This reported was generated by Shirley Calodich 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 Port Townsend Community to support the community's initiative to prevent childhood obesity.
Port Townsend is a rural city located in Jefferson County, Washington. The city is situated on the Northwestern tip of the Olympic Peninsula, 40 miles northwest of Seattle. The total population is 9,113 based on the 2010 census. The weather is mild, with an average low of 43.6°F, and an average high of 57°F. Port Townsend is within the Olympic rain shadow, keeping annual precipitation to an average of 18.75".

There is one public high school, one middle school, one elementary school and two private elementary/middle schools and one private high school. Four grocery stores, 4 convenience stores, and 41 restaurants serve the Port Townsend community. Local recreation opportunities include a community swimming pool, golf course, Skateboard Park, nineteen city parks, and four county parks. Fort Worden State Park a 433-acre multi-use park is at the northeastern tip of Port Townsend. Port Townsend is known as a Victorian Seaport and Arts community. Annual events include Wooden Boat Festival, Kinetic Sculpture Race, and a growing independent film festival.

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 Port Townsend 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.

HEAL MAPPS projects conducted in partnership with rural communities across several Western States (AZ, CO, NM, NV, OR) will provide evidence and insights that will drive the development of a rural

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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 Port Townsend Community

According to the US Census Bureau, the percentage of the Port Townsend population under the age of 18 is 16%. The median household income is $43,597 and the poverty rate is 17.3%. In 2011, 48.2% of students enrolled in the public school system received free or reduced price lunch.

According to the 2008 Healthy Youth Survey for Jefferson County, 33% of 8th 28% of 10th, and 19% of 12th graders are eating the recommended 5 servings of fruits and vegetables per day. In 2010 approximately, 45% of 6th graders, 27% of 8th graders, 58% of 10th graders, and 57% of 12th graders did not meet the daily physical activity recommendation. Approximately, 38% of eighth graders and 45% of sixth graders watched more than three hours of screen time per day.

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 Port Townsend.

Methods and Preliminary Results

A HEAL MAPPS team (n=10) comprised of Port Townsend community members with an interest in creating a healthier community volunteered and were first trained to individually photograph and map the Port Townsend community features that they perceived as either supports or barriers to eating

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4 http://quickfacts.census.gov/qfd/states/53/5355855.html
6 http://www.askhys.net/layout.asp?page=reports/FactSheets
healthy and being physically active most every day. Collectively, over 165 photographs were taken and mapped along 10 routes that represented the community’s active (i.e. walking, bicycling, skateboarding, etc.) and motor vehicle transportation system. The ‘mappers’ covered approximately 90% of the land area included within the 9.46 square miles of the city of Port Townsend and included features in the surrounding unincorporated areas (see Figure 1).\(^7\) The HEAL MAPPS team reconvened to discuss the photographs and maps during a focus group meeting. The most relevant 54 photographs, based on group consensus, were included in a presentation to provoke a larger community conversation. Over 10 Port Townsend residents and stakeholders attended and participated in a community dinner and discussion held at the Port Townsend Community Center on November 4, 2012. 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 YMCA of Jefferson County.

**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 Port Townsend 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 the issue. Questions representing each dimension were asked during the Port Townsend Community Conversation and the participants shared their perception of Port Townsend readiness and preparedness for change. Each dimension was then scored by two independent evaluators and combined to identify the overall stage of readiness.

There appear to be a fair number of groups working to improve the food and physical activity environment in Port Townsend, but only the Gleaners appear to be working cross-organizationally to increase access to fresh fruits and vegetables. Overall, responses at the Community Conversation suggest that groups in Port Townsend are not working together with shared goals around improving access to healthy eating and physical activity opportunities in order to prevent childhood obesity yet. Groups of people are working on implementing things like Safe Routes to School, Farm to School programs, community gardens, healthier school lunch options, and improvements to sidewalks, but

\(^7\) The ‘mappers’ individually determined the community boundaries as within the city and unincorporated land approximately served by the Port Townsend school district.
appear to be struggling to realize their plans and do not have designated organizational leaders. Though there are these more nebulous groups in the community there are also some established organizations (WIC, the Food Bank, and the Gleaners) that have implemented programs or initiatives to improve people’s access to healthy foods at the farmers market, community gardens, food bank garden, and the orchard at Blue Heron School. The YMCA, Rotary, and the Soroptomist organizations have also implemented initiatives to improve the community’s access to physical activity opportunities. These groups and efforts signal that the community is aware of the factors related to childhood obesity in the community, but there is also evidence that there are limitations to the physical activity and food environment in Port Townsend. Some barriers perceived by residents to healthy eating and physical activity include school cafeteria policies, disconnected sidewalks, paths, and bike lanes, limited funds available for Seniors to get food from the farmer’s market, fee-based parks and recreation programs, and limited public transportation access to recreation areas. All of these factors indicate that Port Townsend’s stage of readiness to implement environmental and policy strategies to prevent obesity falls on the low end of 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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Based on the Community Readiness Assessment Model\(^8\), the goal is to raise awareness with concrete ideas to address the issue. Community efforts should focus on: 1) introducing information about childhood obesity, the need for prevention efforts focused on improving the community environmental supports for healthy eating and physical activity through presentations and media; 2) raise awareness that efforts to address childhood obesity are happening in Port Townsend and increase media exposure, including social media; 3) engage and develop support from community leaders, review existing efforts to determine who benefits and to what degree; and 4) initiate a group or coalition with a shared vision of childhood obesity prevention; start planning how to address your objectives and evaluate success of the community’s efforts. Encourage annual height-weight assessments among youth and healthy meals/snacks in schools; sponsor a community picnic and fun-run to kick off the effort; conduct 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. Build and communicate Port Townsend’s

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\(^8\) For additional information about the Community Readiness Model, visit [http://www.colostate.edu/Dept/TEC/article3.htm](http://www.colostate.edu/Dept/TEC/article3.htm).
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](http://www.colostate.edu/Dept/TEC/article3.htm).

**Summary of Results based on Port Townsend Community Conversation**

**Physical Activity**

**Supports**

- Active transportation supports include some bike lanes, bike racks and bike shelters.
- Recreational programs and organizations, such as Kid Fit, YMCA, and county rec.
- Accessible outdoor trails and parks that are resourced.
- Active leisure supports include outdoor rec/exercise facilities such as the skate park, Memorial field, and high school track.

**Barriers**

- Active transportation barriers include few/no options walking or bicycling to/from destinations and a lack of connected bike lanes and bike shelters.
- Policies related to transit and transportation, such as a lack of public transportation to parks and indirect bus routes.
- Sidewalks, paths, and trails are disconnected.
- Recreational program barriers include fee based private rec programs (YMCA) and a lack of physical activity initiatives for students, such as Safe Routes to School.
- Lack of connectivity to parks and trails.
- Inaccessible and poorly maintained outdoor parks due to a lack of connectivity, user fee, indirect transit routes and a need to improve/update play structures.
- Pedestrian/cyclist safety concerns due to accidents between cyclist/pedestrians when bike lanes turn into sidewalks, and paths.
- Limited walkability due to a lack of sidewalks and crosswalks.
- Decreased funding for recreational programs from the state.
- Crime/safety concerns in public areas due to poor lighting.
Healthy Eating

Supports

- Multiple food assistance programs, sponsored by the community and schools.
- Access to healthy, fresh and local foods, including fruits, vegetables and seafood.
- Many local food resource centers which bridge local food production with distribution, including grocery stores, community gardens, and the Farmer’s Market.
- School food environment supports include programs such as Farm to School, nutrition education, and food assistance for students.

Barriers

- School food environment barriers include poor school meals and a lack of kitchen facilities.
- Barriers to food assistance programs such as limited applications for Senior Farmers Market checks and limited hours at the Food Bank.

Resident-Informed Recommendations for Community Change

The following recommendations emerged from the data generated during the Port Townsend community conversation and represent those of the Port Townsend 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.

- Incorporate fresh seafood and local, organic food in school meals by creating a central commercial kitchen facility for the Port Townsend schools.
- Establish community kitchen for individuals and groups to can and freeze food items.
- Increase food bank availability and accessibility.
- Encourage and improve safe routes to school.
- Educate residents regarding proper bike riding and pedestrian etiquette; suggestions include enforcement, signs, and bike bells.
- Create a consolidated calendar of community events.
- State programs, such as WIC, should allow residents to utilize their funds to access physical activity resources, such as purchasing a pool pass, bus pass, gym membership, and enrolling in county parks and rec programs.

- Residents suggested using WIC/DSHS money to fund a Discover Pass, offering a sliding scale for child swim lessons, and free pool passes to people who need it.

- Residents suggested increasing and improving activities for play for individuals, families, and multiple ages along with increasing accessibility of playing fields at the Memorial Field.
Figures 1 through 4 represent the routes navigated by local residents as they mapped the physical features of the Port Townsend 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 Port Townsend community mappers.
Figure 2. Represents all of the routes generated while using a personal motorized vehicle. All photograph location coordinates are in decimal degrees.
Figure 3. Represents all of the walking routes and the features encountered along the routes that enable or hinder healthy eating and/or physical activity.
Figure 4. Represents all of the bicycle routes and the features along those routes that enable or hinder healthy eating and/or physical activity.