

AN EXAMINATION OF SMART GROWTH: A CASE STUDY OF NEW COLUMBIA IN
PORTLAND, OREGON

by

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A REPORT

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Abstract

Smart growth has been offered as one potential solution to ease the strain that urban sprawl creates on cities from a social, economical, and environmental perspective. Simply put, smart growth means making smart decisions on the development and redevelopment of our aging cities. During a site visit to the low income housing community of New Columbia. Located in Portland, Oregon, a scorecard was used to analyze the smart growth components of the development. The scorecard had a maximum of 78 points and New Columbia received 73.5 points. Based on the scorecard rating, New Columbia appears as though it is meeting, and often times exceeding, almost all of the smart growth principles. It has successfully provided a mix of uses, a range of housing options (both price and style), enhances community character through design, is compact and transit-oriented, provides open space and supports environmental protection. This report serves as an analysis of New Columbia in Portland, Oregon, to determine if the initial intentions of the smart growth approach are truly being met four years after the completion of the project.

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CHAPTER 1 - Introduction

Urban Sprawl and Smart Growth

Urban sprawl is a growing problem across the United States. According to “Costs of Sprawl”, if current uncontrolled growth patterns continue, it is projected that sprawl will consume approximately 18.8 million acres of land between 2000 and 2025 (2002). This is almost the same amount of land as the total area consumed by the state of Maine. One proposed, and rather popular solution to urban sprawl, is the application of the concept of smart growth. Smart growth, as defined by APA, “means using comprehensive planning to guide, design, develop, revitalize and build communities for all” through compact, transit and pedestrian-oriented, mixed-use development patterns (Cuddy & Porter, 2006). One particular feature that distinguishes smart growth from other popular strategies is its investment of time, attention and resources to restoring a community’s vitality to its center or previously developed neighborhoods. The “new” smart growth, as referred to by Smart Growth Online (2008), focuses on providing transit and pedestrian oriented development in a compact environment. This modern type of town-centered development also incorporates a greater mix of housing, commercial and retail uses, while also preserving open space and incorporating various environmental amenities.

Smart growth is a concept encompassing many different aspects of the developmental process, but growing smart starts long before moving dirt. Smart growth begins during the site selection phase and continues long after the completion of the project. Smart growth is more than a development plan; it is a way of life. It strives to address the issues often seen in our traditional suburbs—traffic, smog, lack of pedestrian friendliness, etc.—by applying smart

growth principles. While the key principles of smart growth may vary slightly depending on the source, every definition revolves around the same basic concepts.

Once these principles are applied to the design, construction and creation of a community, many involved in this process are satisfied with the accomplishment of creating a smart community and simply walk away. Very seldom do architects, planners, or anyone else in the development process actually revisit their design to determine whether the initial intent of creating a smart growth community is being met. It is important to constantly monitor our smart growth communities to understand which concepts are working and those that still need to be improved.

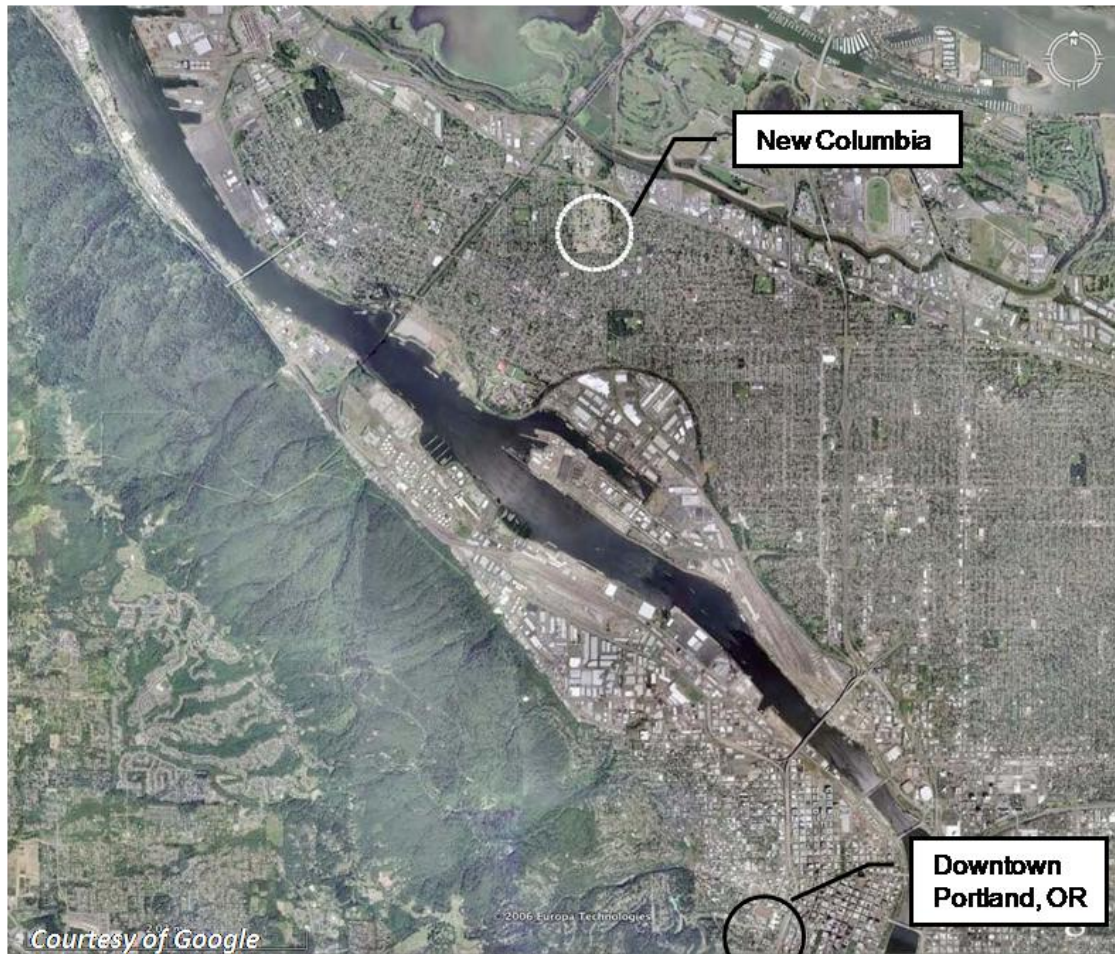
Report Overview

The purpose of this report is to analyze a selected smart growth community using a synthesized scorecard (developed from an analysis of other scorecards) to rate the community on various aspects of smart growth. A copy of the scorecard used to evaluate New Columbia, along with the results, is located in Appendix A. The scorecard critique was completed during a site visit to provide further insight as to whether the original intentions of the development were being met, and if not, identify what (if anything), the community is lacking and what is working well.

The community selected for the heart of this research, New Columbia, is a low to moderate income housing community in northern Portland, Oregon (income families to address the need for lower income housing units (Smart Growth Resource Library, 2009). shows New Columbia outlined with a white circle and downtown Portland represented with a black circle). This community was chosen as the focus of this study for two different, yet equally important reasons. First, New Columbia was recognized as the “2007 Overall Excellence in Smart

Growth” winner in the National Award for Smart Growth Achievements program; and secondly, it provides a smart growth community for lower and moderate income families to address the need for lower income housing units (Smart Growth Resource Library, 2009).

Figure 1.1 Map of Downtown Portland in relation to New Columbia



New Columbia has incorporated smart growth and public housing into an appealing and affordable community. The neighborhood is located on an 82-acre site formerly occupied by Columbia Villa, Oregon’s largest public housing community. The Housing Authority of Portland (HAP) decided to update “The Villa” in 2003 after sixty years of providing housing for over 1,300 low income residents at any given time. HAP completely demolished the site, yet

made significant efforts to save hundreds of very large, mature trees. During the deconstruction stage, HAP also made a pertinent effort to reuse or recycle any housing or other materials worth salvaging. New Columbia today consists of an entirely new street network, seven acres of open space, and 852 housing units available for mixed-income families.

This nationally recognized smart growth community presents the ideals of smart growth when scanning through a checklist of smart growth principles. New Columbia was designed to provide a walkable community served by public transportation, in which mixed use development is only a short walk from every front door. The project incorporates over seven acres of open space by providing a four acre centralized park, along with four pocket parks dispersed throughout the site; a neighborhood center; variety of housing options, including Section 8 units, Habitat for Humanity homes, public housing and market rate homes.

A scorecard approach was utilized in the evaluation phase of New Columbia to identify those areas in which it excels and those areas which can be improved. While other scorecards may exist, a synthesis of the work of others was distilled into an instrument developed by the author and applied to this particular community while visiting the site during the analysis phase.

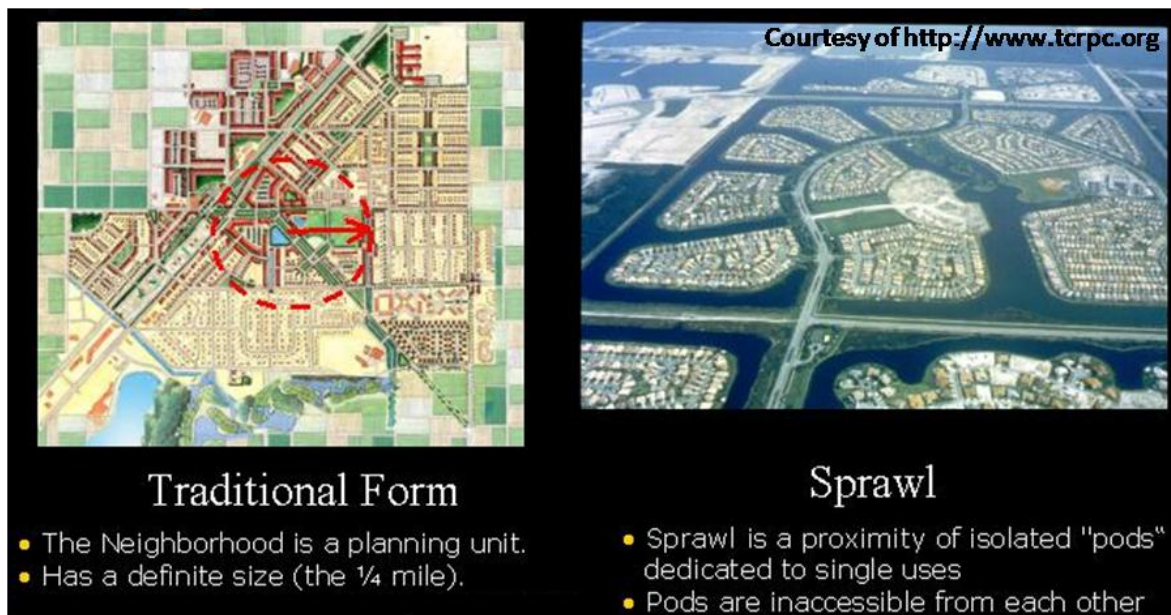
Smart Growth has been offered as one potential solution to ease the strain that urban sprawl creates on cities from a social, economical, and environmental perspective. Simply put, smart growth means making smart decisions on the development and redevelopment of our aging cities. This report serves as an analysis of New Columbia in Portland, Oregon, to determine if the initial intentions of the smart growth approach are truly being met four years after the completion of the project.

CHAPTER 2 - Review of Literature

Traditional Models of Community Design

Smart growth practices are not by any means a new approach for inhibiting urban sprawl. The development patterns of the early twentieth century share many of the same core concepts as smart growth does today, and the abandonment of these approaches has been found to have punishing effects. In the late nineteenth century, the first forces of decentralization began to appear on the urban scene. With the technological advancement of the electric streetcar, the tendrils of urban growth extended further past the city's core than ever before, thus suburbanization began (Levy, 2006).

Figure 2.1 Traditional Neighborhood Form versus Sprawl

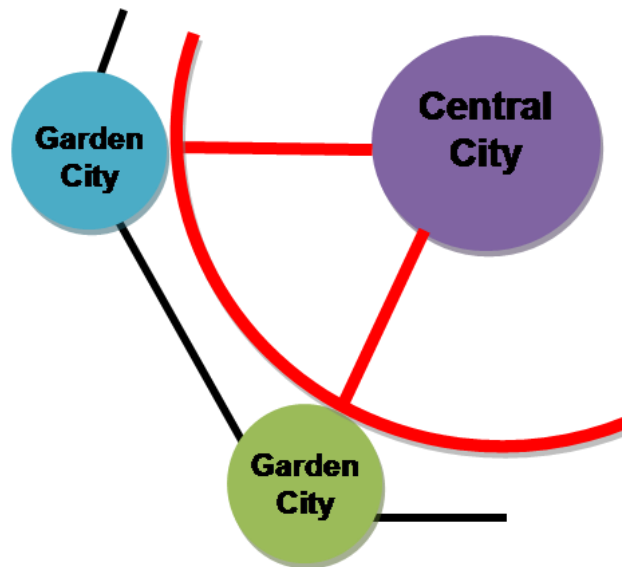


Ebenzer Howard, according to Levy (2006), is perhaps one of the most influential of all reformers or visionaries. Unlike many planners of his time, Howard set out not only to solve

problems within the existing urban framework, but had much grander ambitions. In 1898, Howard published his first book, *Tomorrow: a Peaceful Path to Real Reform*, which was re-issued in 1902 under the title *Garden Cities of Tomorrow* (Howard, E., 1965). In *Garden Cities of Tomorrow*, Howard described a plan to not only improve the existing pattern of development, but a major restructuring of human settlement (Levy, 2006). Living in London during the late-nineteenth-century, Howard experienced the pollution and congestion of living in the urban core, yet was well aware of the economic and social benefits of residing in the city.

Ebenezer Howard's "garden cities" would divert population growth to new urban centers, which would offer the economic and social advantages of the city, while at the same time providing a healthy and tranquil environment that he believed was lost in the nineteenth-century city (Levy, 2006). Howard proposed that these self contained communities be compact and surrounded by greenbelts to blend the best of both city and country lifestyle (Peterson, 2003). These garden cities would be built as satellite cities away from London (and other large cities), yet include a railway serving as a connection to other garden cities and the central city of that region (Figure 2.2).

Figure 2.2 Depiction of Howard's Satellite City

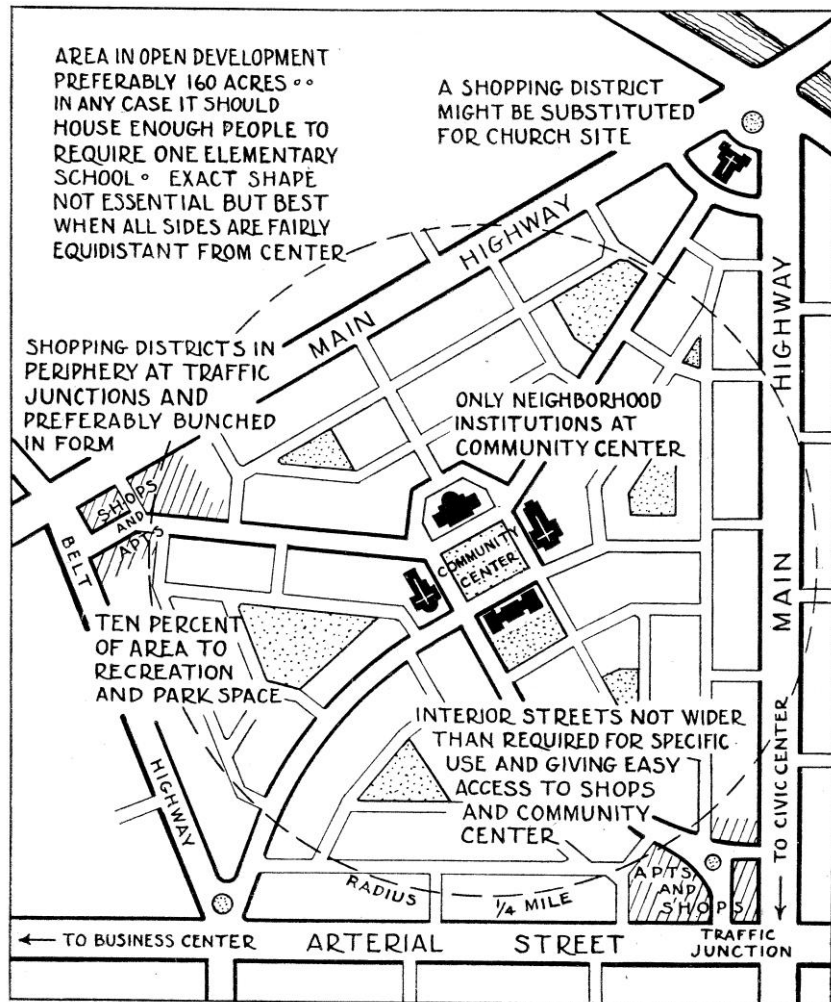


The total development of each garden city would have an area of about 6,000 acres and no more than 32,000 residents. Each garden city would be laid out in a circle approximately 1 ½ miles in diameter, ensuring that any resident would be within walking distance of both the city's core and their place of work (Levy, 2006). Howard designed these walkable cities to enable residents to escape and prevent the pollution and congestion that accompanied urban living. At the center of the city would be an urbanized core accessed by radial boulevards, consisting of a public garden encircled by seven functional rings (from center outward); civic buildings, a park (Central Park), shopping (the Crystal Palace), residences, community facilities (Grand Avenue), more residences, and light industry. The outermost area of the city would be allotted for agricultural greenbelts and institutional uses (Figure 2.3).

neighborhood unit concept included a curvilinear street pattern to discourage through traffic, the preservation of community open space and high-density housing near public transportation, as shown in

Figure 2.4 (Levy, 2006). The neighborhood plan would also typically accommodate facilities for everyday goods like grocery and drug stores and be designed with common areas for social interaction. Traditionally, the neighborhood unit would contain a population sufficient to supply students for one elementary school, which meant a total population of approximately 5,000 or 6,000 (Levy, 2006).

Figure 2.4 Clarence Perry's Neighborhood Unit Concept Diagram



Courtesy of Dr. Larry L. Lawhon, Kansas State University

While both Ebenezer Howard's garden cities and Clarence Perry's neighborhood unit concept provide indistinguishable similarities to the modern practices of smart growth, there are obvious disadvantages to either method. For example, Perry's neighborhood unit plan emphasizes curvilinear streets, which smart growth has tried to discourage in order to promote connectivity and walkability. One key disadvantage to Howard's garden city concept is that, essentially, it still encourages outward growth. Howard only envisioned garden cities to have a carrying capacity of about 32,000 people, and once this limit was reached another satellite

community would need to be created (Peterson, 2003). These early concepts of smart development have helped to shape our modern day communities and practices, including smart growth.

CHAPTER 3 - Smart Growth Defined

In the 1990s, the concept of smart growth emerged and is still continuing to gain momentum. The concept first developed from statewide growth management legislation dating back to the 1970s and 80s (Edwards & Haines, 2007). It was first used as a method for answering the enduring problem of sprawling development and its many negative consequences. There are two main catalysts for the expansion of the smart growth movement. First, the passage of the Smart Growth and Neighborhood Conservation Act in Maryland in 1997 played a significant role in initiating smart growth into the mainstream media (Edwards & Haines, 2007). The second catalyst recognized by authors of “Evaluating Smart Growth”, was the Growing Smart project initiated by the American Planning Association in 1994 (Edwards & Haines, 2007).

Smart growth is a development tactic that does not attempt to inhibit growth, but accommodate growth by developing in smarter ways. It is an alternative to urban sprawl, traffic congestion, disconnected neighborhoods, and urban decay. This challenges the old assumptions in urban planning such as the value of detached houses and automobile use known more familiarly as the “American Dream”. As described by the Urban Land Institute (ULI), the underlying objective of smart growth, is “...to identify a common ground where developers, environmentalists, public officials, citizens and others can all find acceptable way to accommodate growth” (Ten Principles for Smart Growth on the Suburban Fringe, 2004). While sources may vary slightly in identifying the key principles of smart growth, they all address the same basic concepts. Anthony Downs, a renowned scholar in urban policy, suggests six concepts

that are generally considered to be key elements to smart growth (Edwards & Haines, 2007).

These include:

- Limiting the outward expansion of development
- Increased density
- Providing mixed use and pedestrian-friendly development (to minimize auto-dependency)
- Shift development costs to those who benefit
- Emphasize public transit
- Revitalize older neighborhoods

Author Douglas Porter, of *Making Smart Growth Work* (2002), names these six main concepts as the keys to smart growth:

- Compact, multiuse development
- Open-space conservation
- Expanded mobility
- Enhanced livability
- Efficient management and expansion of infrastructure
- Infill, redevelopment, and adaptive use in built-up areas

These two lists provide examples of how difficult it can be to define smart growth and its main components. While these two lists have many similarities, there still is not one solid definition of the concepts of smart growth. The principles noted above by both Downs and Porter may even be described as broad when compared to those identified by sources such as Smart Growth Online (2009). Listed in Figure 3.1 is a series of smart growth principles, provided by Smart Growth Online (2009).

Table 3.1 Smart Growth Principles provided by Smart Growth Online

Principles*
Create a Range of Housing Opportunities and Choices
Create Walkable Neighborhoods
Foster Distinctive, Attractive Communities with a Strong Sense of Place
Make Development Decisions Predictable, Fair and Cost Effective
Mix of Land Uses
Preserve Open Space, Natural Beauty and Critical Environmental Areas
Provide a Variety of Transportation Choices
Strengthen and Direct Development Towards Existing Communities
Take Advantage of Compact Building Design

*Not a comprehensive list of principles, visit smartgrowth.org for a complete list.

When these key principles are applied to development, it *should* result in a well-designed, multiuse community, offering a range of living, working, recreation, and travel options. These principles can be applied to undeveloped sites, as well as, infill development and redevelopment. Smart growth can also guide the development of both small and large projects. Generally, any of these three lists of key principles of smart growth can be adapted to conform to an organization’s interests.

Many states have supported and adopted smart growth as a way to compact sprawling development and to preserve remaining natural resources. Today, federal agencies have begun to support smart growth, like the Environmental Protection Agency (EPA) which promotes it as a way to “achieve healthy communities that accommodate growth while preserving open space, economic development and jobs, strong neighborhoods that offer a range of housing choice, and transportation options (Edwards & Haines, 2007). The U.S. Department of Housing and Urban Development (HUD) suggests that smart growth helps communities achieve sustainable economic growth, preserve green space, ease traffic congestion, and pursue regional smart growth strategies (Edwards & Haines, 2007).

While many states and federal agencies are supporting and encouraging smart growth, it still has its critics. Some argue that smart growth is costly and does not fit in with busy, auto-dependent lifestyles (Edwards & Haines, 2007). Edwards expressed that sprawl often results from consumer preference, and is thus, unavoidable (2007). Other concerns raised are that additional design costs associated with smart growth may price low-income households out of housing markets; or the increasing connectivity of streets may result in more traffic congestion; or even crime (Edwards & Haines, 2007). However, these two criticisms are proved to be incorrect after analyzing New Columbia.

The overall goals of smart growth call for the coordination of infrastructure and development to be located in compact, walkable communities that offer a variety of housing and transportation choices. It is preferable that previously developed sites are utilized for new housing and be located near jobs to reduce traffic and pollution. Affordability and accessibility to local stores and services is another point stressed by smart growth. Finally, one of the key

features of smart growth is the preservation of farmland, environmentally sensitive land, and open space (Edwards & Haines, 2007).

CHAPTER 4 - Methodology

A scorecard analysis of New Columbia was employed to identify those areas in which the community excels and also those areas still requiring improvements. Along with the scorecard apparatus, a more subjective examination of the community was completed through a personal site visit completed on September 23, 2008. Julie Livingston, the Project Manager for HAP, guided this tour of New Columbia, pointing out various features and the history of the community. While on the site visit, it was essential to this report to determine whether people actually did utilize the public transit systems provided, while also evaluating the ease of using such systems. The public spaces were also examined as to whether they provided a place for people to congregate and if the overall community provided a sense of place, safety and was inviting.

In order to evaluate New Columbia on its smart growth principles, a scorecard was developed by the author to rate its various components. Using a combination of four different scorecards, a fairly comprehensive tool was developed to analyze this community (a copy of which is provided in Appendix A). To fully understand and experience various aspects of the community such as “walkability” or “sense of place”, a site visit was completed in September of 2008 to ensure full knowledge and understanding of this community by the author.

The variables addressed on the scorecard used to evaluate New Columbia’s smart growth factors were determined based on fairly standard criteria. The basic topics evaluated are as follows:

- Existing Development and Infrastructure
- Mixed Use

- Range of Housing Options
- Community Character and Design
- Density and Compactness
- Transportation: Accessibility, Mobility, Connectivity, and Walkability
- Environmental Protection and Open Space

Each of these variables was then divided into more specific questions. For a complete list of variables and the rating system exercised, see Appendix A. While on the site visit to New Columbia, Julie Livingston, the Project Manager for HAP, provided a two hour tour of the site. Comments regarding observations, as well as information provided by Ms. Livingston, were documented during the tour. The main purpose of the site visit was to determine first hand if the components of smart growth incorporated into this community were actually being utilized or were performing as initially intended. For example, do residents actually utilize the public transit systems provided? What is the ease of accessing and utilizing such systems? Does the community provide a place for people to congregate? And even more importantly, do people utilize these opportunities? These specific examples were the more subjective questions asked prior to the site visit, that were answered solely on personal experience while in New Columbia. The risks associated with this type of subjective analysis are recognized.

Developing the Scorecard

To evaluate the effectiveness of New Columbia as a smart growth community, a comprehensive scorecard was derived from a composite of scorecards from Idaho, Maryland and New Jersey (the scorecards for each of these states can be found in Appendix B). Curry and Porter state that, “the heart of every program rating system is its list of criteria and standards by

which projects are to be evaluated” (2006). Thus, using the main principles of smart growth as a guide, the scorecard used to evaluate New Columbia was divided into seven main categories. Each of these categories addresses one of the main underlying principles of smart growth. Using the scorecards from Idaho, Maryland and New Jersey as reference, the main categories were then further divided to be more specific about the standards for smart growth. These more specific questions are a combination of both measurable and subjective factors, as suggested by Curry and Porter (2006).

The format used to create the New Columbia scorecard closely resembles that of the New Jersey scorecard, as it seemed to be user friendly and it separated each question by topic. The Planning Advisory Service Report, entitled *Project Rating/Recognition Programs*, provides 19 systems for evaluating projects and after reviewing each method, it was determined that a point system would be used for the New Columbia scorecard, to make the evaluation process as simplistic as possible. The rating system used for the New Columbia scorecard is again, similar to the New Jersey scorecard, yet does not use a weighting system. Rather, each question within the main categories of the scorecard has a minimum point potential of “0” and a maximum of “4”. The maximum point rating however, is dependent upon the number of possible answers for the individual question. An example is provided below in Table 4.1 and Table 4.2. In Table 4.1, the maximum number of points that can be earned for this question is four, with five possible answers, whereas in Table 4.2, the maximum points to be earned is only one, with two possible answers.

Table 4.1 Sample Question

Measurement	Answer	Points	Score
Project is near at least three of the following--housing, restaurants, retail/convenience/services, schools, recreation centers, offices	Less than 1/4 mile	4	
	1/4 to 1/2 mile	3	
	1/2 to 3/4 mile	2	
	3/4 to 1 mile	1	
	1+ miles	0	
19			

There are a total of 46 questions on the New Columbia scorecard, with a maximum of 78 total points. The scorecard used to evaluate New Columbia with the assigned scores is located in Appendix A.

Table 4.2 Sample Question

Measurement	Answer	Points	Score
The project minimizes impervious surfaces to improve stormwater quality and quantity	Yes	1	
	No	0	

CHAPTER 5 - Introduction to New Columbia

Columbia Villa

The following history of Columbia Villa was described in an article prepared by Karen J. Gibson, and published in the Journal of Planning Education and Research, 2007.

The site now occupied by New Columbia was once known as Columbia Villa, Portland's largest public housing development, and home to almost 1,300 residents at any given time. In February of 2003, the Housing Authority of Portland (HAP) sent notices to the residents informing them that they had ninety days to move. Life in Columbia Villa, known to locals as "The Villa", would after sixty years, come to an end. This low-density development consisted of 462 units on eighty-two acres. With the assistance of a federal program known as Housing Opportunities for People Everywhere (HOPE VI), the Villa would be torn down and rebuilt into a higher density, mixed income development, scheduled for occupancy in the fall of 2006. An aerial photo of Columbia Villa prior to the redevelopment is provided in Figure 5.1 . When compared to the aerial photo of New Columbia as shown in Figure 5.2, there is a noticeable difference between the development pattern and density.

***All photographs within this document are by Stephanie Dikeman unless otherwise noted.*

“honorable” to live, especially when compared to the stereotypical high-rise low income housing projects. However, by the mid-70s, the Villa had begun to acquire a new stigma. The local newspaper characterized it as an institutional looking compound and in the 1980s, a drug, gang, and violence epidemic hit the Villa. When the city’s first gang shooting occurred at Columbia Villa in 1988, local agencies came together to strategize a way to push the gangs out. Using an “integrated service model”, HAP was able to reduce drug-related crime by 75% and was awarded HUD’s best practice award in 1994. Although HAP was successful in reclaiming the Villa from the gangs, a permanent stigma remained with Columbia Villa. Thus, New Columbia was born.

New Columbia

New Columbia contains 852 units of mixed-income housing on the 82-acre site. During the transition from Columbia Villa to New Columbia, HAP assisted in finding residents new housing and then allowed them the opportunity for re-occupancy once New Columbia was completed (30% of the former residents returned) (Gibson, 2007). New Columbia was designed to provide more habitable living conditions for its residents, by improving economic opportunity, community livability and environmental quality (Smart Growth Resource Library, 2009).

The overall project goal was to create an improved and viable neighborhood which offers diverse housing types, attractive to diverse groups of people. To attain this goal, New Columbia was designed with a concentration on four principles. First, it was essential that the unattractive, barracks-style buildings be replaced with townhouses, garden-style apartments and single-family dwelling units that coheres aesthetically with the environment. Second, reduce the large concentration of poverty that was consistent with Columbia Villa, by building a variety of housing types, both rented and owned, to encourage economic diversity. Third, provide on-site

services to residents to assist in increasing their skills through education and training, which will lead to better employment, building assets and equity in the community. And the fourth, promote high standards of personal and community responsibility by establishing and maintaining explicit lease requirements and home ownership (New Columbia Fact Sheet, 2005).

HAP partnered with public and private stakeholders to make this development possible. There was a 28-member Community Advisory Committee (CAC) which conducted a series of design workshops and encouraged local residents to participate in the decision making process. For those citizens who were unable, or chose not to participate, the New Columbia Newsletter, created by the CAC, informed residents of the project's progress (Smart Growth Resource Library, 2009).

Today, New Columbia is home to over 2,500 residents and has provided an impressive list of tenants and services within the site. Located along the south side of North Trenton Street are; the New Columbia Opportunity Center which consist of HAP's Evening Trades Apprenticeship Program (ETAP), Construction Apprenticeship & Workforce Solutions (CAWS), and the State of Oregon Employment Department; YWCA senior services; a Naturopathic clinic and Big City Produce market. Along the north side of North Trenton Street, tenants and services provided include, Allied Property Management, New Columbia Community Builders, Community Education Center (which also serves as a community room), the New Columbia History Exhibit, and various literacy programs provided by Neighborhood House and Lifeworks Northwest. New Columbia also includes a Boys and Girls Club, the Rosa Parks Elementary School (kindergarten through sixth grade), a four acre city park, four quarter-acre pocket parks, Seeds of Harmony community garden, and at one point a coffee shop.

There are still two lots located along North Trenton Street, which have yet to be developed. According to Julie Livingston, the Project Manager for HAP, New Columbia will likely see senior housing, a day care, country health clinic among other general social services occupy these two sites in the future (Livingston, 2008). Below in Figure 5.2, an aerial photo of New Columbia is provided to show the site post development.

New Columbia received the 2007 National Award for Smart Growth Achievement in Overall Excellence. This distinguishable honor is awarded by the Environmental Protection Agency (EPA) to recognize outstanding approaches to development that benefit the economy, the community, public health, and the environment (Smart Growth Resource Library, 2005). To be eligible for the award, communities must incorporate the following ten smart growth principles into the development process:

1. Mix of land uses.
2. Take advantage of compact building design.
3. Create housing opportunities and choices for a range of household types, family sizes, and incomes.
4. Create walkable neighborhoods.
5. Foster distinctive, attractive communities with a strong sense of place.
6. Preserve open space, farmland, natural beauty, and critical environmental areas.
7. Strengthen and direct development towards existing communities.
8. Provide a variety of transportation choices.
9. Make development decisions predictable, fair, and cost-effective.
10. Encourage community and stakeholder collaboration in development decisions.

Figure 5.2 Aerial Photo of New Columbia after Redevelopment



CHAPTER 6 - Analysis of the Smart Growth Scorecard

The following chapter is an analysis of the scorecard results from New Columbia. Each main category will be analyzed by examining the questions in that section, along with why it received the appointed score.

I. Existing Development and Infrastructure

The first category examined was “Existing Development and Infrastructure”, which was composed of five questions. These questions determined the impact the new development made on the environment and on existing infrastructure and services. Since one of the main components of smart growth is to use infill redevelopment and efficiently managing the expansion of infrastructure, it was vital to examine the site before the construction of New Columbia. Table 6.1 provides a list of the questions, answers, and scores New Columbia received based on its smart growth components. The total number of points possible in this category was seven, and New Columbia received a score of five.

Table 6.1 Existing Development and Infrastructure

#	Question	Answer	Points	Score
1a	Project is located adjacent to existing infrastructure: roads water and sewer.	Existing Service	3	3
		Less than 1/4 mile	2	
		1/4 to 1/2 mile	1	
		1/2+ mile(s)	0	
1b	Project requires new/additional services and/or facilities (fire,, police, school)	Not needed	1	0
		Needed	0	
1c	The project is located adjacent to existing development	Yes	1	1
		No	0	
1d	The project reuses a brownfield site	Yes	1	1
		No	0	
1e	The project is inside city limits or will be annexed	Yes	1	1
		No	0	
Total Points			7	6

New Columbia is a redevelopment project that occurred by using a previously developed site formerly called Columbia Villa. While the current development is not considered by definition to be a brownfield site, New Columbia still received a point for question 1d, because it reused a former residential site. The existing infrastructure on the site was over 60 years old and failing. As part of the redevelopment project, all existing infrastructure was replaced. The redevelopment of the site more than doubled the number of housing units Columbia Villa provided. In order to accommodate this growth, a new school was built on site for New Columbian residents, as well as, for the surrounding neighborhoods' children.

II. Mixed Use

Smart growth strongly promotes compact, mixed use development as a development concept. New Columbia was evaluated using five questions regarding how well they incorporated mixed use development into the project. This section has a maximum point total of 15 and New Columbia scored 14.5 (shown in Table 6.2).

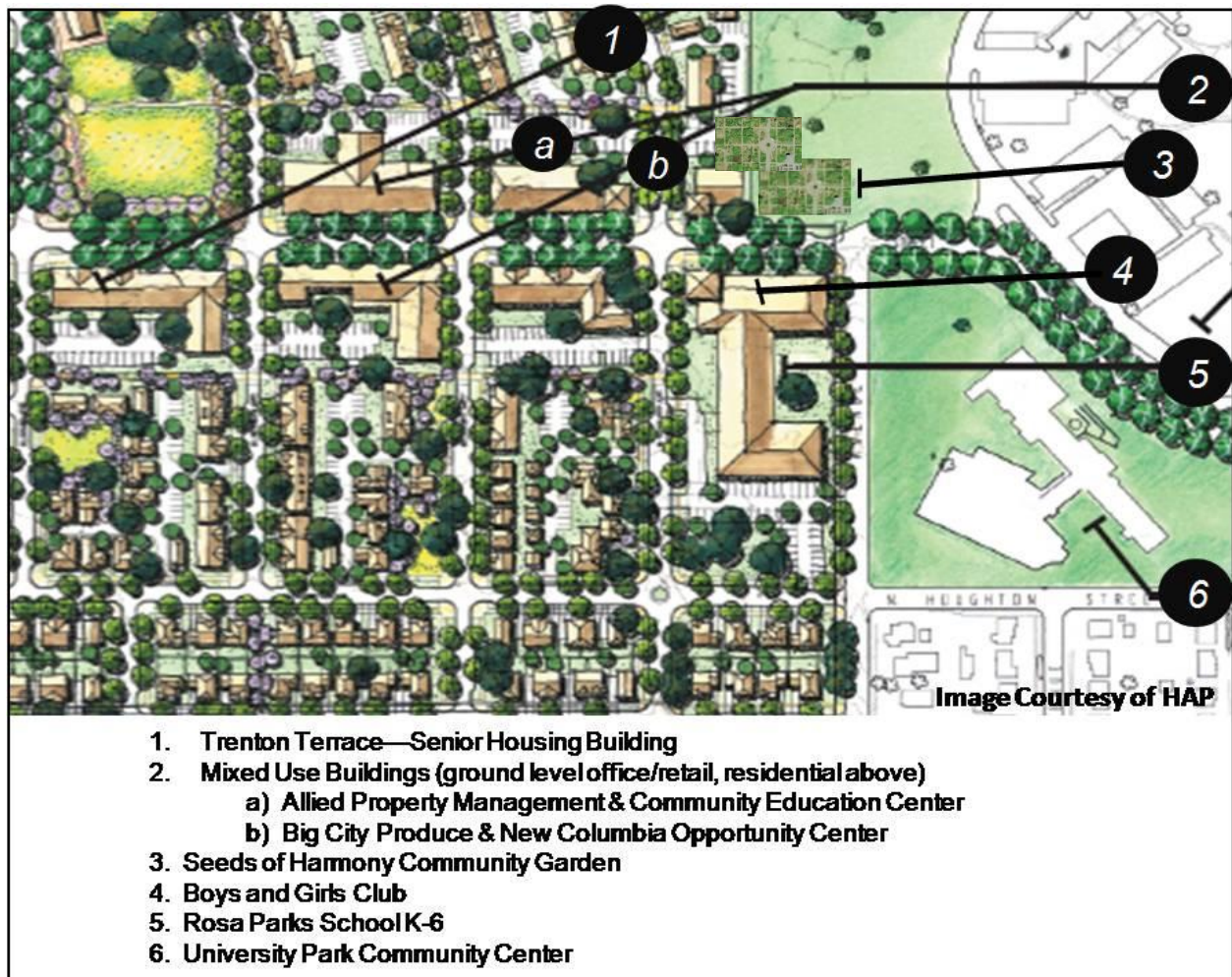
Table 6.2 Mixed Use

#	Question	Answer	Points	Score
2a	Project is near at least three of the following--housing, restaurants, retail/convenience/services, schools, recreation centers, offices	Less than 1/4 mile 1/4 to 1/2 mile 1/2 to 3/4 mile 3/4 to 1 mile 1+ miles	4 3 2 1 0	3.5
2b	Project is mixed use (any combination of housing, retail, office, commercial, public buildings, etc)	4+ uses 3 uses 2 uses 1 use	3 2 1 0	3
2c	Project provides a new type of development to an existing neighborhood such as employment, housing, retail, civic, educational, cultural, recreation, neighborhood-serving retail/service	4+ uses added 3 uses added 2 uses added 1 use added 0 uses added	4 3 2 1 0	4
2d	Project adds to the diversity of uses within an existing community	Yes No	1 0	1

2e	There is a neighborhood center with retail, office, a public meeting space, and/or a park of other green space within 1/2 mile of all residents	Less than 1/2 mile	3	3
		1/2 to 3/4 mile	2	
		3/4 to 1 mile	1	
		1+ miles	0	
		Total Points	15	

Combinations of commercial and residential uses were incorporated into the redevelopment project to provide a variety of uses within walking distance for New Columbia residents. North Trenton Street, located near the southern boundary of the site, consists of residential, commercial, and office uses, as well as, an elementary school, recreational center, community support center and community garden. North Trenton Street is considered the neighborhood center not because of its geographical orientation, but because of the activities occurring on this main street. All residents living in New Columbia are within approximately one-third of a mile from the variety of uses located along North Trenton Street. Figure 6.1 provides a closer look at the southeastern portion of New Columbia and the uses located along North Trenton Street.

Figure 6.1 Mixed Use Development along North Trenton Street



III. Range of Housing Options

Another smart growth component is the inclusion of a range of different housing options. This range of housing does not simply include the types of housing available, but extends to the cost of housing as well. Several prominent examples of communities developed using smart growth techniques claim to have a mix of housing options, yet fail to make units affordable, sometimes even for the middle class. One prominent example is Seaside, Florida, where a two-bedroom townhome ranges in price from \$650,000 to \$785,000 (Shaw, 2000). New Columbia however, not only offers a variety of home types, but satisfies many income levels.

As shown in Table 6.3, New Columbia excels in providing a mix of housing options and prices.

Table 6.3 Range of Housing Options

#	Question	Answer	Points	Score
3a	Project offers a mix of housing types and sizes (apartments, condos, townhouses, single-family, studios, 1BR, 2BR, 3BR, etc.)	4+ types 3 types 2 types 1 type	3 2 1 0	3
3b	Project offers units with a wide range of pricing options for different income levels	Yes No	1 0	1
3c	Project contributes to community's affordable housing	Yes No	1 0	1
3d	Housing types and/or prices are physically mixed in the community	Yes No	1 0	1
Total			6	6

New Columbia provides 852 residential units, 556 of which are apartment units. In total, 297 are public housing units, 74 project-based Section 8 units, and the remaining 184 are affordable units available to families earning below 60% of the area median income (New Columbia, 2008).

Figure 6.2 Tax Credit Rental Housing located on upper floors of Mixed Use Building



HAP operates and maintains approximately 2,400 public housing rental units. Of these 2,400 units, New Columbia provides about 23% of these units. The apartments range from one to six bedrooms to accommodate almost every family size. There are also 66 apartment units at Trenton Terrace, the independent senior living building, located on the south side of North Trenton Street (New Columbia, 2008).

Figure 6.3 Trenton Terrace, Independent Senior Living Building



Approximately ten percent of the entire stock of apartment units located in New Columbia are ADA accessible (Livingston, 2008). The 256 single-family homes located on the site are available at both market rate prices and through government subsidies (Green Building at New Columbia).

Figure 6.4 Market rate single-family home



There are also at least two Habitat for Humanity homes located in New Columbia. One of the habitat homes, shown in Figure 6.5, is part of a pilot study to determine the long term cost effectiveness of solar panels. This program is discussed further in subsection seven, *Environmental Protection and Open Space*.

Figure 6.5 Habitat for Humanity home with Solar Panels



HAP recognized the importance of not only including a variety of housing options, but ensuring that housing choices were not segregated by type or price. New Columbia is a prime example of a well integrated housing community. Appendix E contains rental unit and for sale unit distribution maps to show how each are integrated into the site. Located in Appendix D, are photos of the various housing options located in New Columbia.

IV. Community Character and Design

Upon first entering New Columbia, it is suddenly evident that there is something unique about the community. It is rather apparent why residents' take pride in their community, and rightfully so. North Trenton Street, the main street in New Columbia, has a presence about it, perhaps unmatched by any other low-income housing community. The architectural detail of the buildings, combined with the bold color palette, makes New Columbia drastically different from other low-income housing communities. Figure 6.6 provides a collection of four photos taken at New Columbia depicting the character of this community.

Figure 6.6 Mixed Use Buildings located along North Trenton Street



Smart Growth strongly promotes communities that are pedestrian friendly not only in terms of accessibility, but that provide pedestrians and residents alike with a sense of place. The streetscape of New Columbia incorporated benches, street trees, lighting, windows at the street level, and various pieces of community art. On-street parking is encouraged, by locating parking lots toward the back of buildings. A vast majority of the residential units use alleys to access garages; however, a few streets located on the edge of the site use individual driveways because alleys would not be feasible. The mixed use buildings located along North Trenton Street front directly on the sidewalk, making commercial uses easily accessible to pedestrians.

New Columbia has one four-acre park located in the center of the development, with four one-quarter acre pocket parks located throughout the site. All of the parks are open to surrounding communities and the public.

Table 6.4 Community Character and Design

#	Question	Answer	Points	Score
4a	Project contributes to public streetscape with pedestrian-friendly amenities such as benches, street trees, lighting, trash cans, and windows at street level	4+ types 3 types 2 types 1 type None	4 3 2 1 0	4
4b	On street parking is encouraged. Parking lots are generally located behind street walls and buildings with little street visibility	Yes No	1 0	1
4c	The project use alleys to access garages, rather than individual driveways	Yes No	1 0	1
4d	Commercial buildings front directly on the sidewalk with parking to the side or rear	Yes No	1 0	1
4e	Project creates or enhances community spaces such as public plazas, squares, parks, etc.	Yes No	1 0	1
4f	Public spaces are open to the general public	Yes No	1 0	1
Total Points			9	9

V. Density and Compactness

Compact development is an essential component of smart growth, because it allows alternative modes of transportation as opposed to the traditional personal vehicle. Columbia Villa had an average of six dwelling units per acre prior to the redevelopment and the surrounding neighborhoods were built at nine dwelling units per acre. In order to preserve open space and offer twice the amount of housing units as previously on site, New Columbia was developed at fifteen dwelling units per acre. In Figure 6.7, a before and after of the site is provided to depict the drastic change in the density pre-and post-development.

Figure 6.7 Density Before (left) and After (right) the Redevelopment



Another way to ensure compactness is to reduce the building setbacks. Generally, building setbacks are twenty feet or greater in typical suburban type developments. New Columbia was developed with building setbacks at approximately ten feet. This also allows large areas of land to be left available and utilized as pocket parks and other community spaces.

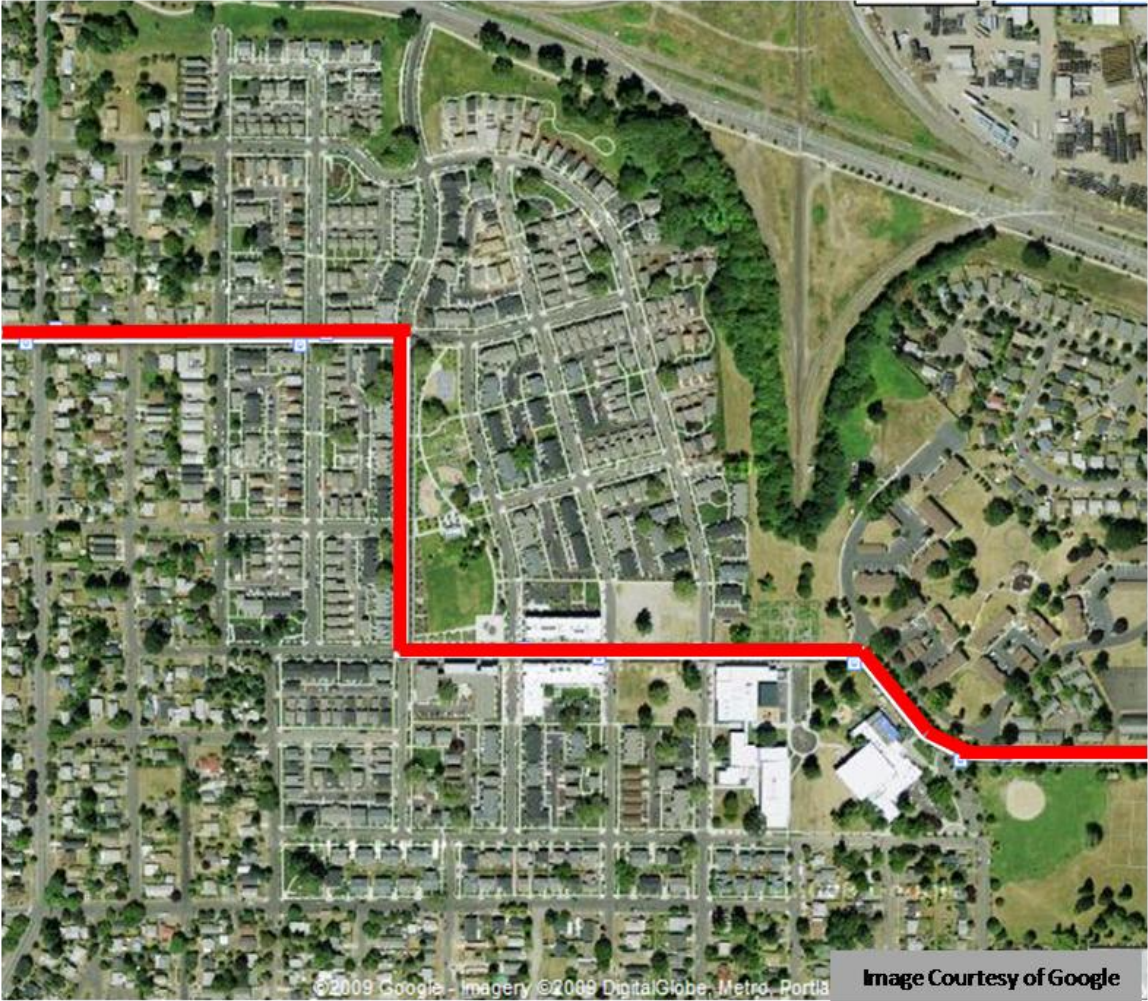
Table 6.5 Density and Compactness

#	Question	Answer	Points	Score
5a	Average number of dwelling units per acre	14+ DU/acre	4	4
		10-13 DU/acre	3	
		7-9 DU/acre	2	
		4-6 DU/acre	1	
		<4 DU/acre	0	
5b	Project density is equal to or greater than that of surrounding areas	Greater density	2	2
		Equal density	1	
		Lower density	0	
5c	Building setbacks are shallow, generally no more than 20 feet	Yes	1	1
		No	0	
Total Points			7	7

VI. Transportation: Accessibility, Mobility, Connectivity and Walkability

Smart Growth strongly advocates the importance of multiple modes of transportation. New Columbia is located on one of the Tri-Met’s high ridership bus lines that run throughout Portland. The Tri-Met bus has several bus stop locations in New Columbia which makes it convenient for residents to travel outside their community using public transportation. New Columbia is located only a few stops (by bus) from the Interstate Max Light Rail, which provides residents with the opportunity to commute to almost anywhere in the Portland-Vancouver metro area. Figure 6.8 provided below, shows the Tri-Met’s route through New Columbia in red. New Columbia also provides secure indoor bicycle storage for apartment residents to help support alternative modes of transportation.

Figure 6.8 The Tri-Met bus route that passes through New Columbia



The covered bus stops located in New Columbia (Figure 6.9) provide riders a safe and dry place to wait for the bus. The buses run rather frequently through the site, which makes it a convenience.

Figure 6.9 Bus Stop located along North Trenton Street



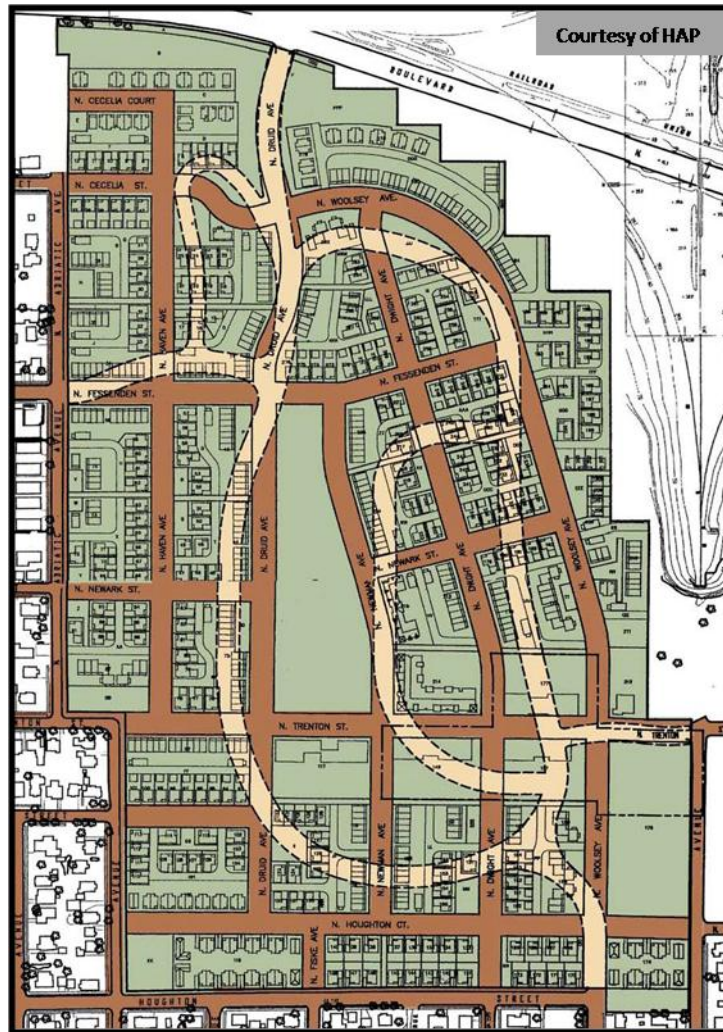
Table 6.6 Transportation: Accessibility, Mobility, Connectivity and Walkability

#	Question	Answer	Points	Score
6a	The project is accessible by multiple modes of transportation (auto, bus, rail, walking, biking)	4+ types 3 types 2 types 1 type None	4 3 2 1 0	4
6b	Streets are organized in a connected network internally and are connected to existing or planned adjacent streets	Yes No	1 0	1
6c	Neighborhood blocks are short	Less than 400 feet 400 to 600 feet 600 to 800 feet 800+ feet	3 2 1 0	2
6d	Cul-de-sacs are avoided, except where absolutely necessary due to natural conditions	Yes No	1 0	1
6e	Traffic calming measures such as curb bulb-outs or choking mechanisms are incorporated	Yes No	1 0	1
6f	Roadways are relatively narrow for local residential streets	Less than 29 feet 30 to 35 feet 36+ feet	2 1 0	1.5
6g	Sidewalks are 4 to 5 feet wide and on either side of the street or are greater than 10 feet wide at the neighborhood center	Yes No	1 0	1
6h	There is an elementary school with pedestrian access within one mile of the neighborhood	Yes No	1 0	1

6i	The project defines a neighborhood(s) that is roughly a ten minute walk from edge to edge (approx. 1/2 mile)	Less than 1/2 mile 1/2 to 3/4 mile 3/4 to 1 mile 1+ miles	3 2 1 0	3
6j	Frequently visited uses are safely accessible without a car	All Uses Some Uses No Uses	2 1 0	2
6k	The furthest edge of the project is within walking distance of public transit (bus, rail, jitney, car share facility)	Less than 5 mins 6-10 minutes 11-15 minutes 16-20 minutes 20+ minutes	4 3 2 1 0	3
6l	There is a dry and safe place to wait for transit in the neighborhood	Yes No	1 0	1
6m	The project provides clearly defined paths for internal circulation between buildings and/or uses	Yes No	1 0	1
6n	The project connects and extends internal paths, bikeway or sidewalk systems to external systems.	Yes No	1 0	1
Total Points			26	23.5

A once segregated and isolated pod, the development of New Columbia was able to reintegrate the community with the surrounding neighborhood by connecting to the traditional street grid. When Columbia Villa was designed and built, there were only four entrances and exits connecting the community to the surrounding neighborhoods. Columbia Villa seemed maze like with its curvilinear streets and cul-de-sacs. The design team for New Columbia sought to change this by destroying the old street network, reusing 100% of the concrete and asphalt rubble as road base or structural fill, and then creating an entirely new street pattern. The new grid system provided 16 new access streets in and out of New Columbia. In Figure 6.10, a diagram contrasts the old street system of Columbia Villa (shown in a light beige), with the street network of New Columbia (depicted in brown).

Figure 6.10 The road network of the site before (tan) and after (brown) redevelopment



The new street network incorporated many traffic calming devices to ensure pedestrian and resident safety. These devices include narrower streets, chokers and raised pedestrian cross walks in the alleys and highly visible cross walks on the streets (shown in Figure 6.11), which will help promote a walkable community by ensuring frequently visited uses are safely accessible without a vehicle.

The average street width in New Columbia ranges anywhere from 28 feet to 36 feet. The widest streets in New Columbia are 36 feet in order to accommodate the Tri-Met buses and provide parking on either side of the street (North Trenton Street would be an example). The

standard width of most New Columbia streets is 32 feet and parking is allowed on either side. The narrowest street in New Columbia is North McCoy Court, one block south of North Trenton Street, and is only 28 feet wide.

Figure 6.11 Traffic Calming Devices and Pedestrian Paths



To ensure pedestrian safety and more efficient accessibility, pedestrian paths and sidewalks have been provided throughout the site. These paths also provide connectivity to surrounding neighborhoods. The overall design of the community also supports pedestrian activity. The longest blocks in New Columbia are approximately 525 feet. However, pedestrian paths dissect each block to provide for quick access from one side of the site to the other. At least every 300 feet, either a sidewalk or pedestrian path is provided. This is especially convenient for the grade school kids who live in the furthest corner from the school. All

residents are located within New Columbia live less than a half mile away from Rosa Parks Elementary School. This also means that the two furthest points on the site are only a half mile apart.

VII. Environmental Protection and Open Space

The following section was described in the Green Building at New Columbia newsletter prepared by the Housing Authority of Portland.

One of the main underlying reasons for redeveloping the present day New Columbia site was to improve the environmental performance of the existing development. The HOPE VI program, which provided \$35 million for the redevelopment project, encourages the use of, “sustainable demolition and construction practices, and to pursue advanced technologies that will improve the quality, durability and environmental performance of the nation’s housing” (New Columbia Newsletter). New Columbia meets this goal of HOPE VI by using sustainable practices during the destruction, design and construction phases.

The construction company hired for the redevelopment project developed a waste minimization plan for all phases of the redevelopment. The plan established a goal that 80% of the total waste generated would be reused and recycled. This plan was implemented by including on-site storage for all materials which were to be recycled: wood, drywall, metal, plastic, glass, cardboard and organic debris.

Since the site was not a greenfield site (which smart growth tries to discourage), there were more than 200 existing buildings that had to be removed before the construction of New Columbia began. During demolition, 82% of the building materials on site were salvaged or recycled, which diverted more than 28,500 tons of waste from entering the landfill. These materials were reused in several ways:

- ❑ 100% of the concrete and asphalt rubble generated during the demolition of the site, approximately 22,000 tons, was reused as road base or structural fill around building foundations
- ❑ 3,200 tons of wood debris was reused on site for erosion control or sold to farmers and ranchers as mulch-like animal bedding
- ❑ Two, four-unit buildings were deconstructed and every component of the buildings was resold (excluding the plaster and insulation)
- ❑ Twenty-three of Columbia Villa's duplex buildings were purchased by local house moving companies and removed intact from the site
- ❑ Other salvaged materials from the site have been reused locally and all over the world: Heavy timbers were used as architectural finish material in Japan; a man in Portland purchased enough lumber, roofing, windows, appliances and plumbing fixtures from Columbia Villa to build three houses for his family; 1,200 square feet of roofing materials were donated to reroof an elderly woman's home in Salem, Oregon; windows and siding were donated to a local school district to refurbish an entire school and gymnasium
- ❑ Some salvaged building materials were reused by HAP for other public and affordable housing sites, while contractors and private parties purchased any remaining items, including, windows, metal roofing, siding, structural timber plywood, cabinetry, doors, door hardware, appliances, furnaces, water heaters, toilets, sinks, and bath tubs

New Columbia also used sustainable demolition techniques to prepare the site for the construction of New Columbia, but HAP went even further to ensure New Columbia would be a “green” building project. The buildings in New Columbia, whether commercial or residential,

were designed to support sustainable development and smart growth practices. Two of the mixed-use buildings located along North Trenton Street have LEED certification, and LEED Gold was awarded to Rosa Parks Elementary. New Columbia also utilized more than 35,000 feet of certified sustainable lumber purchased from a company in Oregon which provided enough lumber to frame 14 residential units. Also implemented were advanced framing techniques which reduce the overall amount of framing lumber needed. Recycled-content fiber-cement siding was used on building to increase the durability and lifespan of the buildings. This recycled siding looks like traditional wood siding, yet is non-combustible and has an expected lifespan of 50 years. LEED-certified drywall, made of 100% synthetic material with a recycled paper face was used in the building to support green building techniques. The insulation used in the buildings was made of a high recycled content.

In order to decrease the amount of energy and water consumed by New Columbia's buildings, Energy Star appliances, windows, water heaters and light fixtures were installed. New Columbia is also experimenting with solar panels on two townhouses. The solar panels were donated by the Energy Trust of Oregon to determine the long-term investment benefit of using solar to heat water and buildings. The solar panels use the sun to pre-heat water before it goes to the water heater. Then the water is distributed to the plumbing fixtures and to furnaces to heat the apartments. The two townhouses will be monitored for 12 months and the information gathered will be used for future solar projects. To conserve water, the toilets, showers and faucets installed in New Columbia rental units outperform the state of Oregon's conservation requirements by at least 20%.

New Columbia is Portland's largest green street site. It earned this title by implementing narrower streets, permeable paving, and pocket swales, planter boxes and dry wells to reduce

stormwater runoff. These techniques have allowed approximately 98% of all stormwater to be processed on site to prevent even further contamination of a local river. The pocket swales have vegetation and soil features to allow for rain water to infiltrate back into the groundwater aquifer. This process decreases the amount of underground piping needed in comparison to traditional development by 80%. New Columbia's "green street" system includes 101 vegetated pocket swales (pictured in Figure 6.12), 31 flow-through planter boxes and 40 public infiltration dry wells.

Figure 6.12 Vegetated Pocket Swale



The permeable paving located in the alleys on the northwest portion of the site are one of Portland's largest porous pavement demonstration areas. These alleys consist of a strip of porous pavers located on top of a soakage trench (shown in Figure 6.13). The stormwater from surrounding impervious surfaces enters the soakage trench through the pavers and filters to a 30

feet deep drywell. These trenches filter hazardous pollutants from the water before releasing it back into the aquifer.

Figure 6.13 Permeable Pavers Located in Alleys



Table 6.6 Environmental Protection and Open Space

#	Question	Answer	Points	Score
7a	The project minimizes impervious surfaces to improve stormwater quality and quantity	Yes No	1 0	1
7b	The project reuses or rehabilitates existing structures	Yes No	1 0	0.5
7c	The project uses at least 30 percent recycled or "low impact" building materials	Yes No	1 0	1
7d	Small green spaces and playgrounds are located within every residential unit	Less than 1/4 mile 1/4 to 1/2 mile 1/2 to 3/4 mile 3/4+ miles	3 2 1 0	3
7e	The site was developed to preserve as many existing trees as possible	Yes No	1 0	1
7f	The buildings are sustainable, energy efficient materials, appliances and design	Yes No	1 0	1
Total Points			8	7.5

Parks and Open Space

At the heart of New Columbia lies McCoy Park, a four-acre park located along North Trenton Street. McCoy Park presents a water fountain, a massive sculpture, covered picnic area, basketball court, climbing wall, playground, a community garden and benches situated along the perimeter of the park. Figure 6.14 provides an aerial photo of McCoy Park right after its construction. Located in Appendix E are more pictures of the park and its amenities.

Figure 6.14 McCoy Park Aerial Photograph



- 1) Fountain**
- 2) The Ancestor Tree Sculpture**
- 3) Covered Picnic Area**
- 4) Playground Equipment**
- 5) McCoy Park Community Garden**
- 6) Basketball Court**
- 7) Climbing Wall**

Figure 6.15 Pictures Correlating with Figure 6.14 of McCoy Park Aerial



In addition to McCoy Park are four, quarter-acre pocket parks located throughout the site. Each pocket park includes playground equipment, large mature trees which provide shading, and picnic tables and benches. The pocket park serving the residents in the northeastern part of the site is shown in Figure 6.16. In Appendix C, the map of New Columbia identifies the location of the four pocket parks are located on the site.

Figure 6.16 Pocket Park located in the Northeastern part of New Columbia



Other open spaces in New Columbia are referred to as shared common spaces. Each of these spaces serves as the front yard for several buildings and consists of an open area and mature trees. Figure 6.17 depicts one of the shared common spaces in New Columbia. In total, there is over seven acres of parks and open space located in New Columbia.

Figure 6.17 Shared Common Green serving as a front yard for multiple houses



Before the redevelopment, 430 trees were located on the property, more than half of which were planted in 1942. Portland's zoning code requires 35% of existing trees be preserved when a site is redeveloped. New Columbia was able to save more than half of the existing trees, many with diameters greater than 48 inches, through careful planning and excellent design. The street and pedestrian path designs purposely avoided mature trees and several buildings were constructed only a few feet away from existing buildings (as shown in Figure 6.18).

Fliigure 6.18 Pedestrian Path designed to accommodate a mature tree



CHAPTER 7 - Concluding Statements

Based on the scorecard examination of New Columbia, it appears as though this community is meeting, and often exceeding, almost all of the smart growth principles. It has successfully provided a mix of uses, a range of housing options (both price and style), enhances community character through design, is compact and transit-oriented, provides open space and supports environmental protection. The scorecard had a total of 78 possible points, New Columbia scored 73.5.

The three scorecards referenced to develop the New Columbia scorecard, each used different methods of determining whether a community would be considered smart growth based on the score it received. For example, the New Jersey scorecard assigns a letter grade depending on the total score the development attains. If implementing this method of assigning a letter grade to a community, the following scale would be used for the New Columbia scorecard to show how “smart” the development actually is (shown in Table 7.1). Based on the score breakdown below, New Columbia would receive an “A” for its smart growth components.

Table 7.1 Final Score and Letter Grade

Score	Letter Grade
78-70	A
69-61	B
60-52	C
51-43	D
42-34	F

Overall, New Columbia is functioning well as a smart growth community. New Columbia did receive an “A”, yet it still was four and a half points away from a perfect score of 78. A majority of the points that were not received were due to the longer than desirable distance from one edge of the site to the other. For example, not all residents were within less than a quarter of a mile from the uses and transit located along North Trenton Street; and some of the neighborhood blocks were longer than 400 feet. While New Columbia failed to attain all of the points possible, the site is still very pedestrian friendly and transit accessible. The only way to make the commercial uses within a quarter of a mile of every resident is to position the “main” street in the center of the development. While it may be unrealistic for New Columbia to relocate its commercial uses to a more central location, future smart growth developments may be able to learn from this.

Perhaps the city in which New Columbia is located is somewhat responsible for its success as a smart growth community. The comprehensive light rail and bus system located in Portland greatly provide the opportunity for New Columbia to be connected with the surrounding metro area. Another supporting factor is the growth management policy in the Portland-metro area which strongly encourages infill redevelopment as opposed to sprawl. Although it cannot be confirmed by this particular study, the existing conditions of the area in which a smart growth community is located, *may* play a crucial role in the success of a smart growth community.

The original intent of this report was to perform a scorecard analyze New Columbia in Portland, Oregon to determine if the initial intentions of the smart growth approach were truly being met four years after the completion of the project. Based on the site visit performed, the literature reviewed, and the scorecard analysis, New Columbia seems to be a thriving smart growth development.

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Appendix A - New Columbia Scorecard

I. Existing Development and Infrastructure

#	Question	Answer	Points	Score
1a	Project is located adjacent to existing infrastructure: roads water and sewer.	Existing Service	3	3
		Less than 1/4 mile	2	
		1/4 to 1/2 mile	1	
		1/2+ mile(s)	0	
1b	Project requires new/additional services and/or facilities (fire,, police, school)	Not needed Needed	1 0	0
1c	The project is located adjacent to existing development	Yes No	1 0	1
1d	The project reuses a brownfield site	Yes No	1 0	1
1e	The project is inside city limits or will be annexed	Yes No	1 0	1
Total Points			7	6

II. Mixed Use

#	Question	Answer	Points	Score
2a	Project is near at least three of the following--housing, restaurants, retail/convenience/services, schools, recreation centers, offices	Less than 1/4 mile	4	3.5
		1/4 to 1/2 mile	3	
		1/2 to 3/4 mile	2	
		3/4 to 1 mile	1	
		1+ miles	0	
2b	Project is mixed use (any combination of housing, retail, office, commercial, public buildings, etc)	4+ uses	3	3
		3 uses	2	
		2 uses	1	
		1 use	0	
2c	Project provides a new type of development to an existing neighborhood such as employment, housing, retail, civic, educational, cultural, recreation, neighborhood-serving retail/service	4+ uses added	4	4
		3 uses added	3	
		2 uses added	2	
		1 use added	1	
		0 uses added	0	
2d	Project adds to the diversity of uses within an existing community	Yes No	1 0	1
2e	There is a neighborhood center with retail, office, a public meeting space, and/or a park of other green space within 1/2 mile of all residents	Less than 1/2 mile	3	3
		1/2 to 3/4 mile	2	
		3/4 to 1 mile	1	
		1+ miles	0	
Total Points			15	14.5

III. Range of Housing Options

#	Question	Answer	Points	Score
3a	Project offers a mix of housing types and sizes (apartments, condos, townhouses, single-family, studios, 1BR, 2BR, 3BR, etc.)	4+ types 3 types 2 types 1 type	3 2 1 0	3
3b	Project offers units with a wide range of pricing options for different income levels	Yes No	1 0	1
3c	Project contributes to community's affordable housing	Yes No	1 0	1
3d	Housing types and/or prices are physically mixed in the community	Yes No	1 0	1
Total			6	6

IV. Community Character and Design

#	Question	Answer	Points	Score
4a	Project contributes to public streetscape with pedestrian-friendly amenities such as benches, street trees, lighting, trash cans, and windows at street level	4+ types 3 types 2 types 1 type None	4 3 2 1 0	4
4b	On street parking is encouraged. Parking lots are generally located behind street walls and buildings with little street visibility	Yes No	1 0	1
4c	The project uses alleys to access garages, rather than individual driveways	Yes No	1 0	1
4d	Commercial buildings front directly on the sidewalk with parking to the side or rear	Yes No	1 0	1
4e	Project creates or enhances community spaces such as public plazas, squares, parks, etc.	Yes No	1 0	1
4f	Public spaces are open to the general public	Yes No	1 0	1
Total Points			9	9

V. Density and Compactness

#	Question	Answer	Points	Score
5a	Average number of dwelling units per acre	14+ DU/acre	4	4
		10-13 DU/acre	3	
		7-9 DU/acre	2	
		4-6 DU/acre	1	
		<4 DU/acre	0	
5b	Project density is equal to or greater than that of surrounding areas	Greater density	2	2
		Equal density	1	
		Lower density	0	
5c	Building setbacks are shallow, generally no more than 20 feet	Yes	1	1
		No	0	
Total Points			7	7

VI. Transportation: Accessibility, Mobility, Connectivity, and Walkability

#	Question	Answer	Points	Score
6a	The project is accessible by multiple modes of transportation (auto, bus, rail, walking, biking)	4+ types	4	4
		3 types	3	
		2 types	2	
		1 type	1	
		None	0	
6b	Streets are organized in a connected network internally and are connected to existing or planned adjacent streets	Yes	1	1
		No	0	
6c	Neighborhood blocks are short	Less than 400 feet	3	2
		400 to 600 feet	2	
		600 to 800 feet	1	
		800+ feet	0	
6d	Cul-de-sacs are avoided, except where absolutely necessary due to natural conditions	Yes	1	1
		No	0	
6e	Traffic calming measures such as curb bulb-outs or choking mechanisms are incorporated	Yes	1	1
		No	0	
6f	Roadways are relatively narrow for local residential streets	Less than 29 feet	2	1.5
		30 to 35 feet	1	
		36+ feet	0	
6g	Sidewalks are 4 to 5 feet wide and on either side of the street or are greater than 10 feet wide at the neighborhood center	Yes	1	1
		No	0	
6h	There is an elementary school with pedestrian access within one mile of the neighborhood	Yes	1	1
		No	0	
6i	The project defines a neighborhood(s) that is roughly a ten minute walk from edge to edge (approx. 1/2 mile)	Less than 1/2 mile	3	3
		1/2 to 3/4 mile	2	
		3/4 to 1 mile	1	
		1+ miles	0	

6j	Frequently visited uses are safely accessible without a car	All Uses Some Uses No Uses	2 1 0	2
6k	The furthest edge of the project is within walking distance of public transit (bus, rail, jitney, car share facility)	Less than 5 mins 6-10 minutes 11-15 minutes 16-20 minutes 20+ minutes	4 3 2 1 0	3
6l	There is a dry and safe place to wait for transit in the neighborhood	Yes No	1 0	1
6m	The project provides clearly defined paths for internal circulation between buildings and/or uses	Yes No	1 0	1
6n	The project connects and extends internal paths, bikeway or sidewalk systems to external systems.	Yes No	1 0	1
Total Points			26	23.5

VII. Environmental Protection and Open Space

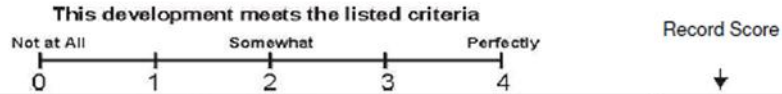
#	Question	Answer	Points	Score
7a	The project minimizes impervious surfaces to improve stormwater quality and quantity	Yes No	1 0	1
7b	The project reuses or rehabilitates existing structures	Yes No	1 0	0.5
7c	The project uses at least 30 percent recycled or "low impact" building materials	Yes No	1 0	1
7d	Small green spaces and playgrounds are located within every residential unit	Less than 1/4 mile 1/4 to 1/2 mile 1/2 to 3/4 mile 3/4+ miles	3 2 1 0	3
7e	The site was developed to preserve as many existing trees as possible	Yes No	1 0	1
7f	The buildings are sustainable, energy efficient materials, appliances and design	Yes No	1 0	1
Total Points			8	7.5
Total Points			78	73.5

Appendix B - Idaho, Maryland, and New Jersey Scorecards

Smart Growth Neighborhood Development Scorecard



Rate each criteria on a scale of 0 to 4. Give the development in question a zero if it does not meet the criteria in any way and a four if it meets the criteria perfectly.

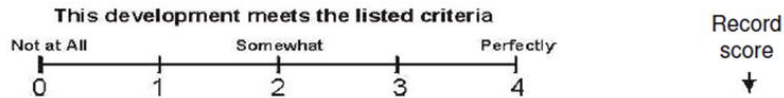


	<i>Land Use Criteria</i>	Score
1	The project is inside city limits or will be annexed (4), is inside an area of city impact (2-3), is outside existing planning areas (0-1).	
2	The project defines a neighborhood(s) that is roughly a ten minute walk from edge to edge (approx. 1/2 mile).	
3	Buildings are zoned by compatibility of building type first, use second; e.g. single family/home office or apartment/office are compatible if building form is similar.	
4	Street trees, sidewalks, front porches and front doors dominate streetscapes, not garage doors and driveways.	
5	There are a variety of housing types and sizes that at least two income levels can afford.	
6	Most lots are less than 70 feet wide. There is rear alley garage access.	
7	There is an elementary school with pedestrian access within one mile of the neighborhood.	
8	<i>There is a variety of housing density and housing density is higher the closer you get to the neighborhood center.</i>	
9	Small green spaces and playgrounds are located within 1/4 mile walk of every residential unit.	
10	Building setbacks are shallow, generally no more than one quarter the lot width, with a maximum of no more than 20'.	
11	There is a neighborhood center with retail (best), office, a public meeting space, and/or a park or other green space within 1/2 mile of all residents (may/may not be part of project).	
12	Commercial buildings front directly on the sidewalk with parking to the side or rear, and/or open spaces/parks are fronted by roadways rather than behind backyards.	
13	On street parking is encouraged. Parking lots are generally located behind street walls and/or buildings with little street visibility.	
14	The project works with the natural topography and minimizes grading. Most natural amenities are retained, or new amenities constructed.	
15	The project approximates pre-development drainage conditions and reduce water pollution potential by using measures such as on-site biofiltration.	
16	The buildings use sustainable, energy efficient materials, appliances and design.	
17	Landscaping conserves water, preserves/uses native plants, preserves/replaces existing trees - especially specimen trees, and/or enhances the site with new trees.	
Land Use Criteria Subtotal		

Carry this subtotal to the other side
(over)



Neighborhood Development Scorecard continued



<i>Transportation Criteria</i>		Score
18	Streets integrate all modes of transportation, with safe and comfortable sidewalks and pathways throughout. The project has transit access (or access is planned).	
19	Streets are organized in a connected network internally and are connected to existing or planned adjacent streets. Blocks are short (<400')	
20	Culdesacs are avoided except where absolutely necessary due to natural conditions.	
21	Traffic calming measures such as curb bulb-outs are incorporated.	
22	Roadways are relatively narrow (e.g. 29' from curb to curb for local residential streets) and parking is allowed on both sides of streets.	
23	Sidewalks are 4-5' wide and detached, or >10' wide at the neighborhood center. 5-10' tree planter strips have shade trees planted an average of 30' on center.	
24	Buildings front on to collectors. Street section design of collectors and arterials is sensitive to the surrounding land use and usable by all transportation modes.	
25	There is a dry, dignified place to wait for transit in the neighborhood center.	
Transportation Criteria Subtotal		
Land Use Criteria Subtotal from front		
Grand Total (Land Use + Transportation Criteria)		

Now add up all of the scores and then add the subtotals to get a grand total. The highest possible score of 100 means the development meets smart growth principles 100%.

80-100 pts. — Congratulations. This is an excellent smart growth neighborhood.
50-79 pts. — Good effort, look for small modifications that might increase the score.
25-49 pts. — Needs major improvements to meet smart growth principles.
0-24 pts. — This is not a smart growth development.

For more information on how to use the Idaho Smart Growth Scorecard please contact us at:
 PO Box 374 Boise ID 83701 Phone (208) 333-8066 isg@idahosmartgrowth.org



MARYLAND

OFFICE OF SMART GROWTH

ELIGIBILITY SCREEN

Project must answer yes to all questions

Is the proposed project located in an approved Priority Funding Area in accordance with the 1997 Smart Growth Act?

Is the project located so that areas designated for development do not include areas already targeted by state or local government programs for preservation?

Is the proposed net density of the project at least 3.5 dwelling units/acre per net buildable acre, considering "excluded lands," or a Floor Area Ratio of .2?

SMART GROWTH SCORECARD

Overall Rating

ATTRIBUTES (refer to detailed score card for explanation of attributes)

N/A	Poor	Fair	Good	Excellent
-----	------	------	------	-----------

A. Location

The proposed project is located adjacent to existing development

The project reuses a brownfield site.

Bonus: The proposed project is in a location receiving State assistance to support re/development

B. Service Provision and Government Expenditures

There is existing or planned sewer and water service within ½ mile of the project site in a planned service area

There is adequate school capacity or is additional capacity planned (N/A for non-residential projects)

There is existing or planned road capacity

C. Density and compactness:

Project density

For residential projects, is there adequate density?

For projects that are commercial and retail single use and mixed use, including mixed use with residential, is there adequate density?

If project site is within ½ mile of a planned or existing transit infrastructure, the project is developed at a density supporting the transit investment

Or, the project is developed at "transit ready" densities, based on potential future service.

Site area devoted to roads is minimized.

Site area devoted to parking is minimized.

Bonus: Structured parking is used.

D. Mixed Use

The project has a mix of land uses. (Uses include housing, retail, office/commercial, public buildings, entertainment, public space)					
Or, for small, infill or single use projects, the project adds to the diversity of uses within 1/4 mile					
Different uses are physically mixed in the project or within the immediate adjacent neighborhood					
E. Housing Diversity (Applicable to projects with residential)					
Different housing types are proposed.					
Or, if project is small, infill and/or single use, type of housing provided increases the diversity of housing options in the immediate neighborhood					
The project provides housing priced to different income levels.					
Or, if project is small, infill and/or houses of a single price range, the housing provided increases diversity of housing prices in the surrounding neighborhood					
Housing types and/or price levels are physically mixed in the project or within the immediate adjacent neighborhood					
F. Transportation:					
<i>Accessibility, Mobility and Connectivity</i>					
Frequently visited uses are within 1/2 mile.					
Frequently visited uses are safely accessible without a car.					
The project is served by public transit.					
An existing or planned transit facility is near the project, and is safely accessible without a car.					
The project road system connects to and logically extends external street systems at multiple locations					
The project provides an internal road system that is interconnected, without cul-de-sac					
Or, the project is located on an existing street system that is interconnected					
The project expands or improves transportation choices on-site, in addition to auto access					
<i>Walkable and Transit Friendly Features</i>					
The project has pedestrian and/or transit friendly features available at the site, or will provide them.					
The project provides or has improved sidewalks along street frontages					
Bonus: The project provides improved, clearly defined paths for internal circulation between buildings and/or uses.					
Bonus: The project connects and extends internal path, bikeway or sidewalk systems to external systems.					
Project parking is located to support a pedestrian friendly environment.					
G. Community Character and Design					
The proposed building orientation maintains or establishes an edge from the street.					
The project provides community centers, recreational facilities, parks, plazas, open space or					

other public spaces.					
Or, public spaces are available within ½ mile off-site.					
Bonus: On-site public spaces are open to the general public.					
Building designs follow existing or desired architectural vernacular, as established in local design codes or in relation to significant buildings or existing structures in the area.					
The project reuses or rehabilitates existing structures.					
The project protects and/or reuses historic structures.					
The project meets the objectives of the local government's comprehensive plan or applicable plan.					
H. Environmental Protection					
<i>Resource Protection:</i>					
The project avoids development on wetlands, streams, shorelines and related buffer areas.					
The project minimizes impervious surfaces to improve stormwater quality and quantity.					
The project uses "green building" design techniques.					
The project avoids development on working agriculture or forest lands.					
The project avoids development on slopes steeper than 15%, on highly erodible or otherwise unstable soils, or on floodplains.					
The project protects on-site habitat for threatened or endangered species.					
The project relieves development pressure on natural resources on or off site.					
Bonus: on-site environmental resources are protected in perpetuity.					
Bonus: The project proposes to improve degraded environmental resources.					
I. Stakeholder Participation					
Citizen and stakeholder participation is conducted early in process, when involvement can create change.					
Innovative tools are used to notify stakeholders and facilitate dialogue.					
Stakeholder concerns are documented and addressed formally.					
J. Economic Development					
The project promotes jobs/housing balance.					
The project positively impacts employment in the community.					
The project uses respond to identified community needs.					
If the project results in business/resident relocations, the relocations are planned and funded.					
The project increases community opportunities for training and education, entertainment or recreation.					



SMART GROWTH SCORECARD — Proposed Developments

An easy-to-use scorecard for identifying Smart Growth strengths and weaknesses in proposed development.

Scorecards are complimentary upon request. Membership support of New Jersey Future and its non-profit research and policy work is welcome. To become a member, and to learn more about our efforts to bring smarter growth to New Jersey, visit our website at www.njfuture.org or call 609/393-0008.

What is Smart Growth?

Smart Growth means adding new homes, new offices and businesses and new jobs to New Jersey's economy in a way that enhances the communities where we already live — without requiring higher taxes, adding to our road and traffic woes and without consuming or polluting our remaining farmland, beachfronts, woodlands and open spaces.

How do you know Smart Growth when you see it?

Smart Growth has two primary features: the "where" and the "how." It happens "where" development can be accommodated with minimal adverse impact to the environment, and in places where development takes maximum advantage of public investments already made. Smart Growth also addresses "how" the finished development will work with neighboring development to restore choices that are missing in places marked by sprawl: such as the choice to walk or use public transit, the choice to meet neighbors in attractive common spaces, or the choice to live in an apartment, a house, or a condominium.

About this scorecard

This scorecard is as much a conceptual model as it is a practical tool. It should be viewed as a way to help citizens and local officials evaluate development proposals and the potential benefits and drawbacks they may bring to the community. The card is best applied to larger projects, which tend to have larger implications for smart growth, but is a useful exercise for most development proposals.

It is important to note that local zoning and accompanying community requirements may not permit an applicant to build to the standards set in this scorecard. In such cases, those concerned about bringing smarter growth to their community will want to work with local leaders on improving zoning and local master plans to encourage these general criteria:

General criteria for Smart Growth

- Located near existing development and infrastructure
- Increases the range of housing options
- Protects open space, farmland and critical environmental areas
- Creates or enhances a vibrant mix of uses (residential, retail, office)
- Creates or enhances choices for getting around
- Walkable, designed for personal interaction
- Respects community character, design and historic features

Directions:

The scorecard is broken up into seven sections, one for each Smart Growth criterion. Simply read through the sections and circle the best answer for each measurement listed. Some questions might require additional information from your local planning and zoning office. The measurements are weighted differently so that the maximum score for each measurement reflects its importance to Smart Growth goals. To calculate the score, multiply the points for a given answer by the measurement's weight and enter it into the score column. Add up the scores for each measurement and write that number (subtotal) in the space provided.

I. Near existing development and infrastructure – Makes the most of limited public resources and builds on public investments already made. Upgrading existing infrastructure and services is more efficient than building new in previously undeveloped areas. Creates opportunity for infill or redevelopment of under-utilized, abandoned and brownfield sites.

Measurement	Answer	Points	Weight	Score
Project is located adjacent to existing infrastructure: roads, water and sewer	Existing service	3	X 4	
	Less than 1/4 mile	2		
	1/4 to 1/2 mile	1		
	1/2+ mile(s)	0		
Project is in State Plan Planning Area 1 or 2, a designated center (according to the State Plan) and/or a designated Area in Need of Redevelopment	Yes	1	X 2	
	No	0		
Project is near at least three of the following – housing, restaurants, retail/convenience/services, schools, recreation centers, offices	Less than 1/4 mile	4	X 2	
	1/4 to 1/2 mile	3		
	1/2 to 3/4 mile	2		
	3/4 to 1 mile	1		
	1+ miles	0		
Project requires new/additional services and/or facilities (fire, police, school)	Not needed	1	X 2	
	Needed	0		

Subtotal

II. Range of housing options – Offers a range of housing types and sizes. Increases the choices available to households of all income levels.

Measurement	Answer	Points	Weight	Score
Project offers a mix of housing types and sizes (apartments, condos, townhouses, single-family, studios, 1BR, 2BR, 3BR, etc.)	Yes	1	X 3	
	No	0		
Project has units with a wide-range of pricing options that will be sold or leased, with at least 15 percent priced as affordable housing	Yes	1	X 2	
	No	0		
Project contributes to community's fair share of affordable housing (COAH number)	Yes	1	X 2	
	No	0		

Subtotal

III. Protects open space, farmland and critical environmental areas – Benefits the general public as it spares watersheds, scenic vistas and agricultural areas needed for drinking water, farm and tourism revenues and strong quality of life.

Measurement	Answer	Points	Weight	Score
Project avoids critical environmental areas (State Plan Planning Area 5, prime watersheds, unbroken forest and grassland areas, critical wildlife areas/wildlife habitat)	Yes	1	X 3	
	No	0		
Project located on land that is physically suitable for development (avoids steep slopes greater than 20 percent, floodplains, stream corridors, aquifers and aquifer recharge areas)	Yes	1	X 2	
	No	0		
Project does not intrude into agricultural and/or open lands	Yes	1	X 2	
	No	0		
Project cleans up a brownfield site	Yes	1	X 2	
	No	0		
Project is energy efficient (example: exceeds standards in NJ energy code, meets standards of NJ Energy Star Homes program, etc.)	Yes	1	X 2	
	No	0		
Project uses at least 30 percent recycled or "low impact" building materials	Yes	1	X 1	
	No	0		

Subtotal

IV. Mix of uses – Creates a vibrant community where places to work, shop, live and play are integrated.

Measurement	Answer	Points	Weight	Score
Project is mixed use (any combination of housing, retail, office, commercial, public buildings, etc.)	4+ uses	3	X 2	
	3 uses	2		
	2 uses	1		
	1 use	0		
Project provides a new type of development to an existing neighborhood such as employment, housing, retail, civic, educational, cultural, recreation, neighborhood-serving retail/service	4 uses added	4	X 2	
	3 uses added	3		
	2 uses added	2		
	1 use added	1		
	0 uses added	0		
Project adds to the diversity of uses within an existing community	Yes	1	X 3	
	No	0		

Subtotal

V. Choices for Getting Around – Sited near existing transit service to decrease dependency on the automobile, thereby reducing traffic and encouraging walkability (see VI. below).

Measurement	Answer	Points	Weight	Score
Project is accessible by multiple modes of transportation (auto, bus, rail, walking, biking)	4+ modes	2	X 4	
	3 modes	1		
	2 modes	0		
Project is in walking distance to public transit (bus, rail, jitney)	Less than 5 mins	4	X 2	
	6-10 minutes	3		
	11-15 minutes	2		
	16-20 minutes	1		
	20+ minutes	0		
Project has an interconnected road system without cul-de-sacs OR the project is located on an existing street network that is interconnected	Yes	1	X 2	
	No	0		

Subtotal

VI. Walkable, designed for personal interaction – Designed at the human scale, rather than for the automobile, to help reduce traffic and create places with increased potential for social interaction, walking and sense of community.

Measurement	Answer	Points	Weight	Score
For residential: Average number of dwelling units/acre (including on-site right-of-way and open space)	14+ DU/acre	4	X 2	
	10-13 DU/acre	3		
	7-9 DU/acre	2		
	4-6 DU/acre	1		
	< 4 DU/acre	0		
	—or—			
	1.0+ FAR	4		
	.76 - 1.0 FAR	3		
	.51 - .75 FAR	2		
	.4 - .5 FAR	1		
< .4 FAR	0			
Project parking is located where it does not visually dominate the development from the street and allows easy and safe pedestrian access to buildings	Parking in rear	3	X 2	
	Structured parking	2		
	On-street parking	1		
	Lot in front	0		
Project density is equal to or greater than that of surrounding areas	Greater density	2	X 1	
	Equal density	1		
	Lower density	0		

Subtotal

VII. Respectful of community character and design – In keeping with the local architecture, especially in historically significant areas. Enhances the community's desirability as a place to live, work, shop and recreate.

Measurement	Answer	Points	Weight	Score
Project reuses or rehabilitates existing and/or historic structures	Yes No	1 0	X 3	
Project building design follows existing or desired architectural style	Yes No	1 0	X 1	
Project contributes to public streetscape with pedestrian-friendly amenities such as benches, lighting, street trees, trash cans, and windows at street level	Yes No	1 0	X 1	
Project creates or enhances community spaces such as public plazas, squares, parks, etc.	Yes No	1 0	X 1	

Subtotal	
-----------------	--

Final calculations:

1. Starting at Table I below, enter the subtotals for each section into Column 2 (Section Scores).
2. Divide Column 2 by Column 1 (Total Possible) and enter that number into Column 3 (Calculation).
3. Multiply Column 3 by 100 and enter that number into Column 4. This is the Final Score for the section.
4. Using Table II below, enter the letter grade for each section into Column 5. This is the Final score for the section.

Once the calculations are complete, take a look at the areas in need of improvement. Does the project score well in terms of proximity to infrastructure, but poorly in terms of its proximity to public transit and other choices for getting around? Is the building design in keeping with the local architectural style, but inaccessible to pedestrian traffic? Making determinations of this nature will help guide a new development in the right direction, toward Smart Growth.

TABLE I

	Column 1	Column 2	Column 3	Column 4	Column 5
Smart Growth Criteria	Total Possible	Section Scores	Calculation (Col 2/Col 1)	Final Score (Col 3 x 100)	Final Grade (A-F)
I. Near existing development and infrastructure	24				
II. Range of housing options*	7				
III. Protects open space, farmland and critical environmental areas	12				
IV. Mix of uses	17				
V. Provides choices for getting around	18				
VI. Walkable, designed for personal interaction	16				
VII. Respectful of community character, design and historic features	6				
TOTAL OVER ALL CRITERIA	100				

* If there is no housing component to the project under review, deduct 7 points from column 1, bringing the total possible to 93 points. Divide the total for column 2 by the new total possible (93 points) to find the project's overall score.

TABLE II

Final Score

Letter Grade

100 – 90	A
89 – 80	B
79 – 70	C
69 – 60	D
59 – 0	F

Appendix C - Map of New Columbia with Corresponding Photos

Figure 7.1 New Columbia Aerial Photo

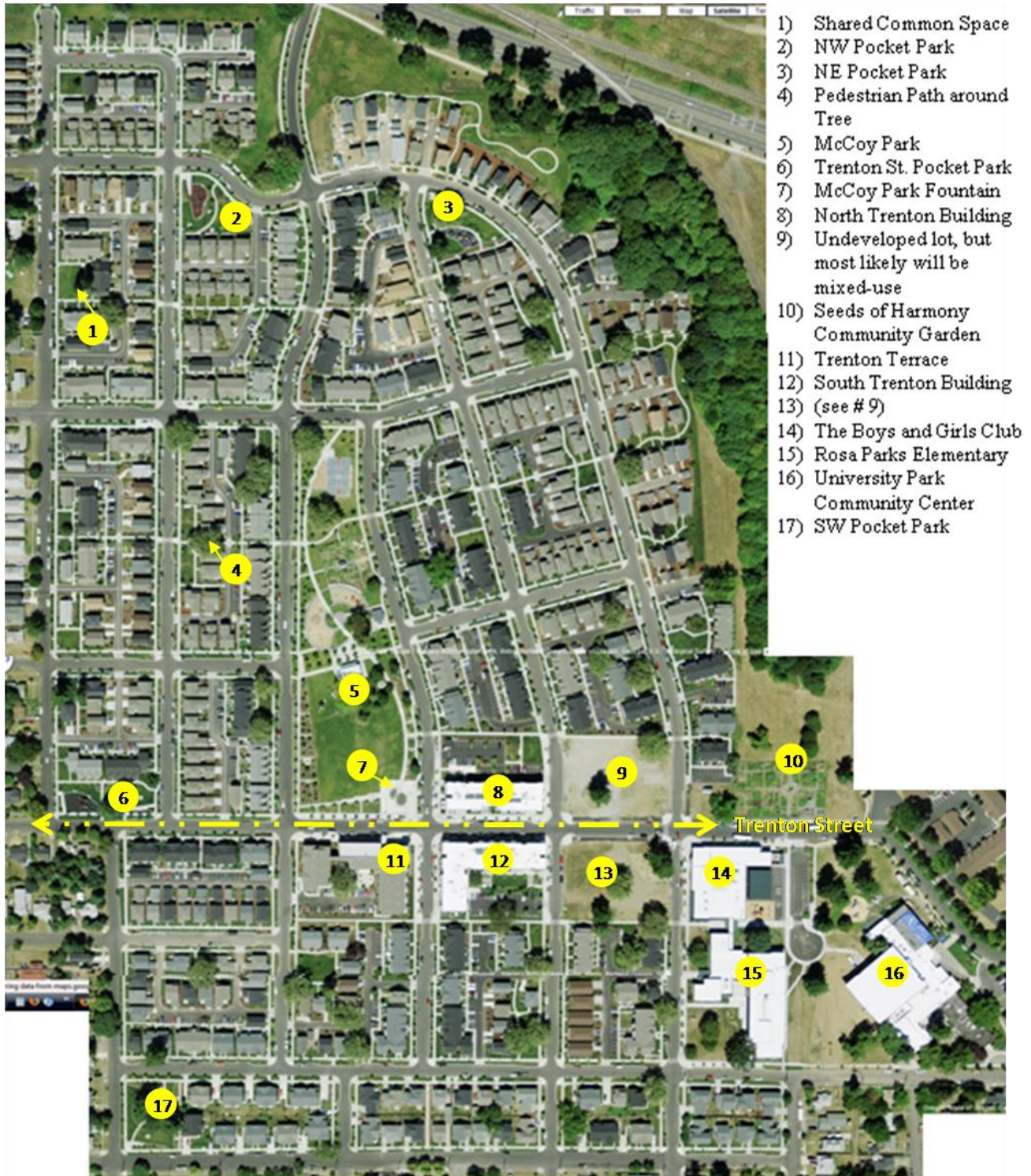


Figure 7.2 (1) Shared Common Space—Rental Quad Plex



Figure 7.3 (2) Northwest Pocket Park



Figure 7.4 (3) Northeast Pocket Park



Figure 7.5 (4) Pedestrian Path Bypassing Mature Tree



Figure 7.6 (5) McCoy Park



Figure 7.7 (6) Trenton Street Pocket Park—Sign located in all 4 pocket parks



Figure 7.8 (7) McCoy Park Fountain



Figure 7.9 (8) North Trenton Building



Figure 7.10 (10) Seeds of Harmony Community Garden



(Photo taken during the fall)

Figure 7.11 (11) Trenton Terrace



Figure 7.12 (12) South Trenton Building



Figure 7.13 (14&15) The Boys and Girls Club & Rosa Parks Elementary

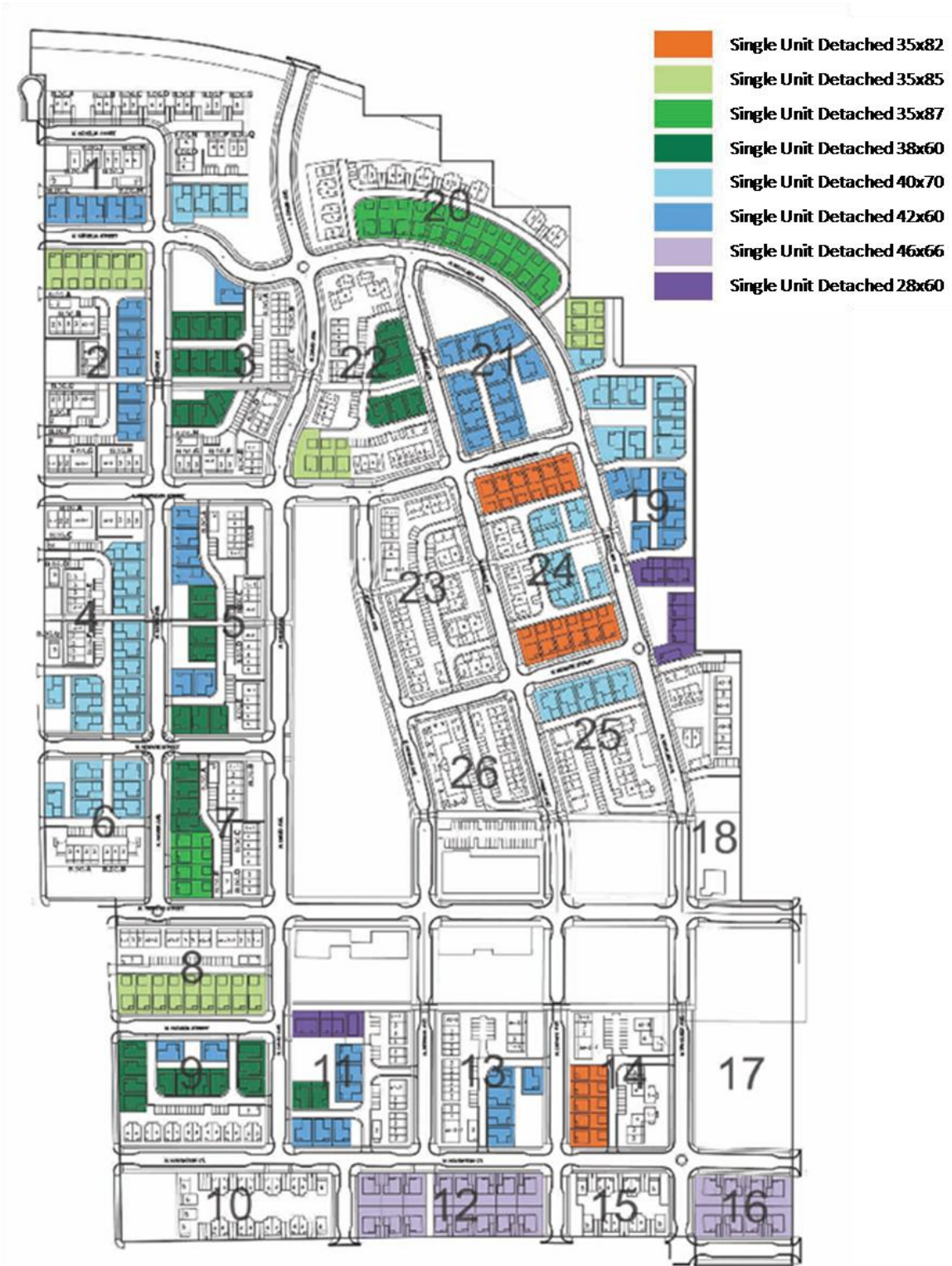


Figure 7.14 (17) Southwest Pocket Park

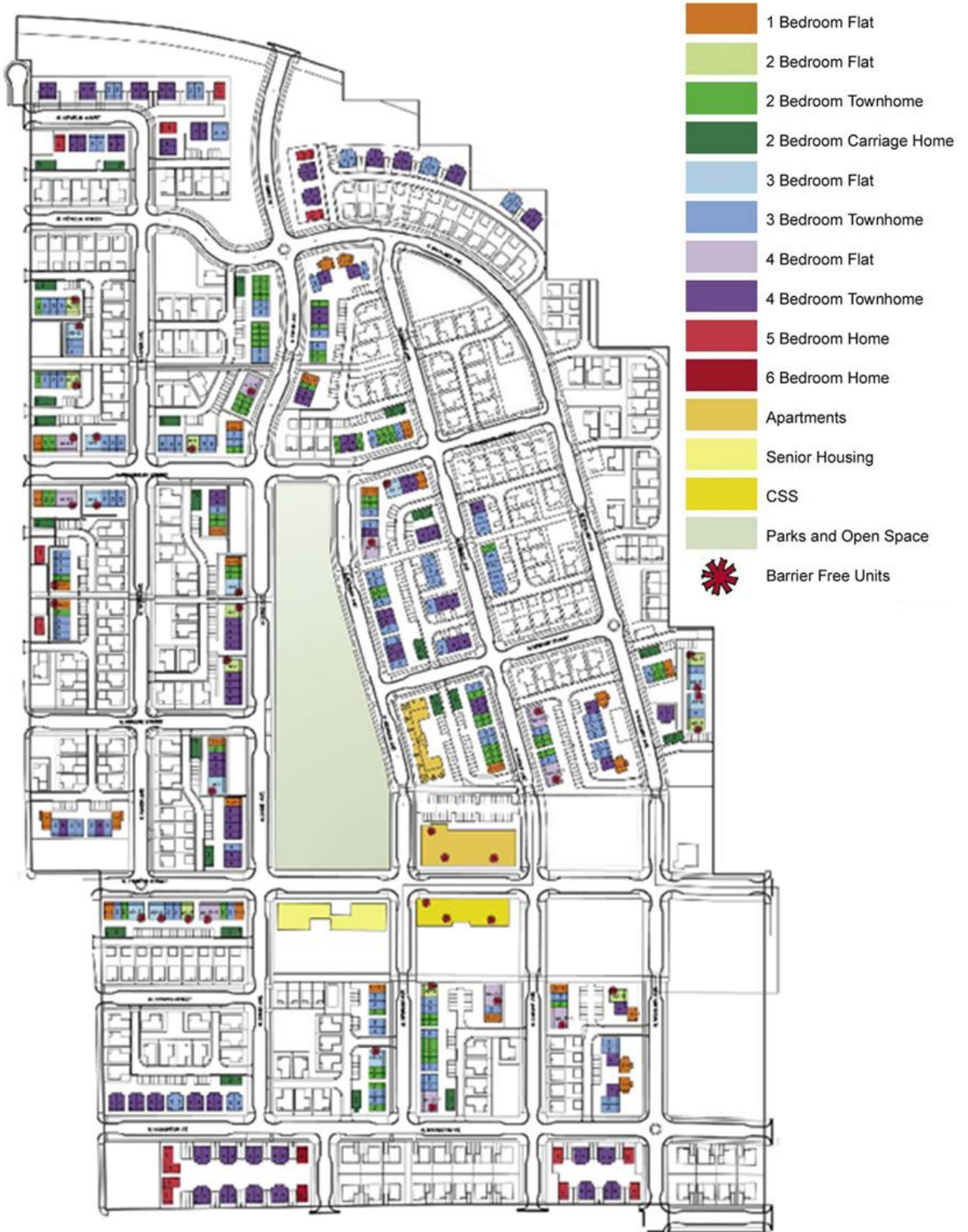


Appendix D - Unit Distribution

For Sale Single Dwelling Unit Distribution



Rental Housing Unit Distribution



Appendix E - Supplemental Photos

Figure 7.15 Three photos of Columbia Villa Housing Options



Rental Housing Units

Figure 7.16 ADA Accessible Apartment on ground floor with a second story flat above



Figure 7.17 Duplex for Rent



Figure 7.18 Habitat for Humanity Home



Figure 7.19 Single Family Home for Rent



Figure 7.20 Apartment Homes located along North Trenton Street



For Sale Units

Figure 7.21 Single-Family Homes for Sale fronting onto Pocket Park



Figure 7.22 Single-Family Home for Sale



Figure 7.23 Single-Family Homes for Rent fronting onto Common Green



Appendix F - Supplemental Site Photographs

Figure 7.24 Vegetated Pocket Swale



Figure 7.25 Vegetated Pocket Swale



Figure 7.26 Backside (south side) Trenton Terrace



Figure 7.27 Mixed Use building located along North Trenton Street

