Liana Hardin and Jenny Rudolph, Columbia County Extension Family and Community Health (FCH), in partnership with Oregon State University, College of Public Health and Human Sciences’ Generating Rural Options for Weight Healthy Kids and Communities (GROW HKC) program and the Rainier community collective supported these impacts. Using data collected during the HEAL MAPPS™ processes, the report provides findings and recommendations to the Rainier community residents and decision-makers that can be leveraged to maintain community actions to change the obesogenic context, create a culture of weight health, and prevent a rise in childhood obesity prevalence. This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award John and Gunter 2011-68001-30020.
Rainier Community HEAL MAPPS™ Report

Rainier is a rural city located between the western shore of the Columbia River and the Pacific Coast mountain range in Columbia County, Oregon. The city is surrounded by agricultural lands, tree farms, and miles of private forest timber lands. Rainier experiences a pacific coastal climate, including mild temperatures throughout the year, moderately dry summers, and plentiful rains during the winter. The average rainfall in the region often exceeds 100 inches a year.\textsuperscript{1} The town of Rainier supports its surrounding rural community located in the valleys and mountains beyond its city limits. These communities include Lindbergh, Goble, and Mayger. For its surrounding area residents, Rainier offers Head Start preschool, an elementary school, a junior-senior high school, and numerous other small businesses, such as restaurants, coffee carts, and convenience stores/gas stations.\textsuperscript{2} Rainier does not have a full range/service grocery store. Rainier can access further resources at the nearest urban center in Longview, Washington, located just across the Columbia River and accessible in town via the Lewis & Clark Bridge.

Within Rainier’s city limits resides a population of approximately 1,889. This population is made up of roughly 91.8% Caucasian residents, 4% Hispanic/Latino residents, 1.1% American Indian/Indigenous residents, and 0.5% African American, Asian, Native Hawaiian, Pacific Islander, and non-specified residents.\textsuperscript{3} Approximately 91.16% of residents hold a high school degree or higher and 16.29% of residents hold a Bachelors or higher degree.\textsuperscript{4} Although most of the region’s back mountain lands are agricultural lands or owned by private logging companies, only an approximate 1.2% of total jobs are supported through agriculture and logging timber industries. A majority of Rainier residents work in the following industries: education/healthcare/social assistance, manufacturing, and retail/trade.\textsuperscript{5} The city’s estimated median family household income is $54,940\textsuperscript{6} and a total of about 5.7% families in the Rainier area fall below the poverty level.\textsuperscript{7}

Rainier provides travelers and residents with a few small recreational attractions including a multi-feature city park (playing fields, a walking track, and a skate park), Dibblee Beach (Columbia River beach access), the Fox Creek Trail (hiking and wildlife), Hudson Parcher Park (boating, camping, fishing, sports, and more), and Camp Wilkerson (camping, horse-back riding, and hiking).\textsuperscript{8} Rainier is also home to the Independence Day celebration of Rainier Days, an annual Canoe Journey of Native American Tribes, and Country Stock musical festival.\textsuperscript{9}

\textsuperscript{1} http://cses.washington.edu/cig/pnwc/pnwc.shtml
\textsuperscript{2} http://www.rainier.k12.or.us/
\textsuperscript{3} http://www.city-data.com/city/Rainier-Oregon.html
\textsuperscript{4} http://www.zoomprospector.com/CommunityDetail.aspx?id=21805
\textsuperscript{5} http://acs-economic-city.findthedata.org/l/21350/Rainier-Oregon
\textsuperscript{6} http://www.city-data.com/city/Rainier-Oregon.html
\textsuperscript{7} http://acs-economic-city.findthedata.org/l/21350/Rainier-Oregon
\textsuperscript{8} http://www.cityofrainier.com/?view=home
\textsuperscript{9} http://www.cityofrainier.com/?view=home
Generating Rural Options for Weight Healthy Kids and Communities (GROW HKC) is a USDA-funded, participatory action research and Extension program aimed at addressing higher obesity prevalence among rural children (when compared to urban). The research is conducted by Oregon State University’s College of Public Health and Human Sciences Extension researchers and FCH Faculty, in partnership with rural residents and communities. GROW HKC and the Rainier community have partnered to map features of the local environment and describe residents’ perceptions of the supportive and obstructive conditions for developing and maintaining healthful dietary and physical activity patterns, 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), to assess community resources and readiness to plan and implement environmental and policy actions that support healthy food and physical activity access and make easier weight healthy behavioral choices for all residents.

Addressing rural health disparities is a goal of Healthy Rural People 2020. The problem of obesity in children is at the forefront of nationwide research efforts; there are documented physical, mental, and social outcomes associated with childhood obesity that contribute to chronic health conditions and economic burdens 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 overweight and obesity is higher among children living in rural areas when compared to those in urban and suburban areas.

To learn more about rural settings as obesity promoting environments, HEAL MAPPS™ programs were conducted in partnership with rural communities across several Western U.S. States (CO, ID, NM, NV, OR, WA). Findings within participating states and from all participating communities will provide evidence and insights to drive the development of a rural obesity prevention model unique to the Western U.S. The rural resident-informed model will be used as a framework for rural community actions aimed to promote healthy eating and physical activity behaviors, and create weight healthy environments, systems, and policies, to address the problem of overweight and obesity among rural children and families.

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 Rainier Community

According to the US Census Bureau, the percentage of families in Rainier with children under the age of 18 is 31%. The city’s estimated median family household income is $50,770 and Rainier’s poverty rate is 2.5%. Approximately 17% of children across Columbia County live in poverty. During the 2014-2015 school year, 60% of Rainier elementary-aged children qualified for free or reduced lunch. In Columbia County, 4% of the population has limited access to healthy foods, meaning they are low income and live more than 10 miles from a grocery store. In fact, 14% of the population experienced food insecurity in the last 12 months. Columbia county ranks 20th out of 34 Oregon counties in health outcomes. Currently, the adult obesity rate in Columbia County is 30.4% compared to 27% for the state of Oregon. Columbia County’s adult obesity rate increased 121% from 1990 to 2009. Obesity is a contributing factor to about 1,400 Oregonian deaths a year.

There is a need to decrease the current trend of obesity in our nation in people of all ages.

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 pleased to provide this report of resources and readiness to prevent childhood obesity for the community of Rainier.

Methods and Preliminary Results

The 2015 HEAL MAPPS™ team composed of nine Rainier community members with an interest in creating a healthier community volunteered to individually photograph and map the community features that they experienced as either supporting or hindering their family’s ability to eat healthfully and be physically active most every day. Collectively, among all ‘MAPPers’, over 115 photographs of local features were taken and mapped along 14 routes that represented the community’s active (i.e. walking, bicycling, skateboarding, etc.) and motor vehicle transportation system. The ‘MAPPers’ covered over xxx miles of roadway, encompassing approximately xx% of the land area included within the 2.62 square miles of the city of Rainier and including

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10 Community data is available from OSU’s Rural Communities EXPLORER and accessed on December 22, 2015 from http://oe.oregonexplorer.info/rural/communitiesreporter/
11 http://www.countyhealthrankings.org/#app/oregon/2012/columbia/county/1/overall
12 http://www.ode.state.or.us/sfda/reports/r0061Select2.asp
16 The Initial HEAL MAPPS™ occurred in 2012
features in the surrounding unincorporated areas (see Figure 6).\(^{17}\) The HEAL MAPPS™ team reconvened for a focus group meeting to discuss the photographs and maps. The most representative (n=76) photographs of the community’s locally available food and physical activity resources, based on group consensus, were included in a presentation that was used to provoke a larger community conversation. Eighteen Rainier residents and stakeholders attended and participated in a community dinner and discussion held at the Rainier School District on November 19\(^{th}\), 2015. Following the community dinner, a community conversation was facilitated by the GROW HKC team trained to conduct HEAL MAPPS™ processes. Photographs of community resources were displayed, participants were polled as to whether the displayed 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.

**Community Readiness**

Communities differ in many ways, including their readiness to take action on an issue and implement changes in programs and policies. The level of community readiness is a major factor in determining whether a particular environmental or policy action can be effectively implemented and supported by the community. Assessing the level of readiness for changing the community context to one that promotes a culture of weight health – and supports healthy eating and physically active lifestyle patterns for all residents and visitors – is thereby a critical component of childhood obesity prevention program planning and evaluation.

The Community Readiness Model\(^{18}\) (CRM) is an assessment tool we used to gain an understanding of the community’s readiness and capacity for changing the rural obesogenic environment. The model includes six dimensions that are known to influence a community’s readiness to take action on a community health issue. The six dimensions are: community knowledge about the issue, current community efforts, community knowledge of the efforts, local leadership, community climate, and local resources related to the issue.

Open-ended questions representing each dimension were posed during the Rainier Community Conversation, and prompted by the questions, engaged audiences shared their perception of Rainier’s resources, readiness and capacity for change. Transcriptions of the conversation were coded into categories of food and physical activity, as well as the six dimensions. The indicators coded into each dimension were scored using the CRM scale by two independent evaluators. Scores from all dimensions were averaged to calculate the overall stage of readiness score.

**Findings**

Rainier has a number of existing environmental supports related to healthy eating, including the schools, who offer healthy snacks and meals (e.g. salad bar) both during school and after; local food resource like area farms and hunting and foraging in the abundant natural areas surrounding Rainier emerged as supports, as did the efforts of several establishments in Rainier to offer healthy food options for sale. Finally, there is a new

\(^{17}\) The ‘mappers’ individually determined the community boundaries as within the city and unincorporated land approximately served by the Rainier school district.

\(^{18}\) 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](http://www.colostate.edu/Dept/TEC/article3.htm).
school based health center in Rainier that was cited as a major support by community members—especially important in an area that has few if any medical or primary care facilities.

Barriers of access to **healthy eating** supports emerged as an overall lack of healthy eating resources, a lack of access due to economic or spatial attributes, and a lack of transportation and walking/biking supports. Rainier does not have a grocery store, and the discount store they have is perceived as selling poor quality or expired foodstuffs. The healthy food that is available to Rainier community members is often too costly for some to access. Finally, there are many in Rainer (e.g., seniors and those without transportation) that cannot gain access to healthy food options because local transportation options are lacking—including few bus stop locations and a lack of sidewalks, crosswalks, and bikes paths to promote active transportation.

Rainier has a number of **physical activity** supports, like sports fields and courts and programs for youth and adults, resources at the school, and local parks, playgrounds and trails. Rainier has sports programs and fields and courts for a variety of activities: Soccer, volleyball and softball to name a few. The Rainier school district offers the community access to supports like the Briarcliff pool (lessons offered), track, and trails on school property. The school district also offers wellness grants to its employees to allow access to activities like yoga or swimming. Within the schools, options like a climbing wall, PE classes, exercise equipment (e.g. elliptical), for use in health classes, are available. The community also has an activity bus 3 days a week that helps kids get to and from various activities. Finally, the community boasts a number of parks and playgrounds with a variety of amenities like supports for camping, fishing, hiking, and the aforementioned sports fields.

Community barriers to **physically active** lifestyle patterns were identified and emerged as a lack of spatial proximity to resources, supports for safe active transportation or other transportation options, and a general lack of low or no cost indoor physical activity options. While Rainer has many parks and playgrounds that offer activities like hiking and camping, many of these are not easily accessed without a car, especially for those who live in the more rural areas and those without access to transportation like senior citizens. The transportation option that Rainer does have (CC rider) has few stops proximate to resources. There is also a general lack of active transportation supports like bike lanes, sidewalks, and safety supports like lights and crosswalks. Finally, there is no fitness/exercise center in the community and generally few indoor physical activity resources that are low/no cost or fee based.

The **overall community readiness** score reflects both the community supports and barriers to healthy dietary and physically active lifestyle patterns across all six dimensions. Rainier’s current stage of readiness to implement environmental and policy strategies to prevent obesity falls between the **Pre-Planning** and **Preparation** stages (4.25), as indicated by the arrow on the Stages of Readiness graph below (Figure 1). Scoring in the **Pre-planning** stage indicates that many community members have at least heard about local efforts. Leadership and community members are acknowledging childhood obesity as an issue in the community and have begun the discussion around this issue and are supportive of continuing and improving current efforts, but may still be limited in their knowledge of best-practice solutions to address the issue (e.g. causes, symptoms, etc.). Some resource needs have been identified and some resources acquired that will make weight healthy lifestyle behaviors that will help prevent increased prevalence of overweight and obesity among youth and their families, but resource gaps still exist in some areas. Rainier’s readiness scores ranged from 3.4 for the “Community Knowledge about the Issue” dimension to 4.9 for the “Resources Related to the Issue” dimension (Figure 2).
Figure 1. 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>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

(4.25)

Figure 2. 2015 Scores for six dimensions of readiness.

- 4.3 Existing Community Efforts
- 4.0 Community Knowledge of Efforts
- 4.5 Leadership
- 4.5 Community Climate
- 3.4 Community Knowledge about the Issue
- 4.9 Resources Related to the Issue

**Recommended Strategies and Next Steps**

Based on stage-match strategies suggested by the Community Readiness Model, local efforts should include:

1) Continue to raise awareness of the issues of Obesity and community-driven solutions, in order to publicize that collectively the community can reduce environmental factors related to obesity risk and positively impact rural weight health.

2) Use local data, based on resident input and barrier identification (including but not limited to GROW data), to drive decisions and make suggestions on where and how environmental, behavioral, and educational efforts should be focused and evaluated.

For example, community coalitions can present information at local events and to groups unrelated to health efforts; using current social media sites and/or launching new sites – initiate meetups and post events, informational flyers, and networks. Present information, blog on the issue, publish print and e-media articles and editorials that highlight the general problem and successful local solutions.
3) Continue to work with your local Oregon State Extension agents and your County Public Health officials to gather information, and add to local data about childhood obesity risks, prevalence, and modifiable risk factors at every level: behavior, social supports and cultural norms, community, school, and family food systems and contexts, and available, easily accessible, physical activity supports, in order to collectively plan and implement effective strategies that reach broadly across the community population and deeply into underserved groups.

4) Continue to work with OSU and others to raise awareness of the actions and impacts to address childhood obesity that are happening at every level, collectively and cohesively in the Rainier community. Build awareness through broader participation in local events, for example: sponsor a community picnic to launch new actions and kick start networking efforts.

5) Plan for sustainability, including how to secure resources and how to evaluate the successes of your efforts. For example, continue to partner with public health agencies and public value organizations (e.g. non-profits, food banks, boy/girl scouts, churches, etc.) to maintain height-weight (healthy growth) surveillance among K-12 students; participate in or host public forums to develop strategies from the grassroots level; utilize key leaders and influential people to speak to groups and participate in local radio and television. Get local health leaders to champion the issue; engage across sectors and across diverse community groups, to develop effective strategies that are shown to reach all segments of the community.

Strengthen and communicate Rainier’s culture of, context for and commitment to weight health – “Rainier Moves to GROW Healthy Kids!”
Summarizing Community Change in Rainier: Examining Resources and Readiness from Start (2012) to Now (2015)

The citizens of Rainier have improved their level of readiness to take action! Overall, the community readiness score increased from 3.50 (between Vague Awareness and Pre-Planning) emerging from the first HEAL MAPPS™ in 2012 to 4.25 (between Pre-Planning and Preparation) as revealed in the second HEAL MAPPS™ (2015). Scores in all dimensions of community readiness improved (see Figure 2), with the largest increases occurring in the dimensions of Leadership (+1.0) and community knowledge about the issues of childhood obesity (+1.0). Even more importantly, since progress is dependent on similar levels of readiness across all dimensions, Rainier is primed for action. Not only does the community have a better understanding of the issues that surround childhood obesity, the community environment, and the link between local environment and local childhood obesity, the culture has shifted – community leaders are as engaged and ready to take action as the citizens.

Figure 3. Community Readiness scores for each dimension of readiness and overall, calculated from data collected during HEAL MAPPS™ processes.

Leadership

The community readiness score for Leadership in Rainier increased from 3.50 in the initial HEAL MAPPS™ event (2012) to 4.50 in the final event in 2015 (Figure 3). Leadership in Rainier is more supportive of continuing basic efforts and, by working towards getting grants or other external funding, considering resources available for self-sufficiency and sustainability of resources and efforts. The school district is especially strong in this regard: the middle school has received a grant for exercise equipment like elliptical and stationary bikes, to integrate into existing nutrition education; the school district has staff wellness grants that can be used for things like yoga classes or swimming; finally, the new school based health center is a fully functional facility that is noted as “helping the entire community”.

Community Knowledge of the Issue

Rainier community members have increased knowledge of the issues surrounding childhood obesity, the community environment, and the link between local environment and local childhood obesity. The readiness score for this dimension increased from 2.375 in the initial HEAL MAPPS™ (2012) to 3.375 in 2015 (Figure 3).
There is also increasing evaluations and access to specific local data on childhood obesity. For example, individual assessments at the high school and head start, the school based health center, and data from the GROW program.

**HEAL MAPPS™ Poll Responses**
HEAL MAPPS™ polls provided additional evidence of community change. In comparing poll results, initially (2012) more than 90% of those polled said they felt that Rainier did not have adequate resources to help community members live an active healthy lifestyle (Figure 4). Whereas, in the time 2 HEAL MAPPS™ poll, only 36% still felt Rainier did not offer adequate resources to eat healthy and be physically active regularly, while 64% (vs. 9%) agreed that Rainier had adequate resources (Figure 4). Poll results also show that there is increasing confidence that the people in Rainer who provide programs, services, activities, and establish policies have expertise and training in healthy eating and physical activity (Figure 5).

**Figure 4.** HEAL MAPPS™ Community Conversation poll responses for Resources Related to the Issue.

**Figure 5.** HEAL MAPPS™ Community Conversation poll responses for Existing Community Efforts.
Results Summary: Themes and Indicators Emerging from Rainier Community Conversation (2015)

Themes relating to Active Living and Healthy Eating that emerged from HEAL MAPPS™ 2015, were related to the Community Context (the setting or circumstances of a community, e.g. physical features), Community Capacity (the ability or power to do, experience, or understand something), Community Engagement – Climate and Culture, and Efforts or Resources related to the Issues (Tables 1 & 2).

Active Living supportive elements that emerged included: Community members who volunteer their personal time to repair and maintain resources in the community; the school district and others who are actively engaged in increasing the number of and access to resources (Table 1). The school district is engaged in a number of activities in this regard: they allow community access to their indoor pool, even offering swimming classes; they allow access to the track and trails on school property and are working to find ways to allow access to fitness equipment as well; they offer wellness grants to employees and are actively engaged in acquiring grant funds to increase active living supports. In fact, they have recently completed a 3-year PEP grant which provided physical activity equipment and training for teachers.

Healthy Eating supportive elements included: food assistance, access to local foods, and healthy food options. (Table 1). Food assistance support include the backpack program (summer lunch for kids), local churches, and the food bank, which not only offers healthy options and produce, but also deliver to local churches/areas/families. Rainier has a number of options for local food resources: there are local farmers and farm stands who sell meat, eggs and vegetables as well as a number of hunting fishing and foraging supports. The school also emerged as a support for local food via participation in the farm to school program and the greenhouse/garden at school. Finally, a number of local food establishments are offering healthier options (e.g. salad bars).

Elements that are obstructive to Active Living included community perceptions and knowledge of healthy lifestyles, a lack of active and/or alternative transportation supports and a general lack of physical activity resources, in particular a lack of indoor physical activity resources (Table 2). One barrier to living an active lifestyle that emerged was largely one of the community culture and climate: Community members seem to lack understanding of the connection between physical activity and health and of the behaviors that promote or deter from healthier lifestyles. In particular, there are some in the community who do not have the time or personal inclination to be healthy and who feel that being healthy is a choice that is not determined or affected by availability or access to resources. In fact, the community lacks sufficient resources that enable the easy daily ability to be physically active: there are no indoor physical activity resources and Rainer has few active transportation supports (e.g. sidewalks, crosswalks, etc.) and limited public transportation options. Subsequently, those who do not live proximate to resources, or who do not have access to transport, are unable to utilize the resources that Rainer does have.

Obstructive elements that emerged for Healthy Eating include a lack of healthy food options, issues with socioeconomic and spatial disparities, and a lack of active and/or alternative transportation options (Table 2). A significant barrier to eating healthy in Rainer is the overall lack of healthy eating resources: Rainer has no grocery store, many local businesses do not offer healthy options, and access to unhealthy foods is relatively easy at area convenience stores. The negative effects of this lack in resources is compounded by socioeconomic and spatial disparities: There is a general lack of close-in healthy food resources, which disproportionally effects
those individuals who live in the more rural areas of Rainer or who do not have access to transportation. Furthermore, where healthy foods are available they are often too costly for community members to access.

Table 1. Themes and Indicators of Resources supportive of weight healthy lifestyles emerging from 2015 Rainier Community Conversation. *Items in Red emerged as both supportive and obstructive.*

<table>
<thead>
<tr>
<th>Active Living</th>
<th>Healthy Eating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resource</strong></td>
<td><strong>Theme</strong></td>
</tr>
<tr>
<td><strong>Community Members</strong></td>
<td><strong>Theme</strong></td>
</tr>
<tr>
<td>Groups like Friends of Fox Creek, Boy Scouts and Eagle Scouts and local churches volunteer to clean up or maintain trails. Community members are engaged in actions to increase resources and access to those resources.</td>
<td><strong>Community Engagement-Culture and Climate</strong></td>
</tr>
<tr>
<td><strong>Active Transportation and Walkability</strong></td>
<td><strong>Active Transportation and Walkability</strong></td>
</tr>
<tr>
<td><strong>Public Transportation</strong></td>
<td><strong>Leadership</strong></td>
</tr>
<tr>
<td>CC Rider. Activity bus</td>
<td>School Administration, Downtown Association and city officials, Local Churches are engaged in increasing and sustaining resources via grants and outreach.</td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
<td><strong>Schools</strong></td>
</tr>
<tr>
<td>School Administration, Downtown Association and city officials, Local Churches are engaged in increasing and sustaining resources via grants and outreach</td>
<td>Engaged in increasing supports for and sustainability of resources: PEP grant, Fuel up and play 60 grants, grants for Staff fitness/wellness, for exercise equipment at school, Classes on nutrition balance</td>
</tr>
<tr>
<td><strong>Information Access</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Low or No Cost Resources</strong></td>
<td><strong>Efforts and Resources related to the Issue</strong></td>
</tr>
<tr>
<td><strong>General Health Supports</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Healthy Food options</strong></td>
<td></td>
</tr>
<tr>
<td>At schools, local businesses, food banks</td>
<td>Area farms and farm stands, &quot;Keep it Local&quot; program, fish, hunt and forage supports, Greenhouse at school and Farm to School program.</td>
</tr>
<tr>
<td><strong>General Health Supports</strong></td>
<td></td>
</tr>
<tr>
<td>School based Health centers</td>
<td>Back Pack program, Local churches, Food Banks</td>
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</table>
Table 2. Themes and Indicators of Resources Obstructive to weight healthy lifestyles emerging from the 2015 Rainier Community Conversation. *Items in Red emerged as both Supportive and Obstructive.*

<table>
<thead>
<tr>
<th>Resource</th>
<th>Theme</th>
<th>Resource</th>
<th>Theme</th>
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<tbody>
<tr>
<td><strong>Active Living</strong></td>
<td></td>
<td><strong>Healthy Eating</strong></td>
<td></td>
</tr>
<tr>
<td>Limited Time, Funds, Involvement</td>
<td>Due to time constraints, economics, personal inclination, education, or otherwise. <strong>Knowledge of the Issue</strong> Lack of understanding of the connection between physical activity (e.g. walking) and health and of the behaviors that promote or deter from healthier lifestyles, perception that healthy lifestyle is a personal choice not affected by external factors.</td>
<td><strong>Limited Time, Funds, Involvement</strong></td>
<td>Due to time constraints, economics, personal inclination, education, or otherwise. <strong>Knowledge of the Issue</strong> Lack of understanding of the Behaviors that promote or hinder healthier lifestyles. Perception that healthy eating is a choice for some.</td>
</tr>
<tr>
<td>Maintenance or Investment In Resources</td>
<td>Sidewalks need improvement, uneven and difficult for some community members to use (e.g. seniors and handicapped) <strong>Safety and Civility</strong> Perception of danger in some areas</td>
<td><strong>Active Transportation and Walkability</strong> Resources hard to get to walking or biking because of lack of crosswalks, ramps, sidewalks or poor maintenance thereof. Few handicapped access supports. <strong>Public Transportation</strong> CC Rider Fee to ride a barrier for some</td>
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<tr>
<td>Weather</td>
<td>Winter weather an impediment to PA <strong>Socioeconomic Disparities and Costs</strong> Cost is a barrier for some. Related: lack of equipment for some activities. <strong>Spatial Access</strong> Lack of Close-in Resources and overall lack of spatially proximate resources in more rural areas. <strong>Information</strong> Lack of signage at some trails sites that offer info on trail: e.g. distance</td>
<td><strong>Socioeconomic Disparities and Costs</strong> Cost of fresh produce or healthy options is too high. Negative perceptions of food bank are a barrier to use <strong>Spatial Access</strong> Lack of Close-in Resources: Seniors and those living outside of city limits most affected, those in town sell mostly unhealthy options. Overall lack of spatially proximate resources in more rural areas.</td>
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<tr>
<td>Low or No Cost Resources</td>
<td>Lack of indoor low cost PA facilities, some school facilities are inaccessible, trails inaccessible to some (handicapped) and may be too far away, local churches (basketball, boxing club) <strong>General Health Supports</strong> Lack of physical Health services (e.g. mental health, PCPs, clinics etc.)</td>
<td><strong>Healthy Food Options</strong> Lack of Healthy Food Choices at area restaurants and stores. No Grocery Store. Food Assistance programs don’t always have healthiest options. Easy access to unhealthy foods at convenience stores. <strong>Local Food</strong> Farm stands and produce only open part of the year and often far away. <strong>General Health Supports</strong> Lack of physical Health services (e.g. mental health, PCPs, clinics etc.)</td>
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**Obstructive**

<table>
<thead>
<tr>
<th>Resource</th>
<th>Theme</th>
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<tr>
<td><strong>Community Engagement-Culture and Climate</strong></td>
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<tr>
<td><strong>Community Capacity</strong></td>
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<tr>
<td><strong>Community Context</strong></td>
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<tr>
<td><strong>Efforts and Resources Related to the Issue</strong></td>
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</table>
Resident-Informed Recommendations for Healthy Community Change

The following list of recommendations emerged from the data generated during the Rainier HEAL MAPPS™ conversation. The list represents those of the Rainier community members who shared their ideas during the facilitated discussion of the photographed community features. We have organized the recommendations by similarity in action. These recommendations do not represent those of the GROW Healthy Kids and Communities project members or Oregon State University.

Multisector Partnerships and Shared Goals for Healthy Community Development

1. Community members are interested in allocating resources/funds to not only organized sports but also to free play activities.

Healthy Food and Physical Activity Policies and Programs

2. School district and Community members interested in increasing community access to school based physical activity resources in a cost effective way.
3. Community Members interested in increasing access to and utilization of school grounds
4. Increase participation in things like buying clubs from local farmers, farmer's market, possible via the creation of something like a co-op service.

Informational Campaigns

5. Increase participation at the food cupboard via a campaign aimed at reducing negative connotations/perceptions and creating a more welcoming environment (e.g. more grocery store like)
6. Increase knowledge of efforts and resources via advertisement on website or other media.

Inclusive Community Involvement and Solidarity Actions

7. Community members understand the importance of connection to others in the community and in increased communication among community members.

Active Transportation, Walk/Bike/Wheel-Ability

8. Community members advocate for a cross walk and/or other traffic calming features to alert people and drivers to pedestrians/skateboarders, etc., and get them to slow down
Figures 6 through 10 represent the routes navigated by local residents as they mapped the physical features of the Rainier community using participatory photographic survey methods. Include one route from each different mode of transportation the mappers used.

Figure 6. Represents all routes generated by the Rainier community mappers.
Figure 7. Represents an example of a route generated while using a personal motorized vehicle, and the barriers and supports that were encountered.
Figure 8. This map is a zoomed in version of a route generated while using a personal motorized vehicle, and the barriers and supports that were encountered.
Figure 9. Represents an example of a route generated while on foot, and the barriers and supports that were encountered.
Figure 10. Represents an example (zoomed in) of a route generated while on foot, and the barriers and supports that were encountered.