This report was generated by Beret Halverson in partnership with Generating Rural Options for Weight Healthy Kids and Communities (GROW HKC) using data collected during the HEAL MAPPS™ processes and provided to the Estacada Community to support the community's initiative to prevent childhood obesity.
Estacada Community HEAL MAPPS™ Report

Estacada is a rural community located in Clackamas County, Oregon. Estacada has a population of 2,695 residents, and about half of local households are families with children under age 18.¹ The city is surrounded by rural farmland and the Mt. Hood National Forest. Estacada was formed in the early 20th century as a camp for workers building a hydroelectric dam on the Clackamas River. Several more dams were later built along the river. Both dam construction and the logging industry have been important to the economy of Estacada.²

The area is served by the Estacada School District, which educates 2300 students across 750 square miles of rural Clackamas County. The district includes two elementary, one middle, and one high school as well as alternative options.³ Estacada is known for its downtown murals - a new community mural is painted each year during the Summer Celebration. The city also boasts many opportunities for outdoor recreation in the Mt. Hood National Forest and along the Clackamas River.⁴ The city motto is “Close to everything, but away from it all”.⁵

Generating Rural Options for Weight Healthy Kids and Communities (GROW HKC) is a USDA-funded, participatory childhood obesity prevention study conducted by Oregon State University’s Extension researchers in partnership with rural residents and communities. GROW HKC and the Estacada community have partnered to map features of the local environment and discuss residents’ perceptions of the community supports and barriers to regularly eating healthy and being physically active, particularly for children and families. Community members were mobilized and trained to use HEAL MAPPS™ (Healthy Eating Active Living: Mapping Attributes using Participatory Photographic Surveys), our community resource and readiness tool, to assess community resources for and readiness to improve and implement healthy eating and physical activity supports – environmental and policy actions to make easier these obesity preventing behaviors.

¹ http://oe.oregonexplorer.info/rural/CommunitiesReporter/
² http://en.wikipedia.org/wiki/Estacada,_Oregon
³ http://www.esd108.org/default.asp
⁴ http://estacadachamber.net/main/
⁵ http://www.cityofestacada.org/
HEAL MAPPS™ projects conducted in partnership with rural communities across several Western States (AZ, CO, NM, NV, OR, WA) will provide evidence and insights that will drive the development of a rural obesity prevention model. The model will be used as a framework for rural community actions aimed to promote healthy eating and physical activity behaviors, environments, and policies to prevent overweight and obesity among children and families.

The problem of obesity in children is in the forefront of nationwide research efforts and there are documented physical and mental health outcomes associated with childhood obesity that contribute to lifelong chronic health problems which may disproportionately affect people living in rural places. Rural residency tends to increase the risk of overweight and obesity for children and adults; the prevalence of childhood overweight and obesity is higher among children living in rural areas.

To date, most evidence-based strategies to combat the childhood obesity epidemic have been developed and tested in non-rural settings and target either individuals or environments. The overall goal of the GROW Healthy Kids and Communities (HKC) project is to learn more about the factors influencing health behaviors in rural places in order to prevent obesity in rural children by improving their behavioral environments – at home, in school, and in the community – to make healthy eating and activity options their easy and preferred choice.

Relevance for Estacada Community

Eighty-nine percent of adult Clackamas County residents have at least one risk factor for chronic disease, including current smoking, overweight or obesity, physical inactivity, or low fruit and vegetable consumption. Forty-five percent of Clackamas County adults do not meet the CDC recommendations for physical activity, and seventy-five percent do not consume the recommended 5 servings of fruits and vegetables each day. Fifty-nine percent of Clackamas County adults are overweight or obese. Although these statistics represent adults, studies show that children with overweight or obese parents are more likely to be afflicted with similar health problems.

Helping children develop healthy habits and providing healthy eating and activity supports to balance their energy intake with energy expenditure is an important aspect to maintaining healthy weight, preventing overweight and obesity, and minimizing chronic disease risk. Because obesity prevention among rural populations requires an understanding of the supports and barriers to healthy eating and active living within and among rural communities, we are

6 http://www.oregonhealthinfo.com/oregon_health_by_region_display_data.php?OHPRGeo=clackamas
7 http://www.yalemedicalgroup.org/stw/Page.asp?PageID=STW001880
pleased to provide this report of resources and readiness to prevent childhood obesity for the community of Estacada.

**Methods and Preliminary Results**

A HEAL MAPPS™ team of 7 comprised of Estacada community members with an interest in creating a healthier community volunteered and were first trained to individually photograph and map the Estacada community features that they perceived as either supports or barriers to eating healthy and being physically active most every day. Collectively, over 74 photographs were taken and mapped along 6 routes that represented the community’s active (i.e. walking, bicycling, skateboarding, etc.) and motor vehicle transportation system. The ‘mappers’ covered approximately 750 square miles of the land area included within the 2.06 square miles of the city of Estacada and included features in the surrounding 748 miles of unincorporated areas (see Figure 1). The HEAL MAPPS™ team reconvened to discuss the photographs and maps during a focus group meeting. The most relevant 49 photographs, based on group consensus, were included in a presentation to provoke a larger community conversation. Over 17 Estacada residents and stakeholders attended and participated in a community dinner and discussion held at the Clackamas River Elementary School on March 20, 2013. The community conversation was facilitated by a member of the GROW HKC team trained to conduct HEAL MAPPS™ processes. Following the community dinner, photographs were displayed, participants were polled as to whether the feature made eating healthy or being physically active easier or harder for themselves or others in the community, and discussed their thoughts and feelings that led to their ratings. Child care was generously provided by an OSU 4-H member.

**Community Readiness**

Communities differ in many ways including their readiness to take action on an issue and implement relevant programs. The level of community readiness is a major factor in determining whether a particular program can be effectively implemented and supported by a community. Assessing the level of readiness for obesity prevention efforts is thereby a critical component of obesity prevention program planning and evaluation.

The Community Readiness Assessment Model is a tool we used to gain an understanding of the Estacada community’s resources and readiness for obesity prevention efforts. The assessment is divided into six dimensions that influence a community’s readiness to take action on an issue. The six dimensions are: community knowledge about the issue; community efforts; community knowledge of the efforts; local leadership; community climate; and local resources related to

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8 The ‘mappers’ individually determined the community boundaries as within the city and unincorporated land approximately served by the Estacada school district.
the issue. Questions representing each dimension were asked during the Estacada Community Conversation and the participants shared their perception of Estacada’s readiness and preparedness for change. Each dimension was then scored by two independent evaluators and combined to identify the overall stage of readiness.

An advantage for Estacada is that both leaders and community members are concerned about children and are advocates for children; this was frequently mentioned during the Community Conversation. Local efforts to increase supports for physical activity include the construction of the Ranger Woods trail and skate park. A few Estacada community organizations such as the SEED Garden Coalition and local school recreation programs and initiatives emerged as supports for promoting healthy eating and physical activity among local youth. These organizations contributed positively to the readiness score of the community. However, participants mentioned that some efforts directed at young people are not specifically designed to improve the food and physical activity environment or encourage healthy eating and physical activity, instead they exist to encourage kids to be outside for its own sake or to prevent risky behavior such as drug use. Overall, responses at the Community Conversation suggest that community members are only vaguely aware of the link between the community environment and obesity. Some barriers perceived by residents to healthy eating and physical activity include a lack of active transportation supports, such as sidewalks and bike lanes, and limited access to healthy fresh fruits and vegetables. Estacada contains many outdoor trails and parks but most are located three or more miles outside of town and there are no public transportation options to these recreational sites. All of these factors indicate that Estacada’s stage of readiness to implement environmental and policy strategies to prevent obesity falls somewhere between stage 3, the vague awareness stage, and stage 4, the pre-planning stage, as indicated by the arrow on the Stages of Readiness graph.

**Stages of Community Readiness**

<table>
<thead>
<tr>
<th>No Awareness</th>
<th>Denial</th>
<th>Vague Awareness</th>
<th>Pre-planning</th>
<th>Preparation</th>
<th>Initiation</th>
<th>Stabilization</th>
<th>Expansion</th>
<th>Professionalization</th>
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<tr>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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Based on the Community Readiness Assessment Model, community efforts should focus on: 1) raising awareness that the community can do something about the problem, and 2) providing suggestions on where and how efforts should be focused based on resident input and identified barriers. Present information at local community events and to unrelated groups; launch a
media campaign - post flyers, posters, and billboards. Begin to initiate events and present information on the issue. Work with GROW Healthy Kids and Communities team to gather more information from other community people, publish newspaper articles and editorials with general information related to local situation. Build and communicate Estacada’s capacity to change – Our Community can GROW Healthy Kids.

For more information about the Community Readiness Model, stages of community readiness, and stage-based strategies to increase community readiness to address health issues visit: http://www.colostate.edu/Dept/TEC/article3.htm.
Summary of Results based on Estacada Community Conversation

Physical Activity

Supports

• Multiple outdoor trails and parks which are well resourced (e.g. playgrounds, parking, boat ramps), including McIver Park, Eagle Fern Park, and Mt. Hood recreation area.
• Public parks and playgrounds, including a skate park, disc golf course, and sports fields.
• School recreation programs and initiatives include youth sports, playground and play structures, and a new walking path.
• Recreation programs offer scholarships and discounts.
• Some new improvements to paths, sidewalks, and crosswalks.

Barriers

• Some outdoor trails and parks are not easily accessible without a vehicle and some charge parking fees.
• Barriers to active leisure include a lack of indoor recreation/exercise facilities and a lack of options for non-competitive activities/recreation, specifically for youth.
• Lack of sidewalks and bike lanes restrict active transportation opportunities.

Healthy Eating

Supports

• Food assistance program includes the Food Bank, Meals on Wheels and low-cost meals served at the community center and Springwater Grange.
• School environment supports include school gardens supported by the SEED garden coalition, horticulture classes, and school lunch program.
• Some local food opportunities, such as two local community supported agriculture (CSA) farms.

Barriers

• Limited access to healthy fresh fruits and vegetables; one grocery store in town.
• Limited Local food production in immediate area.

Resident-Informed Recommendations for Community Change

The following recommendations emerged from the data generated during the Estacada community conversation and represent those of the Estacada community members who shared their ideas during the facilitated discussion of the photographed community features. These recommendations do not represent those of the GROW Healthy Kids and Communities project members or Oregon State University.

• Offer transportation opportunities for residents to get to outdoor trails and parks.
• Partner with schools and businesses to encourage them to incentivize healthy options for customers.
• List and describe physical activity opportunities in a consolidated document for Estacada. A participant suggested sending this list with the water bill.
• Increase organized activities/supervised play for youth in Estacada.
**Figures 1 through 3** represent the routes navigated by local residents as they mapped the physical features of the Estacada community using participatory photographic survey methods. Include one route from each different mode of transportation the mappers used.

**Figure 1.** Represents all routes generated by the Estacada community mappers.
Figure 2. Represents an example of a route generated while using a personal motorized vehicle. All photograph location coordinates are in decimal degrees.
Figure 3. Represents a walking route and the features encountered along the route that enable or hinder healthy eating and/or physical activity.