# Bonanza, Oregon HEAL MAPPS™ Community Report 2015

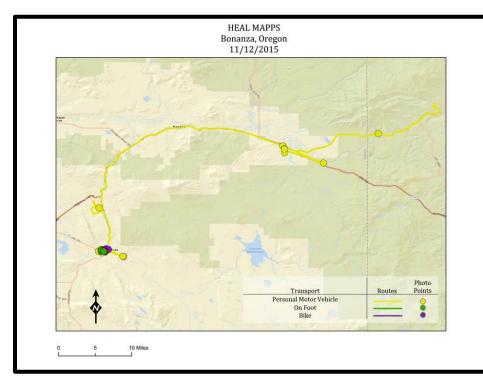


Patty Case and Janet Rojina, Klamath County Extension Family and Community Health (FCH), in partnership with Oregon State University, College of Public Health and Human Sciences' Generating Rural Options for Weight Healthy Kids and Communities (GROW HKC) program and the Chiloquin community collective supported these impacts. Using data collected during the HEAL MAPPS™ processes, the report provides findings and recommendations to the Chiloquin 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.

# Bonanza Community HEAL MAPPS™ Report

Bonanza is a rural city located in Klamath County, Oregon. This community of about 415 residents is located in the Klamath Basin, east of the Cascade Mountains, at the convergence of the Yonna, Poe and Langell Valleys, at an elevation of about 4200 feet above sea level. Average temperatures range from the mid-eighties in the summer to the mid-teens in the winter, and historical annual precipitation is about 17 inches, although recent droughts have affected the area and its water supply<sup>1</sup>. It is a vibrant area dotted with hay, cattle, and dairy farms, and surrounding the small town center of Bonanza are hundreds of rural residents who call it home. Bonanza is about 20 miles from Klamath Falls, where most services are located; but a grocery/general store, a mini-mart, two gas stations, two restaurants, a branch library, and four churches keep residents closer to home. The 2014 ACS Demographic and Housing Estimate<sup>2</sup> determined there were 469 people, 164 households, and 128 families residing in the city. The median age of residents is about 36, though some leading citizens are in their 80's and 90's. The racial makeup of the population as reported by the 2014 ACS Demographic and Housing Estimate<sup>2</sup> is mostly white (92%), with a Latino population of about 12%<sup>2</sup>. Bonanza School, which is a combined Kindergarten through senior high school, draws students from the immediate Bonanza area, as well as from communities as far away as Bly or Beatty, Oregon (over 35 miles, or about an hour's drive away).

Each summer, Bonanza is home to a BBQ cook-off and car show, which draws thousands to the town. Smaller community events throughout the year include a fall festival, a Christmas tree lighting and summer concerts in the park and a weekly farmer's market.



**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 Bonanza community have partnered to map features of the

local environment and describe residents' perceptions of the supportive and obstructive conditions for

<sup>&</sup>lt;sup>1</sup> Western Regional Climate Center, http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?or3232

<sup>&</sup>lt;sup>2</sup> U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF

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.

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 Bonanza Community**

Bonanza has a strong sense of community with a culture that mixes a value for independence with the commitment to provide help to neighbors in need. As a rural community with a largely agriculturally-based economy, Bonanza residents have typically enjoyed an active, outdoor lifestyle that includes hunting, hiking, and outdoor work. Many youth and adults participate in livestock 4-H programs or competitive sports programs. There is a well-attended monthly food pantry where residents get food from the Klamath County Food Bank and elsewhere, and a weekly meal provided by one of the churches.

The median household income in Bonanza is \$35,300, compared to Oregon's \$50,521, and approximately 21% of the total population and of children under the age of 18 lives below the poverty level<sup>3</sup>. In the 2014-15 school year, approximately 73% of elementary students received free and reduced-priced lunches<sup>4</sup>, and

<sup>&</sup>lt;sup>3</sup>U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates, https://factfinder.census.gov/faces/nav/jsf/pages/community\_facts.xhtml

<sup>&</sup>lt;sup>4</sup> Oregon Department of Education, <a href="http://www.ode.state.or.us/sfda/reports/r0061Select2.asp">http://www.ode.state.or.us/sfda/reports/r0061Select2.asp</a>

Bonanza School adopted an award-winning Wellness Program for staff and students in 2010, including fitness classes and healthy-weight awareness. 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 of Bonanza.

# **Methods and Preliminary Results**

A HEAL MAPPS™ team comprised of Bonanza community members (n=8) with an interest in creating a healthier community volunteered to individually photograph and map the Bonanza 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 80 photographs of local features were taken and mapped along 8 routes that represented the community's active (i.e. walking, bicycling, skateboarding, etc.) and motor vehicle transportation system. The 'MAPPers' covered over 80 miles of roadway, encompassing almost 50% of the land area included within the 0.82 square miles of the city of Bonanza, including routes accessing some features located in the surrounding unincorporated areas (see Figure 6).<sup>5</sup> The HEAL MAPPS™ team reconvened for a focus group meeting to discuss the photographs and maps. The most representative (n=35) 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 Bonanza residents and stakeholders attended and participated in a community dinner and discussion held at the Community Center. 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>6</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

<sup>&</sup>lt;sup>5</sup> The 'mappers' individually determined the community boundaries as within the city and unincorporated land approximately served by the Klamath County school district.

<sup>&</sup>lt;sup>6</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.

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 Bonanza Community Conversation, and prompted by the questions, engaged audiences shared their perception of Bonanza'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**

Bonanza has a number of existing environmental supports related to *healthy eating,* including a seasonal farmer's market and a number of local business that sell fresh fruits and vegetables, as well as healthy snack options. The work the food bank is doing in offering tastings and recipes to clients, the summer lunch program and Bonanza school district's efforts towards healthier meals at school were also cited as supportive of healthy eating.

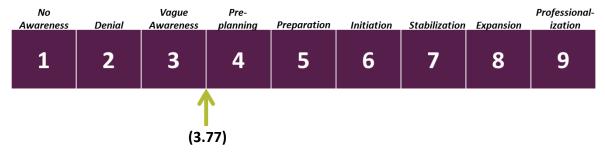
Bonanza has a number of *physical activity* supports that are mainly low or no cost resources. Resources available include organized sports leagues, sports fields and courts, community spaces, the school district, and local public parks and playgrounds. The community has access to three playgrounds (including those on school property) within city limits and a multi-resource park. Big Springs Park — cited a number of times as a superior resource in the community — offers of number of recreation resources/opportunities, including disc golf, basketball courts, horse shoe pits, picnic shelters, and a playground. The school district allows community access to not only the playgrounds, but also resources like the track and gym and the community church offers space for exercise classes. Finally, the work that GROW has been doing both in the community and in the schools was cited as a support for healthy eating and physical activity.

Even with the supports for physical activity and healthy eating that were cited by community members, barriers still emerged to being physically active and eating healthy on a daily basis. Most of these barriers were closely related to the overall rural and disconnected nature of the community: the community is rich in natural resources, with a variety of natural lands, 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. Conversely, services that lie within Bonanza city limits may not be available to the extended community who live upwards of 30 miles away. There is a general lack of bike lanes, crosswalks, or sidewalks in the community, and the community voiced interest and need of an indoor recreation facility. Finally, there is limited access to affordable fresh fruits and vegetables in Bonanza. In fact, the closest full service grocery store to the community lies 25 miles west of city limits. While there exist a few small stores that may offer some produce or healthy options in Bonanza, the choice is limited and cost for these items may be prohibitive to some in the community. Furthermore, many of the retail or food establishments in Bonanza also serve unhealthy food options.

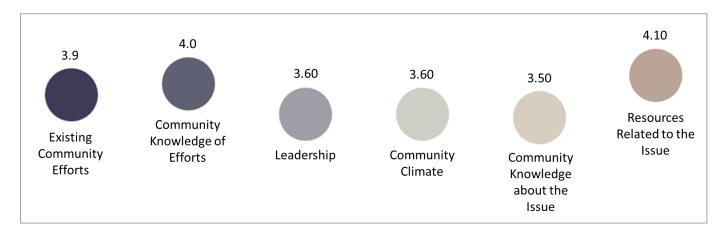
The *overall community readiness* score reflects both the community supports and barriers to healthy dietary and physically active lifestyle patterns across all six dimensions. Bonanza's current stage of readiness to implement environmental and policy strategies to prevent obesity (3.77) falls between 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. Bonanza's Community readiness scores were quite similar across all dimensions with a high of 4.1 for the "Resources Related to the Issue" dimension to a low of 3.5 for the "Community Knowledge about the Issue" 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 Bonanza 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 Bonanza's culture of, context for, and commitment to weight health – "Bonanza Plans to GROW Healthy Kids!"

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

Bonanza is more ready to take action! Overall, the community readiness score increased from 2.9 emerging from the first HEAL MAPPS™ in 2012 to 3.76 as revealed in the second HEAL MAPPS™ (2015). While technically in the **Vague Awareness** stage, Bonanza 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* (+1.0) and in *Resources Related to the Issue* of healthy eating and physical activity (+0.86) dimensions (Figure 3). Even more importantly, since progress is dependent on similar levels of readiness across all dimensions, Bonanza 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 2012 and 2015 HEAL MAPPS<sup>TM</sup> processes.



# **Community Knowledge of the Efforts and Programs**

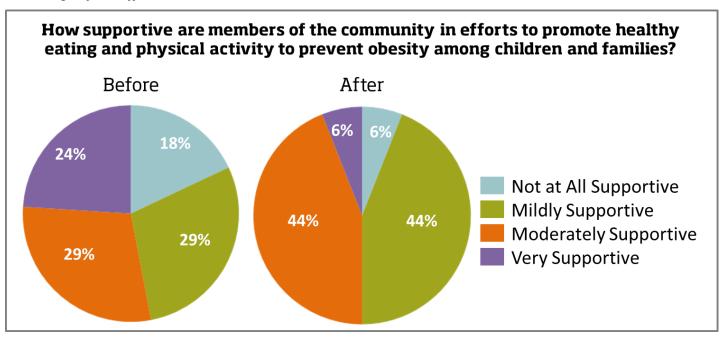
HEAL MAPPS™ polls provided additional evidence of community change. In comparing poll results, initially (2012) 18% of those polled answered that they felt that members of the community were not at all supportive of efforts to promote physical activity and healthy eating, whereas in 2015, only 6% of respondents answered this way (Figure 4). The community seems to have better knowledge of the need for efforts to address childhood obesity and about local efforts and their purpose to this end as well. For example, comments related to the food bank hosting tasting and offering recipes to patrons shows not only an understanding of how the food bank gets people the food they need, but also shows them how to best utilize this food. Other comments about efforts to fix up the tennis courts show how these efforts have resulted in more people getting involved and utilizing the courts for physical activity; "if you make it more accessible, they will come".

# **Existing Community Efforts**

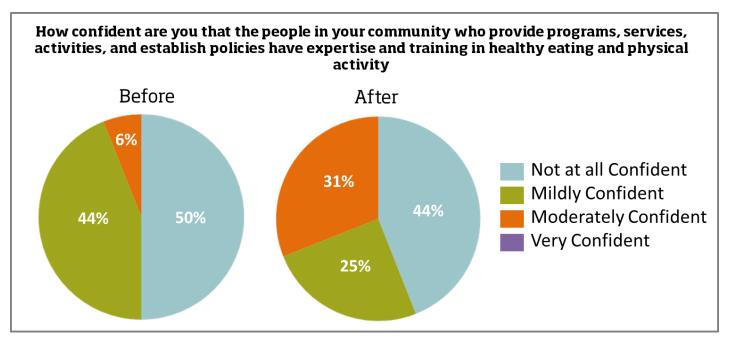
HEAL MAPPS™ polls also provided evidence of community change in *Existing Community Efforts* to promote healthy eating and physical activity to prevent obesity among children and families. In the initial HEAL MAPPS event (2012), 94% of those polled said that they were "Not at all", or "Mildly" confident that the people in your community who provide programs, services, activities, and establish policies have expertise and training in healthy eating and physical activity (Figure 5). In the 2015 HEAL MAPPS event, 74% of those polled still felt

this way, but more importantly, 31% answered that they now felt "Moderately" confidant. This increase in confidence likely stems from the apparent increase in, or knowledge of, efforts. For example, in the 2015 conversation, many more implemented programs/activities were mentioned. Some examples are the farmers market, variety at the grocery store, the natural areas, PA classes and gym at the local church, and the salad bar at the school.

**Figure 4.** Poll results from the first (2012) and second (2015) Community Conversation for the *Community Knowledge of the Efforts* dimension.



**Figure 5.** Poll results from the first (2012) and second (2015) Community Conversation for the *Existing Community Efforts* dimension.



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

Themes relating to Active Living and Healthy Eating that emerged from HEAL MAPPS<sup>TM</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: Some supports of active transportation, Community based activities, and access to low or no cost physical activity (PA) resources (Table 1). The school district has allowed access to some PA resources, like the track and the playground, and there is access to information about resources and activities in Bonanza posted on various community social media sites (Table 1). Finally, community members mentioned how pleased they were with the refurbishment of the tennis courts; this shows leadership and engagement with the city and community.

Healthy Eating supportive elements included: food assistance, access to local foods, and retail healthy food options. (Table 1). Food assistance supports include the summer lunch program and the food bank, which contributes emergency food supplies and offers tasting tables and recipe cards to their clients. Bonanza has a number of options for local food resources: there is a seasonal farmer's market and local farm stands who sell eggs and vegetables (Table 1). Finally, even though Bonanza does not have a full service grocer in town, there are a number of stores that sell fresh produce or have healthier snack items on offer.

There are also resources that are supportive of both active living and healthy eating in Bonanza. These include things like the monthly community newsletter, access to information on community social media sites, and the community health clinic (Table 1).

Elements that are obstructive to Active Living included community knowledge of resources and of the issues surrounding healthy lifestyles, lack of active and/or alternative transportation supports, and a general lack of physical activity resources, in particular a lack of indoor physical activity resources (Table 2). In fact, the community lacks sufficient resources that enable the easy daily ability to be physically active: there are no or few indoor physical activity resources and Bonanza has few active transportation supports (e.g. sidewalks, crosswalks, etc.). Subsequently, those who do not live proximate to resources, or who do not have access to transport, are unable to utilize the resources that Bonanza does have. Finally, even though the community does have some informational resources (see Table 1), many in the community conversation stated that these resources were not known to them.

Obstructive elements that emerged for Healthy Eating include a lack of healthy food options, issues with socioeconomic and spatial disparities, and a lack of active and/or alternative transportation options (Table 2). A significant barrier to eating healthy is the overall lack of healthy eating resources: Bonanza is lacking a full service grocery store and many local businesses offer few healthy options (Table 2). The negative effects of this lack in resources is compounded by socioeconomic and spatial disparities: There is a general lack of close-in healthy food resources, which disproportionally effects those individuals who live in the more rural areas of Rainer or who do not have access to transportation. Furthermore, where healthy foods are available they are often too costly for community members to access or maybe lacking in quality or variety.

A barrier that emerged which covers both active living and healthy eating aspects was largely one of the community culture and climate: some community members may lack understanding of the connection between access to resources and health outcomes. For some, health outcomes (e.g. overweight or obese) are entirely related to personal choices and not availability of active living or healthy eating resources (Table 2.)

**Table 1.** Themes and Indicators of Resources Supportive of weight healthy lifestyles emerging from 2015 Bonanza Community Conversation. *Items in Red emerged as both Supportive and Obstructive* 

Active Living		Healthy Eating					
Resource	Theme	Theme	Resource				
Supportive							
Information Access  Monthly Newsletter @ Library  Facebook Groups (Bonanza Revitalization  Group)	Community Context  Community Capacity		Information Access  Monthly Newsletter @ Library Facebook Groups (Bonanza Revitalization Group)				
Active Transportation and Walkability School Crossing signs, Some crosswalks, Walking path Community Based Activities Little League and White ball Community walking group			Active Transportation and Walkability School Crossing signs, Some crosswalks, Walking path Schools Salad bar and attempts to serve more scratch made food at school meals				
Low or No Cost Resources  Parks, Playgrounds, and open spaces (newly refurbished tennis courts), Sports fields and courts (disc golf, Horse pits, basketball, etc.), School based PA facilities (e.g. Track and Gym), access to Gym and Classes (Zumba) at community church  General Health Supports  Community Health Clinic		rces related to the sue	Local Food  Homebased food retailers, Farmer's market, U-pick/Farm stands  Food Assistance and Community Meals Food Bank (tasting table & recipes), Community meals, Summer Lunch Programs Local Businesses  Some have healthier options/produce General Health Supports Community Health Clinic				

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

Active Living		Healthy Eating				
Resource	Theme	Theme	Resource			
Obstructive Contract						
Knowledge of Resources/Efforts Community members may not know what resources are available because access to information is lacking.  Knowledge of the Issue Lack of understanding of the connection between physical activity (e.g. walking) and health and of the behaviors that promote or deter from healthier lifestyles	Community Engagement-Culture and Climate		Knowledge of Resources/Efforts  Community members may not know what resources are available because access to information is lacking.  Knowledge of the Issue  Lack of understanding of the connection between access to resources (e.g. fresh fruits and veggies) and health			
Active Transportation and Walkability Lack of traffic calming features, bike lanes, crosswalks and sidewalks. Maintenance or Investment In Resources Sidewalks lacking or need improvement, track and little gym need repairs	Community Capacity		Active Transportation and Walkability Lack of traffic calming features, bike lanes, crosswalks and sidewalks.			
Weather  Few places to exercise during inclement weather/winter  Spatial Access  Lack of Close-in Resources and overall lack of spatially proximate resources in more rural areas	Communi	ty Context	Spatial Access  Lack of Close-in Resources, those in town sell mostly unhealthy options  Socioeconomic Disparities and Costs  Cost of fresh produce or healthy options too high for some, Some don't have knowledge/skills to cook with whole foods.			
Low or No Cost Resources  Lack of indoor low cost PA facilities, School facilities may be inaccessible outside of school year (e.g. summer)		rces Related to the sue	Healthy Food Options  Lack of Healthy Food Choices at area restaurants and stores. Grocery store lacks variety. Food Assistance programs don't always have healthiest options. Farm stands and produce only open part of the year. Easy access to unhealthy foods at convenience stores. Lack of healthy options at local sporting events.			

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

The following list of recommendations emerged from the data generated during the Bonanza HEAL MAPPS™ conversation. The list represents those of the Bonanza 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 those of the GROW Healthy Kids and Communities project members or Oregon State University.

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

- Community members interested in making school meals healthier
- Community members interested in making food offered at food bank healthier
  - Involve local farmer/farmer's market
- Community Members interested in increasing use of tennis courts
  - Incorporated at the school level via classes
- Increase physical activity resources and access to them
  - Splash park
  - Activity bus
  - Mountain bike trail
  - Swimming pool
  - Open gym after school

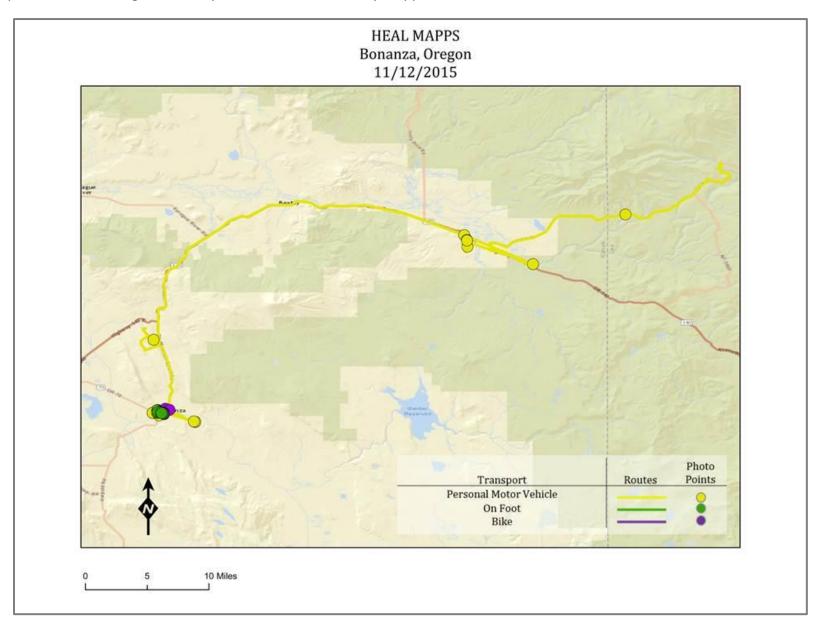
# **Informational Campaigns**

- Increase knowledge of efforts and resources via advertisement on website or other media.
  - Visitor Board
- Increase education around healthy eating
  - What is healthy and how to cook healthy

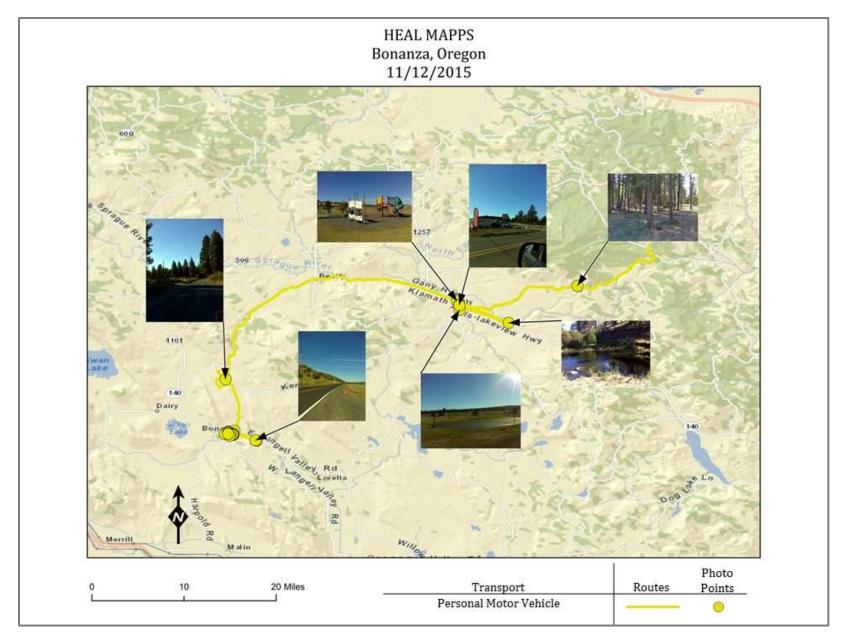
.

**Figures 6 through 10** represent the routes navigated by local residents as they mapped the physical features of the Bonanza community using participatory photographic survey methods.

Figure 6. Represents all routes generated by the Bonanza community mappers.



**Figure 7.** Represents an example of a route generated while using a personal motorized vehicle and the features encountered along the route that enable or hinder healthy eating and/or physical activity.



**Figure 8.** Represents an example of a route generated while using a personal motorized vehicle and the features encountered along the route that enable or hinder healthy eating and/or physical activity –zoomed in to show more detail.

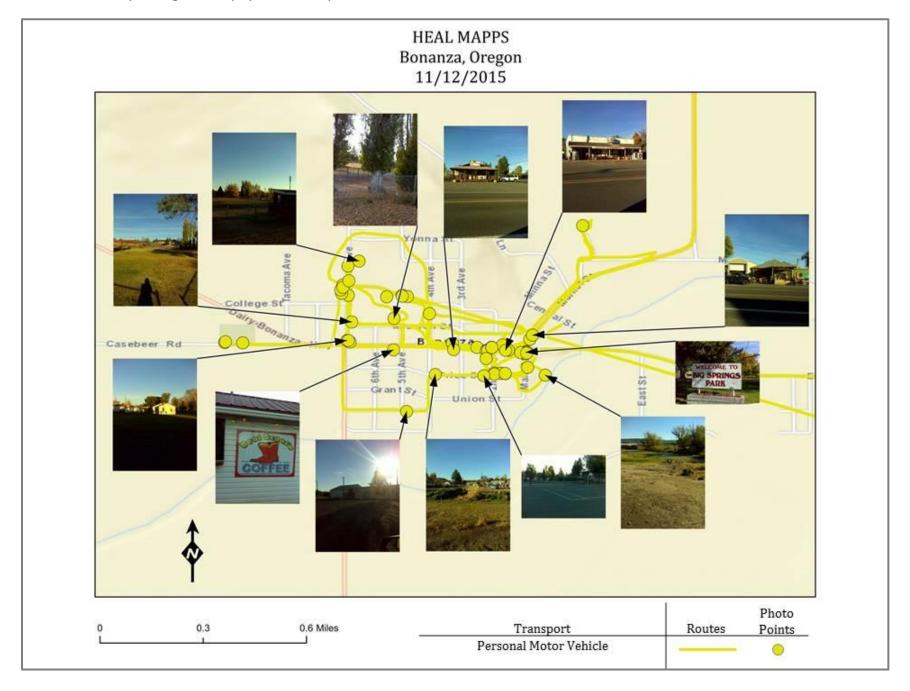
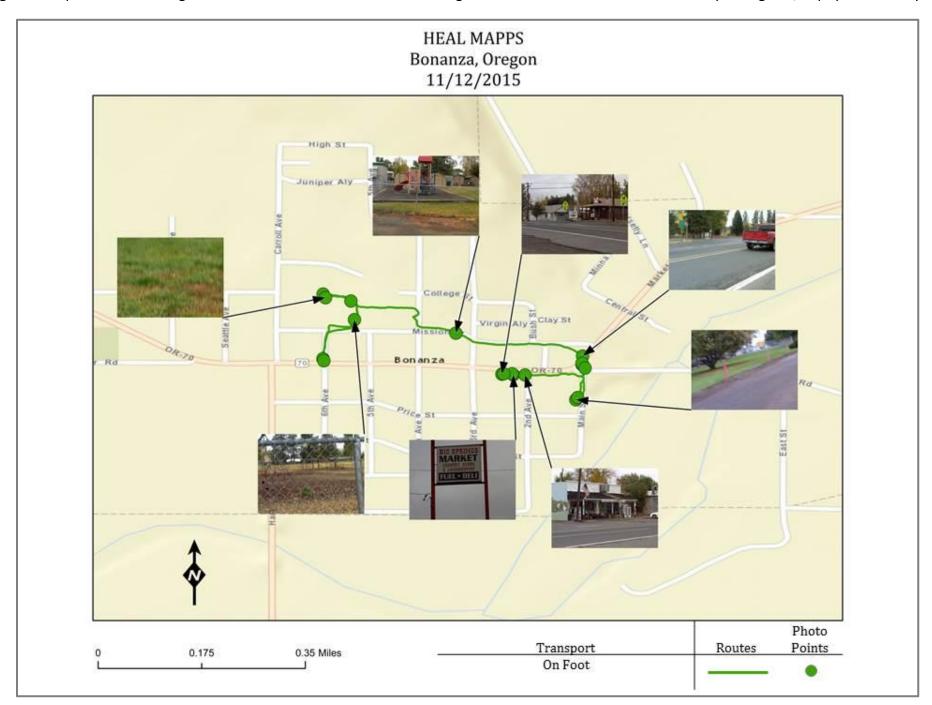


Figure 9. Represents a walking route and the features encountered along the route that enable or hinder healthy eating and/or physical activity.



**Figure 10.** Represents a Biking route and the features encountered along the route that enable or hinder healthy eating and/or physical activity.

