indicate the “opposition” relationship:

- Displacement/relocation
- Environmental injustice/racism
- Gentrification

These key terms indicate that sustainability weakens social justice and that social justice weakens sustainability. I searched for these concepts as I reviewed the topics that I coded for.

Process for Thematic Analysis

First, I coded for every topic in each interview. Next, I scanned the topics of every interview to see if any of them aligned with the social justice principles. I marked these topics as social justice topics. I then reviewed each topic in each participant's response to the question regarding implementing sustainability to understand each participants' approach to sustainability. I examined whether any of the topics in this particular response were the social justice topics that I noted earlier. If any topics aligned with the social justice principles, then I categorized the relationship as "integration". If none of the topics aligned with the social justice principles, I categorized the relationship as "non-integration." For the participants who I categorized as "non-integration," I examined all of the topics in their interview to see if the person ever discussed sustainability in relation to social justice to understand the relationship between the two concepts. I noted how the participants' articulated implementing sustainability and social justice to understand how they apply the concepts in practice. I also noted if any of the topics were related to the two non-integration conflicting relationships using the key concepts of the conflicting relationships that I identified in the previous section.

Lastly, I reviewed all of the topics in each interview to identify which of them were obstacles to advancing social justice. After reviewing each topic that I coded for, I found that 14 of the topics reflected obstacles to advancing social justice and used the topics as themes and subthemes for the thematic analysis. I recognized patterns among the themes and categorized them into three groups: poor community engagement, incentivizing affordable housing and lack of measurements for success.

Sustainability and Social Justice in the Alston Avenue Compact Neighborhood Report Planning Documents

Prior to analyzing the interviews, it is critical to outline how the planning documents that are published on the Durham Department of Planning website articulate the relationship between sustainability and social justice as background. After each section, I stated key points that I found.

Compact Neighborhoods: Introduction Document

The introduction document defines the compact neighborhood tier as a development tier that promotes “high density and intensity infill, redevelopment, and new development that integrates a mix of uses through an urban fabric.” The development tier system serves as a framework for growth and basis for context-appropriate policy and regulation. Durham City Council endorsed a development tier system when they adopted the 2005 Comprehensive Plan. Compact neighborhood tier is characterized by five elements: urban densities, mixed use development, street-oriented buildings, connected street network, appropriately scaled streets and transportation choices.

Similar to Dantzig’s description of a compact city, the report states how compact planning can address environmental, economic and social concerns. The document explains that higher densities leads to environmental protection because “developing compactly... makes it easier for people to drive less, lowering greenhouse gas emissions” (Compact Neighborhoods: Introduction 2015 2). The document states that a greater mix of uses leads to economic growth. It cites a study by Smart Growth America that reported that “many cities have found that compact development, compared to “conventional suburban development,” can save money on upfront

infrastructure costs, reduce the cost of ongoing community services like fire, police, and ambulance, and generate greater tax revenues” (Compact Neighborhoods: Introduction 2015 2). The document also states that compact planning can “reduce household transportation costs” for residents by locating jobs and housing within a short distance of a transit station (Compact Neighborhoods: Introduction 2015 2). The document describes how multi-modal transportation options advances social justice because it allows “people [who do not have access to cars] connect to jobs, education, health care, and other opportunities throughout the regions” (Compact Neighborhoods: Introduction 2015 2). Additionally, the document states that compact planning can play a role in improving public health by increasing opportunities to walk or bike. The document noted that how directing development towards investments in transit can lead to unintended consequences. The document described these consequences as rising land values which results in increased rents and home values and accelerated housing turnover/displacement. I noted that this consequence directly conflicts with how the document states that compact planning can benefit low income people by increasing access to opportunities.

Alston Ave Compact Neighborhood Report

The Alston Ave Compact Neighborhood Report is one of five compact neighborhood reports that the planners created. The report outlines opportunities and challenges in applying compact neighborhood tier principles in the Alston Avenue community. One of the opportunities is that Alston Ave station will be only one short transit stop away from a major employment. Another opportunity is infill development given that nearly 80 acres of land within a half-mile of the Alston Avenue station is undeveloped according to the report. According to the report, these vacancies provide a range of opportunities for infill development that would not displace existing residents or businesses. Another opportunity is that transit-oriented development still benefits

from decent access to the highway transportation network via the Durham Freeway (NC Highway 147) which would attract commuters.

After reviewing this section, I found that these opportunities target both developers and residents since Alston Avenue will be in close proximity to a major hub of employment, entertainment and other resources. Alston Ave can increase access to the transit allowing greater access to these amenities for residents. Alston Avenue could also attract developers who are looking for cheap land to develop. Given this development opportunity and the laws against inclusionary zoning, it is not clear whether existing residents would benefit from developers' ability to purchase land for a cheaper price. The proximity to the increasingly unaffordable options in downtown Durham may incentivize developers to build high end housing options at prices that are competitive with the options in the downtown areas.

The first challenge outlined in the report is equitable neighborhood change. The report states that increased development interest is likely to occur given the neighborhood's proximity to Downtown Durham and access to the proposed Alston Avenue Station. New development causes the land value to rise which can lead to increased rents and home values. The increase in value causes an acceleration in housing turnover and the displacement of long term owners and renters.

The next challenge is freight-oriented development. The railroad provides freight spur connections that a number of existing businesses in the neighborhood utilize. The challenge is that heavy industrial development is not consistent with the vision of a compact neighborhood. This report offers a solution of having these businesses relocate to limited sites in Durham. However, since the sites are limited, I noted that the businesses are not guaranteed to have sites to relocate to. Another challenge is the contamination and brownfield cleanup. These industrial

facilities including those that are currently in use and those that are no longer in use, can leave pollution and hazardous materials that contaminate the soil. These sites are called brownfields. Brownfields are both difficult and expensive to clean up. The report states that the costs of remediation may make redevelopment in this neighborhood cost-prohibitive. I found that this suggest that the remediation would only occur when redevelopment begins. I also found that given the anticipated adverse impacts of redevelopment for this existing community that the report discusses, the current residents would not be able to enjoy the benefits of the improved environmental conditions from the brownfield cleanup. This challenge directly conflicts with the opportunity related to increased development from the proximity to downtown Durham.

The next challenge is the small parcels with varied ownership. The land near where the proposed station will be has been subdivided into small lots. This creates issues because it is more difficult to assemble small parcels for redevelopment than it is to assemble larger parcels with a singular owner. I found that this challenge can be transformed into an opportunity for relationship building. The Durham government can promote revitalization by building relationships with the various business owners and working together to create development opportunities. Relationship building is particularly important as it relates to social justice in historically blighted neighborhoods like Alston Avenue because it creates an opportunity for meaningful community engagement and building trust.

The final challenge is station access. The proposed Alston Avenue Station is located on Pettigrew Street, between the Durham Freeway and the North Carolina Railroad Company corridor. The lead planners are also developing a station area strategic infrastructure study to explore how to improve access to the station because vehicular, pedestrian and bicycle access to this site is a challenge according to the report. Similar to the untended consequences section of

the Introduction report and the equitable neighborhood challenge in the Alston Avenue report, this challenge directly conflicts with the social justice imperative to increase access to opportunities for people who do not access to a car. I noted how the report predicts that low income community members will be at risk of both being displaced and blocked from accessing the station by foot or bike.

City Planners Interviews

The following table outlines how the planners described implementing sustainability in their interviews:

Topic	Quote	Social justice principle (Y/N); If Y, which?	Name, Title
Reduce reliance on cars; Reduce carbon emissions	“I think we reduce reliance on automobiles reduces the emissions that cars create we are trying to I think you know that’s kind of the major ones with regard to environmental sustainability but that relates to air quality and a lot of other factors.”	N; N	Hannah Jacobson, Lead planner
Promote transit-oriented development	“I think our department regards that mostly as environmental sustainability so by promoting compact neighborhoods that are well planned with transit. ”	N	
Encourage intense development	“to focus more intense development in areas that can support it”		Scott Whiteman, Lead planner
Provide more transportation choices	“give people more transportation choices”	Y; Provide more transportation choices	

Prevent development from expanding into local watershed	“To keep from expanding the city further and further out into the watershed.”	N	
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Table 3: Planners' description of implementing sustainability

Non-integration Relationship

The language of both planners reflected a “non-integration” “opposition” relationship. Hannah stated that the department of planning understands sustainability as a mostly relating to environmental concerns similar to how the plan stressed an environmental imperative. I categorized Hannah’s strategy as “non-integration” because she did not include social justice issues as part of her discussion of sustainability. Later in the interview, Hannah articulated how sustainability interacts with social justice specifically how advancing the sustainability goal impacts social justice goals. She described how “it’s a balance between investment can be a very good thing investment in neighborhoods and the flip side of that of course is gentrification.”

In order for investment to lead to gentrification, investment would be exclusively for those that benefit from gentrification which historically is white and wealthy communities. Given the numerous brownfield sites in the neighborhood, investment would require extensive clean up and environmental remediation and so investment would lead to improvement in environmental quality. Her language indicates a relationship between her definition of sustainability, environmental improvement, and social justice issue, the disproportionate number of environmental burdens impacting the current residents. Increasing sustainability would decrease social justice because the existing communities currently being adversely impacted by the environmental burdens would not enjoy the benefits of the improved environmental quality.

Instead, they would be displaced due to the impact of gentrification. Her language also precludes affordable housing to be considered a form of investment. She frames sustainability as a luxury of the wealthy. Exclusive benefits of environmental improvement and gentrification reflect the key terms and concepts of the “opposition” relationship where advancing sustainability weakens social justice. This indicated the “non-integration opposition” relationship.

Similar to Hannah, Scott described how his sustainability approach can adversely impact social justice. Despite including social justice concerns as part of the implementation of sustainability, he later noted on how this approach operates on the ground stating that “the challenges of our overall goal of sustainability is to try to encourage intense development in these places but then that means there is going to be a lot of change in these places maybe opposition to that or it may cause other changes which impacts some of the equity issues.” He elaborated on this equity issue: “there is a lot of a new apartments that get built here that will probably change the demographics so trying to strike that balance of encouraging new investment but not displacing existing residents.” His discussion of displacement indicates a lack of affordable housing which relates to the social justice principle about promoting affordable housing. He ultimately framed sustainability as development and discussed how it was in conflict with the social justice imperative of affordable housing. His response reflects Campbell’s discussion about the “development conflict” and his argument that planners can have priority issues that exclude social justice from their approach (Campbell 1996). This reflected how sustainability approaches can integrate social justice in theory but end up being conflicting with social justice in practice. He framed advancing his definition of sustainability as adversely impacting social justice goals. This relationship between sustainability and social justice indicates the “non-integration opposition” relationship.

Scott and Hannah described the “balance of encouraging new investment but not displacing existing residents” or “balance between investment and gentrification” respectively where investment was part of their sustainability approach. This underscores the need for a sustainability framework that sees addressing social justice concerns as part of investment for city.

Community Members and Consultant Interviews

The following table outlines how the community members and consultant described implementing sustainability into the plan:

Topic	Quote	Social justice principle (Y/N); If Y, which?	Name, Title
Efficiency of space	“Arguably if you put more people in the same amount of space served by transit you are already starting one step ahead on the sustainability equation.”	N	Karen Lado, Affordable housing consultant
Green-oriented economic development	“Have a proactive economic development strategy that’s focused around bringing in green-oriented development green-oriented interests”	N	
Incorporate social justice	“The third leg of sustainability is social justice”	Y; Explicit mention of social justice	Ben Filippo, Director of Preservation Durham
Lack of community engagement/bottom up process	“It’s going to have to be an actual you know sort of community-oriented design process in some way.”	Y; Facilitate community engagement in planning and land use decisions	
Brownfields	“There are a lot of brownfield issues in neighborhoods like this so that’s a need and I think doing environmental review is just going to be great to get it out and in front of	Y; Promote public health and a clean and safe environment	

	people again and understand the need and the issues at play that kind of probably fallen off the radar for a number of years there.”		
Increasing access to transportation for areas for people who have limited access	“Increasing access to transportation for areas for people who have limited access.”	Y; Provide more transportation choices	Jim Svara, Member of NECDLC
Reduce the use for cars	“Reducing the use for cars.”	N	
Allow people to access to jobs throughout the area	“It can make to persons that have limitations in their access to transportation would be benefitted by this plan and potentially allow people to access to jobs throughout the area”	Y; Improve access to opportunities and daily necessities	
Relocating current residents	“If they need to have more residential area to complete the goal the project goal and meaning relocating people.”	Y; Support existing communities	Michelle Evans, Cosmetology instructor at the Holton Career Center
Economic development opportunities for current residents	“Black economic development plan... That’s part of sustainability if you have your own system in place where your folks can always go to in a time of crisis you sustaining.”	Y; Support existing communities	Steve Hopkins, Chair of PAC-1

Table 4: Community members' and consultant's description of implementing sustainability

Integration Relationships

Community member, Ben Filippo, described social justice as one of the three legs of sustainability. He mentioned how challenges begin when large institution often entered a historically blighted communities with a sustainability plan already formed and urgent

community needs are not reflected in the plan. He discussed social justice not only an outcome needed to advance sustainability but also as a process. He highlighted a social justice imperative to ensure public participation in the planning process and describes it as part of achieving sustainability. He included social justice concerns as part of the implementation of sustainability which indicated an “integration” relationship.

Community member, Jim Svava, also stressed the need for compensation for those displaced stating that “there are going to be families that will be displaced by the project they need to be compensated and they need to be relocated and if it were carried out in such a way that there were staging in the elements of the project.” He characterized the relationship between sustainability and social justice as compatible. He stated that, “I think that this plan is certainly compatible with a sustainability focus as well as an equity focus. If it is done right I mean it certainly is built on the basic idea of increasing access to transportation for areas for people who have limited access and reducing the use for cars.” In order for the relationship to be “done right,” the transit-oriented development will have to maintain some affordability so that these community members are able to benefit from increased access to transit. He included social justice concerns as part of the implementation of sustainability which indicated an “integration” relationship.

Community member, Michelle Evans, discussed how a benefit to implementing sustainability was the renovation and revitalization projects. Her response reflects how she understood sustainability as an environmental improvement and she did not discuss who would be served by this renovation and revitalization. However, she anticipated that not all residents will benefit from the improvements since she noted a need for assistance through a relocation program for those who will be displaced by the plan; however the plan does not mention any

assistance to those displaced the plan. She included social justice concerns as part of the implementation of sustainability which indicated an “integration” relationship. Community member, Hopkins, stressed the importance of economic development opportunities for current residents as part of his sustainability strategy. He included social justice concerns as part of the implementation of sustainability which indicated an “integration” relationship.

Non-integration Relationships

The affordable housing consultant, Karen Lado, stressed an environmental focus when discussing sustainability. As a result, I categorized this relationship as “non-integration.” She later described how sustainability interacts with social justice stating that those who are not displaced by rising land values “will have more access to employment, they will have more access to amenities they will live safer and higher quality environment.” Her language indicates a relationship between her definition of sustainability, environmental improvement, and social justice issue of affordable housing. Again, increasing sustainability would decrease social justice because the existing communities would not enjoy the benefits of the improved environmental quality and she characterized those who will enjoy the benefits as “those who manage to survive.” This indicates a “non-integration opposition” relationship.

Advancing Social Justice through Compact Planning

This section of the research explored advancing social justice through compact land use planning. I specifically focused on the obstacles to achieving social justice goals using a compact planning strategy. The following figure illustrates the themes and the theme categories that I identified:

Poor community engagement	Lack of incentives for the development of affordable housing	Lack of measurement for success
<ul style="list-style-type: none"> • History of unjust planning • Lack of community-oriented design process • Lack of awareness about the plan • Disengagement • Barriers to public participation <ul style="list-style-type: none"> • Inconvenient timing • Inability to comprehend planning documents • Community expectation of negative outcomes <ul style="list-style-type: none"> • Competition between current and future residents • Competition between current residents and commuters • Competition between current residents and professionals 	<ul style="list-style-type: none"> • Laws against inclusionary zoning • Budget constraints 	<ul style="list-style-type: none"> • Lack of shared vision • Need for more stakeholder outreach • Lack of metrics

Table 5: Themes of obstacles to achieving social justice goals using a compact planning strategy

Theme Category: Poor Community Engagement

Theme	Quote	Name, Title
History of unjust planning	“When it comes to planning, zoning, housing we’ve got probably some of the worst history for social justice you can imagine in local and federal policies and action... municipality and institutions more broadly don’t have a great history with you know community engagement ”	Ben Filippo, Director of Preservation Durham

<p>Lack of community-oriented design process</p>	<p>“but it’s going to have to be an actual you know sort of community-oriented design process in some way rather than what is in my opinion already happened a little with this project and very often does which is hey we’ve got these things that we’ve already kind of done here they are which of them we have already chosen for you are the ones you want.”</p>	<p>Ben Filippo, Director of Preservation Durham</p>
<p>Lack of awareness about the plan</p>	<p>“Very little awareness what the station area itself looks and the size of the parking deck that’s going in there so that prime location of where you can have housing six story housing high density next to the station area that’s going to providing spaces for cars not people because that’s what Go Triangle has insisted on in its plan so that’s a major issue to be resolved.”</p>	<p>Jim Svara, Member of NECDLC</p>
<p>Inconvenient timing</p>	<p>“I got a letter I think the meeting was I want to say it was like something like in 5:30pm – 7:30pm or something and I have two little kids so I just want to go to bed so I can’t go to meetings like that you know unless there is a good deal of notice and if I recall there was not quite a large amount of notice so yeah it’s not universal certainly there probably were it probably did work for other people and I’m certain other people went I would hope but no for me you know it was as a universal experience it wasn’t particularly convenient.”</p>	<p>Ben Filippo, Director of Preservation Durham</p>
<p>Inability to comprehend planning documents</p>	<p>“It’s very challenging digest there’s not yes you can get the two-three page letter in the mail that gives you a glimpse a snapshot of what it is but it’s not really clear what the plan is from that document or at least it wasn’t to me and I suspect it has you know a white male privileged with graduate education if I am having trouble figuring it out then probably it’s going to be an issue for a lot of other people so I get that that to me is a little troubling.”</p>	<p>Ben Filippo, Director of Preservation Durham</p>

<p>Inability to comprehend planning documents</p>	<p>“Planning is a lot of common sense we somehow have a way of making it harder for people to understand so making sure that people we’re on the same page we’re talking the same language with people and you know they understand our intentions we understand where they’re coming from all of that takes a long time.”</p>	<p>Hannah Jacobson, Lead planner</p>
<p>Disengagement</p>	<p>“They don’t listen to us they have never listened to us like I said learn from our mistakes. You go to all these meetings offer all of these advices and they didn’t take none of them. Why waste my time... everyone saying well Steve why you didn’t come to no meetings because none of it was going to matter.”</p>	<p>Steve Hopkins, Chair of PAC-1</p>
<p>Competition between current and future residents</p>	<p>“They are cleaning up the area but they are not cleaning it up for the people that they are. They’re cleaning it up for the people that are going to move into there.”</p>	<p>Steve Hopkins, Chair of PAC-1</p>

<p>Competition between current residents and commuters</p>	<p>“is this really serving the neighborhood and the residents who live there or is it serving commuters who drive who take 147 take Alston exit and then park and use that to access the other areas and I don’t think that issue has been discussed enough.”</p>	<p>Jim Svara, Member of NECDLC</p>
<p>Competition between current residents and professionals</p>	<p>“No I haven’t been involved in the meetings... I think you’ve had more professionals academias and business owners and individuals who understand the impact of having a plan for this more involved.”</p>	<p>Michelle Evans, Cosmetology instructor at the Holton Career Center</p>

Table 6: Interview responses regarding the theme category of poor community engagement

Theme: History of Unjust Planning

My definition of social justice includes both the outcomes and public participation of planning efforts. Public participation includes recognition, process, and procedure in the form of public participation (Agyeman 2013). The interviewees noted barriers to achieving full public participation. The root of this issue is the history of non-consultation with particularly historically disenfranchised communities in the planning field. Ben noted this history when describing how urban planning has the worst history of social justice. Part of the legacy of unjust planning is poor community engagement. Historically, planners have only been accountable to the people who Ben described as “the very tiny sliver who may have you know certain access

and certain privilege.” Disparities as part of social justice concerns go beyond the outcomes. The disinvestment in this community also included being historically disenfranchised during the public participation process. Planners must anticipate how this history can become reproduced and socialized during their community outreach process. Examples of this include lower expectations for community involvement since historically the community members have not been involved. Ben gave another example where planners may put in less effort stating that “what I really would be worried is that [planners] feel like they’ve done a lot and it doesn’t really work out and so they don’t try as hard which I’ve seen before too.” I connected this history to the poor community engagement tactics that community members discussed because the decreased effort that Ben mentioned can lead to planners not putting in the effort needed to create meaningful tools of engagement.

Theme: Barriers to public participation

The two subthemes of the barriers to public participation are inconvenient timing and inability to comprehend planning documents. These subthemes serve as examples of barriers to public participation. Inability to comprehend planning results from the complexity of the language in the materials that planners publish. The public may struggle to understand the technical details of the available documentary materials. As a result, they would not have a strong enough understanding of the issues to effectively question planners at community meetings. Hannah recognized this issue and her response indicated a lack of intentionality by planners to use language legible to the public despite an awareness of the issue. Ben anticipated being able to understand the documents but instead he found that they were too complex for him to be able to understand. Ben underscored the need to be intentional about using language that allows the community to engage so that the planners can address their needs.

Timing of public hearings is also an example of barriers to public participation. Ben emphasized that: “[residents] often are working full time if not two or three jobs and often have kids as I mentioned earlier so I think that you know these are not things that are totally controllable but I do think that if you’re going to if their intention is true sustainability again of the project and public democratic engagement with it then I think some better efforts.” If residents are not able participate in environmental decision-making, they are not able to challenge public decisions that create environmental injustice. Ben connected the public participation component to democracy recognizing the importance of participation in decision-making to our democracy. This can preclude an integrated sustainability approach from being achieved as Ben pointed out.

Theme: Community expectations of negative outcomes

Poor community engagement has led to negative community expectations and even disengagement from the planning process. The three subthemes of the community expectations of negative outcomes are: competition between current residents and (1) commuters, (2) future residents and (3) professionals. Each represents an example of community expectations of negative outcomes.

Jim’s language reflected how he anticipated competition between current residents and future residents. He described these groups as divergent priorities of the plan. The plan discussed how transit-oriented development will increase access for residents who do not have cars; however, Jim noted how GoTriangle is developing infrastructure to accommodate commuters. Jim asked the question of “is this really serving the neighborhood and the residents who live there or is it serving commuters who drive who take 147 take Alston exit and then park and use that to access the other areas.”

Jim anticipated a relationship in which there are two priority stakeholders: commuters and local residents. I found that he discussed these two priorities as potential trade-offs where transit serves current residents or commuters. The planners are involved in the development of this infrastructure through a plan called the Station Area Infrastructure Study which examines how people are going to be getting to the station. Jim raised the question of whether the planners will support development that will address the needs of the commuters or the needs of current residents.

Community member, Steve Hopkins, anticipated competition between current residents and future residents. After witnessing how his neighborhood was getting cleaned up, Steve concluded that the current residents would not benefit from the improved environmental quality. Steve described how current residents will get displaced because their jobs do not allow them to make enough money to afford the price increases. In his description of this displacement, he distinguished between two groups of residents, current residents and future residents. This indicates that he does not think that the plan will support existing communities but instead the future residents of the neighborhood. Similar to Jim, Steve described these two groups as substantive trade-off.

Community member, Michelle Evans, anticipated competition between current residents and professionals. When discussing the public participation process, she stated that “I think you’ve had more professionals academics and business owners and individuals who understand the impact of having a plan for this kind and projecting it in the area more involved than you have just average citizens who wouldn’t fully understand why it’s being done.” Michelle’s comment reflect a concern that Ben raised regarding the plan only benefiting who he described

as “the very tiny sliver who may have you know certain access and certain privilege.” Michelle recognizes that the knowledge gap for non-professionals such as the working class.

Theme: Disengagement

In addition to expectations of negative outcomes, another response that a community member had to the poor community engagement was disengaging from the public participation process. Steve noted how he has become so disillusioned with the public participation process that he decided to disengage. Steve described how he did not feel that the planners were listening to him so he stopped attending to public meetings. His disillusionment is not only in response to the recent community engagement opportunities but also the history of non-consultation with the local community about planning decisions. His reaction suggested that he no longer trusts that the planners will listen to him. It reflected the danger of not reconciling the distrust between community members and planners that the history of unjust planning can cause.

Figure 3 illustrates the relationship among the themes within the poor community engagement the category that I identified:

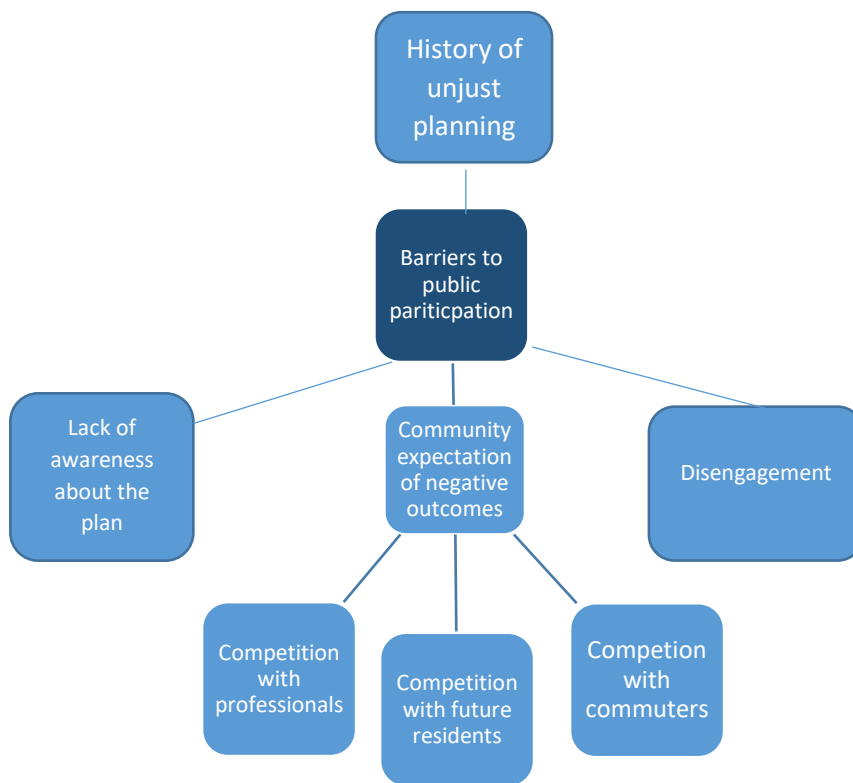


Figure 3: Relationship among the themes within the poor engagement theme category

The planners must identify language that empowers these groups to engage and create opportunities for all voices to be heard. This would address the communication barriers noted in the theme, inability to comprehend planning documents. Overall, the commentary of the community members reflected how they viewed their community as in competition with other groups and often in competition for the attention of planners. This suggested that they do not think planners are able to serve their needs while serving the needs of these other groups. This may be the result of not having outlets to engage with planners regarding their strategy for meeting the needs of both groups and discussing how they will reconcile any conflicting priorities. I found that the history of unjust planning led to poor community engagement tactics and these tactics or non-consultation led to the community members' expectation of negative outcomes, disengagement and lack of awareness about the plan.

Theme Category: Lack of Incentives for the Development of Affordable Housing

The most frequently discussed obstacles to social justice was the lack of incentives for the development of affordable housing.

Theme	Quote	Name, Title
Laws against inclusionary zoning	“We have to create incentives through our zoning ordinances that would make it feasible for them to incorporate affordable housing and the way we do that we’re fairly limited on how we can actually do that because the state regulations so we cannot you might hear the term inclusionary zoning a lot and what that means you know if you are going to get a rezoning you must include 15% or some percentage of the units must be affordable in order to receive that zoning approval in the state of NC we cannot do that it is not allowed by state law so we cannot require it.”	Hannah Jacobson, Lead planner
Laws against inclusionary zoning	“From affordability perspective the one piece that we’ve been talking about trying to take advantage of the rezoning can we can we um incense some degree of affordability in the rezoning process and that’s a maybe right now and the idea is I don’t know if you’re familiar with the concept of inclusionary zoning we can’t do it. ”	Karen Lado, Affordable housing consultant
Budget constraint	“One of the biggest challenges is money of course I think there is a lot of political will to try to make sure that these areas grow and in an equitable way kind of putting the money where the mouth I think is a challenge. ”	Hannah Jacobson, Lead planner
Budget constraint	“The city is moving to try to more proactively prioritize that area but I can say as the person who ran the numbers on what they can do with the resources they have it is this big <i>*motions a small amount with hands*</i> and that’s the	Karen Lado, Affordable housing consultant

	<p>ongoing challenge the affordable housing problem is this big <i>*motions a big amount with hands*</i> and the resources we have to solve it is this big <i>*motions a small amount with hands*</i> and so the most you can do is maximize your impact knowing that is not enough.”</p>	
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Table 7: Interview responses regarding the theme category of lack of incentives for the development of affordable housing

Theme: Laws against inclusionary zoning

Inclusionary zoning generally refers to mandating that new development in a jurisdiction, over a minimum threshold, includes a certain number of units that meets affordability goals for some percentage of the area median income. Hannah described affordable housing as a priority social justice issue. Others noted that the biggest challenge facing planners in promoting the development of affordable housing is inclusionary zoning. Given the laws against inclusionary zoning are state laws, there is a need to create local government interventions. The City of Durham has the opportunity to be creative in developing incentives at the municipal level.

Theme: Budget constraints

The planners and the consultant’s discussion about budget constrains also reflected Campbell’s argument that professional and fiscal constraints are significant limiting factors to implementing an integrated approach to sustainability (1996). Planners are restricted to the narrower interests of their clients typically municipal authorities and bureaucracies despite efforts to work outside those limitations (Marcuse 1976). As a result, planners can only pursue social justice after reconciling the tensions with sustainability. In this case, planners expressed pessimism toward their ability to address the social justice issue of affordability and this often led to them discussing sustainability and social justice as conflicting.

Theme Category: Lack of Measurements for Success

Theme	Quote	Name, Title
Lack of shared vision	“We don’t have a very strong consensus or vision for what these areas what the Alston Ave area could be I don’t think were necessarily tying all the goals the way that we should.”	Hannah Jacobson, Lead planner
Need for more stakeholder outreach	“We’re certainly going to have to do more outreach to figure out who all the players are who need to be at the table.”	Hannah Jacobson, Lead planner
Need for more stakeholder outreach; lack of shared vision	“We need you know work more closely with other departments to help create a vision”	Hannah Jacobson, Lead planner
Lack of metrics	“We have not identified metrics for success.”	Hannah Jacobson, Lead planner
Short term success; long term success	“Primary success is that city council is comfortable adopting it later on we’ll have to see if it results in those things that got discussed earlier do we get new development particularly new housing that is transit oriented are we able to provide some new affordable housing and create good change for the neighborhood but unfortunately those are long term things so it will be a while before we know if it is successful or not.”	Scott Whiteman, Lead planner
Short term success not sufficient; Need for long term success	“you [cannot] measure success by saying hey its adopted we’re done so these are plans that are going to play out for a long time I mean they have lasting impact right?”	Hannah Jacobson, Lead planner

Table 8: Interview responses regarding the theme category of lack of measurements for success

Metrics to measure progress toward achieving project goals are integral to the success of a planning project. Developing a set of indicators for measuring an integrated approach to sustainability can help to advance social justice because the planners will be able to assess to what extent the indicators capture relevant social justice issues, and how specifically the indicators are tied to social justice. However, in this case study, both planners stated that they do not have metrics for success. Prior to creating metrics, planners must first work with the community to create a vision and then reach out to stakeholders to build consensus on their

vision. Lead planner, Scott, envisioned success in both short and long term goals. On the other hand, Hannah noted that success couldn't be measured by short term goals. She stressed the need for a long term vision in order to measure success. The planners must have a shared vision for success to work with other stakeholders and creating metrics. The metrics should consist of steps toward achieving the project vision and so the vision must be created first.

Most of the community members articulated a vision for success that was rooted in addressing the current needs of the community. Ben stressed a need for the democratic process specifically "having you know fairly democratic process if you understand kind of what the needs are and rather than sort of swiping a slate clean and generally rezoning." Jim described success as "the station area itself is accessible to the area that it serves that there is increase in the housing that's available including substantial amount of affordable housing that is available that in this area." Each community member highlighted the risk at stake in this neighborhood and the need to think more creatively about strategies for the development that compact neighborhood planning seeks to promote. Metrics for success that include social justice would help to hold the planners accountable to a social justice imperative. After the planners work with the community to develop a vision, they will be able to identify which stakeholders they need to work with to achieve the vision. Once they have identified a group of stakeholders and developed stakeholder engagement strategies, they can develop metrics for success. The following figure illustrates the relationships between these themes.



Figure 4: Relationship among the themes within the lack of measurements for success theme category

Toward A Just and Sustainable Future in Compact Neighborhood Development: Opportunities to Promote Complementary Relationship

Discussion

Tensions and opportunities in the implementation of sustainability and social justice revealed in the interviews and planning documents reflect the different relationships that were highlighted by authors in the literature review. Hannah's and Karen's approach exemplified the dominating environmental focus of sustainability. Scott's sustainability approach reflected how social justice may appear in theory but gets undercut in practice. The community members described their sustainability strategy in terms of their greatest community needs. They understood sustainability as first meeting their basic needs. In order to begin building a vision and common understanding with the community, planners must acknowledge that not all

residents will see their quality of life as being improved by sustainability projects. Planners must describe sustainability in terms that are legible to the community members. Planners' efforts may appear to only represent the perspective of privileged community members. Community members may be more hesitant to engage given the history of poor community engagement as Ben discussed and they may perceive development to portend displacement.

After acknowledging this history, strategies for compact neighborhood planning must be rooted in an understanding of race, class and environmental inequalities, with an explicit focus on preserving affordability and restoring the environment in this neighborhood. Furthermore, social justice through recognition, process, and outcome are also vital and should be seen as interdependent with sustainability in order to create a complementary relationship between social justice and social justice. Prior to moving to the next stage of this plan, planners should actively address barriers to public participation and involve residents as leaders in planning and implementation of the plan especially since the community members have a clear vision for success of the plan. Finally, promoting development without supportive government intervention particularly on the issue of inclusionary zoning also has the potential to promote conflicting relationships. The planners must develop creative ways to incentivize developers to maintain affordability due to the state laws against inclusionary zoning. Furthermore, given that community expectations are of competition, creating complementary relationships will require active and focused attention on both the planning and communication process.

The interviews and planning documents revealed numerous challenges to advancing social justice as an outcome and as a process. The planning staff often described the limitations of their departments in ensuring affordability given the opportunities for new development and trends of the market. Generally, they framed lack of incentives for developing affordable housing

as the primary obstacle to social justice. The planners often cited affordable housing as their priority for advancing social justice and so this led to them framing the obstacles accordingly. Their commitment to affordable housing as a city-wide goal is also indicated by the hiring of Karen Lado to provide recommendations on creating affordable housing strategy. This focus on incentivizing affordable housing reflects the outcome component of social justice. The planners mainly treated social justice as an outcome. Given the legacy of discriminatory planning practices in this community, community members understand social justice through the lens of disinvestment and a history of non-consultation. This led to them describing obstacles as barriers to public participation. This focus on public participation reflects the process component of social justice and so the community members mainly treated social justice as a process. The final obstacle to advancing social justice, lack of measurements for success, has the ability to tie these two parts of social justice together and provide the planners with a clear road map that reflects their understanding of social justice as well as the community members' understanding of social justice. These metrics will provide ways to measure their progress on advancing social justice as an outcome and as a process in addition to holding them accountable to this holistic understanding of social justice.

Planners should not overlook the impact that these planning decisions will have on the lives of current residents specifically the issues of affordability and public participation. Planners framing of social justice through affordable housing and prioritizing environmental goals when considering the implementation of sustainability has the potential for obscuring equitable outcomes and processes. Ben noted that urban planning has historically obscured these outcomes when discussing how urban planning has the worst history for social justice. However, compact

neighborhood planning presents an opportunity to address this history and the particular conditions that persist due to the legacy of discriminatory urban planning practices.

Recommendations

The plan analysis, planning staff and community members interviews, and review of planning literature conducted for this case study suggest several planning and policy recommendations to advance social justice as part of an integrated approach to sustainability. I identified how obstacles could be transformed into opportunities that will encourage a complementary relationship between sustainability and social justice. An increased focus on the opportunities presented in the table below will be vital to ensuring sustainable compact neighborhood planning that is inclusive of social justice goals. I present these opportunities in the table 10.

Obstacle	Opportunity
Lack of community-oriented design process	Community Visioning Workshop
Budget constraints	Affordable Housing
Competition between current residents and commuters	Reduction to parking standards

Table 9: Obstacles and their associated opportunities to promote a complementary relationship between sustainability and social justice

Community Visioning Workshop

Community visioning workshop leads a sustainable and just planning process because they empower residents to be leaders in the planning process. The workshops will also hold the planners accountable to the needs of the community. Public agencies like planning departments can sponsor these workshops. These workshops should be led by a trained facilitator who will lead participants through structured discussions and design exercises. Exercises involve community members working together to design a representation of the community’s desired

future. After completing the exercise, the facilitators should lead a discussion on the participants' reflections on the representation. The ideas expressed in the visual representation and discussions should be shared with the broader public and decision-makers and integrated into planning processes (EPA 2013). Planning and visioning workshops should always be designed to meet the specific needs of participants. Conducting pre-workshops also provides an opportunity for facilitators to educate participants about effective strategies which will expand their knowledge of potential solutions and prepare them to work with municipal staff (EPA 2013). I recommend that the planners host a community visioning workshop with the community to create a vision prior to moving forward with the development of the plan.

Affordable Housing

One of the most frequently cited social justice issues during the interviews was gentrification. Incentivizing affordable housing in new development creates an opportunity for people in all income brackets to benefit from the city's planned light rail line and subsequent transit-oriented development. One tool for implementing affordable housing is land banking. Land banking involves having a public or nonprofit entities like the Durham Land Trust acquire land for affordable housing near transit early when prices are lower. These groups would hold it in a land bank until the time is right for redevelopment. When a private developer expresses interest in developing the land, land bank authorities transfer the land to the developer with recommendations guiding how it can be developed in this case mixed-income housing. Municipalities can remove barriers to affordability and reduce costs by waiving or reducing impact fees, expediting permitting approvals, or donating publicly owned land. Additionally, increasing collaboration among local planners, metropolitan planning organizations, community development organizations, and developers can lead to development that meets the needs of

current residents. I recommend that the planners explore these options and work with the Durham Land Trust to develop strategies in addition to working with their affordable housing consultant.

Reduction in Parking Standards

Policies and practices that support automobile centric development undermine the effectiveness of strategies like compact land use planning that support density, walkability and affordability in transit station areas. The parking garage that Jim discussed may hinder the plan's ability to increase access to opportunities through transit-oriented development. Parking minimums can decrease the overall supply of housing, discourage certain development types and increase rents (Enterprise 2015). At the neighborhood scale, dedicating land for surface parking lots can reduce the area's potential for a critical mass of population, variety of uses, and other amenities necessary for an affordable walkable and transit-oriented neighborhood. Investing in parking infrastructure can lead to more automobile use, creating more demand for parking and automobile infrastructure. Municipalities can encourage equitable transit-oriented development by reducing or eliminating minimum parking standards. This can lead to a decrease in the costs of development and therefore the costs of building affordable housing (EPA 2013). As a result, the population without access to cars are more likely to be able to afford to live in the transit-oriented neighborhood and benefit from the increased access to opportunities. Although the garage does not preclude planners from promoting walkability and providing more transportation choices, they can take more steps to minimize parking standards with the anticipation of car-centric development that parking garages promote. I recommend that the planners reform their parking standards and invest infrastructure needed to increase access to the station as well as infrastructure for cars in an effort to promote equitable transit-oriented development.

Limitations/Further Research

Limitations in my research efforts include capturing the voices of all the stakeholders. I was not able to capture the full diversity of opinions of community members. Many of the community members who I reached out to expressed a discomfort in being interviewed because of their lack of knowledge about the plan. Additionally, I reached out to GoTriangle for an interview and they responded that staff would not be able available until a few months after my project deadline. Transit-oriented development is a critical part of this plan and so their perspective would have been helpful in understanding if and how their understanding of sustainability and social justice differed from the planning department given that the planners cited them as stakeholders.

My findings indicate a need to identify more opportunities to address the obstacles that I identified. The above recommendations represent examples of actions that planning departments can take to advance social justice within a sustainability framework through compact land use planning projects. There is also need for a targeted community outreach approach that will change the community's engagement expectations about negative outcomes of urban planning projects. In further research, I would like to explore more strategies that planners can utilize to advance a sustainability framework that is inclusive of social justice and complements social justice goals. It is my hope that this research will serve as a model for further examination of these issues as government agencies, community groups, and individuals work to implement compact land use planning in cities. Further research could serve to detail how policies and programs would be structured to increase sustainability and social justice in compact planning implementation.

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Appendix

Interview Guide

Interview Questions for city planners:

What are the department's goals in implementing this plan?

Describe the department's sustainability goals in relation to compact neighborhood planning

Describe the department's goals for justice in relation to compact neighborhood planning

What are the benefits and challenges for justice for implementation?

What are the sustainability benefits and challenges for implementation?

What has the role of the department been in plan development?

What is the department's current role and timeline for implementation?

How do you view major challenges to implementation for the department?

How do you measure success of the plan?

What are the challenges to measuring success?

What are some current and future plans for collaboration with other agencies/ groups for implementation? Are there any resulting challenges?

Interview Questions for Community/ Advocacy Groups:

How do you think the plan will affect your group or neighborhood?

What are the benefits and challenges for justice for implementation?

What are the sustainability benefits and challenges for implementation?

How would you characterize the planning process and public involvement?

How were you involved in the planning process? How did the group's involvement affect the plan?

What is the importance of the plan/ compact neighborhood planning for the group/ neighborhoods?

How do you measure success of the plan?