### **DESIGN FOR HEALTH**

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# Case Study:

# King County, Washington



Version 1.1

DESIGN FOR HEALTH is a collaboration between the Metropolitan Design Center at the University of Minnesota and Blue Cross and Blue Shield of Minnesota that serves to bridge the gap between the emerging research base on community design and healthy living with the every-day realities of local government planning.



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### Introduction

This is part of a Design for Health case study series that explores the emerging trend of incorporating public health into comprehensive planning and community design. The first of these case studies is King County, Washington, which is widely recognized for its efforts to embed public-health language into its planningpolicy framework. Many techniques it is using to advance public health agendas are, however, ones that have previously been used to achieve other purposes, such as energy efficiency, sustainable development, and increased quality of life. The lessons from King County are perhaps less about developing new tools to incorporate health into comprehensive planning and more about utilizing existing planning processes and tools to achieve health objectives as part of comprehensive planning proposals.

This case study is in three parts. It:

- identifies the regulatory framework and the key players in linking planning and health in King County,
- outlines the approach that King County uses to prioritize health within its planning framework, and

 offers insights for other communities seeking to model a planning approach based on King County's efforts.

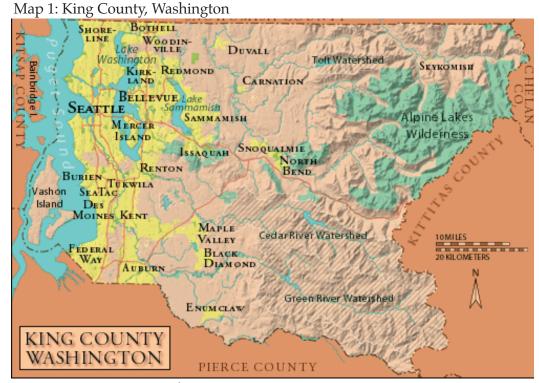
This case study is informed by research done by the Design for Health team. The team has developed a series of documents for planners that discusses varying approaches to integrating health into comprehensive planning and helps sort out evidence-based research from common misconceptions about health and planning. These documents include:

- Information Sheet Series
- Key Questions Series
- Health Impact Assessment
- Technical Assistance Library

Each is available at www.designforhealth.net.

### **Key Players & Policy Framework**

King County, one of 39 counties in the State of Washington, is the fourteenth most populous county in the United States with approximately 1.78 million residents (County of King 2004, 1; U.S. Census Bureau 2004). Many of the residents live in two of Washington's largest cities, Seattle



Source: King County, Washington

and Bellevue, but there are also large populations in suburban and rural communities. King County has over twice the land area of the state of Rhode Island. Its total area is 5974 sq. km. (2307 sq. mi.), of which 7.82 percent is water (County of King 2004). King County borders Snohomish County to the north, Kitsap County to the west, Kittitas County to the east, and Pierce County to the south. It also shares a small border with Chelan County to the northeast. King County includes Vashon Island and Maury Island in Puget Sound (Map 1).

King County's efforts to link the built environment and public health occurred within the context of similar efforts undertaken by other entities, such as the Puget Regional Council and Public Health – Seattle & King County (PHSKC). Sometimes these were cross-jurisdictional efforts and sometimes each group focused on its own policies and plan implementation. In general, the emphasis to increase linking the built environment and public health focused on physical activity. What made these unusual were the collaborative partnerships between publichealth and planning officials. Key players are described below, including:

- Washington State Legislature (state)
- Puget Sound Regional Council (multi-county regional body)
- King County (county)
  - Metropolitan King County Council (county governing body)
  - Public Health Seattle & King County (department)
  - Executive Office
- City of Seattle Planning Department (city)

In a sense, these players helped create an incubator environment to establish links between public health and planning.

### **State Level**

During the past 20 years, the state of Washington has undergone a series of significant growth spurts that have pushed policymakers to consider how to best manage growth, while still protecting the unique characteristics of the state. Since 1994, for example, King County grew by 11 percent and is expected to continue growing (County of King, 2004). These demographic changes contributed to an increasing concern that growth would overtake the region (Bikle 2006). In response, Washington passed the Growth Management Act



Source: King County, Washington

(GMA) in 1990 in an effort to "further protect the unique Pacific Northwest quality of life" (County of King 2006). The Act requires all counties and cities to develop a comprehensive plan to direct growth in an efficient manner; whereas, previously counties were not required to have a plan. It required the following plan elements: land use, housing, capital facilities, utilities, rural, transportation, economic development, and park and recreation. Further, the GMA requires counties to develop countywide planning policies that support the GMA requirements. This act increased King County's influence as a policy-making body because it facilitated the development of a series of King County Planning Policies (KCPP) that directly and indirectly guided development in both incorporated and unincorporated communities.

The GMA also called for counties to establish urban growth areas (UGAs) within their communities in order to better plan for growth. In response, King County, through its KCPP, established a UGA within the western third of the county (Map 2).

The UGA is not a continuous demarcation line; rather, communities like Snoqualmie, Duvall and Enumclaw also have designated UGAs. These are communities with a small town character established during the early history of Washington State (Bikle 2006). The UGA is designed to assist all local governments in planning policy and plan implementation. King County uses its land-use and transportation KCCP to create opportunities for physical activity within a policy framework for communities within the UGA.

In 2005, the State Legislature amended the GMA to respond to growing national and local concern over the increasing rates of obesity. It passed Senate Bill 5186 that centered on increasing physical activity through "promoting policy and planning efforts that increase access to inexpensive or free opportunities for regular exercise" (State of Washington 2005, 1). This amendment acknowledged a connection between physical activity and the built environment by targeting the land-use and transportation

portions of the GMA. The bill (State of Washington 2005, 2) states that,

Wherever possible, the land-use element should consider utilizing urban planning approaches that promote physical activity. However, as different kinds of physical activity or exercise require different kinds of environments—from sidewalks to playing fields to indoor gymnasia or even visible stairs—the exact planning and design implications of the legislation are not clear. In addition, the bill adds a required sub-element for the transportation element (State of Washington 2005, 8). It states that,

Pedestrian and bicycle component [are] to include collaborative efforts to identify and designate planned improvements for pedestrian and bicycle facilities and corridors that address and encourage enhanced community access and promote healthy lifestyles.

It is an interesting example of how physical activity can be imbedded within a state's entire growth management framework, as opposed to it being isolated as a stand-alone bill with no resources for implementation.

#### Regional Level

The GMA also requires multi-county planning for the Puget Sound region that includes King, Pierce, Snohomish, and Kitsap counties. The Puget Sound Regional Council (PSRC), a regional planning agency, serves as the metropolitan planning organization (MPO), with the authority to administer federal funds for transportation. The PSRC distributes close to \$160 million in Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funds each year that support its transportation vision (PSRC 2007, p. 1). The GMA requires that the PSRC develop a regional plan that "coordinates regional transportation, economic and growth planning for the central Puget Sound region" (Puget Sound Regional Council 2007, p. 1). Communities in the four counties must follow the plan, entitled Vision 2020, as they conduct their own short- and long-term planning under

the GMA. PSRC is currently in the process of updating the regional plan, to be entitled Vision 2020 + 20. As part of a county-wide effort PHSKC drafted explicit health policies during the update process.

The PSRC worked closely with PHSKC to set the stage for the update process. As described below, PHSKC is a county-wide health agency that provides public and environmental health services to communities in King County. As a result of coordinating efforts with PHSKC, the PSRC included the issue paper, "What's Health got to do with Growth Management, Economic Development, and Transportation?" as a supportive document for the Vision 2020 update (Puget Sound Regional Council 2004). This paper advocates a series of preliminary implementation actions and strategies related to health and active living. It recommends, for example, that,

Provisions addressing health and well-being should be incorporated into local comprehensive plans in the four-county region. As an incentive to encourage the development of health provisions in local plans, a 'health' criterion should be introduced into regionally-managed transportation funding decision-making and/or regional prioritization processes for transportation projects (Puget Sound Regional Council 2004, 12).

The issue paper also includes a section on ways that public health can be included in the plan update Vision 2020 + 20, including updating existing multi-county policies, plan implementation efforts and guidance for developing measurable objectives for monitoring relevant health issues. Examples of efforts from this document include:

• forming collaborative partnerships between the Washington State Department of Transportation and the Department of Urban Design and Planning at the University of Washington to develop measures to assess walkability and bikability in higher density communities (Puget Sound Regional Council 2004, 13), and  identifying environmental public health as a major benefit for the urban growth and transportation provisions in the revised multicounty policies.

The health policies that have been submitted are still under review at PSRC. It remains to be seen how their acceptance at the regional level will influence planning and policy at other governmental levels.

### **County Level**

Prior to passing the GMA in 1990, King County had been actively managing future growth. The County completed its first comprehensive plan in 1964 and in 1985 had established an urban growth boundary. To comply with the GMA requirements and coordinate planning among jurisdictions in the county, King County has worked with its cities to develop the KCPP. These KCPP were developed by the Growth Management Planning Council (GMPC), a formal body within the Department of Development and Environmental Services consisting of locallyelected officials from King County, Seattle, Bellevue, other cities and special districts (e.g., sewer, fire) in King County. Then, the KCPP were approved by the Metropolitan King County Council, which is the overarching governing body for the county. Once approved, all unincorporated and incorporated communities within King County must support these policies (Growth Management Planning Council 2005).

King County is headed by the King County executive, an elected officer. Through a grant from the Federal Transit Administration (FTA), the executive office of King County, the cities of Kent and Redmond, regional staff from the PSRC, and other partners engaged in a two-year study of the relationship among land use, transportation, air quality and health (or LUTAQH)" (Frank 2006, 5). The issue paper includes a summary of the study (3-4) that states:

Low density separated land uses and disconnected street networks are associated with: (1) increased automobile use, per capita air pollution, greenhouse gas emissions, and energy consumption; (2) reduced transit

ridership, walking and physical activity; and (3) increased obesity and likelihood of cardiovascular disease, type II diabetes, and colorectal cancer.

While more recent evidence does not fully support this summary (Ewing 2005), this study did influence the Vision 2020 update, the regional transportation plan, entitled Destination 2030 and the Comprehensive Plan update in King County. Phase two of LUTAQH was recently initiated to continue exploring the linkages between health and various aspects of the built environment.

PHSKC is the sole public health agency within the county and all incorporated areas. This is unlike most larger communities that also have city-operated public-health departments. PHSKC prioritized health and the built environment as departmental initiatives due to the collaborative work done by the Environmental Health Community Assessment Team, which was an interdisciplinary team that included clinical service practitioners, the prevention division and director's office. As mentioned earlier, PHSKC released an issue paper that focused on obesity and lack of physical activity by linking these concerns to the built environment (National Association of County and City Health Officials 2005, 1). PHSKC also established partnerships with planning officials; public health officials, for example, worked with various planning bodies, such as the PSRC, to incorporate public health issues in its regional planning. PHSKC is now engaging in the major 2008 Comprehensive Plan update for King County. They expect to introduce explicit health policies, similar to those provided to PSRC, during the upcoming update process. PHSKC is also the organization that spearheaded the Overweight Prevention Initiative that is explored more fully below. Because PHSKC provides all the public-health services for King County, it is in a unique position to pair direct medical services with an upstream approach that focuses on improving the built environment as a primary prevention strategy (Bikle 2006).

### **Municipal Level**

The cities of Seattle, Bellevue and others in King County are responsible for ensuring that their comprehensive plans are consistent with and implement the countywide planning policies.

### **Approach**

Prior to being involved in the major Comprehensive Plan update that is underway now and occurs once every four years, King County's approach to integrating health into its comprehensive plan, took four forms: a minor plan update, a series of corrective/selective amendments, revised codes/ordinances, and separate health-related plans (this

is outlined in Information Sheet 1). King County's approach is mostly a corrective amendment, which involved an extensive amendment process that resulted in many changes, though not a complete integration of health into every section of the comprehensive plan. Characteristics of a corrective/selective amendment (Design for Health 2007, Information Sheet 1: Integrating Health into Comprehensive Planning) include: 1) updating or adding to existing comprehensive plan content, without revising the entire document, and 2) including short text amendments, drafting supplemental sections or adding full elements.

Within the King County Comprehensive Plan (KCCP), public health is prioritized in the chapters on Urban Communities and Transportation. The Urban Communities chapter is framed differently than other elements typically seen in comprehensive plans, because it takes a holistic and integrated look at how various characteristics contribute to a livable community. This chapter includes sections on land use, housing, business centers, economic development, and human services where the goal is to "create urban communities that provide the places and choices for people and how they want to live" (County of King 2004, chap. 2: 1). As can be seen, however, this is a broad goal with many potential justifications, not only human health.

Public health is incorporated in the Urban Communities chapter and particularly in the land-use section. Public health is stated as a characteristic of livable communities:

"Development within the Urban Growth Area should create and maintain safe, healthy and diverse communities" (County of King 2004, chap. 2: 2). While human health is only briefly mentioned here, its inclusion does demonstrate the importance of health within the entire chapter.

Human health is more deeply explored in a landuse section entitled, Urban Communities (County of King 2004, chap. 2: 2-4). Growth in Cities and Urban Centers and the Promotion of Public Health specifically addresses the link between the built environment and health, stating that:

Focusing development in urban areas can have a positive effect on public health. The percentage of King County residents who are overweight or obese has risen rapidly since the late 1980s. With obesity comes increased risk for diabetes, hypertension and heart disease. Evidence suggests one major reason for rising obesity is the lack of physical activity. Growth patterns in suburban areas, which discourage walking and promote a reliance on private auto use, have contributed to this public health problem. Communities that feature many land uses, higher housing density, sidewalks and street connections and nearby services encourage physical activity such as walking and bicycling (County of King 2004, chap. 2: 3).

This theme is further supported through a series of countywide planning policies, including a number that deal with pedestrian and biking infrastructure (U-107; U-108; U-109).

These examples help illustrate the emphasis on pedestrian and bicycle infrastructure that continues throughout the rest of the plan. The focus of the plan overall is on increasing outdoor physically-active transportation rather than physical activity indoors (e.g., climbing the stairs), or for recreation or leisure. The mixed use-development section, for example, includes a threshold-based introductory paragraph: "Mixed-

use developments can promote public health by providing opportunities for people to walk or bicycle to retail and public services. People are more likely to walk to their destination if the distance is less than one-half mile or to bike if the distance is less than two miles" (County of King 2004, chap. 2: 10). Policies support these claims. One policy (U-128), for example, states that design features for mixed-use should include "safe, accessible pedestrian connection and bicycle facilities within the development and to adjacent residential developments" (County of King 2004, chap. 2: 10). For more detailed information on how physical activity is incorporated into the land-use sub-section, please visit http://www.metrokc.gov/ddes/ compplan/2004/PDFs/Chap2-Adopted.pdf. Public health is also indirectly addressed in the chapter on Transportation through an emphasis on non-motorized transportation. The ways in which public health has been incorporated into the plan are likely to be expanded and built upon during the major update that is now underway. Two new topics affecting public health—climate change and food systems—are expected to be part of the update.

# Considerations for Other Communities

### **Comprehensive Plan Integration**

While the KCCP is not fully organized around health, or even physical activity which is the main emphasis in the health area, the plan addresses health issues across various existing elements and their supporting policies. Rather than including a single health element, the plan includes public-health objectives throughout the document, particularly in the chapters on urban communities and transportation. Moreover, health is embedded within a few key concepts of a statewide policy and countywide policy to build livable communities and an efficiently-designed region. Institutionalizing health as part of the plan contributes a framework to guide new development and redevelopment in King County.

### **Collaborative Approach**

King County demonstrates a cross-jurisdictional approach to dealing with health and planning. The regulatory framework section of this case study points to the number of political entities that were involved from the municipal to state level. Individual relationships among planners, public-health professionals and elected officials often help create the momentum for collaboration. In this case, legislative action created a framework to formalize intergovernmental and interdisciplinary coordination in the long term. This work also led to restructuring that has helped bypass the traditional boundaries between public health and planning. Anne Bikle, an environmental planner with a background in land use issues and landscape architecture, for example, was hired by PHSKC to oversee the initiative to better link the built environment and planning. Also, Karen Wolf, a land-use planner, moved from the King County planning department into the executive office where she helped coordinate these efforts with planners in other communities in King County.

#### Implementation

King County not only recommends policies related to health and planning, but it also proposes ways for communities to implement changes. The KCCP, for example, associates trail linkages with increased opportunities for physical activity. It states:

King County supports increases in urban residential density through a rezone or a proposal to increase density through the density transfer or density incentive programs when the proposal will help resolve traffic, sewer, water, parks or open-space deficiencies in the immediate neighborhood or will help promote physical activity by providing trail linkages and connections to services.

Even though there is some disagreement in the research as to how to increase overall physical activity, the statement is significant as it

recommends tools that could help communities implement policy into action.

These implementation strategies also include suggestions about design-related options pertaining to livability. The King County plan, for example, states that, "Nonresidential uses, such as schools, religious facilities, libraries and small-scale retail and personal services should be integrated into urban residential neighborhoods to create viable neighborhoods with reduced dependence on the automobile. These uses should be sited, designed and scaled to be compatible with existing residential character and should provide convenient walking and bicycling connections to neighboring residences (U-137)." This moves beyond thinking about how physical activity fits within the transportation networks, instead considering these issues within the larger framework of the urban fabric.

While the effect of the plans is uncertain until they translate into on-the-ground changes, there are other implementation efforts underway. PHSKC is developing a series of educational programs that target physical activity through methods apart from physical planning. For example, through their participation, The King County Physical Activity Coalition, was developed to "raise the activity levels of those who are currently sedentary or inactive to decrease their risk of chronic disease" (PHSKC 2004; PHSKC 2006, Physical Activity). In addition, PHSKC is in the process of piloting a Health Impact Assessment (HIA) on a light rail transit station to learn more about linkages between community, health and the built environment (Bikle 2006). The King County Board of Health also passed an obesity prevention resolution plan in 2005, called Recommending a Comprehensive Strategy to Promote Healthy Eating and Active Living in King County, and included a number of objectives, such as supporting safe-routes-toschools programs and using evidence-based practices (PHSKC 2006, Achievements). This included working with Active Seattle and Active Living by Design, and creating an "active transportation" education tool for policy makers that recommended a specific list of policy objectives to increase levels of physical activity (Public Health Seattle and King County 2006, Achievements). Active Seattle is an Active Living by Design project funded by the Robert Wood Johnson Foundation, which is a collaboration between Feet First, PHSKC and the Seattle Department of Transportation to increase walking and biking through improvements to the built environment (PHSKC 2006, 1). This initiative includes partners from PHSKC, King County Board of Health and University of Washington's Exploratory Center for Obesity Research and Center for Public Health Nutrition. That said, the efforts to date have been focused primarily on providing policy language, advocacy, and voluntary action and there have been few, if any, implementation tools, such as regulations, that have been explicitly designed to address links between the built environment and health that have been outlined in the KCCP. King County representatives, however, underscore the importance of the fact that the State of Washington's legislative action related to health was an amendment to the Growth Management Act, as opposed to a stand-alone bill. This approach creates an explicit link between health and the general community goal of growth management.

There has been some dissent, moreover, about whether or not increasing physical activity should be included in planning and plan implementation. King County instigated a series of actions to take advantage of this regional momentum. The Growth Management Planning Council (GMPC) reviewed health-related landuse language for a new Countywide Planning Policy (CPP) amendment, including language on clean air, water and soils, and active tranportation (GMPC 2005, 5): The GMPC, however, failed to pass the health-related CPP amendment in response to a number of concerns (Bikle 2006). The Suburban Cities Association, for example, advocated addressing these issues at the local level on a discretionary basis. Some felt that the health-related language already existed, so there was no reason to add more. While the amendment did not pass, King County continued to add public-health language in its comprehensive plan.

### **Focus on Physical Activity**

While there are a few mentions of other health themes, such as air quality and water quality, King County focuses specifically on physical activity. Physical activity is a vitally important contributor to human health, however it is not the only health aspect that communities can consider and it is not even the one with the clearest physical-planning implications. The Design for Health team offers a series of other documents that provide ways to look at how comprehensive planning can also focus on the food environment, mental health, social capital, air quality, water quality, safety, etc.

### High-density vs. Lower-density Communities

Most of the connections between the built environment and physical activity focus on urban communities. The KCCP, for example, states that, "It should guide the development of new urban communities and redevelopment of existing communities within the unincorporated portion of the Urban Growth Area" (County of King 2004). This raises questions about how to facilitate opportunities for physical activity in rural areas.

### **Connecting Research with Planning**

The Comprehensive Plan refers to research on physical activity and obesity, and it makes claims that certain strategies support increases in overall physical activity. That said, these comments are not cited or annotated in the document, which makes it difficult to see if the language is backed up by evidence or if it stems more from public values as indicated by legislative bodies or public participatory opportunities. This is particularly important when it comes to physical activity, because recent research on physical activity has shown a more complex and ambiguous picture than the research used to influence this particular comprehensive plan, which is focused on increasing active transportation and proposes that this will also increase overall physical activity. As is outlined in the Design for Health Physical Activity Key Questions sheet, the picture is more complex (Design for Health 2007, Key Questions: Physical Activity). This is a

challenging issue, however, that all work in fastmoving research areas has to deal with—using the best available evidence at the time and then having a capacity to revise.

## **Final Thoughts**

Overall, the planning approach advocated in these various plans and policies is virtually indistinguishable from approaches often labeled smart growth, sustainable development, livable communities, energy-efficient design, or new urbanism. As such, it is basically good planning for providing residents with options for where they live and work, and being efficient in terms of resources.

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