

Chiloquin Community HEAL MAPPS™ Report

Chiloquin is a rural city located in Klamath County, Oregon. This community of about 700 residents is located on the northern edge of the Klamath Basin, resting on the eastern shoulder of the Cascade Mountains at the convergence of the Sprague and Williamson Rivers, at an elevation of about 4200 feet above sea level. Average temperatures range from the mid 80's in the summer to the low teens in the winter, and historical annual precipitation is about 16 inches, although recent droughts have affected the area and its water supply¹. It is a forested area about 30 miles south of Crater Lake National Park, and just to the east and north of Agency and Klamath Lakes, respectively. Chiloquin is about 27 miles north of the city of Klamath Falls, where most shopping and services are located; but two grocery/convenience stores, a hardware store, a few restaurants located in and around town, and a Community Center with a branch library and art gallery, and 4 churches keep residents closer to home.

Surrounding the town center of Chiloquin are neighborhoods on both sides of the Williamson River, and further afield, up to 4000 rural residents who call it home. The 2010 US Census determined there were 780 people, 318 households, and 217 families residing in the city proper. About 40.3% of the families in Chiloquin include children under the age of 18. The median age of residents is about 34.8, and 28.7% of the residents are under 18. The racial makeup of the population as reported by the Census is divided between white (40.7%) and Native American (49.2%), with a Latino population of about 6.5%². Chiloquin Elementary (138 students) is next door to Chiloquin Middle/High School (132 students), and these two schools, along with a charter K-8 school about six miles out of town (Sage Community School, with about 80 students), draw students from the immediate Chiloquin area, as well as from communities as far away as Fort Klamath (13 miles) and Sprague River (25 miles).

The area around Chiloquin (and originally extending into Northern California) is the traditional home of the Klamath, Modoc and the Yahooskin Band of Snake Paiute people (known today as "the Klamaths") which owned and managed the forests and fisheries until the U.S. Congress terminated their tribal status in 1961. In 1986, the Tribes regained their tribal status however this did not include their tribal land base. They retain rights to hunt, fish and gather food on previous reservation land. The annual "Restoration Days" celebration includes a pow wow, parade, a youth rodeo, and, most importantly, a positive vision of the future of the Tribes. Today, Tribal Administration is based in Chiloquin, with medical, social, and other services offered to Native Americans in Chiloquin and Klamath Falls. The Tribes are one of the major employers in the area through Tribal administration and the operation of the KlaMoYa casino and travel center on Highway 97, just a few miles south of town.

Once-bustling Chiloquin's economy was hit hard by the decline of the timber industry in past decades, and now Jeld-Wen, a window and door manufacturer, is one of the only other large employers, and its future in the area is uncertain. According to the census, unemployment is at about 26%, nearly three times the Oregon rate of 9.8%, and as is the case in many rural

¹ Western Regional Climate Center, <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?or1571>

² US Census Bureau, American Factfinder, <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml>

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 Chiloquin Community

According to the US Census Bureau, the percentage of families in Chiloquin with children under the age of 18 is 36.8%. The median household income is \$33,571 compared to Oregon's \$50,521 and the poverty rate is 42.2%. In 2016, over 90% of Chiloquin elementary-aged children qualified for free or reduced lunch. The state average obesity rate for low-income preschoolers is 14.2%; the adult obesity rate in Klamath County is 28.7% compared to 27% for Oregon³. According to Oregon Healthy Teens 2007-2008 Survey for Klamath County⁴, less than 24% of 8th and 11th graders are getting the recommended amount of fruits and vegetables per day and about one in four 8th and 11th graders did not meet the daily physical activity recommendation. Approximately 40% of 8th graders and 46.5% of 11th graders watched two or more hours of TV per day, and "screen time" in rural youth has been shown to be higher than their non-rural counterparts.⁵

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 Chiloquin.

³<http://public.health.oregon.gov/BirthDeathCertificates/Surveys/AdultBehaviorRisk/county/Pages/1013.aspx>

⁴<http://public.health.oregon.gov/BirthDeathCertificates/Surveys/OregonHealthyTeens/results/2007/county/Documents/klamathlake11.pdf>

⁵ <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3111847/>

Methods and Preliminary Results

The 2015⁶ HEAL MAPPS™ team composed of Chiloquin residents (n=10) with an interest in creating a healthier community volunteered to individually photograph and map the Chiloquin 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 100 photographs of local features 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 over 130 miles of roadway, encompassing almost 80% of the land area included within the 1 square miles of the city of Chiloquin, including routes accessing some features located in the surrounding unincorporated areas (see Figure 7).⁷ The HEAL MAPPS™ team reconvened for a focus group meeting to discuss the photographs and maps. The most representative (n=60) 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. Over 15 Chiloquin residents and stakeholders attended and participated in a community dinner and discussion held at the Chiloquin Community Center on November 4, 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 Model⁸ (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,

⁶ The Initial HEAL MAPPS™ occurred in 2012

⁷ The 'mappers' individually determined the community boundaries as within the city and unincorporated land approximately served by the Klamath County school district.

⁸ 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>.

local leadership, community climate, and local resources related to the issue. Open-ended questions representing each dimension were posed during the Chiloquin Community Conversation, and prompted by the questions, engaged audiences shared their perception of Chiloquin'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

Chiloquin has a number of existing environmental supports related to ***healthy eating***, including the Klamath Tribe's efforts towards food security and its diabetes program, and the addition of a community garden as well as a weekly Farmer's Market. There are also a number of food assistance opportunities in Chiloquin and the surrounding area that include food pantries as well as community meals or meal delivery (e.g. Blessing Pot). Several Chiloquin community organizations, such as Local Churches, Food Pantries and assistance sites, and the Klamath tribes emerged as supports for promoting healthy eating among local youth.

Chiloquin has a number of ***physical activity*** supports that are mainly low or no cost resources: there are a number of state and county parks located nearby that have a variety of natural areas for recreation (e.g. rivers and forest land); there is new playground equipment and exercise classes (e.g. yoga) at the community center; and the Klamath tribe works to maintain their hunter gatherer rights as well as promote activity through their diabetes program and a fun run/walk event.

Most of the barriers that emerged were closely related to the overall rural and disconnected nature of the community: the community is rich in natural resources, with a plethora of forestland, lakes and rivers, unfortunately, many of these lie well outside of the city limits and therefor may be difficult to access for those without a vehicle. Alternatively, those resources that are located within town are inaccessible to those folks who live outside of town and don't have a means of transportation. There is a general lack of bike lanes, crosswalks, or sidewalks in the community, few recreation opportunities – most importantly, indoor facilities are lacking – as well as limited access to affordable fresh fruits and vegetables; in fact, most organized PA activities and grocery stores are more than 26 miles away from Chiloquin. Other barriers that emerged related to the community's perception of safety and the aesthetics of the community: Some parks and areas of the community are seen as dangerous to visit because of drug activity, vandalism, trash, or wildlife. Finally, the barriers of alcohol and substance abuse remain in Chiloquin. This is especially evident in comments from the community members who spoke about the underlying historical traumas that contribute to these chronic conditions in the community. It will likely be very difficult for those experiencing these conditions to attempt a healthy lifestyle, without addressing these issues first.

The ***overall community readiness*** score reflects both the community supports and barriers to

healthy dietary and physically active lifestyle patterns across all six dimensions. Chiloquin’s current stage of readiness to implement environmental and policy strategies to prevent obesity falls between the **Vague Awareness** and **Pre-planning** stage, 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. Chiloquin’s readiness scores ranged from 3.5 to 4.1, with the highest scores associated with the “Community Climate” and “Resources Related to the Issues” dimensions (Figure 2).

Figure 1. Stages of Community Readiness

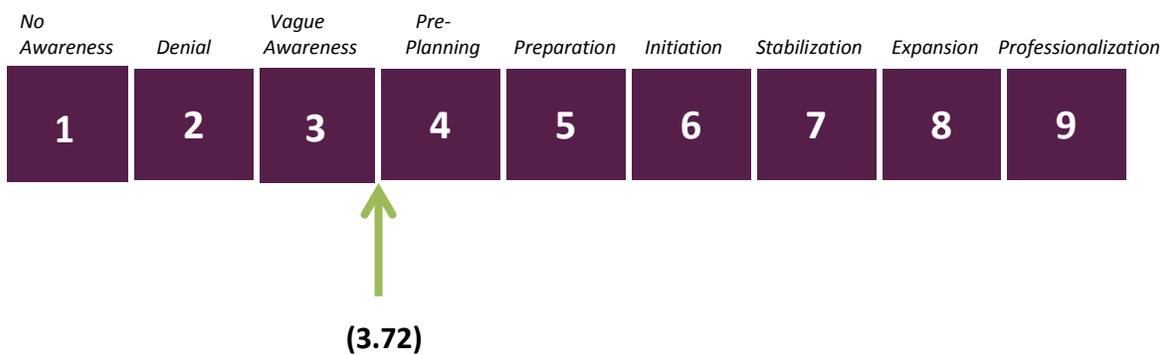
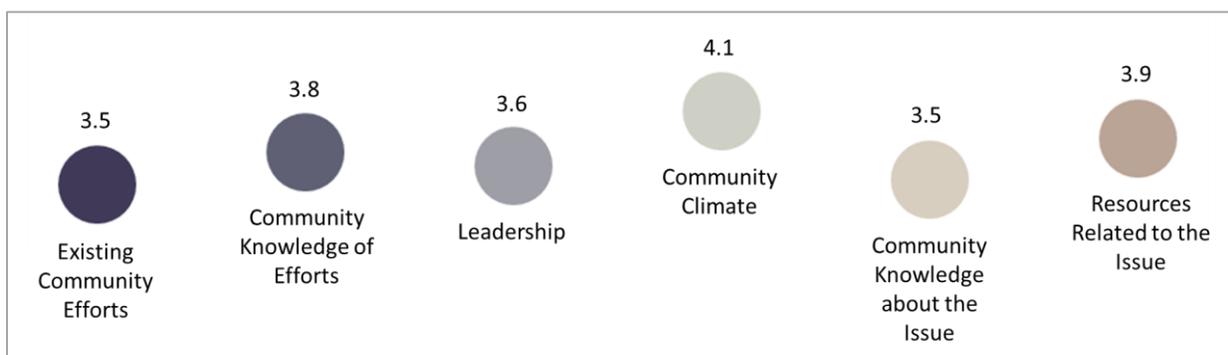


Figure 2. Scores for six dimensions of readiness



Recommended Strategies and Next Steps

Continue to raise awareness of the problem, and community-driven solutions to publicize that collectively the community can reduce environmental factors related to obesity risk and positively impact rural weight health. Based on stage-match strategies suggested by the Community Readiness Model, local efforts should include:

1. Educational outreach programs that include prevalence rates of rural overweight and obesity for youth and adults, and correlates or causes of unhealthy diets and physical inactivity among diverse children and families living in rural areas.
2. Educational outreach programs that introduce the concept of obesity prevention as a community solution, developing a community culture of rural weight health, and illustrate specific prevention programs aimed at improving access to and consumption of healthful dietary choices and increasing access to and patterns of physical activity by other rural communities with similar profiles.
3. Local media campaigns emphasizing that actions and impacts to address childhood obesity are happening at every level, collectively and cohesively in the Chiloquin community, and the consequences of an obesogenic community context and culture are being addressed through community-driven changes. Local events, like a community picnic or fun-run to launch new actions and kick start networking efforts.

For example, community coalitions can present information at local events and to groups unrelated to health efforts; launch and maintain a social media site – initiate meetups and post events, informational flyers, and networks. Present information, blog on the issue, publish print and e-media articles and editorials that highlights the general problem and successful local solutions. In preparing for action (stage 5):

4. Use local data, based on resident input and barrier identification, to drive decisions and make suggestions on where and how environmental, behavioral, and educational efforts should be focused and evaluated.
5. Continue 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 and easily accessible to all every day supports for physical activity in order to collectively plan and implement effective strategies that reach broadly across the community population and deeply into underserved groups.
6. Plan for sustainability, including how to secure resources for and evaluate the successes of your efforts. For example, partner with public health agencies and public value organizations 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 leaders to champion the issue; engage across sectors and with all community groups, including demographics, to develop effective strategies that are shown to reach all segments of the community.

Strengthen and communicate Chiloquin’s culture of, context for, and commitment to weight health – “Chiloquin Plans to GROW Healthy Kids!”

Summarizing Community Change in Chiloquin: Examining Resources and Readiness from Start (2012) to Now (2015)

Chiloquin is more ready to take action! Overall, the community readiness score increased from 3.25 emerging from the first HEAL MAPPS™ in 2012 to 3.72 as revealed in the second HEAL MAPPS™ (2015). While technically still in the **Vague Awareness** stage, Chiloquin is fast approaching the **Pre-Planning** stage. The scores of all dimensions of readiness improved from the first HEAL MAPPS™ process (See Figure 3). The greatest increases in readiness were in the dimensions of *Community's Knowledge of Existing Efforts and Programs* (+0.875) and in *Resources Related to the Issue* of healthy eating and physical activity (+0.75) dimensions (Figure 3). Even more importantly, since progress is dependent on similar levels of readiness across all dimensions, Chiloquin is primed for planning and action.



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

Not only has Chiloquin made strides in a number of aspects of Healthy Eating (HE) and Active Living (AL) - there were noted improvements in resources, programs and efforts in Chiloquin – there were also observed increases in level of community knowledge about, and support for these efforts. Also worth noting was a slight improvement in the community climate for addressing childhood obesity risk and prevalence through environmental and policy actions. This improvement shows a developing culture of acceptance and shared values for collective efforts that will positively impact the community environment, supporting the development and maintenance of weight healthy dietary and physical activity patterns for all residents, and creating a weight healthy rural community.

Community Knowledge of the Efforts and Programs

HEAL MAPPS™ polls provided additional evidence of community change. In comparing poll results, initially (2012), 17% of those polled responded that felt that community members were not at all supportive of HE and AL efforts, whereas now (2015), 0% answered this way (Figure 4). Community members seem to have a better understanding of how the built environment affects their health. For example, they understand how the community garden both increases

AL and access to HE resources, how the new playground equipment encourages AL, and alternatively, how those without access (e.g. homeless, poor, those with substance abuse issues) are at a disadvantage. Furthermore, there is an increased understanding of why parents and children may not utilize resources, like raw or unprocessed foods, because they are unfamiliar or do not know how to cook them. Finally, community members also seem to have a better understanding of how the aesthetics and safety perceptions of the environment (e.g. trash, vandalism, theft, etc.) affect a person's desire or ability to engage in PA activities.

Community Climate

HEAL MAPPS™ polls also provided evidence of community change in the community climate for addressing childhood obesity risk and prevalence through environmental and policy actions. In 2012 (time 1) 27% felt that childhood obesity was of none or mild concern in their community (Figure 5). In 2015 (time2) All of those polled felt that the issue was of moderate to great concern (Figure 5). Since the first HEAL MAPPS™ event, community members have taken increased responsibility for – and involvement in – efforts for HE and PA. For example, the Klamath tribe has a food security and organic policy program in place, there has been personal involvement in community cleanup as well as 4h involvement in some PA projects, there is community involvement in the community garden and with food assistance organizations like the blessing pot and tribal youth involvement in AI healing. However, there is still a large alcohol and substance abuse problem in the community. While 100% of those polled feel that obesity is an issue in their community, most are not sure what they can do to help (Figure 4). This is especially true in terms of the American Indian (AI) community; the historical trauma that the community has endured is a substantial barrier to all aspects of healthy living in the AI community.

Resources related to the Issue

Chiloquin has gained a number of resources since the first HEAL MAPPS process: a seasonal farmer's market, a community garden, and new playground equipment and plans are in the works for a skate park to be built in the next year. There are also people (leadership and community members) attempting to acquire grants or other funding to increase and make sustainable further healthy eating and physical activity supports. However, Chiloquin still lacks a grocery store, active transportation supports, has limited recreational facilities (especially indoor) and the continuing barriers of substance abuse, crime, and vandalism. This is borne out by the similar poll results from 2012 and 2015 events (Figure 6): for both instances over 80% of those polled disagreed that Chiloquin had adequate resources to help the community live active and healthy lifestyles (90% and 86% respectively). Unfortunately, the community is so small that they may be lacking an economic base to support major increases in PA or HE resources (e.g. Grocery Store or Indoor Gym) in the near future.

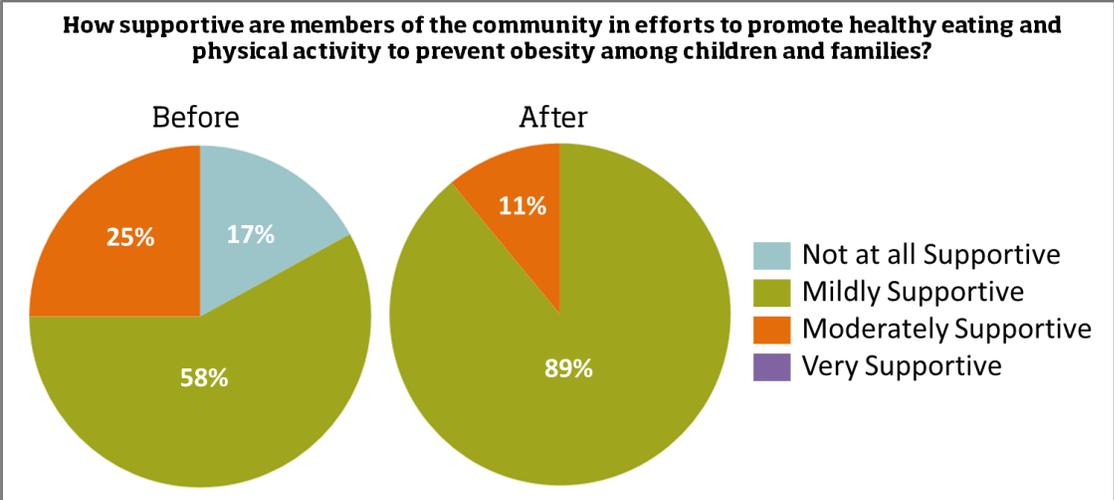


Figure 4. Poll results from the first and second Community Conversation for the *Community Knowledge of the Efforts* dimension.

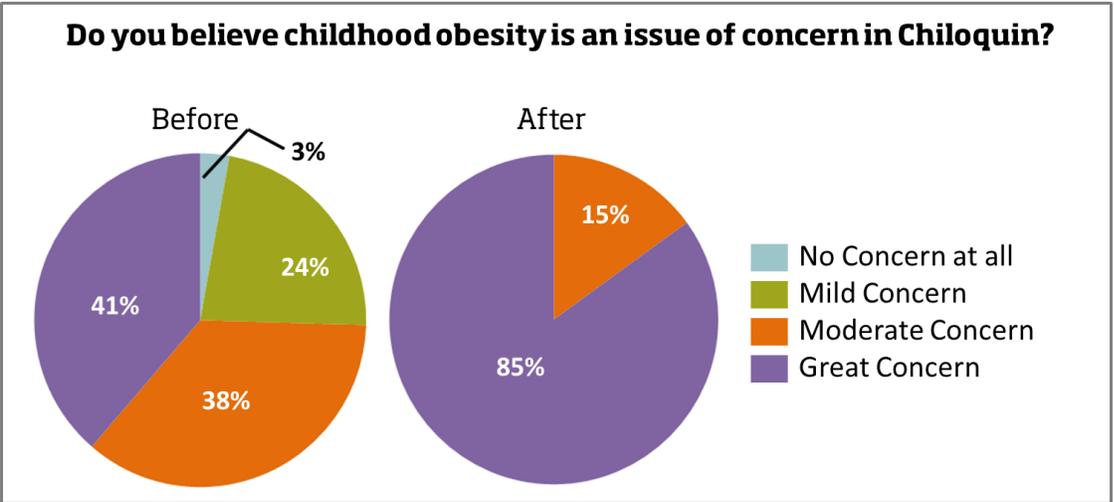


Figure 5. Poll results from the first and second community conversation for the *Community Climate* Dimension

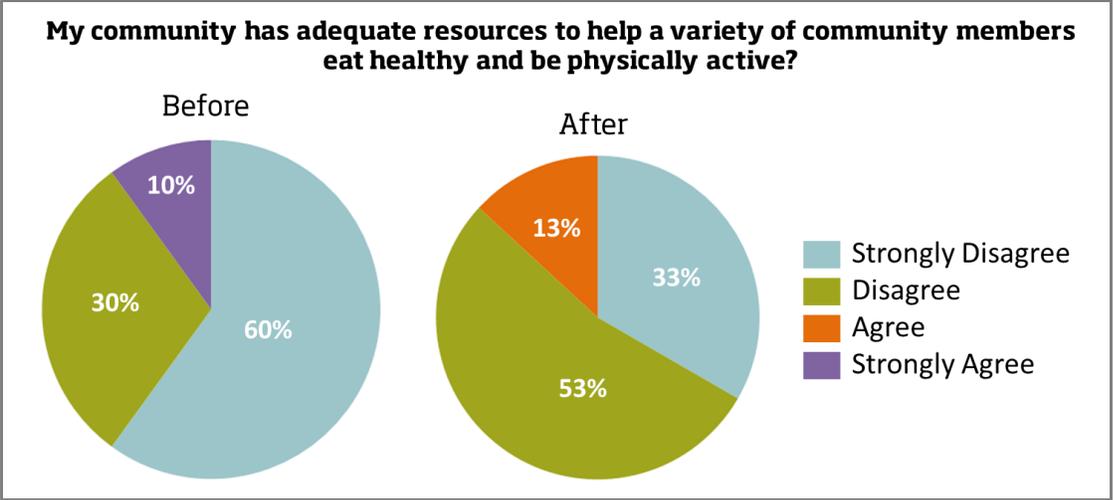


Figure 6. Poll results from the first and second community conversation for the *Resources Related to the Issue* Dimension

Results Summary: Themes and *Indicators* Emerging from Chiloquin Community Conversation (2015)

Themes relating to Active Living and Healthy Eating that emerged from HEAL MAPPS™ 2015, were related to 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 based activities like the community garden and the 4H spring and summer PA projects; Low or no cost resources like public parks, playgrounds and spaces; and community members themselves (e.g. volunteering) (Table 1).

Healthy eating supportive elements included: Tribal efforts to reduce the prevalence of diabetes and increase healthy eating with food policy and maintaining hunter/gatherer rights; Local food and food assistance, like the community garden and farmer’s market and food banks and other food assistance sites (Table 1).

Table 1. Themes and Indicators of Resources Supportive of weight healthy lifestyles emerging from 2015 Chiloquin Community Conversation.

Active Living		Healthy Eating	
Resource	Theme	Theme	Resource
Supportive			
<i>Community Members</i> Volunteer park cleanup, 4H Group	<i>Community Engagement-Culture and Climate</i>		
<i>Community Based Activities</i> 4H Spring and Summer PA projects, Community Garden, Tribal Diabetes program (Fun Run/Walk), Tribal Hunting and gathering rights.	<i>Community Capacity</i>		<i>Tribes</i> Maintain Hunter/Gatherer rights, diabetes program, Tribal food policy
<i>Low or No Cost Resources</i> Parks and Playgrounds (new playground features), Natural Areas in County and State parks (Forests, Lakes, Rivers), Big Gym, School Track, Community Center (Yoga Classes), Community Garden <i>Fee Based Resources</i> Golf Course, Let's Paddle	<i>Efforts and Resources related to the Issue</i>		<i>Local Food</i> Community Garden, Farmer's market <i>Food Assistance and Community Meals</i> Food pantries in Chiloquin and surrounding area, Community meals, food donation and food delivery (Blessing pot, Local Churches, Tribes) <i>Local Businesses</i> Some have healthier options/produce

Elements that are obstructive to active living included Quality of life issues, both of the personal and public realm. For instance, community members cited crime, vandalism, and trash as barriers to enjoying local parks and community spaces and also commented to how substance abuse and its associated outcomes, may be significant barriers for some to living an active lifestyle (Table 2). Other barriers to Al that emerged were a lack of active transportation supports (e.g. bike lanes, sidewalks, etc.) and the lack of close in recreational resources (Table 2).

Quality of life issues were also cited as barriers to healthy eating, especially in terms of how substance abuse and poverty affect one’s ability to access healthy foods (Table 2). Other barriers that emerged included a lack of access to affordable healthy foods; there is a lack of close in resources that carry healthy foods (most of the stores in town carry fried or fast/convenient foods), and when healthier options are available they may be too costly for some (Table 2).

Table 2. Themes and Indicators of Resources Obstructive to weight healthy lifestyles emerging from the 2015 Chiloquin Community Conversation.

Active Living		Healthy Eating	
Resource	Theme	Theme	Resource
Obstructive			
<p>Quality of Life Issues Crime, vandalism, and trash keep some from using city parks/natural areas, Alcohol and Substance abuse: a personal and public barrier (e.g. "the Porch")</p>	<p>Community Engagement-Culture and Climate</p>	<p>Quality of Life Issues Alcohol, Poverty, Substance abuse make choosing a healthy lifestyle more difficult, some don't want to choose the healthy option or behavior</p>	
<p>Maintenance or Investment In Resources There is a lack of signage for or directions to resources and rules of use. Lack of trash bins in parks and around town.</p> <p>Active Transportation and Walkability Lack of traffic calming features, bike lanes, crosswalks and sidewalks.</p>			<p>Community Capacity</p>
<p>Spatial Access lack of close-in recreational opportunities, especially in door.</p> <p>Socioeconomic Disparities and Costs Use of some resources our equipment needed may be too costly for some community members.</p>	<p>Efforts and Resources related to the Issue</p>	<p>Spatial Access Lack of Close-in Resources, those in town sell mostly unhealthy options</p> <p>Socioeconomic Disparities and Costs Cost of fresh produce or healthy options is too high, Some don't have skills to cook with whole foods.</p>	

Resident-Informed Recommendations for Community Change

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

Active Transportation and Walkability

1. Bike lanes would promote PA
2. Interests in creating roadsides that are 2-3 feet wide in order to ride a bike or run.
3. Increase safe walking/biking access to park via a nature trail or other off road means.

Quality of Life Issues

4. Multiple comments around alcohol/substance abuse issues.
 - Community wants more resources to address youth substance abuse
 - More prevention associated around the Liquor store and “the Porch”
 - Potential for “the Porch” to be cleaned up and used as an outreach center
 - Community members understand that the socio-economic issues of poverty and substance abuse will need to be addressed before any actions on AL/HE could be successful.
5. Trash Clean up in and around Chiloquin
 - Community is interested in curbside trash and recycling.
 - Community is interested in the addition of trash receptacle around town
 - It helps get this idea of pride in the community if we are clean. Instead of seeing so much garbage. If we all get in this more it would be so pretty

Healthy Food and Physical Activity Policies and Programs

6. Community members are interested in expanding access to the Farmer’s Market
 - Expand the Friday Market.
 - Address issues of Price
 - Move market to Saturday when there may be more traffic.
7. Community members are interested in exploring ways to increase healthy foods in schools and at local establishments.
 - Healthy food and salads during school time.
 - Addition of healthy food items to places like the Table.
8. Community is interested in increasing education on how to prepare whole foods
 - Menus or recipes associated with food bank items
9. Community members see the lack of a gym in town as significant barrier to leading an active life.
10. Community is interested in encouraging others to be healthy by having community walks/walking groups, and in general by offering support for AL/HE.
11. Increase access to information about local resources: e.g. hours of operation, how to reserve, rules of use, etc.

Multisector Partnerships and Shared Goals for Healthy Community Development

12. Make Chiloquin more inviting to visit by increasing attractions and pride in the area.
13. Add a health fair and/or fun runs that include recognition and encouragement.
14. Increase leadership involvement with trash abatement (e.g. addition of trash receptacles)
15. Increase signage to show trail location and information (e.g. trail map).
16. Addition of an orchard or community garden space with walking trail in town.
17. Increase leadership investment in development to attract business/tourism
 - Renovate abandoned houses/mill into businesses or supports for the community
 - Add signage to attract people

Figures 7 through 9 represent the routes navigated by local residents as they mapped the physical features of the Chiloquin community using participatory photographic survey methods. Include one route from each different mode of transportation the mappers used.

Figure 7a. Represents all routes generated by the Chiloquin community mappers.

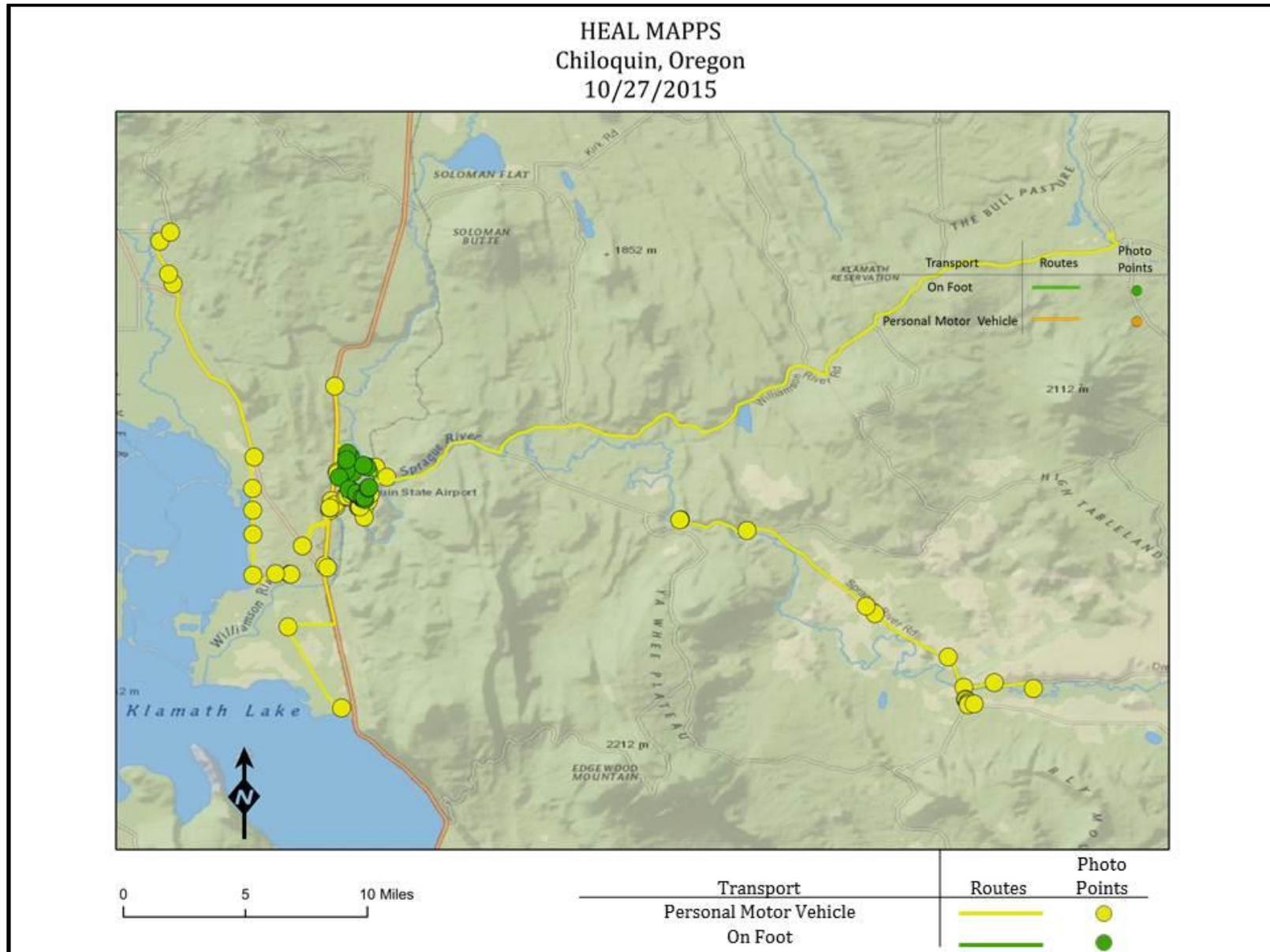


Figure 7b. Represents all routes generated by the Chiloquin community mappers; zoomed in to better show detail.

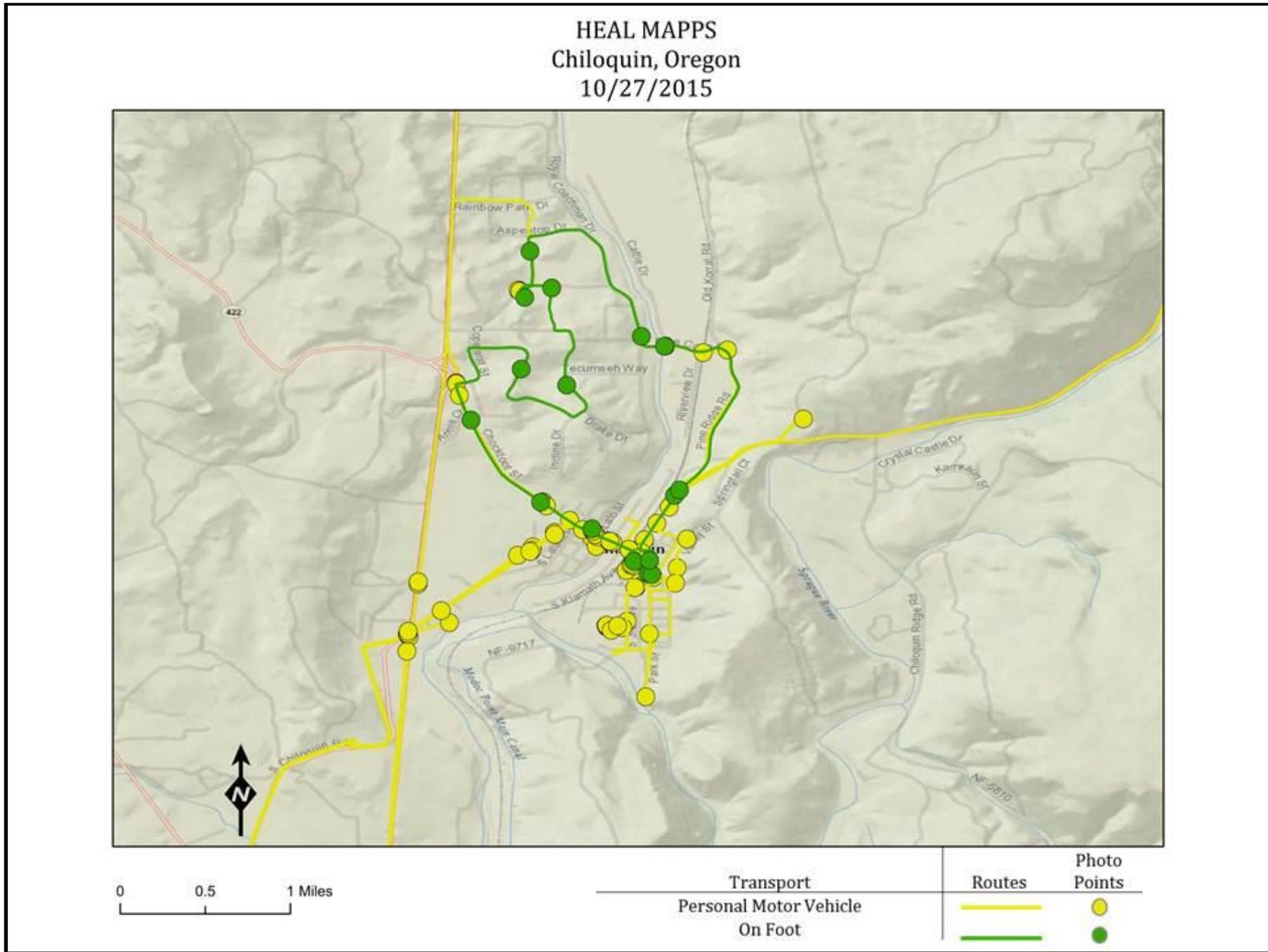


Figure 8a. Represents an example of a route and supports and barriers encountered generated while using a personal motorized vehicle.

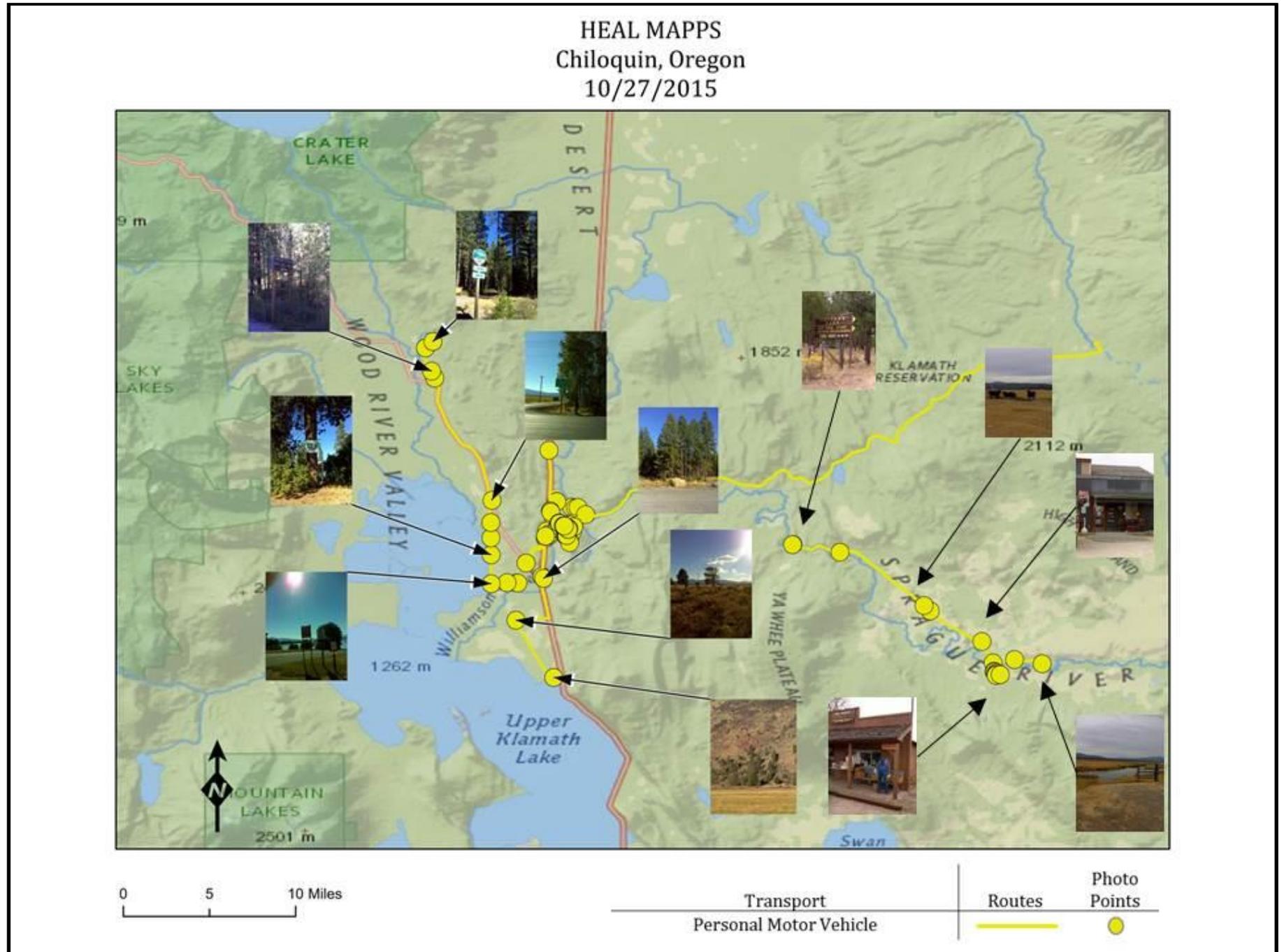


Figure 9. Represents a walking route and the features encountered along the route that enable or hinder healthy eating and/or physical activity.

