FROM BIG BOX TO TOWN CENTER:
How Redevelopment of the Greenwood Shopping Center
Can Help Create a More Livable and Sustainable Town Center
While Reinforcing the Neighborhood's Distinctive Character

by

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF LANDSCAPE ARCHITECTURE

in

THE FACULTY OF GRADUATE STUDIES
(Landscape Architecture Program)

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

August 2004

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Title of Thesis: From Big Box to Town Center: How Redevelopment of the Greenwood Shopping Center Can Help Create a More Livable and Sustainable Town Center While Reinforcing the Neighborhood's Distinctive Character.

Degree: Master of Landscape Architecture

Year: 2004

Department of Landscape Architecture

The University of British Columbia
Vancouver, BC Canada
Seattle is a city of neighborhoods. The City's long range plans call these neighborhoods 'urban villages', and lays out how they might develop over time into fuller service centers for community life. Few designated urban villages have the potential that Greenwood does. Starting with a historic main street commercial area at its core, Greenwood also has a 3 1/2 block area in the center that is ripe for redevelopment. The impetus for this thesis is the proposed expansion of a big box retail store within this 3 1/2 block area, and the community's desire to see the entire area planned comprehensively.

This project starts with the solid policy base established over ten years of study, hard work, and consensus building within the Greenwood community. It analyzes this existing policy base against three critical elements of sustainable community design: Green Infrastructure, Livability and Placemaking, and builds on this base where it doesn't fully address these elements. Measures of sustainable community design are developed for use in later assessment of the alternatives.

Through extensive inventory, analysis and research on the community, the physical and social opportunities and constraints for the project are developed. The two alternative master plans arising from this foundation provide a range of development options intended to meet the design strategy's requirements. Finally, this project presents an assessment of the two alternatives based on the measures of sustainable community design.
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I am grateful for the guidance provided by my Thesis Advisors: Don Luymes and Patrick Condon from the UBC Landscape Architecture Program, and Michael Larice from the UBC Community Planning Program. Each has different areas of expertise and therefore offered very different and valuable insights. I thank Doug Paterson for his periodic casual critiques, his depth of design knowledge, and his dedication to the cause.

Numerous people in Seattle provided assistance and in return I give my gratitude. This project would not have been possible without their input and support. Thanks also to my classmates and friends both at the University of Washington and at UBC, who have been there for me throughout this odyssey.

My deepest gratitude goes to my partner, Ken Shaw, for his patience and support as I've slaved away at this degree. I appreciate it more than he could imagine.
CHAPTER 1 INTRODUCTION

"Without community we are all doomed to private worlds that are more selfless and loveless than they need be. As our society becomes more privatized and our culture more narcissistic, the need and appetite to be part of something bigger than our individual selves grow...."

Douglas Kelbaugh, Repairing the American Metropolis, 7.

Where and how we live is important to us as human beings. Many people desire to live in a community where they feel comfortable and at home. They seek a human scaled, understandable place, with everything they need close-by. They seek a community with opportunities for social interaction as well as solitude. They seek welcoming places - with spaces for raising their families. They often seek a place with a center, which becomes the focus of community life. The physical form of a place is important in this equation.

One thread in urban design theory that is relevant to this project is the current interest in pursuing simplicity, of creating “more from less”. The inspiration for this approach, according to Nan Ellin in Postmodern Urbanism is “nature, the vernacular, the mundane, the ‘everyday’” (10). She further goes on to state that the place that results from this approach is “not a generic machine for living, nor an escape from the present into the past or from reality into fiction or virtual reality, nor a surrender to market forces. Rather it is a place that sustains the environment including the people who use it” (10). (Emphasis added)

A place that sustains the environment as well as the people who use it - that is the ultimate goal of this project.

This project borrows from many theories - including sustainability, new urbanism, smart growth, critical regionalism, and others - in addition to those described by Ellin above.

While there are many ideas on what elements constitute a good community and the town center at its core, this project focuses on three elements considered critical in developing ‘a place that sustains the environment as well as the people who use it’. These three elements are: Green Infrastructure, Livability, and Placemaking. These three elements must be considered within, and tempered by, an economic and market context. A town center is a community place in large part because it is the marketplace. A successful town center plan ensures that it works for both purposes.

Within this context, this project undertakes the design of a redeveloped town center for the Greenwood neighborhood in Seattle, Washington. It is at this level that change can be made, and where broad goals and policy objectives are implemented on the ground. Having played a role in the development of the policy framework for Seattle’s Comprehensive Plan, its implementation on the ground is of particular interest.

This chapter introduces the site and the project, including its goals, objectives, limitations, and the methodology used to develop the project designs. The following chapters fill in all the details. Guiding principles and a design strategy are first developed. Two different alternatives for a redeveloped Greenwood Town Center area are then presented. Through development and assessment of these two plans, the guiding principles are implemented and tested.
Introduction to Greenwood & The Site

Greenwood is one of over 30 distinct neighborhoods within the city of Seattle. It is located about 5 miles north of downtown, and about a mile west of Interstate 5, just north-west of Green Lake. Like many of Seattle's neighborhoods, it has a commercial core that serves the surrounding, primarily single family residential area. The heart of Greenwood is at the intersection of 85th St. and Greenwood Ave., but the community spreads out at least 1/2 mile in each direction. Greenwood houses both community and region serving businesses.

As detailed in Chapter 4, Greenwood started as a forested and marshy area considered unfit for habitation. Over time the forested area was logged and the marsh filled in, and a bustling community developed. The community's historic commercial core, at the crossroads of 85th St and Greenwood Ave., began as the terminus for the streetcar running from downtown Seattle and a stop on the Interurban line that ran northward. This neighborhood of approximately 15,000 residents continues to grow and change, always building on its past.

Located adjacent to the commercial main street core are several large blocks that contain a 'big box' discount store (Fred Meyer) and several other large buildings housing a grocery store, drug store and other uses. The planned expansion or redevelopment of the Fred Meyer discount store, housed in a 1970's era concrete building too small for its current purposes, is the impetus for the development of a master plan for these properties to guide future development.

This 3½ city block area, located at 85th St. and 1st Ave. – one block from Greenwood’s main intersection - is the subject site for this project. The aerial photograph on the next page shows the site and adjacent area.

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The majority of the site is currently owned by a family trust, although Fred Meyer is the major tenant and is influential in development decisions. The owners, along with Fred Meyer, are currently preparing their own master plan for the entire site, though actual development will occur incrementally.

The community is very interested in how redevelopment of this site can forward their interest in developing a fuller and more cohesive town center area that fulfills more of their community needs. Seattle's Comprehensive Plan identifies the area as a residential urban village, the Neighborhood Plan identifies concepts for this town center area, and both a Main Street Plan and a Town Center Plan further develop some of these ideas, though still at a conceptual level.

Greenwood is an ordinary neighborhood, with 'good bones' and great potential to once again become a thriving hub of activity. The neighborhood envisions itself as a community with "all the familiarity and comforts of a small town as well as the vibrancy and amenities of a diverse urban center" (Greenwood Neighborhood Plan, p.4.)

Redevelopment of this key site and the surrounding area will determine how well the neighborhood develops as a pedestrian oriented, full service, live-work-play urban village.

Figure 3: This 1999 aerial photo shows the site, highlighted in yellow, adjacent to the historic commercial core at 85th St. and Greenwood Ave. Note the differences in scale and character between the areas. Source: City of Seattle DPD Website, GIS Maps.
Project Goal
To demonstrate how redevelopment of the Greenwood Shopping Center can help create a more livable and sustainable town center, while reinforcing the neighborhood’s distinctive character.

Project Objectives
1. Review the existing policy framework & assess how well it addresses principles of sustainable community design, with specific focus on: (1) Green Infrastructure; (2) Livability; and (3) Placemaking.

2. Consolidate the Vision/Goals, Objectives and Design Interventions from the existing policy framework, into one comprehensive design strategy matrix. Make additions to more specifically address the 3 elements of sustainable community design, where appropriate.

3. Develop measures of sustainable community design to use in assessing alternative master plans.

4. Apply the comprehensive design strategy through development of:
   - Two alternative town center designs.
   - Detailed design of the public realm (e.g., open space, plazas, public walkway, streetscapes, etc.)

5. Assess how well the two alternatives and the existing condition address the design strategy, including an analysis of how they meet the measures of sustainable community design.

Project Limitations
The physical boundary of this site is limited to the Greenwood Shopping Center and immediately surrounding properties. It does not include the entire urban village, though much of the inventory and analysis, of necessity, looked at the entire area and how the site fits within it.

The redevelopment of the Greenwood Shopping Center properties is a real likelihood, therefore this project was approached as though it was a real project.

This project acknowledges and uses the variety of plans and policy documents that have already been done. It does not attempt to ‘recreate the wheel’, but rather to look at site development from a different angle.

Finally, this project acknowledges that there are ongoing studies on transportation, groundwater and peat issues. The designs presented here are intended to provide ideas that may need to be tested further when additional information is available. On the other hand, it is also the intent of this project to question some of the conventional thinking, therefore the reader is asked to keep an open mind.

Methodology
The iterative design process followed for this project included the following elements:

Site Selection - this site was chosen based on a familiarity with the neighborhood, knowledge of impending redevelopment plans, and an interest in development of this town center.
Map and Plan Review - All existing plans and maps from various sources, including historic maps, were reviewed to gain an understanding of the area and the neighborhood’s aspirations for it.

Develop and Refine Design Strategy - Research was undertaken on the various existing theories on community design and town center development to develop and refine the critical elements that would be used in this project. These were applied to the existing policy framework and resulted in a design strategy matrix for the project.

Site Visits and Experiential Assessment - The site and surrounding area was visited and experienced on a number of occasions, at different times of day, different days of the week, and different seasons of the year.

Site History - The influence of the past can be seen in present day Greenwood. Neighborhood and site history was explored to gain an understanding of how it has influenced current development and implications for this project.

Precedent Studies - A number of precedent studies were done on town center and mixed use projects in the Seattle area, in other cities in the US, and in Vancouver, British Columbia. These studies were undertaken to better understand the design and development of such projects as it might be applicable to this project.

Issue Studies - Several issue studies were undertaken on special areas of concern, including place-making, parking requirements, mixed use development, natural stormwater management and wetland design. This information was used to inform the design.

Consultation - Interviews and conversations were done with city staff, neighborhood representatives, property owners, and special interest groups to gain knowledge, understand limitations, and better understand the project area and people’s aspirations for it.

Site Inventory & Analysis - A thorough inventory and analysis of all aspects of Greenwood that could impact the design of the town center was completed. This included traditional site planning and urban design analyses as well as an assessment of census data. These resulted in an assessment of opportunities and constraints for the project development.

Develop Overall Conceptual Plan - Based on the information gathered, an overall concept was developed for the project.

Develop Conceptual Master Plan Designs for Town Center - several concepts for the master plan were developed, including (1) expanding existing Fred Meyer and (2) demolition and new construction.

Design Development - detailed concepts/designs for portions of the public realm were articulated.

Design Assessment - Each of the alternatives and the existing condition was assessed based on how it met the various measures outlined in the design strategy.
CHAPTER 2 GUIDING PRINCIPLES FOR PROJECT

This chapter sets out the principles that guided development of the design strategy and master plans. It includes a summary of the existing policy framework, a discussion of the elements of sustainable community design that are considered critical for town center development, and provides an assessment of the existing policy framework against these critical elements.

Guiding Policy Framework

A number of plans have been developed for and by the Greenwood community that guide development of the town center area. These plans serve as the overall guiding policy framework for the designs in this thesis, and are summarized below. Specifics of the plans, including vision, objectives and design interventions are considered and summarized in Chapter 3, Design Strategy.

A. Seattle Comprehensive Plan (1995)

Seattle's Comprehensive Plan was prepared by City staff and adopted by City Council in response to State Growth Management legislation. This legislation required the city to plan how it would address growth and development over a twenty year period. The Plan lays out the Citywide Vision, Goals, Objectives & Policies, including the urban village strategy.

The urban village strategy directs concentrated development into certain neighborhood centers with higher density housing, transit service, commercial goods and services, infrastructure and community amenities. The Plan identifies Greenwood/Phinney Ridge as a Residential Urban Village, with an emphasis on creating a mixed-use center with a focus on retail and residential uses served by transit. The addition of at least 350 new units was expected in the village over 20 years, although actual development has already exceeded these figures (as it has in most city neighborhoods.)

Goal and policy statements from each neighborhood plan are adopted into the Plan and used to determine consistency of projects with the Plan. Most statements are general and are not prescriptive/specific requirements.

Figure 4: Seattle Comprehensive Plan map showing designated urban villages.
Source: Comprehensive Plan, p. 10-11.
B. Greenwood-Phinney Neighborhood Plan (April 1999)

Implementation and realization of the Comprehensive Plan started with the development of Neighborhood Plans, work on which began in 1996. Greenwood-Phinney's Plan was prepared by A Northwest Collaborative Consultants closely working with the community. While the entire Neighborhood Plan technically carries no legal weight, it is a strong indicator of the Community's desires.

The vision and concepts formed the basis for the goals and policies subsequently adopted into the Neighborhood Planning Element of the Comprehensive Plan. A number of design ideas are discussed in the neighborhood plan. Most of these are not specifically adopted, but indicate the tone and flavor of neighborhood design discussions.

The Plan identifies potential redevelopment of the Greenwood Shopping Center properties as "a great opportunity to reframe Greenwood," and further states "this location has the potential to become a part of what unifies the community" (8). The Plan contains two conceptual plans and principles for this redevelopment. While primarily the work of the consultant and not necessarily indicative of community support (Spiegel interview), these plans include some interesting ecological principles, which are detailed in the matrix in Chapter 3.

Goals and policies adopted into the Neighborhood Planning Element of the Comprehensive Plan were broad and general, and didn't include specific reference to, or design interventions for, the Greenwood Shopping Center properties. Based on the Plan, the neighborhood identified Key Strategies for Implementation, which were adopted in a matrix. The City has committed to including some of these in the City's work plans.

C. Greenwood/Phinney Main Street Design Report (March 2001)

This report was the first step in implementing the Neighborhood Plan. It was prepared by a consultant to the community, MAKERS architecture, and paid for by City "Early Implementation" funds. It recommends and prioritizes design improvements in the existing linear business core area on Greenwood Ave. and 85th St. to facilitate neighborhood plan implementation.

The plan concept consists of a set of circulation and design projects, and a palette of urban design elements to strengthen and unify the area's visual identity. Recommendations for the Greenwood business core emphasized "pedestrian connectivity and the reconfiguration of Greenwood Ave. N. for smoother traffic transitions" (5). Specifics from the plan are included in the matrix.

D. Greenwood Town Center: Concepts for Potential Redevelopment (December 2002)

This plan was also prepared as result of Neighborhood Planning recommendations. It was prepared by consultants Heartland, GGLO Architects and Heffron, working closely with an active Citizen Advisory Committee and City staff. This town center plan was initiated by citizens to proactively guide and nurture the redevelopment potential of the town center area, particularly the Greenwood Shopping Center properties. While it was not officially adopted, it has received buy-in from the community, the property owner and Fred Meyer to a large extent. It includes both a Transportation and Market analysis. This plan has aspects of a strategic urban design plan, and gets much more specific than other Plans on the physical manifestation of the community's vision.
Town Center Plan (Cont’d.)
Projected development scenarios were included in the plan, which identified the most likely scenario to be the addition of: 125,000-175,000 square feet of commercial and 750-1000 residential units throughout the center (see map below). The preference is for these to be in mixed use structures. The Plan proposes increases in development capacity through a contract rezone in return for constructing pedestrian related amenities.

The 142 recommendations regarding Economic Development, Urban Design, and Transportation are summarized in the matrix.

Guiding Policy Framework (Cont’d.)

E. Greenwood/Phinney Neighborhood Design Guidelines (June 2004 Draft)
Design guidelines grew out of the Neighborhood Planning process. The City is now finalizing the neighborhood-wide guidelines that were initially drafted by a consultant & put on hold pending completion of the Town Center Plan. The neighborhood-wide guidelines cover: Site Planning; Height, Bulk & Scale; Architectural Elements and Materials; Pedestrian Environment; and Landscaping. Town center specific guidelines are based primarily on the urban design recommendations of the Town Center Plan.

Redevelopment Potential

<table>
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<td>250,000</td>
<td>264</td>
</tr>
<tr>
<td>Moderate</td>
<td>150,000</td>
<td>150</td>
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<tr>
<td>Low</td>
<td>50,000</td>
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Note
Figure 5: This figure, from the Greenwood Town Center Plan, shows the preferred development scenario, the report shows the Greenwood Shopping Center Properties, in blue, as having a high potential for redevelopment. Under this scenario, likely development capacity was set at about 250,000 square feet of retail space and 264 residential units. Source: Greenwood Town Center Report, p. 65.

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Elements of Sustainable Community Design

Based on a review of a number of theories and the various existing plans, three elements stand out as being critical to sustainable community development. These critical elements are: Green Infrastructure, Livability, and Placemaking. These three elements are the guiding principles for this project. This section outlines these guiding principles and concludes with an assessment of existing plans based on these elements.

Sustainable Community Design

Seattle's Comprehensive Plan: Toward A Sustainable Future refers to sustainability as "the long-term social, economic and environmental health of our community. A sustainable culture thrives without compromising the ability of future generations to meet their needs" (Comprehensive Plan, ix). The Comprehensive Plan's four core values are seen as the foundation upon which to build a sustainable future. These core values are:

1. Protect the environment;
2. Retain a sense of community;
3. Build a strong economy; and
4. Ensure no one is left out (Comprehensive Plan Digest).

The urban village strategy is the City's means of achieving a sustainable future. This strategy includes policies that strive to develop and enhance the following qualities of urban villages:

- Diversity in age, income, culture, employment and interests;
- Vibrant, pedestrian oriented commercial areas;
- A variety of housing types;
- A strong relationship between residential and commercial areas;
- Community facilities within walking distance of the village core;
- Transit, bicycle and pedestrian facilities with connections to neighboring villages, and good circulation within the village and between the village and surrounding neighborhoods;
- Well integrated public open space; and
- A unique identity reflecting local history, natural features and culture (Comprehensive Plan, x).

Citywide environmental goals and policies were added well after initial plan adoption, and are not well integrated with the urban village strategy.

Condon has identified Six Principles of Sustainable Communities (Lecture Notes), most of which overlap with those identified in Seattle's plan, as follows:

1. Mix of housing types with a broad range of densities in the same area.
2. A compact walkable neighborhood where basic services such as transit and shops are within a 5-6 minute walking distance.
3. Buildings that present a friendly face to the street.
4. An interconnected street network.
5. Lighter, greener, cheaper, smarter infrastructure.
6. Natural drainage systems where surface runoff infiltrates naturally back to the stream.

From both of these sources, there seem to be two subsets within the rubric of sustainability: Green Infrastructure and Livability. These are detailed further in the next section.
Elements of Sustainable Community Design (Cont’d.)

**Green Infrastructure**
Green infrastructure includes the principles and strategies in the above discussion having to do with protecting and sustaining the environment. Condon states that green infrastructure refers to "...the ways in which natural systems are integrated into the structure of a community. Green infrastructure can mean using the naturally absorptive areas of the streets, forests and open areas to allow rainwater to infiltrate the ground. It can also mean integrating stream systems with large natural areas..." (Sustainable Urban Landscapes, 53)

Green infrastructure means using natural systems when possible to perform the functions that are now typically performed by human-made infrastructure. In practical terms, it typically refers to stormwater management.

**Livability**
Livability includes the majority of principles in the lists on the previous page. A livable place is one that is capable of sustaining a good life. Many of these principles are pulled from the work of the New Urbanists, who pulled the principles from older communities that seemed to work well. These principles have been adopted by many people under many different names, but essentially include the following:

- Compact, walkable neighborhoods.
- All facilities and services within walking distance.
- Mixed uses.
- Variety of housing options.
- Connectivity of street and pedestrian system.
- A commercial core with higher density housing surrounding and mixed in with it.

**Placemaking**
Place Theory promotes identification and reinforcement of the historic context, human needs, and essential qualities of a place in an authentic and un-sentimental way. This addresses the urban village strategy's objective of developing and enhancing "A unique identity reflecting local history, natural features and culture" (Comprehensive Plan, x).

Trancik discusses place theory as giving "...physical space additional richness by incorporating unique forms and details indigenous to its setting. This response to context often includes history and the element of time and attempts to enhance the fit between new design and existing conditions....In place theory, social and cultural values, visual perceptions of users, and an individual's control over the immediate public environment are as important as principles of lateral enclosure and linkage" (98). He further states that "The essence of place theory in spatial design lies in understanding the cultural and human characteristics of physical space" (112).

This may include symbols and fragments of the past to show continuity of time. According to Lynch, each locality should seem continuous with its recent past and its near future (116).

These three elements are described in general terms here and are operationalized in the Design Strategy Matrix in Chapter 3.
Each of the existing plans to a greater or lesser extent address the three elements of sustainable community design. Following is an assessment of how the existing plans address these elements. This assessment serves as the basis for the Design Strategy matrix presented in Chapter 3.

**Seattle Comprehensive Plan (1995)**
The *urban village strategy* covers Livability quite well. It also acknowledges Placemaking. While protecting the environment is a core value of the Plan, the concept of Green Infrastructure is not integrated with the *urban village strategy*. Additionally, the designation of Greenwood/Phinney as a *Residential Urban Village* doesn’t recognize the dual role of the town center area as both region and local serving. The interest and desire of the community is key to ultimate development of the Greenwood town center. The Plan does include a core value to “Build a strong economy” and includes an economic development element which provides guiding policy.

**Greenwood-Phinney Neighborhood Plan (April 1999)**
The Neighborhood Plan addresses all three areas: Green Infrastructure, Livability and Placemaking. Several preliminary plans for the town center are presented, and include Green Infrastructure elements. Green Infrastructure discussion and recommendations, however, were not translated into the adopted Plan and key strategies. The Plan is general and leaves much of the detailed work to further planning efforts. Additionally, the Plan doesn’t fully address the dual nature of the commercial core: neighborhood and region serving.

**Greenwood/Phinney Main Street Design Report (March 2001)**
This plan has a narrow focus on the linear business core. It addresses community identity and Placemaking to a large extent, and addresses some aspects of Livability. It does not address Green Infrastructure, nor does it address using the unique natural setting or aspects of the area’s natural history as part of Placemaking (except for views.)

**Greenwood Town Center: Concepts for Potential Redevelopment (December 2002)**
This report contains a set of good design recommendations. It addresses Livability elements well. Additionally, it does address the dual nature of the area as both region and local serving to some extent. However, the Plan: (1) doesn’t go far enough on Green Infrastructure (there are many more ways to put the green in Greenwood!) Specifically, it doesn’t address stormwater/drainage or current peat issues; and (2) doesn’t adequately address how to maintain/reinforce a sense of place – particularly in relation to the natural setting, and use of this as design inspiration. This report includes a Market Analysis, which grounds it in reality, however it appears the plan is driven by market and economic ‘realities’ much more than by consideration of the 3 elements of sustainable community design.

**Greenwood/Phinney Neighborhood Design Guidelines (June 2004 Draft)**
The draft design guidelines address Livability and Placemaking well. Green Infrastructure is not addressed, in large part because these guidelines were based on the Town Center Plan.
CHAPTER 3 DESIGN STRATEGY

This chapter outlines the design strategy used to prepare and assess the master plans as part of this project. The community's vision and objectives were culled from the various existing plans and are summarized below. These are accepted as the Vision and Objectives for the master plans and set the broader stage for design. Following from the vision and principles is a design strategy matrix that summarizes the set of design instructions used to develop the plans. Policy direction from the existing plans forms the basis for the matrix. Additions to the existing policy framework are made to more fully address all three elements of sustainable community design.

Vision

A community that has:

- A center with the familiarity of a small town main street and the vibrancy, convenience and amenities of a diverse urban center.
- Vibrant, economically vital, and pedestrian oriented commercial areas providing a variety of goods & services within walking distance.
- A strong and positive relationship between residential and commercial areas.

Objectives/Principles

1. Put the Green Back in Greenwood.
2. Celebrate the heart: revitalize the historic commercial crossroads at N. 85th St. and N. Greenwood Ave.
3. Improve mobility and accessibility in the neighborhood.
4. Maintain the human scale.
5. Address the infrastructure deficit north of 85th St.
6. Connect the mixed use district to reinforce the center.
7. Populate the urban core.
8. Respect the surrounding community.

Design Strategy Matrix

The matrix on the next two pages more specifically fleshes out the design instructions used to develop the master plan alternatives and design details. Following is an explanation of the categories used in the matrix:

Elements of Sustainable Community Design:
Green Infrastructure, Livability, and Place-making, as defined in Chapter 2 and used throughout this document.

Principles: Culled from existing plans and literature relating to the elements of sustainable community design. These are the overarching principles for development of the master plan alternatives.

Measures: Developed as indicators for how well the principles are being met. They will be more fully described and used in Chapter 7 to assess the master plan alternatives.

Program Guidelines: Design & performance targets pulled from the existing plans. This is the set of design instructions used to develop and judge the master plan alternatives.

Specific Design Interventions: A detailed list of design moves from the existing plans, with additions to address all elements of sustainable community design. These informed development of the master plan alternatives and were incorporated, as possible, in the designs.
<table>
<thead>
<tr>
<th>Program Guidelines</th>
<th>Measures</th>
<th>Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Program planning</td>
<td>1. Integrate the concept of the program into the curriculum and classroom management.</td>
<td>Provide educational materials, tools, and activities that support the program.</td>
</tr>
<tr>
<td>2. Program funding</td>
<td>2. Engage community partners and stakeholders to support the program.</td>
<td>Strengthen the program by involving local community leaders and businesses.</td>
</tr>
<tr>
<td>3. Program delivery</td>
<td>3. Ensure the program is delivered effectively and efficiently.</td>
<td>Focus on the delivery of the program by addressing the needs of the participants.</td>
</tr>
<tr>
<td>4. Program evaluation</td>
<td>4. Monitor and evaluate the program regularly.</td>
<td>Use data to improve the effectiveness of the program.</td>
</tr>
<tr>
<td>5. Program outcomes</td>
<td>5. Set clear goals and objectives for the program.</td>
<td>Ensure that the program outcomes are measurable and achievable.</td>
</tr>
<tr>
<td>6. Program sustainability</td>
<td>6. Plan for the long-term sustainability of the program.</td>
<td>Develop strategies to ensure the program continues to function in the future.</td>
</tr>
</tbody>
</table>

### Specific Design Interventions

- **Designing culturally relevant curriculum:** Include local history, culture, and language in the curriculum to make it relevant to the students.
- **Providing resources for students:** Ensure students have access to the necessary resources to succeed in the program.
- **Collaborating with community organizations:** Partner with local organizations to provide additional support and resources.
- **Incorporating technology into the program:** Use technology to enhance the learning experience and engage students.
- **Fostering positive student-teacher relationships:** Build strong relationships between teachers and students to create a supportive learning environment.
- **Creating a safe and inclusive learning environment:** Ensure the program is safe and inclusive for all students.

**Table 1 (cont'd.)**
This chapter provides contextual information that helped guide Master Plan development. It includes Greenwood's history, information on Greenwood's population, community character, and built character, and a summary of the market analysis prepared for the Town Center Plan.

Greenwood's History

Commercial Core - Transportation Based

At the beginning of the new century Greenwood began to emerge and grow as a settlement. By the early 1920's the Greenwood district had all of the retail outlets & services found in a small town of the times (SPL, 1-2).

Greenwood developed as a streetcar suburb – the streetcar ran on 85th St. and Greenwood Ave. The Interurban railway, built in 1910 to connect Seattle and Everett, also had

Prior to human settlement, Greenwood was a forested, marshy swamp and peat bog, considered unsuitable for building. This landform was likely scoured by the Vashon glaciation some 10,000 years ago. This swampy bog constitutes the headwaters of Piper's Creek, once a salmon bearing creek, which empties to the Puget Sound. Figure 7 shows the evolution of Piper's Creek from the time of early settlement to today, showing how it once extended close to the project site.

There is no known Native American presence in the immediate area, although it is possible natives gathered cranberries in the bog, as they did in other bogs in the area.

Early settlers began trickling into the area in the 1870's. Construction of the Great Northern Railroad along the coast in the 1890's enabled lumbermen to penetrate the woods, and the ensuing sawmills turned Green Lake, Haller Lake and Bitter Lake into log ponds (Beurge, 27). Dirt and plank roads connecting Seattle with Edmonds to the north were built in the early 1900's.

From Big Box to Town Center

Theresa Cherniak August 2004
a stop in Greenwood. The community's historic commercial core developed where the streetcar stopped, at the intersection of Greenwood Ave. and 85th St.

The majority of modest homes in the neighborhood were built between 1900 and 1940. Some of oldest homes were originally summer cottages. At the end of WWII the area grew again quickly, and about a third of the housing reflects the "hurried and bland" construction of this period. (SPL, 2)

Greenwood's hey-day as a commercial center was in the 1940's, when it boasted a variety of retail and services, grocery stores, a public library, and a department store. Most of Greenwood developed outside Seattle's borders -- until 1952 Seattle's northern bounds was 85th St. Areas N of 85th developed under King County's more relaxed standards.

Until city annexation, "Greenwood had a reputation as a somewhat naughty place, with nightclubs, taverns and a Chinese gambling den flourishing in what was unincorporated King County, right across the city line. The home of the Taproot Theater was, at one point in its history, a porno palace" (Dietrich, 22).

History (Cont'd)

City Annexation, Unfulfilled Promises
Annexation to the city in 1952 brought the promise of paved streets and sewers. In 1971 the City installed a storm drain system in NW Greenwood to address flooding & high groundwater problems, however, almost 50 years later residents still complain of the lack of sidewalks & inadequate storm sewers. By the time the drainage improvements were beginning, "much of the neighborhood was slipping into slum." (Historylink) For a long period, area development lagged behind the rest of the city.

Greenwood's Fred Meyer discount store was built in 1971, just north of 85th St. Residential land was rezoned & street rights-of-way were vacated to make development possible.

Today's commercial core is surviving, though not as thriving and as bustling as it once was.

Urban Village
The City's Comprehensive Plan, adopted in 1995, identified the Greenwood core as an "urban village." The neighborhood subsequently prepared a neighborhood plan identifying revitalization of the commercial core as a priority, and redevelopment of the Greenwood Shopping Center properties as a prime opportunity. The community is keen on redevelopment of the shopping center properties.

Nature Reasserts Herself
Recently, the area's natural history has begun to reassert itself. The peat layer which underlies a large portion of northern Greenwood has begun to compress and sink, due presumably to dewatering occurring with new development as well as recent drought conditions. Portions of roadways and homes have been sinking, leading to resident and City concerns and various responses. This issue is addressed in the Inventory & Analysis.

Figure 8: Corner of Greenwood Ave. and 85th St. in 1947. Source: U. of Washington Special Collections.

From Big Box to Town Center
Theresa Cherniak August 2004
Figure 9: The Robert D. McCausland Mural, painted in the 1920's on a wall in an apartment on Greenwood Ave., shows the community as it was at the time. Note the area covered in water in the upper right hand corner, which appears to be on the current Greenwood Shopping Center properties. Also note the trolley system. Source: Greenwood Neighborhood Plan, p. 8.
**Existing Population & Housing**

Greenwood is a fast growing, relatively racially homogeneous, and gentrifying, neighborhood. It is primarily a neighborhood of single family homes, though new multi-family development is taking place in the commercial core on both 85th St. and Greenwood Ave. A new condo building, a market rate apartment building and several high quality subsidized housing projects have been built on 85th St. just east and west of the commercial core and on Greenwood Ave. at 87th St.

Particularly in the area north of 85th St., owner occupied housing is significantly more affordable than the citywide median, although rents are about the same as citywide averages. This area has fewer amenities, and the housing stock is newer and has less character than areas to the south. As a result of these factors, younger families are moving in and renovating homes. The census shows a big decrease in the number of elderly in the area, potentially indicating the sale of family homes and downsizing — it also may indicate the lack of smaller, affordable senior housing.

In 2000, there was still a big difference between areas north and south of 85th St. in terms of incomes, housing value, and diversity. Areas north of 85th had lower incomes and housing values, greater racial diversity and higher percentages of rental properties. These differences increased between 1990 and 2000, however, their current direction is uncertain. Anecdotal evidence suggests both that the Hispanic population continues to grow, increasing the racial diversity, and that incomes and housing values are increasing as younger families (with children) start to move into the area and renovate the homes. Single family rental homes will likely be sold and renovated to owner occupancy as demand and prices increase.

**Potential Future**

As housing prices increase throughout the city, people look for less expensive areas. Once undesirable because they were too far away or didn't have the desired amenities, these areas are now becoming more attractive.

The upscale character of the shops further south on Greenwood Ave. is slowly moving north, though none have pushed past 85th St. With amenities moving up Greenwood Ave. and the likely Fred Meyer/Town Center redevelopment, Greenwood is becoming more desirable.

Gentrification is possible in the area, with people buying and renovating these more affordable homes. This process has likely already started. The area is becoming more affluent, pushing out the lower income residents and reducing ethnic and income diversity. The area south of 85th St. has already gentrified, and the area north of 85th St. appears to be in the process of gentrifying.

**Implications for development:**

With a younger and more affluent population in the area, there is an increased and changing market for goods and services. This group has more options and therefore may be more demanding — different types of goods and services may be supported than are currently available. The pressure for infrastructure improvements will increase as people invest more in their homes and have children.

Sidewalks in particular will increase in importance. With a younger and more affluent population, there may be more openness to innovative and greener solutions to infrastructure issues. As gentrification occurs, racial, income, and other types of diversity will decrease. Efforts will be needed to ensure a range of housing types and sizes, and a range of services in maintained.
Community Character

“The beauty of Greenwood is in its contrasts. It’s a kind of old fangled neighborhood with a trendy edge, a place where coffee shops mix with espresso bars and where young families live among senior citizens. This is a community that comes together for block parties and tree plantings, for holiday caroling and Seafair Parades, for arts and antiques.”

Seattle Post Intelligencer Webtowns

Greenwood’s history has resulted in an eclectic but strong community. The historic commercial core is the locus for a number of events, including the Classic Car and Rod Show, the summer Seafair parade and festival, pumpkin carving, Halloween Trick-or-Treating, a holiday tree lighting, and an annual ArtWalk where local businesses feature the work of local artists.

Greenwood is a modest place. “The commercial hub seems to have one foot comfortably stuck in the 1950’s. The shop owners are real and unpretentious. The kids still go to the Boys & Girls Club. The Fred Meyer is as worn as a comfortable old boot” (Dietrich, 19).

Other cultural events include live performances at the Taproot Theater, ethnic restaurants and Latin markets on Greenwood Ave., a dance studio and yoga studio, and several pubs. Community character in addressed in more detail in the Inventory and Analysis.
Built Character

Greenwood’s commercial core is characterized by low-rise, historic, brick-faced storefront buildings dating from the 1920’s. These house a diverse mix of merchants including antique stores and restaurants. The overall feel is historic, funky and eclectic.

The community’s image of itself, as described in its Main Street Plan, is that of being a solid, and stable community, with simple vernacular architecture and mid-20th century signs (6). These are elements the community cherishes about itself, and wants to preserve.

The immediate area is also characterized by 1950’s to 1970’s era, concrete box structures. More recent development is much larger in scale, but is attempting to fit in through use of similar materials and detailing, primarily brick. The images on this page show the range of built character in Greenwood.

Figure 11: Images of Greenwood’s built character. Clockwise from top left: Antique store on Greenwood Ave.; new Safeway streetscape; 1920’s architectural detail; new mixed use on 85th; Pig & Whistle bar & grill; fish at seafood store on Greenwood; funky storefront on Greenwood.

Figure 11 (Cont’d.): Images above, clockwise from top left: Fred Meyer store; Washington Mutual Bank historic building at corner of 85th St and Greenwood Ave. (Photo: Seattle Times/Post Intelligencer); view from Safeway parking structure to residential buildings. (Photos by author except as noted)
A market analysis prepared by Heartland in April 2002 for the Town Center Plan identified market trends guiding development in Greenwood. It began with demographics which, in combination with regional competition and land availability, are the primary determinants of the size, format and composition of retail developments (Lyon, 29). The market study's demographic findings included: relatively consistent population growth since 1980 within the primary service area (one mile ring) of Fred Meyer, which is expected to continue; high average incomes, which are expected to continue to rise; and a high percentage of population between the ages of 25 and 54 yrs old—typically the age group with the largest annual increases in income & the highest annual expenditures on retail goods.

Commercial Market Analysis

The report concluded that the retail market in Greenwood's core was relatively healthy and the long term outlook was good. Retail vacancies were low since rents have kept pace with other closer-in neighborhoods. The diversity of goods available and limited supply of land for the competition are significant advantages that make the neighborhood function as a strong retail center.

Redevelopment of the Greenwood Shopping Center properties is seen as a key opportunity that will have a positive substantial spillover effect on the neighborhood.

The analysis concluded that businesses targeted for the neighborhood should build on the existing customer base, and include:

- Art galleries
- Bookstores (e.g., Elliott Bay, B&N)
- Boutique clothing and jewelry
- Home Stores
- Food: sidewalk cafes, ethnic restaurants, brew pubs and restaurants
- Entertainment: art movies & live music in existing venues.

Commercial and Residential Market Analysis

The analysis compared Greenwood to other neighborhood centers (Fremont, Ballard, Wallingford) and found that the neighborhood was positioned as a full service retail hub. The existing variety of goods and scarcity of land for new commercial centers are the most significant competitive advantages.

Specific findings were that:

- Not much retail development is likely east of Greenwood on 85th—mixed use here will likely include office uses.
- Restaurants and the Taproot Theater are some of strongest businesses in neighborhood.

Retail rents in the area in 2002 were $16/sf per year on a net basis, and new shop space was expected to rent for $13-17/sf. Larger spaces for anchor tenants would likely range from $16-19/sf. Competition between current and future retailers was less likely to be an issue than rising rents because of the close proximity to the newly redeveloped center.

Residential Market Analysis

The residential market was considered strong, with lower rental and sales prices than nearby neighborhoods. The analysis expected new development of townhomes, stacked flat condos and apartments. Following are data on existing residential units in the area:

- Townhomes: average size - 1,300 square feet (sf) (range 833-1500)
- Stacked flat Condominiums: average size - 823 sf (450-1532 sf)
- Stacked flat Apartments: average rent - $807 (2002), average size - 710 sf

Single family housing prices continue to rise out of reach of many. Homeownership in Seattle is now down to 47%, compared to the national average of 66%. Given these trends, the analysis concludes that multifamily options will be an attractive alternative to single family housing.
Retail Center Planning Considerations

“To achieve long term sustainability, plans for rebuilding neighborhood shopping streets must...embrace solutions that are realistically market based. It is not enough to base them solely on enlightened public policy goals or the community’s wish list, no matter how well intentioned.” (Beyard, vi)

Greenwood contains two very different retail areas: the Greenwood Ave. neighborhood shopping street, focused at the intersection of Greenwood Ave. and 85th St., and the broader serving community shopping center, which includes the Fred Meyer and other large format retailers. The two types of retail areas have different and sometimes conflicting design requirements that can make compatibility between the two difficult. Research indicates, however, that there may be flexibility in the requirements. The intent is to ensure compatibility between the community shopping center and neighborhood shopping streets, while ensuring the town center’s economic vitality. This section summarizes literature on this issue that was used in development of the master plan alternatives.

Neighborhood Retail

The Urban Land Institute (ULI), a developer based organization, recognizes the importance of neighborhood shopping streets and districts in creating more livable environments and sustainable communities – and that this can be good for business! In their report, Ten Principles for Rebuilding Neighborhood Retail, they discuss how neighborhood streets can compete with other shopping destinations “by providing goods and services tailored to the specific needs of each neighborhood in an environment that is convenient, service oriented, pedestrian-scaled, and connected to the urban lifestyles of the neighborhood’s residents” (4). Many of the Livability factors discussed in Chapter 2 reflect the importance of both the commercial and residential components of a neighborhood, and also appear to be good for business.

Three of the ULI’s ten principles are most pertinent to this project, as follows:

Think Residential: “Successful retail depends on successful residential neighborhoods....Where residential growth and revitalization is occurring, retail is primed to follow....” (6). Mixed use developments with housing, retail and office uses “supports retail by creating more customers, supporting longer business hours, and bringing in rents up to 20 percent higher” (7). Office uses, professional tenants like doctors and lawyers, and educational facilities are “demand anchors” for retail while civic, cultural and entertainment anchors attract visitors (21).

Honor the Pedestrian: “The first goal for a neighborhood shopping street should be to satisfy the aspirations and enhance the lifestyles of a neighborhood’s residents. Neighborhood retail should not be structured in a way that encourages commuters to move quickly through the neighborhood to reach other neighborhoods” (8). They also caution not to “…let traffic engineers rule the streets” (8), recognizing that accommodating traffic is only one of many goals for successful shopping streets. Both the pedestrian and automobile must be accommodated.

Parking is Power: “Easy accessibility, high visibility, a sense of personal security, and adequate, convenient parking are all preconditions for successful retailing, and without them retail likely will fail, regardless of the
Retail Center Planning Considerations (Cont'd.)

- A center turn lane or controlled access at the primary entrance. Primary access at mid-site (47-49).

Parking is important. Customers will usually choose stores nearest and easiest to reach from their home. Adequate, free and convenient parking in comparison to the local competition is critical. The goal is to have a vast majority of parking directly in front of the center and within 300-350 feet of the main entrance (44-47). This goal is met in the existing development.

Changes, however, are underway in the retail world. In order to remain competitive with new ‘lifestyle centers’, retailers are making stores more ‘comfortable, intuitive and appealing’ (52). Also, urban markets have different constraints and retailers are beginning to rethink their assumptions (e.g., multi-level stores, less parking).

By locating as part of a larger retail area, the store serves as a generator of retail demand and vitality, creating additional demand. If augmented with restaurants, community services and designed as a pedestrian center, they can become destinations - which may mitigate the need for massive frontal exposure (98).

Lyons’ research found that flexibility in retail siting, design and operations is a function of market strength and demographics. Amenities reduce price competitiveness and sales, and retailers are generally more amenable to capital than operating cost increases. While there is little evidence that amenities increase sales, this may be changing. Finally, he concludes the retailer will risk innovation only when a location is a ‘sure thing’ (83-85). Information on the retail market areas is shown in the Inventory & Analysis.

Community Shopping Center

To successfully plan for the redevelopment of the Greenwood Town Center – including an expanded Fred Meyer and other successful retail stores - one must first understand the conventional rules of auto oriented shopping and how and when these can be modified. Retailers are inherently conservative and risk averse, and their willingness to innovate is dependent on market conditions & the retailers attitude & corporate goals (Lyons, 49-53).

Typically, these stores assume people rely exclusively on the car for shopping, and see no economic value in catering to the pedestrian. Richard Lyons, in his Master's thesis on this topic, summarizes the typical planning requirements:

- A convenient, highly visible location at or near major arterials, preferring corners at the intersection of 2 arterials.
- Signage, scale and façade orientation designed to appeal to drivers on an arterial moving at 35 mph.
- Intuitive circulation and ample parking within close proximity of front entrance.
- Dedicated service drives behind and at sides of buildings.
- A limited number of entrances with clear internal circulation and minimal external glazing - preferring one way in and out.

They do recognize, however, that parking needs will be less because some people will walk, bike or use transit. Additionally, they admit that in dense urban locations "innovative parking designs – such as parking behind, above or below the stores – should be considered" (13).
CHAPTER 5  SITE INVENTORY AND ANALYSIS

Existing Neighborhood and Town Center Plans were based on extensive inventory and analysis of area conditions, though in general these are not included in the reports. The reader, therefore, typically isn't aware of the extent of this work. For this project, a comprehensive inventory and analysis was completed of the physical and social aspects of Greenwood considered pertinent to the town center design. This information is presented on individual maps, followed by a Synthesis Map that summarizes the key opportunities and constraints.

The chapter starts with an aerial photo history of the site, followed by current site images. It concludes with the Inventory and Analysis and Synthesis Maps.

The Site, Defined

The approximately 15.7 acre Greenwood Shopping Center (GSC) properties were the starting point for defining the site area for this project. Also included are several adjacent properties within this 3-1/2 block area that are not owned by GSC but were deemed important to include in order to comprehensively plan for the area. Finally, 100' of the single family residential area just north of 87th St. was included to provide room for transitional land uses. The project area also includes all street rights-of-way within this defined area.

The final land area for the project is, therefore, 19.7 acres. The boundaries are shown in Figure 12 below.

Many different geographies are referred to in this report. Following are definitions for these areas, which are shown on the map below:

**Urban Village**: that area defined by the City in its Comprehensive Plan as the hub of commercial and residential activity in Greenwood & Phinney Ridge. It includes a linear corridor down Greenwood Ave. along Phinney Ridge.

**Town Center**: A term coined by the Greenwood community in its Town Center Plan to describe a smaller area focused on Greenwood itself.

**Commercial Core**: Refers to the smaller, older main street area focused at the intersection of 85th St. and Greenwood Ave.

![Figure 12: This map shows the site area and the boundaries of the three geographic areas referred to in this report.](image-url)
Figure 13

Historic Aerial Photos

CHANGES

From Big Box to Town Center

Source: University of Virginia Library

and City of Charlottesville (DPS Engineering Library)
Site Pictures - Legend

The images on the next three pages show various aspects of the site and immediate surroundings. Each page shows images of structures and the surrounding streetscape on one of the blocks, as shown below.

Figure 14: Site Pictures Legend
Site Images - Block 3

Figure 17
Inventory & Analysis Maps

The Inventory and Analysis maps are grouped as they relate to the three elements of sustainable community design: Green Infrastructure, Livability, and Sense of Place. Individual Inventory and Analysis maps are presented first, followed by a Synthesis Map that identifies the top urban design issues and idea generating concepts identified through the inventory and analysis. These opportunities, constraints and design implications served as the basis for master planning and detail design work.

The following Inventory and Analysis maps are included:

**Green Infrastructure**
- Microclimate
- Shaded Relief Map
- Drainage System
- Topography & Soils
- Peat Thickness
- Depth to Compressible Soils
- Impervious Surfaces & Vegetation

**Livability**
- Existing Land Use
- Zoning
- Building Heights
- Business Type & Size
- Street Right-of-Way and Subdivision Pattern
- Transportation

**Sense of Place**
- Community Resources
- Figure-Ground (Positive-Negative Space)
- Imageability

**Retail Market Areas**

**Synthesis Map**
Figure 19

Note: Hillshade and shaded relief base data provided by the Puget Sound Lidar Consortium.

Elevation
- High: 467
- Low: 0

SHADED RELIEF MAP OF PROJECT AREA

Seattle Public Utilities
Greenwood Subsurface Characterization Study
Seattle, Washington

April 2004
21-1-09915-005

Source: Shannon & Wilson, Figure 2

From Big Box to Town Center
Theresa Cherniak August 2004
Oppportunities & Constraints

Opportunities:
- Natural setting and walking trails
- Scenic views of the river
- Close proximity to the town center
- Potential for development

Constraints:
- Limited access to transportation
- Limited infrastructure
- Limited funding for development
- Environmental concerns

Inventory & Analysis

Figure 2
opportunities & constraints

Figure 20

topography & soils

interior & analysis

From Dig Box to Town Center
Figure 22

Legend

Peat Thickness Contour - 1 Ft. Interval

Peat Thickness (Ft) Greenwood Peat Study Explorations

High: 16.5 ● Explorations w/ Peat

Low: 0 ▲ Explorations w/o Peat

Site Boundary (Added)

Seattle Public Utilities
Greenwood Subsurface Characterization Study
Seattle, Washington

PEAT THICKNESS

April 2004 21-1-09915-005

Source: Shannon & Wilson, Figure 8
Figure 23

Legend

Depth Contour- 1 Ft. Interval

Depth to Compressible Soil (Ft)
- High: 38.5
- Low: 0.0

Greenwood Peat Study Explorations
- Explorations w/ Peat
- Explorations w/o Peat

Seattle Public Utilities
Greenwood Subsurface Characterization Study
Seattle, Washington

DEPTH TO COMPRESSIBLE SOIL
April 2004 21-1-09915-005

Source: Shannon & Wilson, Fig. 9

Site Boundary (Added)
OPPORTUNITIES & CONSTRAINTS

There are some opportunities for the area to be more vibrant and activate the existing development. Some of these include:

- Enhancing public spaces and open areas
- Improving connections between the different parts of the neighborhood
- Developing new commercial and residential uses
- Creating more green spaces
- Enhancing the visual and physical connections to the river

Existing Land Use

FIGURE 25
Zoning

Figure 25

Opportunities & Constraints

There is no recognized boundary for the C-1 zone and

There is a small L-1/R-2 stand area which is needed

For mixed use development

On the far west side of the commercial

and commercial areas.

where the commercial area is several blocks

along the commercial shopping center.

Figure 25 - Zoning of commercial shopping centers (property with 2006 zoning code: C-1).
Building Height & Business

Type A Size

Business Type A Size

Opportunities & Constraints

Fig 27

Ongoing economic development requires an understanding of the county’s current key economic issues. The current economic situation is driven by the following factors:

- Job creation and the attraction of new businesses.
- Infrastructure development and the adequacy of services.
- The availability of skilled labor and the education system.
- The business climate and regulatory environment.
- The quality of life and the attractiveness of the area.

These factors contribute to the overall economic health of the county and its ability to attract and retain businesses. The economic development strategy is centered on addressing these key factors and creating a business-friendly environment.

Constraints

- Limited availability of developable land.
- High cost of land and development.
- Regulatory and permitting processes.
- Access to financing and capital.
- Competition from other areas.

Opportunities

- Growth in the tech industry.
- Expansion of existing businesses.
- Development of new commercial areas.
- Investment in infrastructure.
- Partnerships with local universities and colleges.

Building Heigths - Opportunities & Constraints

The development of the area is guided by a comprehensive land use plan that outlines the future growth and development of the region. The plan includes provisions for the development of new commercial areas, the expansion of existing businesses, and the improvement of infrastructure.

The following diagram illustrates the proposed development areas and the key constraints that need to be addressed in the planning process:

- Vacant areas that are suitable for development.
- Areas with existing businesses and commercial parks.
- Areas with limited access to transportation.
- Areas with insufficient infrastructure.

The diagram also highlights the opportunities for development, including:

- Growth in the retail sector.
- Expansion of the industrial sector.
- Development of new residential areas.
- Opportunities for tourism.

The development strategy aims to create a balanced and sustainable development that benefits all stakeholders.

The following diagram illustrates the proposed development areas and the key constraints that need to be addressed in the planning process:

- Vacant areas that are suitable for development.
- Areas with existing businesses and commercial parks.
- Areas with limited access to transportation.
- Areas with insufficient infrastructure.

The diagram also highlights the opportunities for development, including:

- Growth in the retail sector.
- Expansion of the industrial sector.
- Development of new residential areas.
- Opportunities for tourism.

The development strategy aims to create a balanced and sustainable development that benefits all stakeholders.
The design is the first step and should be part of the design phase. In the design phase, the designer will require input from various stakeholders, including architects, engineers, and community members. The designer will work with these stakeholders to create a design that meets the needs of the community and is sustainable.

**OPPORTUNITIES & CONSTRAINTS**

The two major opportunities are:

1. Community Resources - The area has access to a number of resources, including public libraries, community centers, and parks.
2. Infrastructure - The area has access to a number of infrastructure resources, including electricity, water, and sewage.

**INVENTORIES & ANALYSES**

These are a number of resources that serve as...
Based on the design strategy and the knowledge gained through information gathered and analyzed in the previous chapters, an overall concept plan and two alternative master plans were developed. This chapter starts with the overall concept plan, which served as the basis for more detailed design. Two alternative master plans are presented, along with sections and axonometrics to further explain the plans. Design details and a closer look at the street types in the project give a fuller understanding of the two alternatives.

**Overall Concept Plan**

The overall concept plan is based on opportunities presented by the natural history of the area, its location relative to Piper’s Creek, expected redevelopment of GSC properties, the location of community facilities, and the drainage needs of the community. The overall concept is one of “Connections, with a Green Heart”, and is described in detail on the next page.

**Master Plans**

Two alternative master plans were developed to provide a range of options. These are presented in plan, section, and axonometric. The primary variables are the location and size of the Fred Meyer store, since this is the driver for the redevelopment, and the location and size of a proposed storm-/groundwater recharge and recreation wetland. Other variables include the location and mix of building and use types, the location and types of public spaces, and the street layout.

Alternative One keeps the existing Fred Meyer and expands it southward to link the store with 85th St. It includes a 2 acre wetland and increased stormwater infiltration. Most buildings other than the Fred Meyer are mixed use.

Alternative Two includes a new 2 story Fred Meyer store, with housing above, located on 85th St. It includes a 3+ acre wetland and removal of the portion of Palatine that is currently sinking, to be replaced with a pedestrian boardwalk connection. The master plans, sections and other drawings flesh out the details of these two alternatives.

**Design Details**

One sheet is presented for each sustainable community design element, detailing one aspect of the alternative plans related to that element, along with precedent photos. The aspects detailed are:

- Green Infrastructure - Wetland Design
- Livability - Pedestrian Walkway Design
- Placemaking - Materials

**Street Typology**

The proposed street system is an important aspect of the proposed designs. They are a large part of the implementation of the Green Infrastructure principles, as well as having important implications for Livability and Placemaking. This section shows the existing and alternative street typologies, followed by sections and descriptions of the streets.
CONNECTIONS, WITH A GREEN HEART

Create a true "Urban Creek's Legacy" for Piper's Creek through these Major Moves:

- Connect human and water flows to Piper's Creek.
- Provide Green corridors connecting all open space and the Village.
- Reveal and restore the Wetland's historic functions.
- Develop the wetland area as the "Green Heart" of Greenwood.
- Use public land to reveal and address stormwater issues (street right-of-way and parks).
- Reduce impervious surfaces and increase vegetation to increase stormwater infiltration.
- Address drainage in an artistic & educational way.

Existing Elements
- Parks and Playfields
- Piper's Creek
- Street Trees in Priority Area

Proposed Elements
- Proposed Marsh Areas
- Green Streets, incl. streets with natural drainage
- Proposed Street Trees in Priority Area
Alternative 2

Figure 4
Typical Extended Detention Wetland Section

WETLANDS

Green Infrastructure Details

Figure 42
Use Established Elements

Use Local Historic Materials

Re-create the Mural

Gateway Buildings

Figure 44
**Comparison**

Street Layout & Type

Figure 45
Street Type Sections & Plans

Figure 47
Street Type Sections & Plans

Figure 4b

This figure shows the street type sections and plans for a hypothetical urban area. The diagrams illustrate various street layouts and parking arrangements, emphasizing the importance of efficient traffic management and pedestrian safety. The plans highlight the integration of green spaces and parking facilities to enhance the overall urban environment.

Key Points:
- Street types: residential, commercial, and mixed-use.
- Parking arrangements: on-street, off-street, and mixed.
- Green spaces: parks, sidewalks, and tree plantings.
- Traffic flow: one-way streets, two-way streets, and roundabouts.

These diagrams are crucial for urban planners and policymakers in designing sustainable and livable communities.
CHAPTER 7 DESIGN ASSESSMENT

Two alternative master plans were prepared, based on the guiding principles set out in the Design Strategy Matrix in Chapter 3. The purpose of this Chapter is to assess the two alternative plans, as well as the existing conditions, against the measures included in the matrix. It begins with maps that provide detailed information on commercial and residential development and parking. These are followed by maps showing the design moves from each alternative that address the three elements of sustainable community design. Finally, a numerical assessment of the alternatives is presented, based on the measures listed in the Design Strategy matrix.

Development Details Maps
To perform an assessment of the existing conditions and alternative plans, many details about the plans were needed. The uses and layout of each building were therefore designed at a basic level, including residential unit layout, circulation, parking layout, and size of commercial storefronts, in order to understand and assess the proposals. These details are presented in the three figures on the following pages.

Assessment Maps
The major design moves from each alternative master plan that are intended to address each of the three elements of sustainable community design are then presented. These are shown in several figures and compared against each other.

Alternatives Comparison
The graphic assessments are followed by several tables that numerically compare the two alternatives and the existing conditions based on the measures listed in the design strategy matrix. As a recap, the measures were:

- % Effective Permeable Surfaces
- % of Residents within a 5 minute walking distance (1/4 mile) of daily destinations
- Range of Housing Types Provided
- Housing Density
- Commercial Frontage on the Sidewalk
- Street Interconnectivity
- Placemaking Elements

These measures help assess how well each design meets the elements of sustainable community design.

The intent was not to judge which alternative was better or to make a recommendation - each alternative is an attempt to fulfill the design strategy as laid out. They are both presented as different options to show that a more sustainable development could occur even if the Fred Meyer remains in its current location.
Figure 5

Residential Details

- 2 Bedroom 1 Bath
- 2 Bedroom 2 Bath
- 3 Bedroom 2 Bath
- 4 Bedroom 3 Bath

Parking

- 100' of parking
- 200' of parking

Commercial

- 5000 sq ft
- 10000 sq ft

Alternative Two

Development Details
Figure 25

Assessment

Green Infrastructure

Common Elements

Rain Barrels (on all residential)
Alternative TWO

Liability Assessment

Figure 54
Figure 65

Planning Assessment

Alternative 2

Alternative 1
Table 2

ALTERNATIVES COMPARISONS

LAND AREA (in Acres)

<table>
<thead>
<tr>
<th>Site</th>
<th>Existing</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenwood Shopping Center (GSC)*</td>
<td>15.7 ac</td>
<td>19.7 ac</td>
<td>19.7 ac</td>
</tr>
<tr>
<td>87th St. &amp; 87th St. Housing</td>
<td>4 ac</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Site</strong></td>
<td><strong>19.7 ac</strong></td>
<td><strong>19.7 ac</strong></td>
<td><strong>19.7 ac</strong></td>
</tr>
<tr>
<td><strong>Single Purpose Residential</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential (GSC)</td>
<td>1.6</td>
<td>1.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Residential on 87th</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Residential Acreage</strong></td>
<td><strong>3.6 ac</strong></td>
<td><strong>3.2 ac</strong></td>
<td><strong>4.3 ac</strong></td>
</tr>
<tr>
<td><strong>Single Purpose Commercial</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings (footprint)</td>
<td>3.5</td>
<td>3.25</td>
<td>0.4</td>
</tr>
<tr>
<td>Parking/Loading</td>
<td>8.6</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Total Commercial Sites</strong></td>
<td><strong>12.1 ac</strong></td>
<td><strong>3.7 ac</strong></td>
<td><strong>1 ac</strong></td>
</tr>
<tr>
<td><strong>Mixed Use (Building Footprint)</strong></td>
<td>0 ac</td>
<td>2.9 ac</td>
<td>4.1 ac</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Road &amp; Alley Right-of-Way</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1st, Palatine, 87th, Alley &amp; Sidewalks)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Alternatives include new roads)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Open Space</strong></td>
<td>0</td>
<td>3.4 ac</td>
<td>4 ac</td>
</tr>
<tr>
<td><strong>Total Public and Semi-public Space (including walkways)</strong></td>
<td>0</td>
<td>3.4 ac</td>
<td>4 ac</td>
</tr>
</tbody>
</table>

Note:
* Includes several lots not owned by GSC, and Palatine and 1st Streets on-site. See Figure 12 on p. 24 for map of the site area.
### Table 3
ALTERNATIVES COMPARISON

#### DEVELOPMENT DETAILS

<table>
<thead>
<tr>
<th></th>
<th>Existing</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential Units</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Family/Duplex</td>
<td>27</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Townhouse</td>
<td>0</td>
<td>71</td>
<td>56</td>
</tr>
<tr>
<td>Stacked Flat (Apartment or Condo)</td>
<td>0</td>
<td>366</td>
<td>240</td>
</tr>
<tr>
<td>Loft</td>
<td>0</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>27</td>
<td>437</td>
<td>341</td>
</tr>
<tr>
<td><strong>Commercial Square Footage</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fred Meyer only</td>
<td>106,345</td>
<td>135,470</td>
<td>134,000</td>
</tr>
<tr>
<td>Other retail</td>
<td>81,800</td>
<td>87,675</td>
<td>78,755</td>
</tr>
<tr>
<td>Office</td>
<td>0</td>
<td>33,200</td>
<td>41,760</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>188,145</td>
<td>256,345</td>
<td>254,515</td>
</tr>
<tr>
<td>% Commercial sf in Fred Meyer</td>
<td>57%</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td><strong>Community/Public Space</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Buildings</td>
<td>0</td>
<td>4,700 sf</td>
<td>9,500 sf</td>
</tr>
<tr>
<td>Plaza/Wetland/Parks</td>
<td>0</td>
<td>78,000 sf</td>
<td>132,250 sf</td>
</tr>
<tr>
<td>Pedestrian Walkways (E-W &amp; N-S)</td>
<td>0</td>
<td>34,500 sf</td>
<td>34,750 sf</td>
</tr>
<tr>
<td>Semi-public (e.g., infiltration gardens, green space, rain garden)</td>
<td>0</td>
<td>35,000 sf</td>
<td>5,250 sf</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0</td>
<td>152,200 sf</td>
<td>181,570</td>
</tr>
<tr>
<td><strong>Parking Spaces</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Lot</td>
<td>763</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td>Underground</td>
<td>50</td>
<td>715</td>
<td>551</td>
</tr>
<tr>
<td>Structured</td>
<td>0</td>
<td>125</td>
<td>396</td>
</tr>
<tr>
<td>Street</td>
<td>72</td>
<td>255</td>
<td>217</td>
</tr>
<tr>
<td><strong>Total (not incl. single family)</strong></td>
<td>885</td>
<td>1131</td>
<td>1197</td>
</tr>
<tr>
<td></td>
<td></td>
<td>plus 62 spaces (at least) in proposed community parking structure</td>
<td>plus proposed community parking structure</td>
</tr>
<tr>
<td><strong>Parking Details</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Spaces</td>
<td>885</td>
<td>671</td>
<td>832</td>
</tr>
<tr>
<td>Commercial Parking Ratio</td>
<td>1 space/213 sf, 4.7 sp/1000 sf</td>
<td>1 sp/392 sf on-site, 2.62 sp/1000 sf (or 1/350 sf including off-site spaces)</td>
<td>1 sp/306 sf, or 3.25 sp/1000 sf</td>
</tr>
<tr>
<td>Residential Parking Spaces (not including single family)</td>
<td>x</td>
<td>460</td>
<td>347</td>
</tr>
<tr>
<td>Residential Parking Ratio</td>
<td>x</td>
<td>Typ. 1 sp/u</td>
<td>Typ. 1 sp/u</td>
</tr>
</tbody>
</table>
## Table 4
### ASSESSMENT OF ALTERNATIVES

<table>
<thead>
<tr>
<th>Green Infrastructure</th>
<th>Existing</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pervious Surfaces</td>
<td>approx 3ac*</td>
<td>3.4 ac</td>
<td>4.5 ac</td>
</tr>
<tr>
<td>% Pervious</td>
<td>approx 15%</td>
<td>17%</td>
<td>23%</td>
</tr>
<tr>
<td>Effective Permeable Area**</td>
<td>approx 15%</td>
<td>approx. 90%</td>
<td>approx. 90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Livability</th>
<th>Existing</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of residents w/ 5 minute walk of services</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Residential Density (gross acreage)</td>
<td>1.4 du/ac</td>
<td>22.6 du/ac</td>
<td>17.5 du/ac</td>
</tr>
<tr>
<td>Range of Housing Options</td>
<td>None. Single family only.</td>
<td>Limited variety of hsg. types</td>
<td>Most Variety of hsg. types</td>
</tr>
<tr>
<td>% Comm sf in Mixed Use bldg.</td>
<td>0</td>
<td>47%</td>
<td>90%</td>
</tr>
<tr>
<td>Commercial Street Frontage - linear ft.</td>
<td>1,500'</td>
<td>4,000'</td>
<td>3,540'</td>
</tr>
<tr>
<td>Commercial Use Frontage on Street</td>
<td>200'</td>
<td>2,655'</td>
<td>2,675'</td>
</tr>
<tr>
<td>Commercial Use Frontage as % of Street Frontage</td>
<td>13%</td>
<td>66%</td>
<td>76%</td>
</tr>
<tr>
<td>Street Interconnectivity &amp; Walkability</td>
<td>Broken Network, No connection through superblock Pedestrian connections made through parking lots.</td>
<td>Mostly Interconnected Network, Several critical linkages missing. Alleys in N. area provide connectivity for single family area.</td>
<td>Interconnected Network, More complete grid - more overall connectivity through site &amp; between site &amp; neighborhood.</td>
</tr>
<tr>
<td>Node Numbers: (A) Vehicular &amp; Pedestrian, (b) Pedestrian Only</td>
<td>(A) 23, (B) 4 (Informal)</td>
<td>(A) 37, (B) 9</td>
<td>(A) 33, (B) 10</td>
</tr>
<tr>
<td>Linkage Numbers : Total Vehicular &amp; Pedestrian</td>
<td>32 Total</td>
<td>64 Total</td>
<td>62 Total</td>
</tr>
<tr>
<td>Network Connectivity Index</td>
<td>0.43</td>
<td>0.48</td>
<td>0.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Placemaking</th>
<th>Existing</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective based on included Elements</td>
<td>Few elements.</td>
<td>Connection to creek; Green Streets; Re-create McCausland Mural; Gateways; Preserve Historic Bldgs.; markers &amp; education elements; reconnection to natural history through wetland, urban forest; historic building materials (board walk, brick); preserve small storefront feel; reestablish the grid.</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
* All impervious surfaces are on single family lots
** Effective Permeable Area is "a measure of how much of the land is permeable to rainwater or delivers rainwater to another permeable area" (Teed, 5).
This project started with the solid policy base established over ten years of study, hard work, and consensus building within the community. It analyzed the existing policy base against three critical elements of sustainable community design: Green Infrastructure, Livability and Placemaking, and built on this base where it didn't fully address these elements. Through extensive inventory, analysis and research on the community, the physical and social opportunities and constraints for the project were developed. The two alternative master plans arising from this foundation provide a range of development options intended to meet the design strategy's requirements.

Both alternatives contain a larger Fred Meyer store, though in different configurations. While both alternatives propose large wetland/open space areas, they still accommodate the amount of development projected by the community in its Town Center Plan. This development would require transferring development capacity from one area to another within the project site. In response to current peat/ground subsidence concerns, the city has indicated its willingness to modify some of its requirements.

Alternative 2, with a rebuilt 2-story Fred Meyer in a new location on 85th St., comes out ahead on most of the measures of sustainable community design. This alternative, however, would require tearing down the old Fred Meyer and building new, which would be an expensive undertaking. Alternative 1 is still a good option, particularly considering the economics of teardown and building new. The intent, however, was not to judge which alternative was better or to recommend one over the other. Each alternative is an attempt to fulfill the design strategy as laid out. Both are presented to show that a more sustainable development could occur even if the Fred Meyer remains in its current location.

This project's intent is to offer alternative town center plans that are more livable, sustainable and distinctive than many current proposals. Both plans would result in 'a place that sustains the environment and the people who use it'. Both would connect with the existing core in a way that would enhance both, and make the area feel like a cohesive town center. And, it is hoped, both would help the community realize its visions.
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