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.
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.

*People’s lived experiences are very important for understanding how and why healthy habits develop.*

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?

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.

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

**Adult Body Mass Index (BMI)**
- **11% Healthy**
  \( (BMI \leq 24.9) \)
- **82% Overweight**
  \( (BMI \leq 29.9) \)
- **7% Obese**
  \( (BMI > 30) \)

*DMV records used to calculate BMI reliably illustrate the BMI distribution despite underestimation.*
Where people live matters for easy access to resources

Community boundaries include the School District catchment for 3 schools and city limits.

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.
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.
Most populated areas were food and PA resources relevant to where most people live. The study zone (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.
Grocery Store Locations

Clatskanie has one grocery store located within city limits and 3 SNAP Authorized retailers.

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).
Resources for Groceries Shown by Location

The Safeway in Clatskanie is a full service supermarket and is one of the SNAP retailers in town. Safeway is also 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.
Local Food, Agriculture, & Food Assistance

Clatskanie has a number of “Local Food, Agriculture, and Food Assistance” resources.

Local Food and Agriculture includes farm stands, u-picks, home-based food retailers, farmer’s markets, and hunting/fishing/gleaning supports.

Food Assistance includes food banks, summer lunch programs, community meals and other supplemental food support programs.
Clatskanie has nine Local Food/Agriculture resources. Many of these lie outside of city limits and are home based operations, selling eggs and vegetables. There is also one year round farm stand/u-pick operation.
Within city limits, Clatskanie has a farm stand and community garden (some fees apply), as well as two locations for food assistance: Turning Point Food Bank and a lunch program that happens in the city park during summer break.
Clatskanie has three Fast Food type eating establishments located within city limits and close to local schools.

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.
Resources for Fast Food Shown by Location

The Fast Food establishments in Clatskanie consist of a drive through coffee hut and a vending machine.
Convenience Stores

Clatskanie has five convenience stores, three of which are located within city limits.

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.

Comparing the ratio of fast food establishments per 1000 people to the fact that Clatskanie has less than one grocery store per 1000 people, you can see why Clatskanie scores low on this index.
There are three convenience stores located within city limits that sell food and beverage items.
Clatskanie has 12 Café, Deli, Restaurant type eating establishments.

There are eight Sit-down Restaurants with table service, three Coffeehouse/Bakeries, and One Deli/Sandwich Shop.
Resources for Café, Delis & Restaurants Shown by Location

Outside of city limits community members can dine at three Sit-down Restaurants with wait staff.
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.
City/Neighborhood Parks and Playgrounds

Clatskanie has two city parks and three playgrounds, most within city limits.
A total of two public parks with 8 unique amenities (not including those on school property) can be found within city limits.

Day Use, Dog Walking, No Fee
Playground, Sports Fields
and Fitness Trail

Picnic, Camping, Skate park,
Tennis Courts,
Ball Fields, Playgrounds,
Fees for some amenities

Clatskanie Elementary School
Clatskanie Jr/Sr High School
Pre-K
City Limits
School Catchment Area
Public Park
Fees
Number of Amenities (1-7)
Playground at Location

Not shown here: 1 playground located outside of city limits
Other Public Parks

Clatskanie has two other public parks: a botanical garden located downtown and a natural amenity park on state land 16 miles NW of city limits.
Resources for Other Public Parks Shown by Location

- Checkmate Park
  - Day Use, No Fee, Botanical Garden

- Clatskanie Elementary School
- Clatskanie Jr/Sr High School
- Pre-K
- Other Public Park
- City Limits
- School Catchment Area
Clatskanie has four fee based “Other Physical Activity (PA)” resources, all of which are located within city limits. These resources may be located indoor or out.
Resources for Other PA-Fee Based Shown by Location

There are four fee-based "Other PA" resources located within city limits. These are mostly outdoor resources, with the lone indoor resource being a fitness center.

*PA=Physical Activity
Clatskanie has a variety of other physical activity options (20 in total) these are mainly outdoor resources located outside of city limits.
Resources for Other PA-Free Shown by Location

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

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

The school district allows public access to Gardens, Gyms, Track, Playgrounds, and various Sports/Playing Fields and Courts
Resources for School Physical Activity
Shown by Location

School Fields/Courts
School Track
School Gym
School Garden
School Playground
School Garden
School Fields/Courts
School Track

Clatskanie Elementary School
Clatskanie Jr/Sr High School
Pre-K
Access to Gymnasium
Access to Sports Fields/Courts
Access to Garden
Access to Track
City Limits
School Catchment Area
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

<table>
<thead>
<tr>
<th>Low/No Cost PA Resources</th>
<th>Fee- Based PA Resources</th>
<th>Local Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Centers</td>
<td>Golf Courses</td>
<td>Farm stands/U-picks</td>
</tr>
<tr>
<td>Public lands/Parks &amp; Playgrounds</td>
<td>Equestrian centers</td>
<td>Farmer’s markets</td>
</tr>
<tr>
<td>Sports Fields/Courts</td>
<td>Exercise/Fitness centers</td>
<td>Home-based sales (Eggs, Milk, Veggies)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hunting/Fishing/Gleaning Supports</td>
</tr>
</tbody>
</table>
Ease of Access to Resources

Analyzed via a ¼ mile network buffer: approximately a 5 to 10 minute walk

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

Proportion of Clatskanie Population within 1/4 mile of Food and Physical Activity Resources

Less than 40% have easy access to most abundant resource types

Less than 10% have easy access to any Indoor Physical Activity Resource
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 spread out and often located far from the town center, making them inaccessible to those without a means of transportation. Supports need to be affordable and accessible from where people live and work.