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.
GROW Healthy Kids & Communities
Background Information

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.

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.
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.
Molalla Community - Adult Weight Health (BMI)

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

Adult Body Mass Index (BMI)
• 3% Healthy (BMI 18 - 24.9)
• 96% Overweight (BMI 25 - 29.9)
• 1% 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 5 schools and city limits.

Molalla has 16531 people living in 6241 households (2010 census) spatially dispersed in an area of about 72 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; Molalla is sparsely populated (greens) throughout much of the boundary area.
The most populated areas were used to define the “study zone” to determine the Food and Physical Activity resources relevant to where most people live.

The study zone (purple) captures 96% of Molalla’s population.

Defining the study zone helped limit time and travel distance for Molalla community members who mapped resources and collected survey data, while not limiting the ability to capture data that is important to the community.
According to the Healthy Food Financing Initiative, a food desert is an area where a larger proportion of people have low or no access to a supermarket or grocery store.

Molalla has two grocery stores—less than 1 store per 1000 people—but is still considered a partial food desert.

Based on a measure of availability of healthy food options, the “Modified Retail Food Environmental Index,” Molalla scored “28” on scale ranging from 0 (no access to healthy food) to 100 (only access to healthy food).
Molalla has two grocers within city limits: a Supermarket and a smaller discount grocer. Both of these are authorized SNAP retailers.

SNAP, or the Supplemental Nutrition Assistance Program, is a federal program that offers nutrition assistance to income eligible families and individuals.
Molalla 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.
There are 11 local food/agriculture options that lie outside of Molalla city limits: These include a number of farm stands or u-pick farms, homebased food retailers selling things like eggs and vegetables, a plant nursery and supports for hunting.
Resources for Local Food, Agriculture & Food Assistance Shown by Location

Within city limits, Molalla has a community garden, a food bank/pantry at the Molalla service center, and community meals at the adult community center.
Molalla has ten convenience stores, three located outside city limits and seven located within.

Molalla’s “Modified Retail Food Environmental Index” score was 28. 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 Convenience Stores Shown by Location
Molalla has seven convenience stores within city limits, all of which are SNAP authorized retailers.
Molalla has 11 fast food establishments, all located within city limits.

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

Fast Food options in Molalla consist of drive through, coffee stands, vending machines, and food trucks.
Molalla has 17 Café, Deli, Restaurant type eating establishments, all but one located within city limits.

There are four Coffee house/Bakeries, twelve Sit–down Restaurants with table service and one Deli/Sandwich Shop.
Resources for Cafés, Delis, & Restaurants Shown by Location

* Not all resources shown
Molalla has ten Neighborhood/City Public Parks that offer a variety of amenities and opportunities for physical activity (PA).
There are three Public Parks that lie outside of city limits, with a variety of amenities: Beaches/Waterways for boating or swimming, paved trails for walking, biking, or dog walking, overnight camping, and picnic shelters. There are entrance fees or fees for use of amenities at some locations.
Resources and Amenities include:

- Picnic Shelters,
- Areas to walk dogs,
- Playgrounds,
- Sports/Playing Fields and Courts,
- A Skate Park,
- and Restrooms. Most are free, but some have fees to reserve park amenities.
Molalla has a variety of other physical activity options that may or may not have fees associated with them. These are mainly outdoor resources located both within and outside of city limits.
Molalla has four outdoor resources located outside of city limits: two beaches/waterways for boating or swimming, a golf course, and a sky diving operation.
Within city limits, Molalla has a skate park, BMX track and four sports/playing fields or courts, all of which are located outdoor. There are a number of fee based indoor resources as well: a bowling alley, two dance studios, and an exercise gym. The only indoor recreation resource that has no fees is the Molalla Adult Community Center.

*PA=Physical Activity
School Physical Activity Resources

The School District allows public access to Gardens, Gyms, Playgrounds, and various Sports/Playing Fields and Courts.
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.

- 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
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 Molalla within 1/4 mile of Food and Physical Activity Resources

- Less than 50% have easy access to most abundant resource types
- Less than 30% have easy access to the most healthy food options

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>% Population</th>
<th># Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low/No Cost Outdoor PA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low/No Cost Indoor PA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fee-Based Outdoor PA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fee-Based Indoor PA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locally Ag, Grocery Stores, &amp; Food Assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience Stores Fast Food and Restaurants</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---
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 many are dispersed or located only within city limits, making them inaccessible to those without a means of transportation. Supports need to be affordable and accessible from where people live and work.