



STATUS REPORT:
Twenty-minute Neighborhoods



City of Portland Bureau of
Planning and Sustainability
Sam Adams, Mayor | Susan Anderson, Director

20-Minute Neighborhoods

“Walkable communities are designed for people...safe, secure, balanced, mixed, vibrant, successful, healthful, enjoyable, and comfortable...”

Dan Burden (Walkable Communities)

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Desires for sustainable living: increased energy conservation, support for local businesses, active and healthier lifestyles and improving community connections and equity has led to an interest in fostering the development or redevelopment of walkable communities, or 20-minute neighborhoods, in Portland.

Through the Portland Plan, which is the update of Portland’s long-range development plan, we will explore how the 20-minute neighborhood concept may help inform decisions about growth, development and livability in Portland in the 21st century. This report, which summarizes our work to date on the concept of the 20-minute neighborhood, is divided into four parts:

- What is a 20-minute neighborhood?
- What are the benefits of a 20-minute neighborhood?
- Where are Portland’s 20-minute neighborhoods?
- Recommendations and Next Steps

Staff is preparing a more detailed version of this report that includes more information on the analysis and findings; it will be available in summer 2009.

WHAT IS A 20-MINUTE NEIGHBORHOOD?

A 20-minute neighborhood is a place with convenient, safe, and pedestrian-oriented access to the places people need to go to and the services people use nearly every day: transit, shopping, quality food, school, parks, and social activities, that is near and adjacent to housing. In other words, a 20-minute neighborhood is another name for a walkable environment. We have used the term 20-minute neighborhood because we think it is easier to understand—it is where people go and get to in about twenty minutes.

20-minute neighborhoods have the following three basic characteristics:

- A walkable environment
- Destinations that support a range of daily needs (*i.e., shops, jobs, parks, etc.*)
- Residential density

Before the 1920s, when autos were rare and few people had access to a car on a regular basis, most people lived in 20-minute neighborhoods by necessity. As cars became more available, proposals to preserve 20-minute neighborhoods entered planning literature. In 1929, the “Neighborhood Unit” by Clarence Perry described successful neighborhoods as those that offer accessibility to the spectrum of day-to-day human needs. He proposed defining these neighborhoods in terms of a one-quarter mile walk.

Despite well-recognized interest in keeping 20-minute neighborhoods in the late 1920s, and beyond, during the second-half of the 20th century, the trend across the United States was toward providing auto-oriented residential and commercial environments.

However, increased interest in improving sustainability—responding to challenges posed by climate change by reducing car trips and decreasing energy use in general, the need for affordable housing and to reduce housing-related costs, the need to stay physically fit and live healthily and wants to support local businesses—has renewed interest in walkable environments or 20-minute neighborhoods.

While some aspects of a walkable environment are obvious: They are compact, with good walking surfaces. They have direct, obvious and safe routes with frequent connections to attractive destinations—places to which people need and want to go. Other aspects of 20-minute neighborhoods or walkable environments many not be immediately obvious. However, a growing body of national and international research agrees on a basic set of features and elements that make walkable environments or 20-minute neighborhoods. According to the research, walkable environments—or 20-minute neighborhoods—generally include the following:

- building scales that are comfortable for pedestrians;
- mixed-use and dense development near neighborhood services and transit;
- distinct and identifiable centers and public spaces;
- a variety of connected transportation options;
- lower speed streets;
- accessible design; and
- a street grid or other frequently connected network of local streets

WHAT ARE THE BENEFITS OF A 20-MINUTE NEIGHBORHOOD?

Twenty-minute neighborhoods offer direct and indirect benefits. The most direct benefit of 20-minute neighborhoods is that they allow residents to drive less and thus reduce their overall household transportation expenditures, which at this time averages 16% of one's income¹. According to the 1995 Oregon Bicycle and Pedestrian Plan “walking will help reduce traffic congestion, air and noise pollution, wear and tear on roads, and consumption of petroleum; it will reduce the number of pedestrian-motor vehicle-related crashes, injuries, and fatalities; and it will reduce the need for additional roads, travel lanes and parking.”

Economic benefits frequently include an increase in housing values, attraction of new economy workers, offer business relocation opportunities, reduce commuting costs, decreases infrastructure investments (which ultimately affects the taxpayer), and they attract tourists.²

¹ According to the Center for Neighborhood Technology, residents of the Portland-Salem area spend, on average, 16% of their income on transportation; coupled with housing, we are looking at 46% of one's income.

² Center For Community Economic Development, University of Wisconsin-Extension, “Let's Talk Business,” Issue 83, July 2003.

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Other benefits include improved quality of life, improved physical fitness and general health, and increased social interaction in the community.

WHERE ARE PORTLAND'S 20-MINUTE NEIGHBORHOODS? A PRELIMINARY ANALYSIS

To understand how the 20-minute neighborhood concept might apply in Portland, the Bureau of Planning and Sustainability analyzed Portland's neighborhoods in terms of three factors:

- "Distance" meaning how easy it is to travel by foot or bike,
- "Destinations" meaning the presence of nearby businesses (grocery stores, restaurants, and retail) and public facilities (schools, parks),
- "Density" meaning having sufficient numbers of residents, employees and income to support businesses and public facilities.

DISTANCE

Some studies have shown that a 20-minute walk equates to approximately 1 mile walking at a fast pace; however, the average person could walk between $\frac{1}{4}$ to $\frac{1}{2}$ a mile under safe, conducive walking conditions, (e.g. sidewalks and short blocks).

To emphasize the importance of short distances for walking, we used an analysis area with dimensions of 500 by 500 feet and used the frequency of intersections and the presence of sidewalks as factors in walkability. We also recognize that slopes over 20-percent limit walking and biking accessibility. Transit, which gives access to more distant destinations, is also a factor.

DESTINATIONS

Destinations refers to the quality and type of the destination (presence of proximate grocery stores, restaurants, and retail). In this analysis, the following destinations were evaluated: full service grocery stores, both chain and single store operators; neighborhood-serving retail; eating & drinking establishments; parks; and elementary schools.

DENSITY

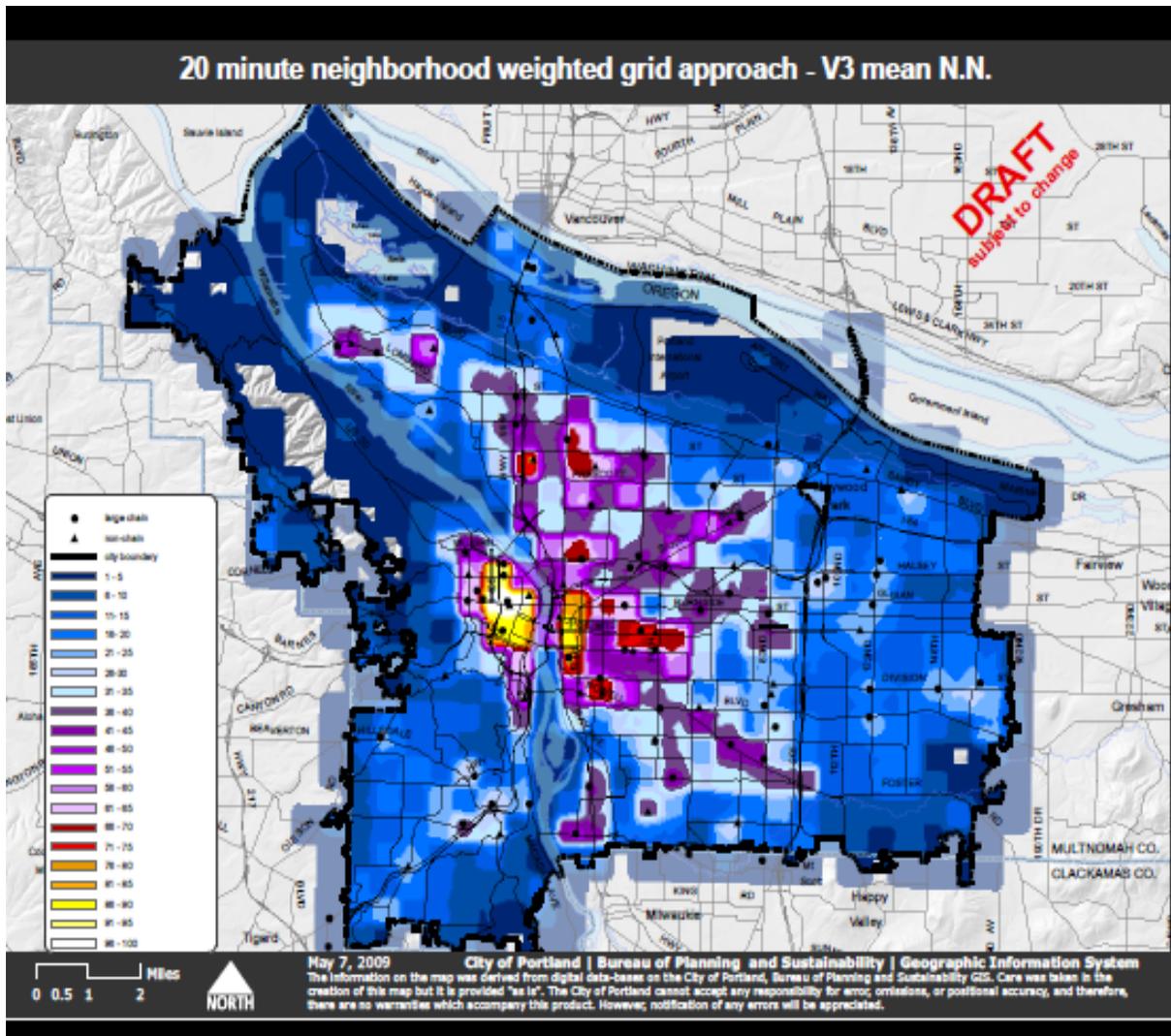
Density is needed to support the retail services used as walkable destinations. Twenty-minute neighborhoods require higher residential densities than are typically found where the car is the dominate mode of travel. It appears from the literature that 12-18 households per acre is the minimum density needed to support the retail uses we selected as destinations.

OTHER FACTORS TO CONSIDER

For the purpose of this analysis, we developed a "least common denominator" type of definition—one that was simple and straightforward and would include the minimum elements that could be applicable to the largest area of the city. We recognize that this definition leaves out a key characteristic of most successful 20-minute neighborhoods—they each have a special character that reflects the people who live in the area, its history, its physical features.

THE ANALYSIS

To begin to understand the opportunities and barriers for 20-minute neighborhoods in Portland, the Bureau did a preliminary analysis of how each part of the City performs in terms of distance, destinations and density. By overlaying and weighing the three factors, we were able to identify where areas had more or less 20-minute neighborhood characteristics. The following color-coded map shows the results.



FINDINGS

The areas shown in white to red have a significant presence of all three 20-minute neighborhood factors. The lilac to dark purple areas have some of the elements. The areas shown in light blue to dark blue are areas that lack significant 20-minute neighborhood characteristics.

Approximately 6% (34,000 people) of the City's population live in the white to red range; 25% (137,000 people) live in the lilac to purple range and 69% (368,000 people) live in the blue/dark blue range where 20-minute characteristics are the least. The results of this analysis can change

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depending on the weighting. Other versions of the analysis identified more small 20-minute nodes even in the blue areas.

“Hot spots” include Central Portland and some inner neighborhoods. These areas provide a cluster of businesses, grocery stores, open spaces, appropriate infrastructure, intersections, and transit. These areas clearly stand out as the focal points of the existing 20-minute neighborhoods.

Close-in, Southeast, and Northeast Portland: The map shows areas of the city that offer walkable destinations, but are not necessarily a high density of the destinations we selected and in some cases they do not have continuous walkable areas. However, they do offer connections to other areas through biking or transit.

Beyond this core area there are corridors (Sandy and Foster stand out prominently) and islands (St. Johns, Sellwood-Moreland and Montavilla) that have some of the characteristics of 20 minute neighborhoods, but they lack the “hot” focal points of destination activities that serve as the focal points of a complete 20 minute neighborhood.

Almost all of the above areas are in the older, streetcar-era parts of the city, where the elements of a walkable neighborhood were already reflected when the neighborhoods were created.

Beyond this are areas where creating 20 minute neighborhoods will be more of a challenge. In some cases there are small centers of activity (Multnomah Village, Hillsdale or Gateway, for example) which could be strengthened. But the absence of sidewalks or lack of a finer grain of street connectivity are additional challenges that must be overcome if we are to create neighborhoods with walking and/or biking access to retail services and schools. Some areas of Southwest, East Portland, and Cully will need new destination clusters and the increased density to support them if they are to become 20 minute neighborhoods.

RECOMMENDATIONS AND NEXT STEPS

In the Portland Plan, Portlanders should consider whether there should be a goal to maximize the number of Portlanders who could live in 20-minute neighborhoods. The Climate Action Plan suggests a target of 90% of Portlanders living in such neighborhoods, and this appears to be a worthy target.

With a target that high, we need to recognize that all 20-minute neighborhoods can not all be cut from the same mold. We will need strategies that include “20-minute Essentials” while working with the local conditions and differences across the city. It is clear that planning around 20-minute neighborhoods is a complex effort which will rely both on community desires and on technical factors and capabilities.

The map we have produced of existing 20-minute neighborhoods shows that the city has a few “hot spots” that meet all the factors for a 20 minute neighborhood and many other areas that have some of the characteristics. The question for the Plan is: How can public policy affect the elements of “distance”, “destinations” and “density” and support more 20 minute neighborhoods?

DISTANCE (EASE OF ACCESS):

- What are options for sidewalk improvements and additional connections so that accessibility is improved?
- Can bicycle and transit access enlarge the market area for neighborhood serving services without increasing density?

DESTINATIONS:

- Do our policies support the market for and development of local retail and other services as well as access to parks, natural areas and schools?
- How do our policies help reduce the cost of commuting to jobs?
- How do we ensure areas of the city are not underserved, where basic needs are met, and have the appropriate commercial uses for the community?
- How do our policies support high quality transit service?

DENSITY:

- How do we locate and design for increased density of residents in appropriate locations to the minimum level of retail and public services to 20-minute neighborhood levels?
- How do densities affect the demand for schools continuously over time?

Finally, we will consider whether some areas of the city should simply not become 20-minute Neighborhoods. That is the clear answer for a few areas, especially single or exclusive use areas like the airport and marine terminals, the industrial sanctuaries and large natural areas like Forest Park. These areas are necessary in a city, but their value lies in their large area dedicated to one use. They should be connected to the system of 20-minute neighborhoods, but they will never be 20-minute neighborhoods themselves.

There are also, however, other residential neighborhoods, often in hilly or other areas of high environmental values where the preservation and connectivity of natural resource features are determined to have a high value that should not be compromised by the density or access requirements of 20-minute neighborhoods.

The exploration of the 20-minute neighborhood concept will be carried on as part of the Portland Plan.