

Appendix 49 Health Built Through the Environment

INTRODUCTION

The purpose of this document is to present the planning process, discussion on health and the built environment, and public involvement used to incorporate health goals, policies and action measures into Comprehensive Plan elements on the built environment. This document provides information that is the basis for goals and policies related to two new sections in the Gresham Community Development Plan, Volume 2: Food Access and Health through the Built Environment. It is also the basis for minor modifications to policies related to Access to Schools. Last, it is the basis for additional background for goals and policies related to land use, transportation, parks and schools that already address health through the built environment.

The purpose of the HEAL project is to promote wellness and provide positive sustainable health changes in Gresham by advancing policy approaches for the built environment with a strategic focus on reducing obesity. The outcome of the project is amendments to the Gresham Community Development Plan (GCDP), including new and updated health-related goals, policies and action measures related to the built environment that will improve the health of Gresham’s residents.

The city effort was funded through the Multnomah County Health Department (MCHD) effort called Communities Putting Prevention to Work (CPPW). MCHD received a grant from the Centers for Disease Control and Prevention (CDC) for this work. As described by the CDC, CPPW seeks to reduce chronic disease related to obesity.¹

By advancing approaches in policy, systems, and environmental change, Communities Putting Prevention to Work communities will work to reduce risk factors, prevent/delay chronic disease, promote wellness in children and adults, and provide positive, sustainable health change in communities. Through policies enacted and programs implemented, the Communities Putting Prevention to Work program expects to have a proven public health impact in the long term and a high return on investment in terms of improved community health status and health outcomes.²

HEAL promotes equitable access and opportunities for active living such as walking and bicycling, and equitable access to healthy, affordable food. The interest in HEAL has grown as the linkage between healthy eating, active living, and health outcomes – such as obesity, hypertension, diabetes, cancers, and asthma – has been documented. For example, the U.S. Surgeon General’s 1996 Report on Physical Activity and Health reviews hundreds of research studies to document the relationship between

¹ <http://www.cdc.gov/healthycommunitiesprogram/communities/cppw/>, accessed January 12, 2011.

² http://www.cdc.gov/CommunitiesPuttingPreventiontoWork/about/logic_model.htm, accessed January 12, 2011.

physical activity and chronic disease. Mortality rates and the prevalence of chronic diseases decrease as physical activity increases.³

The built environment is one element that has an impact on HEAL opportunities.

- Access to healthy eating is enhanced by having full-service grocery stores and fresh produce available in close proximity to where people live.
- Active living opportunities are enhanced by having complete and safe sidewalk networks that allow people to walk for leisure and to walk to local destinations. Active living is enabled by having parks with active space accessible and in close proximity to residential areas.

By having access to HEAL opportunities and ensuring policy approaches are in place, the built environment can play a role in preventing/delaying chronic disease associated with obesity, promote wellness in children and adults, and provide sustainable health change in the community.

PROCESS

In order to understand what types of goals and policies best incorporate health in built environment elements of comprehensive plans, a national policy scan was performed. This scan describes the link between health and different elements of the built environment, then present goals and policies adopted into comprehensive plans by other cities in the US that address this link. Key themes and conclusions are then presented for each element.

Five cities were selected for this scan. They were chosen because their comprehensive plans have been updated with an eye towards community health. The cities include:

- Benicia, CA
- Minneapolis, MN
- Richmond, CA
- Sacramento, CA
- Seattle, WA

The built environment elements considered in the scan are listed below. More detail may be found in the Health through the Built Environment section of this appendix.

- **Community Health**, which identifies general health goals and policies found in comprehensive plans.
- **Land Use**, which describes how uses occur in the built environment.
- **Food Access**, which explores goals and policies specific to access and location of food.

³ US Surgeon General, "Report on Physical Activity and Health," 1996.

- **Parks**, which examines the amount, programming, location, and accessibility of parks and other open spaces.
- **Transportation**, which describes how people and goods move through a community and contains elements such as bicycle, pedestrian, and vehicular movement.
- **Schools**, which describes the roles schools play in the community and in community health.
- **Equity**, which discusses how different segments of the population experience the built environment.

The conclusions from the National Policy Scan were then used to assess how the GCDP addressed the link between the built environment and health. This assessment, also known as the Comprehensive Plan Audit, was organized as follows:

- **National policy scan element:** Community health; Land use; Food policy; Parks; Transportation; Schools; and Equity.
- **Themes:** Each theme under each element is identified.
- **Example Goals and Policies:** This includes goals and policies from the five jurisdictions that are exemplary of the stated theme.
- **Gresham's Related Goals and Policies:** This includes examples from the GCDP of goals and policies that address the example goals and policies.
- **Comments / Where Gresham Could do Better:** This column provides an assessment of how Gresham achieves the example goals and policies.

The conclusions of this comparison demonstrate the following:

- **Community Health:** The GCDP does not meet best practices. There is no language that discusses community health.
- **Land Use:** The GCDP meets best practices since it addresses mixed-use development, distribution of community facilities throughout the city, and incorporates transportation into land use planning.
- **Food Policy:** The GCDP does not meet best practices. There is no language regarding access to food choices including farmers' markets, community gardens, or grocery stores.
- **Parks:** The GCDP meets best practices since it addresses accessibility of facilities; an integrated system of parks, trails, and open spaces; and facilities that respond to their users.
- **Transportation:** The GCDP meets best practices since it addresses a multimodal system that supports biking, walking, and transit options.
- **Schools:** The GCDP generally meets best practices since it addresses school siting and joint use agreements with school facilities. The school siting section of the GCDP can include language that addresses access to schools through walking or biking.

The recommended approach to addressing these conclusions is to update the City's policies by building upon the many good policies in place while filling in gaps and strengthening the policy link between the built environment and health. The recommended approach is:

1. Develop and incorporate findings into the Gresham Community Development Plan that discuss the health benefits of different facets of the built environment such as parks, land use, and transportation.
2. Add a section to Volume 2 of the Gresham Community Development Plan that includes goals and policies related to food access, including farmers' markets and community gardens.
3. Add a section to Volume 2 of the Gresham Community Development Plan that includes an overarching goal and related policies discussing the impact of the built environment on community health.
4. Enhance implementation strategies in 10.411 School Services to discuss access to schools through walking or biking.

HEALTH THROUGH THE BUILT ENVIRONMENT

The national policy scan examined the following elements to determine best practices for shaping goals and policies. General information is presented for each element, followed by key themes found in best practices.

COMMUNITY HEALTH

Community health may be influenced by a variety of factors including access to health and social services, recreation opportunities, parks, economic opportunities, mixed-use neighborhoods, safety, public spaces, healthy foods, and transportation options. Typically, the greater the access to these attributes, the higher the quality of the community and the health of its people. Health is a core value for many people, and a healthy community is one aspect of health.

Community health may be seen in how well vulnerable populations thrive. These populations may include the very young, the elderly, populations experiencing poverty, people experiencing disabilities, and populations of diverse race and ethnicity. The young and the elderly may not, or cannot operate a motor vehicle, thus limiting their ability to access community resources. Low-income populations and populations of diverse race and ethnicity experience good health in lower rates than higher income and Caucasian populations. These populations also experience chronic health conditions such as cardiovascular conditions, asthma, and cancer at higher rates than the population at large.

Public safety is an element of community health. It is more than law enforcement and preventing crime. It includes efforts to build safer communities and ensure community gathering places are safe for all users. Crime Prevention Through Environmental Design (CPTED) is an approach to the built environment that seeks to increase safety through design elements. Natural access control, natural surveillance, and territorial reinforcement are the three overlapping strategies of CPTED.

- Natural access control seeks to ensure entrances are well defined, visible, well lit and observable by nearby windows.
- Natural surveillance seeks to design areas where people and activities can be readily observed, considering features such as landscaping and window placement looking onto common areas.
- Territorial reinforcement seeks to develop places where users feel a strong sense of ownership.

Together, they provide greater opportunities for observations on public and semi-public areas and greater distinctions between public and private areas. The result of this approach is to build safety elements into the built environment, focusing on infrastructure such as sidewalks, bikeways, roads, and parks. The City can affect the health of all residents by promoting community design and healthy environments that are conducive to physical activity and safety.

Key themes found in the National Policy Scan related to Community Health goals are:

1. Focus on community health and safety.
2. Prevent and reduce crime.
3. Create a healthy environment where the community may practice healthy living, are well nourished, and have access to affordable health care.

LAND USE

A community that provides for a well-designed variety of uses in close proximity increases the opportunity for active living opportunities. The mix, location, intensity, and design of uses affects healthy eating and active living by shaping the destinations, shaping the environment in between destinations, and determining how attractive and conducive active living may be. Additionally, land use goals, policies and regulations shape the ability of food options to locate in an area.

A mix of land uses in close proximity to each other allows the chance for a person to walk or bicycle to a destination rather than use a motorized vehicle. “20-minute neighborhoods,” where everyday needs of residents are within a compact, walkable area, are highlighted in studies as particularly beneficial to healthy eating and active living goals, making walking and biking viable transportation options for short trips.⁴ Convenient access to uses such as grocery stores, schools, parks, employment, and other destinations that provide services used on a regular basis encourage active transportation, thus increasing physical activity and health.

Supporting smart growth strategies and zoning for new developments and revitalizing communities, including compact and mixed-use zoning is one way to provide opportunity for physical fitness and health in the built environment.⁵ Smart Growth covers a range of development strategies that help

⁴ Indicators of Activity-Friendly Communities: An Evidence-based Consensus Process, American Journal of Preventive medicine, LK Brennan Ramirez. 2006.

⁵ Promising Strategies for Creating Healthy Eating and Active living Environments, Prevention Institute, 2008.

protect the natural environment and make communities more attractive, economically stronger, and more socially diverse. Ten basic principles of Smart Growth include:

1. Mix land uses
2. Take advantage of compact building design
3. Create a range of housing opportunities and choice
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.⁶

Uses that provide for healthy eating options should also be present throughout a community. Grocery stores or other sources of produce should have the ability to be located so that the entire population has the opportunity to access food options. Other land uses such as community gardens and farmers markets provide access to healthy food options and should be considered for inclusion in the community fabric.

The design of uses matters. The buildings that make up the built environment provide the background for active transportation, and can make it a pleasant experience. Interesting buildings that include pedestrian-scale amenities and details enhance walking. Site design influences the quality of the built environment and how people interact with it. Elements such as lighting, fencing, landscaping, and windows contribute to a sense of safety and natural surveillance, and thus enhance the active transportation experience.

Key themes found in the National Policy Scan related to Land Use goals are:

1. Ensure development plans incorporate transportation access and facilities.
2. Support development in corridors that enhance street character.
3. Preserve / encourage neighborhood commercial nodes.
4. Encourage higher densities and a mix of uses that take advantage of existing infrastructure, especially in major activity centers.
5. Strive to distribute community facilities and parks throughout the community.
6. Promote an urban form of neighborhood corridors and centers.

⁶ http://www.epa.gov/smartgrowth/about_sg.htm, accessed may 10, 2011.

7. Strive to locate employment opportunities convenient to residential populations.

FOOD ACCESS

Community health may be influenced by individuals' opportunity to access healthy food options. These may be seen by the presence and location of full-service grocery stores, community gardens, market gardens, and farmers' markets. Access to healthy, affordable food is shaped in part by the built environment and the ability to access locations that provide these options.

Research has demonstrated that people choose healthier food options when they have the ability to access the locations that provide for it.⁷ Having a grocery store or other source of fresh produce nearby increases the likelihood that a person will opt for a healthy food option, and thus will have a more positive health outcome than not having such a facility nearby. Further, having healthy food sources nearby and accessible increases the likelihood that a person would bike or walk to this destination rather than drive, thus increasing their physical activity.

Areas where there are no healthier food options are called food deserts, and the health of people in these areas may be lower than the health of people who live closer to such options. There has been increased national interest in understanding where food deserts occur, who they affect, their health implications, and ultimately eradicating them. Gresham did a preliminary analysis of this issue in 2010 and noted that some areas that are without a source for fresh food are also areas with more vulnerable populations, based on income and lack of drivers licenses.

The Healthy Eating Active Living Convergence Partnership highlights the importance of providing for fresh, local, and healthy food for all communities and neighborhoods and offers a couple mechanisms to achieve increased accessibility:

- Create regional infrastructure for production, distribution, and processing of local and regionally grown healthy foods.
- Establish grant and loan programs, technical assistance, and other incentives to attract retail grocery stores, improve offerings at small stores, start and sustain farmers' markets, and other innovative means.⁸

Key themes found in the National Policy Scan related to Food Access goals are:

1. Support the creation and improvement of community gardens.
2. Maintain and improve access to open spaces, parks, and community gardens.
3. Expand access to food choices through grocery stores, community gardens, urban agriculture and local markets.
4. Support existing farmers' markets.

⁷ How to Create and Implement Healthy General Plans, Raimi & Associates, 2008.

⁸ Promising Strategies for Creating Healthy Eating and Active living Environments, Prevention Institute, 2008.

PARKS

The presence of parks close to where people live increases physical activity and health. Parks, natural areas, and recreation facilities provide individuals and communities with personal, social, economic, and environmental benefits that contribute to a higher quality of life.⁹ Parks provide for physical activity, connections to greenspaces, quiet places for reflection, and an enhanced sense of community derived through public spaces and community events. Parks also provide connections within and between neighborhoods and act as community gathering spaces. Many parks provide community gardening space, providing individuals the opportunity to grow their own food.

The City of Gresham, Parks and Recreation, Trails and Natural Areas Master Plan lists the many personal, social, economic, and environmental benefits parks provide for a community. The benefits from a healthy eating/active living perspective include increased opportunities for physical activity for all ages, socioeconomic classes, and physical abilities.

Research shows that residents who live within walking distance of a park are 25% more likely to achieve recommended minimum weekly levels of exercise.¹⁰ This highlights the health benefits of having parks geographically dispersed through a community so that all people may have access to parks. This increased amount of exercise has other health benefits such as reduced obesity and reduced risk of cardiovascular conditions and diabetes.

Key themes found in the National Policy Scan related to Parks goals are:

1. Promote safe outdoor amenities and spaces.
2. Provide an integrated system of parks, open spaces, and recreational facilities.
3. Improve accessibility of open spaces and parks for all residents.
4. Locate resources that support a range of activities close to neighborhoods.
5. Plan parks that are responsive to the needs and interests of their users.

TRANSPORTATION

How people move through and interact with their environment plays a role in achieving active living outcomes. Transportation includes modes such as bicycling and walking, which provide a physical fitness element and increase exercise through routine travel. This exercise reduces the risk of health ailments such as respiratory disease, cardiovascular conditions, and obesity. Providing access to facilities for these modes of travel and ensuring they are designed to promote pleasant experiences increases the likelihood that people will use these modes of travel.

⁹ Parks and Recreation, Trails and Natural Areas Master Plan, City of Gresham, 2009.

¹⁰ Frank, Lawrence et. Al. "Linking Objectively Measured Physical Activity with Objectively Measured Urban Form: Findings from SMARTRAQ." American Journal of Preventive Medicine. 2005.

A person is a pedestrian at some point of every trip, be it a walk from a car to a building, a walk to the bus stop, a walk to a destination, or simply a walk around the block. Complete and safe pedestrian networks that connect the community ensure access and opportunity to this transportation mode. Networks should connect where people live, work, play and to other transportation modes such as transit stops. Programs such as Safe Routes to School focus on ensuring safe connections from neighborhood to education destinations for the children in a community.

Similarly, the bicycle network should be safe and provide connections within and beyond the immediate community in order to be accessible to the broader public. The opportunity to bike from a residence to a variety of destinations increases the likelihood that people will use this mode of transportation and benefit from its physical fitness aspect. Biking has other benefits for a community such as reductions in vehicle emissions, vehicle miles traveled, congestion, and noise.

Access to transit is often associated with some walking and biking as these are ways to arrive at a transit stop. Transit provides connections to the broader community and increases the opportunity to access destinations throughout the larger region. When homes, business and other destinations are located near transit, there is less reliance on motorized vehicles for transportation, and a greater opportunity for active transportation modes to be used. The walking and biking to/from transit helps people incorporate physical activity into their daily routines.

Street design influences the accessibility of transportation facilities for active modes of transportation. Pedestrian and bicyclist comfort and safety are a result of street design and elements such as sidewalks, landscaping, lighting, traffic speed, and street furniture/amenities. Sidewalk width and the presence of a buffer from the street enhance a pedestrian's sense of safety while using a sidewalk. Dedicated bike lanes provide the opportunity for cyclists to use transportation facilities with less conflict with motorized vehicles. Well-designed lighting enhances the sense of safety for both modes. Further, street design has an impact on the accessibility of these facilities for vulnerable populations such as children and the elderly, who may rely on other wheeled transportation to get around (stroller, wheelchair, scooter).

Pedestrians should feel safe from vehicular traffic and from crime.

Key themes found in the National Policy Scan related to Transportation goals are:

1. Enhance and encourage walking and bicycling by having safe, comfortable, pleasant routes.
2. Provide a balanced multimodal transportation system.
3. Encourage programs and alternatives to single-occupancy travel.
4. Support access to adequate and safe public transit options.
5. Improve system connectivity by removing barriers to travel.
6. Provide complete streets that balance the diverse needs of users.

SCHOOLS

Schools are an integral component of a city, providing education to its youth, recreation opportunities during and after school, and serving as community centers outside of normal school hours. The recreational opportunities offered during and after school have an impact on the health of the student populations.

School fields may be available to the broader community for recreational purposes through joint-use agreements. These agreements may provide access to fields for recreational purposes after school hours. This helps make the most of this resource.

The ability to walk or bike to school affects students' health. If a student cannot safely walk or bicycle to school, the student is more likely to take a bus or be driven to school. This reduces the amount of physical exercise students may achieve in a day.

Key themes found in the National Policy Scan related to Schools goals are:

1. Provide pedestrian and bicycle paths to schools.
2. Alleviate vehicle traffic congestion near school sites.
3. Examine joint use agreements for school facilities.
4. Encourage new school sites near the populations to be served.

PUBLIC INVOLVEMENT

The examination of how health can be addressed through the built environment included a public engagement effort focused on sharing information with the public and learning from Gresham's residents what issues are important to them. The City held an Open House, two Community Forums – one which was bilingual, and provided information at numerous other meetings to share and learn. The project website and other technological tools were used to share information with interested people. Key public involvement events include:

- April 6, 2011 Open House. This event was held at City Hall. General project information was shared with the public at this open house, including a video, food access mapping, and active living mapping. A survey was provided for participants to share their thoughts on what helps and hinders access to food options and physical activity opportunities.
- May 21, 2011 Compassion Rockwood. Participation at this community event included a bilingual video introducing the project, a project flyer, and information on the Community Forum scheduled for June. Bilingual staff were present to talk with participants at Compassion Rockwood.
- June 28, 2011 Community Forum. This Community Forum was held at the Rockwood Library, and provided a venue for community conversation in English and Spanish. El Programa Hispano shared information about this project ahead of the Community Forum to garner greater interest in the effort from the diverse populations in Gresham. Group discussions examined

what existing conditions helped or hindered access to food options and physical activity opportunities, and what the public would like to see in the future. Additionally, this forum provided an opportunity to share information on the Gresham Transportation System Plan update and the East Metro Connections Project.

- October 3, 2011 Community Forum. This Community Forum was held at City Hall. The purpose of the forum was to gain public input into draft Comprehensive Plan goal, policy, and action measure language prior to adoption.

Announcements of the Open House and Community Forums were shared via newspaper advertisements, posters in the community, and emails to interested parties. After these events, a Public Input Summary was prepared and made available to interested parties and posted on the project website.

The effort also used two teams to examine information.

1. A Technical Group, comprised of public health, transportation, parks, and housing experts. This group was convened throughout the effort to provide expert insight. They also provided comments on draft goals, policies, and action measures.
2. A Stakeholder Group, comprised of people who live, work, and represent Gresham residents. This group was convened throughout the effort. The Stakeholders Group provided insight into what Gresham residents consider food options and opportunities for active living, and how well the built environment achieves these. They also provided comments on draft goals, policies, and action measures.

Six Planning Commission work sessions were held for reviewing materials associated with this effort:

- February 14, 2011. Introduction
- May 23, 2011. Review of the National Policy Scan
- August 8, 2011. Review of findings from the Comprehensive Plan Audit
- September 26, 2011. Review of Preferred Approach
- December 5, 2011. Review of Draft Comprehensive Plan language
- January 9, 2012. Commission hearing