# Estacada HEAL MAPPS™ Community Report 2015



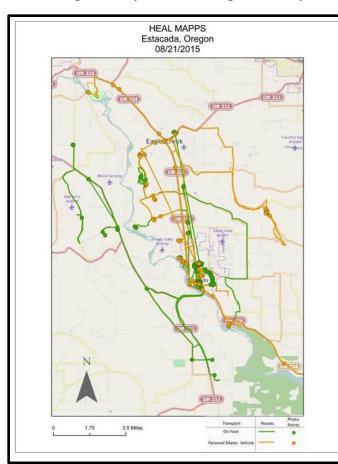
Beret Halverson and Erin Devlin, Clackamas County Extension Family and Community Health (FCH), in partnership with Oregon State University, College of Public Health and Human Sciences' Generating Rural Options for Weight Healthy Kids and Communities (GROW HKC) program and the Estacada community collective supported these impacts. Using data collected during the HEAL MAPPS™ processes, the report provides findings and recommendations to the Estacada community residents and decision-makers that can be leveraged to maintain community actions to change the obesogenic context, create a culture of weight health, and prevent a rise in childhood obesity prevalence. This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award John and Gunter 2011-68001-30020.

#### Estacada Community HEAL MAPPS™ Report

Estacada is a rural community located in Clackamas County, Oregon. The City of Estacada has a population of 2,860 residents, and just under half of local households are families with children under age 18. The city is surrounded by rural farmland and the Mt. Hood National Forest. Estacada was formed in the early 20<sup>th</sup> century as a camp for workers building a hydroelectric dam on the Clackamas River. Several more dams were later built along the river. Both dam construction and the logging industry have been important to the economy of Estacada.<sup>2</sup>

The area is served by the Estacada School District, which educates students across 750 square miles of rural Clackamas County. The district includes two elementary, one middle, and one high school as well as alternative options.<sup>3</sup> Estacada is known for its downtown murals - a new community mural is painted each year during the Summer Celebration. The city also boasts many opportunities for outdoor recreation in the Mt. Hood National Forest and along the Clackamas River.<sup>4</sup>

Generating Rural Options for Weight Healthy Kids and Communities (GROW HKC) is a USDA-funded,



participatory action research and Extension program aimed at addressing higher obesity prevalence among rural children (when compared to urban). The research is conducted by Oregon State University's College of Public Health and Human Sciences Extension researchers and FCH Faculty, in partnership with rural residents and communities. GROW HKC and the Estacada community have partnered to map features of the local environment and describe residents' perceptions of the supportive and obstructive conditions for developing and maintaining healthful dietary and physical activity patterns, 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), to assess community resources for and readiness to plan and implement environmental and policy actions that support healthy food and physical activity access and make easier weight healthy behavioral choices for all residents.

<sup>&</sup>lt;sup>1</sup> Estacada, Oregon. In *Communities Reporter*, *Rural Communities Explorer*. Retrieved March 9, 2016, from http://oe.oregonexplorer.info/rural/CommunitiesReporter/

<sup>&</sup>lt;sup>2</sup> Estacada, Oregon. (2015, November 23). In *Wikipedia, The Free Encyclopedia*. Retrieved March 9, 2016, from https://en.wikipedia.org/w/index.php?title=Estacada,\_Oregon&oldid=692064197

<sup>&</sup>lt;sup>3</sup> Estacada School District Website. Retrieved March 9, 2016 from http://www.esd108.org/

<sup>&</sup>lt;sup>4</sup> Estacada Chamber of Commerce Website. Retrieved March 9, 2016 from http://estacadachamber.net/main/

Addressing rural health disparities is a goal of Healthy Rural People 2020. The problem of obesity in children is at the forefront of nationwide research efforts; there are documented physical, mental, and social outcomes associated with childhood obesity that contribute to chronic health conditions and economic burdens 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 overweight and obesity is higher among children living in rural areas when compared to those in urban and suburban areas.

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 Estacada Community**

Seventy-eight percent of adult Clackamas County residents have at least one risk factor for chronic disease, including current smoking, overweight or obesity, physical inactivity, or low fruit and vegetable consumption<sup>5</sup>. Seventy-five percent of Clackamas County adults do not meet the CDC recommendations for physical activity, and 75% do not consume the recommended 5 servings of fruits and vegetables each day. Over 25% of Clackamas County adults are considered obese. Although these statistics represent adults, studies show that children with overweight or obese parents are more likely to be afflicted with similar health problems.<sup>6</sup>

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 local 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 Estacada.

<sup>&</sup>lt;sup>5</sup> http://www.oregonhealthinfo.com/oregon\_health\_by\_region\_display\_data.php?OHPRGeo=clackamas

<sup>&</sup>lt;sup>6</sup> http://www.yalemedicalgroup.org/stw/Page.asp?PageID=STW001880

# **Methods and Preliminary Results**

### **Community Resources**

The 2015<sup>7</sup> HEAL MAPPS™ team composed of nine Estacada residents with an interest in creating a healthier community volunteered to individually photograph and map the 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 9 routes that represented the community's active (i.e. walking, bicycling, skateboarding, etc.) and motor vehicle transportation system. The 'MAPPers' covered over 100 miles of roadway, encompassing approximately 70% of the land area included within the 2.25 square miles of the city of Estacada, including routes accessing some features located in the surrounding unincorporated areas (see Figure 6).8 The HEAL MAPPS™ team reconvened for a focus group meeting to discuss the photographs and maps. The most representative (n=39) 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 20 Estacada residents and stakeholders attended and participated in a community dinner and discussion held at Clackamas River Elementary on October 11, 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 Model<sup>9</sup> (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, local leadership, community climate, and local resources related to the issue. Open-ended questions representing each dimension were posed during the Estacada Community Conversation, and prompted by the questions, engaged audiences shared their perception of Estacada's

<sup>&</sup>lt;sup>7</sup> The Initial HEAL MAPPS<sup>™</sup> occurred in 2012

<sup>&</sup>lt;sup>8</sup> The 'mappers' individually determined the community boundaries as within the city and unincorporated land approximately served by the Estacada School District.

<sup>&</sup>lt;sup>9</sup> 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.

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**

Estacada has a number of existing environmental supports related to *healthy eating*, including a number of farm/produce stands, food assistance in the form of the school district's summer food program, food banks, and events like church food drives. The Schools emerged as leaders in efforts at healthy eating by having gardening programs, Horticulture clubs, a no treats policy at schools, and the farm to school program. While Estacada does have a grocery store in town, many cited the cost or lack of options there as an obstacle that causes many to shop outside of town.

Barriers of access to *healthy eating* supports emerged in the areas of cost and transportation. Some community members find the cost of produce at the grocery store or resources like fishing licenses prohibitive. The lack of bus routes or alternative transportation options were cited as barriers that resulted in some children getting to school too late to partake in school breakfast.

Estacada has a number of *physical activity* supports, many of which are low or no cost, including organized sports (soccer, softball, volleyball, wrestling), the skate park, P.E. every day in schools, the senior and community centers, the bike station for repairing bikes downtown and events like the Best Dam walk. Estacada also has a wealth of natural areas (rivers, forests, lakes, etc.) where people can hike or bike, fish, or forage for berries. There are also opportunities for golfing and other fee based activities in Estacada, as well as a new 24-hour gym in town. However, some cited the cost of membership or the size of the gym as barriers to their access. Finally, while Estacada's downtown area is fairly walkable with crosswalks, sidewalks, signals, etc., those areas that lie outside of the downtown core remain largely lacking in these supports.

Community barriers to *physically active* lifestyle patterns were identified and emerged as: lack of information or knowledge of resources and spatial access. For example, community members mentioned the lack of available signage at many resources and mentioned their wish for a single location (e.g. an information kiosk downtown) to house a directory of trails, restaurants, and activities in Estacada. As is the case for many rural communities, populations and resources may be highly dispersed, and Estacada community members who live outside of town feel disconnected to efforts or feel as though they are not a part of Estacada, and as such are not participating or utilizing the resources/events that they might otherwise.

The *overall community readiness* score reflects both the community supports and barriers to healthy dietary and physically active lifestyle patterns across all six dimensions. Estacada's current stage of readiness to implement environmental and policy strategies to prevent obesity falls within the **Pre-planning** stage (4.15), 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. Estacada's readiness scores ranged from 3.5 for the "Community Knowledge of the Issues" dimension to 4.8 for the "Existing Community Efforts" dimension (Figure 2).

Figure 1. Stages of Community Readiness

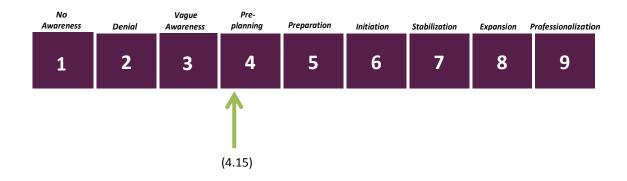
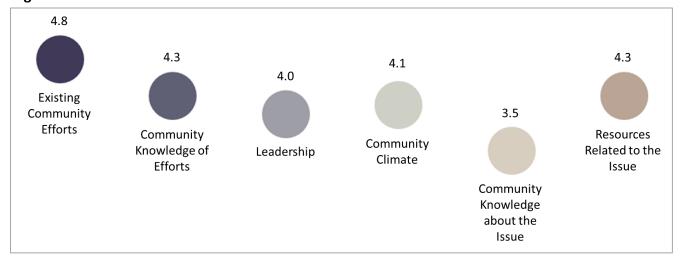


Figure 2. 2015 Scores for six dimensions of readiness.



#### **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 Estacada 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.

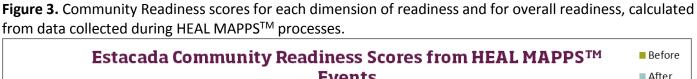
For example, community coalitions can present information at local events and to groups unrelated to health efforts; launch and maintain a social media site – initiate meetups and post events, informational flyers, and networks. Present information, blog on the issue, publish print and e-media articles 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 Estacada's culture of, context for, and commitment to weight health – "Estacada Plans to GROW Healthy Kids!"

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

Estacada is more ready to take action! Overall, the community readiness score increased from 3.6 (Vague Awareness) emerging from the first HEAL MAPPS™ in 2012 to 4.15 (Pre-Planning) as revealed in the second HEAL MAPPS™ (2015). The scores of all dimensions of readiness improved or stayed the same from the first HEAL MAPPS™ process (See Figure 3). The greatest increases in readiness were in the dimensions of *Existing Community Efforts* (+1.15) and *Community Knowledge of the Efforts* (+1.72). Even more importantly, since progress is dependent on similar levels of readiness across all dimensions, Estacada is primed for planning and action. Not only has Estacada 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 Estacada – 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.





#### **Existing Community Efforts and Programs**

HEAL MAPPS™ polls provided additional evidence of community change. In comparing poll results, initially (2012), 16% of those polled responded that they were moderately or very confident in the individuals in the community who provide programs, service, and establish policies, whereas now (2015), 34% feel that way, and no one polled in the second conversation responded that they were "not at all confidant" (Figure 4). The second community conversation and HEAL MAPPS™ event provoked conversation around a number of efforts and programs. For example, community members spoke positively about the number of school district sponsored summer lunch program opportunities throughout the community, as well as other food assistance resources like food banks, community meals, and food drives by local churches. The community members also recognized the school staff and administration as leaders in healthy eating and physical activity promotion: the middle and elementary schools now participate in PE every day, have reduced availability of snacks on

campus, and offer access to fresh produce through the SEED program, which includes farm to school and the school garden programs, as well as through horticulture clubs. In fact, the school gardens donate surplus produce to the food bank, further magnifying their positive impact on the community. Local parks and natural resources were mentioned a number of times during the conversation and are recognized as crucial outlets for physical activity in the community. For example, Estacada has a skate park that is very popular and Timber park — a highly accessible park to those living in town — has a number of amenities available (e.g. disc golf, trails). Community members also recognized the benefit of being in close proximity to many natural resources —forests, reservoirs and streams — that offer outlets for activity and healthy eating. Finally, there were many comments about the new gym in town, community or local business sponsored walks, activities at the senior center, and produce/farm stands — many of which were not evident in the first conversation.

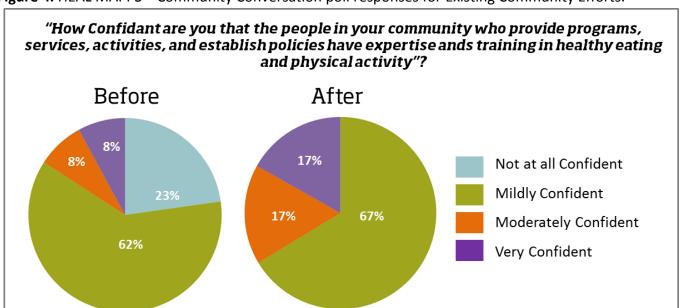
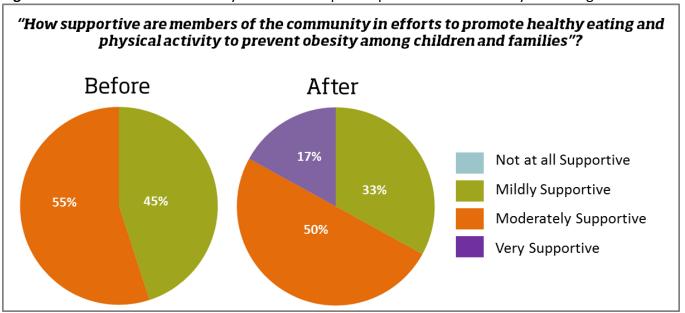


Figure 4. HEAL MAPPS™ Community Conversation poll responses for Existing Community Efforts.

# **Community Knowledge of Efforts**

HEAL MAPPS™ polls also provided evidence of community change in the knowledge of efforts dimension. In 2012 (time 1), no poll respondents rated members of the community as "very" supportive of efforts to promote healthy eating and physical activity; whereas in 2015 (time 2), 17% responded that members of the community were "very" supportive of efforts (Figure 5). Community members have increased their knowledge about local efforts since the first HEAL MAPPS™ event, as well as knowledge about the purpose of these efforts. They realize that summer lunch programs both feed children and get them out and active; they realize that efforts like HEAL grants (Health Eating Active Living grants sponsored by Clackamas County Public Health) can facilitate the growth and sustainability of healthy eating and active living programs; how having physical or economical access to healthy foods makes it easier to eat healthy; and how community involvement in these efforts helps to facilitate and maintain these efforts and programs.

**Figure 5.** HEAL MAPPS™ Community Conversation poll responses for Community Knowledge of the Efforts.



### **Community Knowledge about the Issue**

HEAL MAPPS<sup>TM</sup> polls also provide evidence for community members increased knowledge about childhood obesity, links between obesity and the environment, and how access to physical activity and healthy eating resources might allow them to lead a healthier lifestyle. In 2012 (time 1), 6% of those polled felt that people in their community were "not at all" knowledgeable about the link between childhood obesity and the community environment, while no one polled in 2015 (time 2) responded that way. Furthermore, in 2015 (time 2), 14% answered that they thought community members were "very" knowledgeable, while in 2012 (time 1), no one responded that way (Figure 6). For example, community members understand that kids are less likely to eat junk food at school if they don't have access to it and may better understand or recognize how screen time (computer/video games, etc.) can act as a barrier to youth being active.

"How knowledgeable are the people in your community about the link between the community environment (e.g. play spaces, parks, roadways, sidewalks, etc.) and obesity"?

Before

After

Not at all Knowledgeable

Mildly Knowledgeable

Moderately Knowledgeable

Very Knowledgeable

Figure 6. HEAL MAPPS™ Community Conversation poll responses for Community Knowledge of the Issue.

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

Themes relating to Active Living and Healthy Eating that emerged from HEAL MAPPS<sup>™</sup> 2015, were related to the Community Context (the setting or circumstances of a community, e.g. physical features), 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: availability of information about resources, including rules of use; supports for walkability, especially in downtown Estacada; and a variety of low or no cost physical activity resources (Table 1).

Healthy eating supportive elements included: access to local food sources, like community gardens and farms stands; food assistance, including community meals and food banks; and school leaderships engagement in increasing HE in their schools (Table 1).

**Table 1**. Themes and Indicators of Resources supportive of weight healthy lifestyles emerging from 2015 Estacada Community Conversation. *Items in Red Text emerged as both supportive and obstructive.* 

Active Living		Healthy Eating			
Resource	Theme	Theme	Resource		
Supportive					
Information Access Useful signage pointing to area resource (e.g. lakes, events, etc.). Estacada has a tourism guide that has useful information	Community Context				
Active Transportation and Walkability Downtown Estacada is very walkable, there are curb cuts, ramps, and sidewalks; there is a bike station downtown that offers free bike repair resources  Community Based Activities Events/programs like Relay for Life and Best Dam walk in town.	Community Capacity		Schools  Leadership is engaged as part of their job  (e.g. the no treat policy) and school resources like: garden space, farm to school, tastings, Horticulture club, and superintendent friendly to increasing supports (e.g. fruit trees)		
Low or No Cost Resources  Community and Home Gardens, Community and Senior Centers, Local Churches, Library (Summer Reading Program), Skate park, Local Parks and Playgrounds (Sports fields and courts, Trails, Disc golf, etc.), Natural Resources like lakes and trails (Hiking, Swimming, Geocaching, Fishing), P.E. everyday at school, Organized sports (Soccer, Softball, Volleyball, etc.)  Fee Based Resources  Fitness Club/Gym and Golf Club	Efforts and Resource	es related to the Issue	Local Food  Community Gardens, Greenhouse at H.S., Gardens at J.R. high, Farm/Produce stands, Lucky Dawg email: help find stand locations, Foraging, Fishing, and Hunting (e.g. Blackberries, Fishing, etc.) Food Assistance and Community Meals Eagle creek, Food Bank, Food drives at local churches, Free kids meal @ Andale, Summer lunch program Restaurants  Some have healthy options, Estacada does not have many fast food establishments		

Elements that are obstructive to active living emerged as a lack of time or funds to be actively involved in physical activity; a lack of maintenance or investment in resources, especially as it concerns the park improvements or cleanup; and a lack of active transportation or walkability supports, including sidewalks between the school and the park and a lack of lighting for night activities (Table 2). Interestingly, "Active Transportation and Walkability" emerged as both supportive and obstructive (Tables1 & 2) to living an active lifestyle. This is likely due to differing levels of supports in the downtown core compared to surrounding areas of Estacada, that results in geographically different lived experiences.

Obstructive elements that emerged for healthy eating included limited time or funds: school lunch periods may be too short, and some community members have limited funds to enable themselves and their family to eat healthy; Socioeconomic disparities and cost: access to some resources (fishing tags, cost of fresh produce, etc.) may be too costly for some community members (Table 2).

**Table 2.** Themes and Indicators of Resources Obstructive to weight healthy lifestyles emerging from the 2015 Estacada Community Conversation. *Items in Red emerged as both Supportive and Obstructive.* 

Active Living		Healthy Eating		
Resource	Theme	Theme	Resource	
<b>Obstructive</b>				
Limited Time, Funds, Involvment due to time constraints, funds, or lack of information.	Community Engagement-Culture and Climate		Limited Time, Funds, Involvment due to time constraints, funds, or otherwise. Children are not given suffiencet time to eat (20 min) in order to finsh food.	
Maintenance or Investment In Resources Parks need improvemnets and trash clean up (bigger swings and fixing broken play structures). There is a lack of singage for or directions to resoruces and rules of use. Active Transportation and Walkability Lack of sidewalks between school and park, lack of ligting at night, Overall lack of sidewalks and crosswalks.	Community Capacity		Transportation There is a need for more bus routes so that kids can get to school on time for breakfast  Leadership There have been budget cuts which have caused some challenges for school gardens; Director of community Center may also be cut	
Handicapped Accesibility Lack of special equipment at parks, and accesibility (e.g. ramps) is misising at some reources.  Socioeconomic Disparites and Costs Resources (i.e. Gym, Fishing Liscenses, and daily park passes) are too costly for some	Communi	ty Context	Socioeconomic Disparietes and Costs Fishing tags/Liscenses are too costly for some. Cost of fresh produce at the grocery store is too high, Food Assitance may run out of meals.	

# **Resident-Informed Recommendations for Community Change**

The following list of recommendations emerged from the data generated during the Estacada HEAL MAPPS™ conversation. The list represents those of the Estacada community members who shared their ideas during the facilitated discussion of the photographed community features. We have organized the recommendations by similarity in action. These recommendations do not represent the opinions of the GROW Healthy Kids and Communities project members or Oregon State University.

#### **Healthy Food and Physical Activity Policies and Programs**

- 1. Improvements to the park: bigger swings and fixing broken play structures
- 2. Interest in food preservation classes
- 3. Interest in growing food and season elongation with greenhouses
- 4. Community would like more cooking classes or classes about healthy eating for both adults and youth
- 5. Increase playtime at school during recess with supervision and structured activities

# Multisector Partnerships and Shared Goals for Healthy Community Development

- 6. Increase School and City leadership involvement with healthy eating encouragement
- 7. Creating an award for healthy eating or participating in a horticulture club
- 8. Parental classes on setting parameters in terms of limiting screen time

# Active Transportation, Walk/Bike/Wheel-Ability

9. Interest in acquiring grant funds to increase sidewalks

### Informational Campaigns

- 10. Advertise county park pass.
- 11. Increase advertisement of events
- 12. Disseminate this report to all principals, Superintendent and PE teachers as well as to newspapers with slides/pictures
- 13. Create events that increase or promote active transportation and walkability, for example "Car-less Thursday" or pedestrian only areas for special events (e.g. fairs)

#### **Inclusive Community Involvement and Solidarity Actions**

14. Use punitive actions (e.g. detention) as teachable moments for healthy eating and active living

**Figures 7 through 12** represent the routes navigated by local residents as they mapped the physical features of the Estacada community using participatory photographic survey methods.

**Figure 7.** Represents all routes generated by the Estacada community mappers.

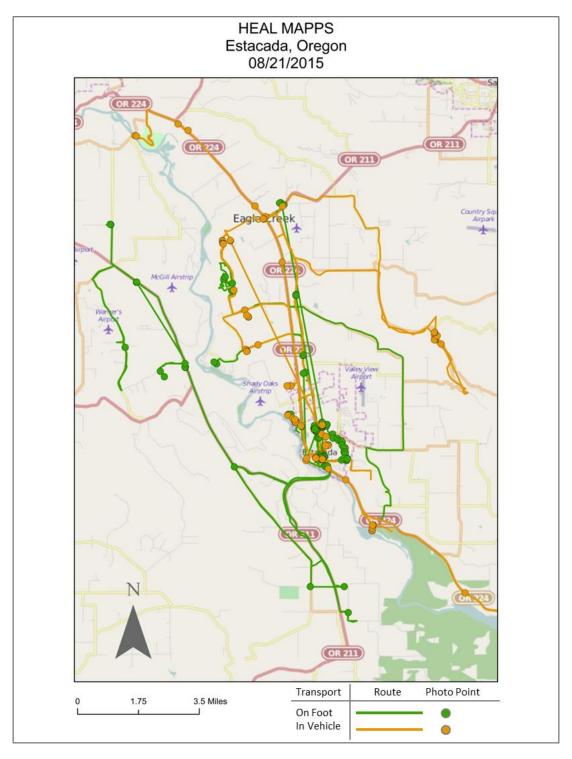
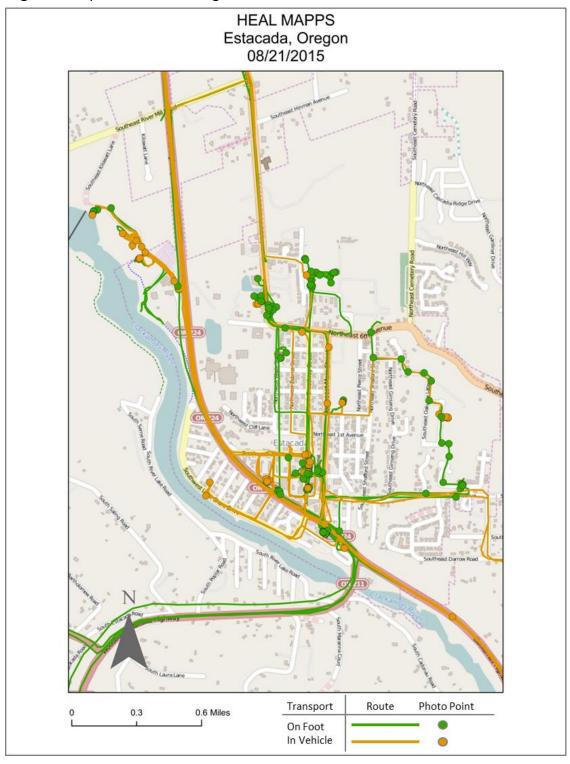
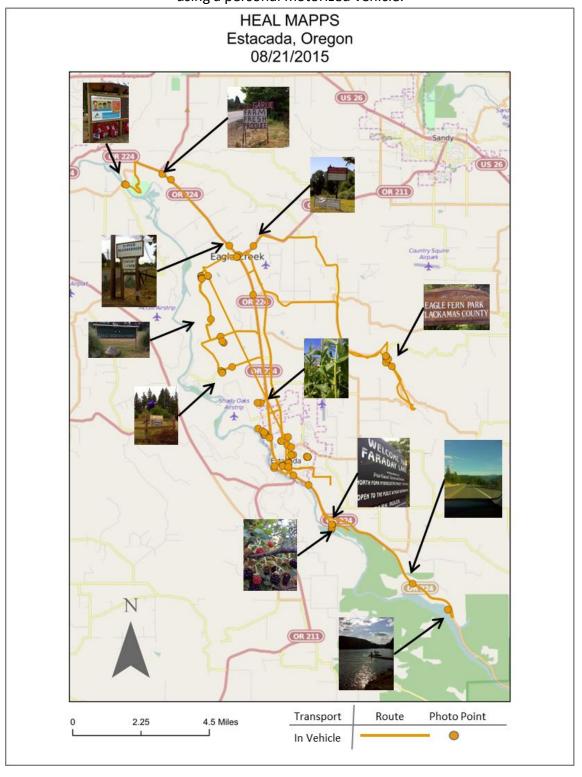


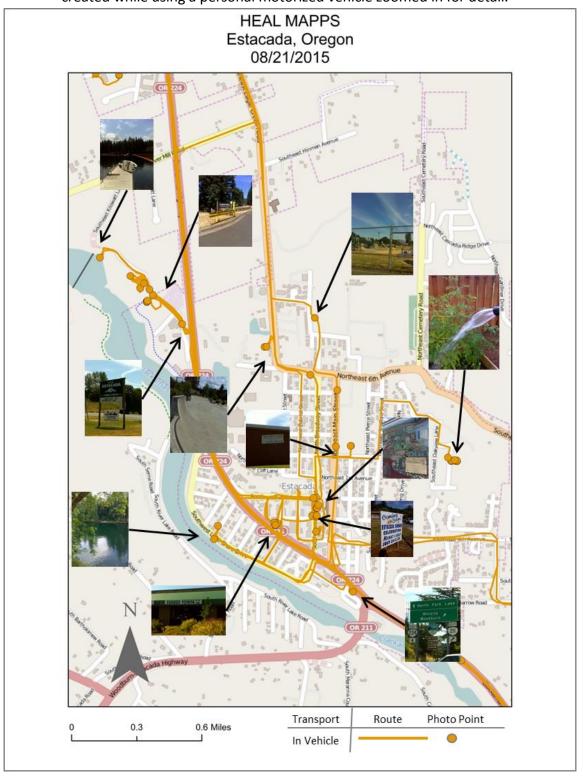
Figure 8. Represents all routes generated zoomed in for detail.



**Figure 9.** Represents an example of a route, with barriers and supports encountered, created while using a personal motorized vehicle.



**Figure 10.** Represents an example of a route, with barriers and supports encountered, created while using a personal motorized vehicle zoomed in for detail.



**Figure 11.** Represents a walking route and the features encountered along the route that enable or hinder healthy eating and/or physical activity.



**Figure 12.** Represents a walking route and the features encountered along the route that enable or hinder healthy eating and/or physical activity, zoomed in for detail.

