The information contained in this report can be used to drive decisions about land use and siting for new resources, to secure funding to improve the community food system, parks and recreation resources, and transportation planning. It can also be used by community members to seek out locally available and affordable healthy food and physical activity options.

This report was generated by Liana Harden and Jenny Rudolph, (Columbia County Extension Family and Community Health), in partnership with the GROW HKC project campus team: Winfield, T., John, D., and Gunter, K.
### GROW Healthy Kids & Communities

#### Background Information

GROW HKC partners with rural people, organizations, and communities to generate local options to support weight healthy lifestyles – healthy eating and physical activity every day - for all children and families.

GROW engages people in the communities we serve in assessing the conditions that most affect them where they live, learn, work and play. We do this to identify what changes will best support weight healthy behaviors for children and families and improve food and physical activity resources in the community.

<table>
<thead>
<tr>
<th>HEAL MAPPS, one of the GROW programs, helped residents to tell their story of life in the community, their personal experiences or encounters with food and physical activity resources as either supporting or hindering weight healthy choices and habits.</th>
</tr>
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<tbody>
<tr>
<td><strong>People’s lived experiences are very important for understanding how and why healthy habits develop.</strong></td>
</tr>
<tr>
<td>In order to have the most complete picture of the food and physical activity environment, we need to know about all of the available resources: who makes food and physical activity available, what types of food and physical activity are available, where are they located, and is there a cost?</td>
</tr>
<tr>
<td>The Rural Community Food and Physical Activity Environment Audit is a participatory survey of all of the food and physical activity resources in the community. The auditors use camera-enabled GPS units and photomapping methods to document and survey resource availability and location. These surveys were done twice: first in 2013 and then again in 2016.</td>
</tr>
<tr>
<td>OSU faculty integrate community data with other geographic information systems (GIS) data to provide a visual report of the relationship between the location and types of food and physical activity assets and where most people live in the community.</td>
</tr>
</tbody>
</table>
Community Audit activities yield rich attribute data that can be associated with resource photos and tracks. Community members collect this information while mapping by using a survey that integrates two research-based measures: the rural active living assessment and the community food security assessment. OSU researchers included additional items known to be influential in the rural food and physical activity systems, such as hunting, fishing, and foraging supports.
Many risk factors have been associated with childhood obesity, including rural residency:
- Overweight/obesity prevalence is higher among children living in rural (36%) compared to urban (30%) areas.
- Weight health and habits carry over into adulthood.
- Rural communities face unique environmental challenges that can impact residents’ healthy eating and physical activity lifestyle patterns.
- Environmental strategies found to prevent obesity have focused on more urban areas.
Clatskanie Community - Adult Weight Health (BMI)

Visualizing weight health in Clatskanie was enabled by the Oregon Environmental Public Health Tracking Program.

Mean BMI at Census Block Group Level

Mean % BMI at School District Level

*2014 DMV records used to calculate BMI reliably illustrate the BMI distribution despite underestimation.
Within the School District Boundary, Clatskanie has 5508 people living in 2466 households (2010 census) spatially dispersed in an area of about 124 sq. mi.

Easy access to locally available resources is determined by proximity, transportation mode, ability to drive, cost & household income, etc. which will vary among families.

Where People Live Matters for Easy Access to Resources
Community Boundaries Include the Approximate School District Catchment Area (“School District Boundary”) for Three Schools and Clatskanie City Limits
Within audit boundaries, we calculated statistically significant clusters of population based on population density.

The geographic centers of these clusters were used to create network buffers, ranging in size from 2 to 5 miles, that captured 85% or more of the community population.

The yellow to red areas are the most highly populated; Clatskanie is sparsely populated (greens) throughout much of the boundary area.
Using Maps to Show Where Most People Live: Study Area

A “study area” was defined using the areas most densely populated, in order to determine the food and physical activity resources relevant to where most people live.

The study area (purple) captures 95% of Clatskanie's population.

Defining the study zone helped limit time and travel distance for Clatskanie community members who mapped resources and collected survey data, while not limiting the ability to capture data that is important to the community.
Resource Maps

We collected information on resources in each community in 2014 and again in 2016 to assess any changes in resource availability and accessibility in our communities. We created publicly available resource maps for each community and offer them in this report as well as online via google maps. These can be found by visiting the community maps section of the GROW HKC project website:
http://extension.oregonstate.edu/growhkc/outputs/maps
Clatskanie has one grocery store located within city limits.

The grocery store is a SNAP authorized store. SNAP, or the Supplemental Nutrition Assistance Program, is a federal program that offers nutrition assistance to income eligible families and individuals.

Based on a measure of availability of healthy food options, the “Modified Retail Food Environmental Index,” Clatskanie scored “12.5” on scale ranging from 0 (no access to healthy food) to 100 (only access to healthy food).
The Safeway in Clatskanie is a full service supermarket, and is one of the SNAP retailers in town as well as a WIC (Women, Infants, and Children) authorized vendor.

WIC is a SNAP program that provides supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk.
Clatskanie has a variety of local food/agriculture and food assistance resources available, located mainly within city limits.

Local Food and Agriculture includes farm stands, u-picks, home-based food retailers, farmer’s markets, and hunting, fishing, and gleaning supports. Food Assistance includes food banks, summer lunch programs, community meals and other supplemental food support programs.
Clatskanie has four Local Food/Agriculture resources that lie outside of city limits. These are mainly home based operations, selling eggs and vegetables.
Resources for Local Food, Agriculture & Food Assistance Shown by Location

Clatskanie has gained a number of new resources since the original audit: a farmer’s market, community meals at the senior center, and access to school gardens have been added. New (or not previously audited) are a number of summer lunch program sites located throughout Clatskanie city limits. Clatskanie also has a farm stand and community garden (some fees apply), as well as a food bank.
Clatskanie has four Fast Food type eating establishments (one new since the original audit) and five convenience stores.

For our purposes here, fast food is considered any place that sells prepared foods or drinks and does not have seating, or if it does have seating, then it also has a drive through.

Clatskanie’s “Modified Retail Food Environmental Index” score was 12.5 (out of 100). A lower score indicating a higher number of places that don’t typically have healthy food and lower numbers of places that would typically have healthy food options.
Resources for Fast Food and Convenience Stores Shown by Location

Two of Clatskanie’s convenience stores lie outside of city limits
The Fast Food establishments in Clatskanie consist of a drive through coffee hut and a vending machine.
Clatskanie has 14 Café, Deli, Restaurant type eating establishments, two of which were added since the original audit.

There are nine Sit-down Restaurants with table service, three Coffeehouse/Bakeries, and two Deli/Sandwich Shops.
Outside of city limits community members can dine at three Sit–down Restaurants with wait staff and one New Deli/Sandwich shop.
Within city limits, community members have a variety of options: they can dine at the five Sit-down type restaurants as well as a number of Café/ Bakeries, and a Deli/ Sandwich shop.
Public Parks and Playgrounds

Clatskanie has four Public Parks – including three playgrounds. Most of these parks and their amenities are located within city limits.
Clatskanie has one Public Park and one playground outside of city limits.

Day Use, Dog Walking, Picnic, No Fee
Resources and Amenities Shown by Location for Public Parks and Playgrounds

A total of three public parks with 8 unique amenities and 3 playgrounds (not including those on school property) can be found within city limits.
Clatskanie has a number of “Other Physical Activity (PA)” resources, most of which are located outside of city limits. These resources may be located indoor or out and may or may not have fees associated with them.
Resources for Other Physical Activity Shown by Location

Resources are mainly trails/logging roads on private timber land, which may be closed due to fire danger or logging activities.

- Hiking, Bike Riding, Horseback Riding, Dog Walking
- Westport Community Center
  - Only Free Indoor PA Resource in area

* PA= Physical Activity
Resources for Other Physical Activity Shown by Location

- Waterway
- Community Garden
- Fees for Garden Plots
- New Free PA Equipment Check Out
- Paved Trail
- Membership Fees
- Anytime Fitness
- Camping and Hiking Gate Key Deposit
- Clatskanie Recreation Center
- Riverview

There are 10 “Other PA” resources located within city limits. These are mostly outdoor resources, the two indoor resource area fitness and recreation centers. Clatskanie added a new equipment check out program since the original audit.
Change in Resources for School Physical Activity Access

The school district allows public access to Gardens, Gyms, Track, Playgrounds, and various Sports/Playing Fields and Courts and has added further access to school gardens and a trail at the elementary school, as well as the high school track and forestry area.
Resources for School Physical Activity Shown by Location

- Playing Fields/Courts
- Playground
- Trail
- Forestry Area
- Garden
- Track

Access to School Garden
Access to School Trail
Access to School Gym
Access to School Playing Fields/Courts
Access to School Track
Other
Ease of Access to Resources

- Spatial accessibility is relative: if you have a car and gas money, your spatial access to resources is potentially only limited by how much time you want to spend in the car. As our goal is to include all potential community members, not just those with a means of transportation, we analyzed the proportion of community members who have “Easy Access” to resources.

- We described Easy Access as being located within a ¼ mile distance to a resource category.

- While Clatskanie does have some food and physical activity (PA) resources located close-in, the bulk of the PA and Local Food resources are located outside of city limits.

- Resources have been aggregated into 6 categories: Low/No Cost Outdoor PA, Low/No Cost Indoor PA, Fee-Based Outdoor PA, Fee-Based Indoor PA, Local Agriculture, Grocery and Food Assistance, Fast Food/Convenience Store and Restaurant

**Low/No Cost PA Resources**  
- Community Centers  
- Public lands/Parks & Playgrounds  
- Sports Fields/Courts

**Fee-Based PA Resources**  
- Golf Courses  
- Equestrian centers  
- Exercise/Fitness centers

**Local Agriculture**  
- Farm stands/U-picks  
- Farmer’s markets  
- Home-based sales (Eggs, Milk, Veggies)  
- Hunting/Fishing/Gleaning Supports
Clatskanie's ease of access to resources remained relatively stable with some nominal changes: a 3% increase in access to resources in the Local Food/Food Assistance/Grocery Stores category. Still, less than 40% have "easy" access to these resources and only about 13% have access to Indoor PA resources. Even though six new resources were added in the Low/No Cost Outdoor PA category, they were added at pre-existing resources (the schools), and as such offered no increase in spatial access.
There were no changes in the number of grocery store resources in Clatskanie. However, food resources were added in the form of a farmer’s market, community meals at the senior center, access to school gardens, new (or not previously audited) summer lunch program sites, a fast food restaurant as well as two new Café/Deli/Restaurants. There were no changes in any PA category except Low/No Cost Outdoor PA, where the school district added community access to a number of school resources.
Conclusions

In rural communities, a lack of available resources and accessibility to existing resources may make developing and maintaining healthy dietary and activity habits difficult.

Resources are available, but mainly located within city limits, leaving those who live in more rural areas without easy access. Supports need to be affordable and accessible from where people live and work.