

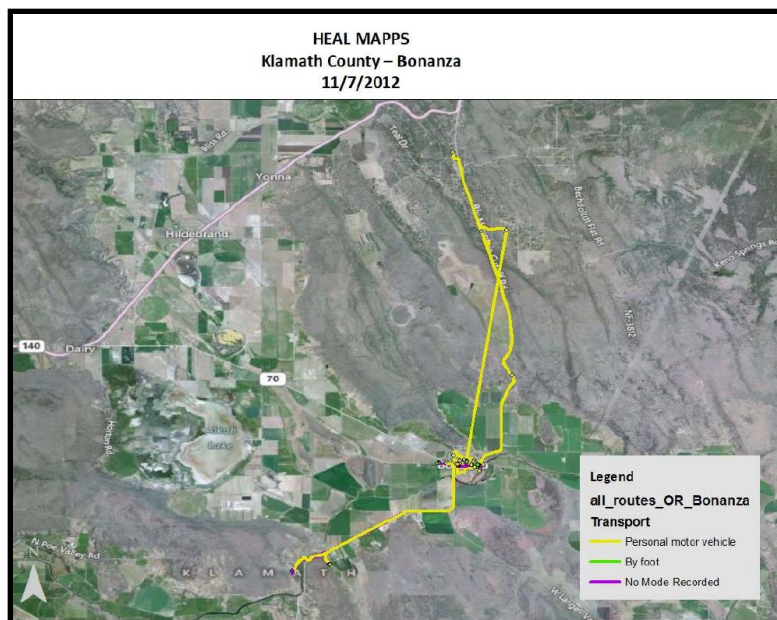


## Bonanza Community HEAL MAPPS™ Report

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 13 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 2010 US Census determined there were 415 people, 139 households, and 102 families residing in the city. The median age of residents is about 30, though some leading citizens are in their 80's and 90's. The racial makeup of the population as reported by the Census is mostly white (86%), with a Latino population of about 27%<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, Oregon (35 miles and about an hour's drive away).

Each summer, Bonanza is home to a Chili Cook-off and car show, which draws thousands to the town. Smaller community events throughout the year include fall festivals, a Christmas-

decoration contest, and, in the summer, a weekly Farmer's Market.



**Generating Rural Options for Weight Healthy Kids and Communities (GROW HKC)** is a USDA-funded, participatory childhood obesity prevention study conducted by Oregon State University's Extension researchers in partnership with rural residents and communities. GROW HKC and the Bonanza community have

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

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

partnered to map features of the local environment and discuss residents' perceptions of the community supports and barriers to regularly eating healthy and being physically active, 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), our community resource and readiness tool, to assess community resources for and readiness to improve and implement healthy eating and physical activity supports – environmental and policy actions to make easier these obesity preventing behaviors.

HEAL MAPPS™ projects conducted in partnership with rural communities across several Western States (AZ, CO, NM, NV, OR, WA) will provide evidence and insights that will drive the development of a rural obesity prevention model. The model will be used as a framework for rural community actions aimed to promote healthy eating and physical activity behaviors, environments, and policies to prevent overweight and obesity among children and families.

The problem of obesity in children is in the forefront of nationwide research efforts and there are documented physical and mental health outcomes associated with childhood obesity that contribute to lifelong chronic health problems 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 childhood overweight and obesity is higher among children living in rural areas.

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 is a strong 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 4-H programs that focus on livestock or other food production. 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.

Bonanza School, which maintains a very active Future Farmers of America chapter, adopted an award-winning Wellness Program for staff and students in 2010, including fitness classes and healthy-weight awareness. Approximately 80% of elementary students receive free and

reduced-priced lunches, and OSU Extension delivers three to four nutrition education lessons in each elementary classroom each year.

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 and were first trained to individually photograph and map the Bonanza community features that they perceived as either supports or barriers to eating healthy and being physically active most every day. Collectively, over 67 photographs 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 approximately 90% of the land area included within the 2 square miles of the city of Bonanza and included features in the surrounding unincorporated areas (see Figure 1).<sup>3</sup> The HEAL MAPPS™ team reconvened to discuss the photographs and maps during a focus group meeting. The most relevant 36 photographs, based on group consensus, were included in a presentation to provoke a larger community conversation. Over 24 Bonanza residents and stakeholders attended and participated in a community dinner and discussion held at the Living Springs Fellowship on November 13, 2012. The community conversation was facilitated by a member of the GROW HKC team trained to conduct HEAL MAPPS™ processes. Following the community dinner, photographs were displayed, participants were polled as to whether the 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**

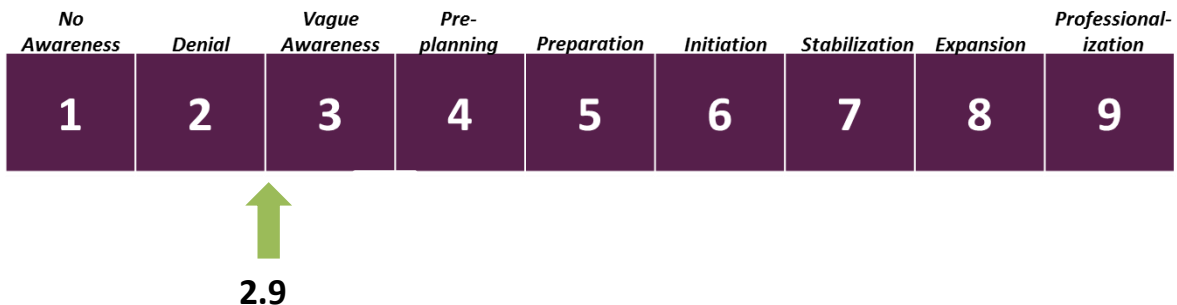
Communities differ in many ways including their readiness to take action on an issue and implement relevant programs. The level of community readiness is a major factor in determining whether a particular program can be effectively implemented and supported by a community. Assessing the level of readiness for obesity prevention efforts is thereby a critical component of obesity prevention program planning and evaluation.

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<sup>3</sup> The 'mappers' individually determined the community boundaries as within the city and unincorporated land approximately served by the Bonanza school district.

The Community Readiness Assessment Model is a tool we used to gain an understanding of the Bonanza community’s resources and readiness for obesity prevention efforts. The assessment is divided into six dimensions that influence a community’s readiness to take action on an issue. The six dimensions are: community knowledge about the issue; community efforts; community knowledge of the efforts; local leadership; community climate; and local resources related to the issue. Questions representing each dimension were asked during the Bonanza Community Conversation and the participants shared their perception of Bonanza’s readiness and preparedness for change. Each dimension was then scored by three independent evaluators and combined to identify the overall stage of readiness. Several Bonanza community organizations, including Head Start, emerged as supporting healthy eating and physical activity by providing one or more of the following dimensions: leadership, expertise, efforts, resources, and/or willingness to work for change, which contributed to the overall community readiness score.

### Stages of Community Readiness for Obesity Prevention



Bonanza was scored at **Stage 3 – Vague Awareness** for overall community readiness to implement environmental and policy strategies to prevent obesity as indicated by the arrow on the Stages of Readiness graph. Improvements to the community food and physical activity environment would include increasing access, availability, and affordability of healthful nutrition options, including local foods and gardens, and physical activity opportunities for transportation, recreation, and in schools and worksites. A community in Stage 3 is beginning to recognize that obesity is a local problem but generally efforts to address the problem are not strong or focused. Ideas about why the problem occurs and who has the problem tend to be stereotyped or vague. Only a few leaders have been identified and those in community leadership roles aren’t seen as leaders for obesity prevention. Based on the Community Readiness Assessment Model, the goal should be to ***raise awareness that the community can do something about obesity by increasing opportunities for healthful eating and physical activity for children and families.***

Community-wide strategies appropriate to advance readiness to address childhood obesity include:

1. Get on agendas and present information about the relationship between health, obesity and the environment at local community events and to unrelated community groups.
2. Post informational flyers, posters, and billboards promoting healthful eating, exercise and play outdoors together, walking and biking routes, and minimizing screen time.
3. Begin to initiate events that promote healthful eating and physical activity among all members of the community and use the events to generate partnerships, present information, provide experiences, and shift attitudes.
4. Gather more information about specific dimensions and from other people to expand the network of knowledge about generating rural options for weight healthy kids and communities.
5. Write and publish newsletters, editorials, and articles with general information and local implications in print, online, and social media.

Three dimensions scored below the average, including C-Leadership, D-Community Climate, and E-Community Knowledge About the Issue, two were at the average, including A-Existing Community Efforts and B-Community Knowledge About the Efforts, one was above the average, specifically F-Resource Related to the Issue. For F-Resources Related to the Issue, a small number of resourceful people in the community who can and are managing to make money, equipment, and space available to support healthy eating and/or physical activity shifted the rating above “not knowing where resources would come from” toward “efforts have been initiated.”

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>.

## **Summary of Results based on Bonanza Community Conversation**

### ***Physical Activity***

#### Supports/Strengths

- Multiple outdoor trails and parks, with some improvements to play structures and sports courts including Bonanza schools sports complex.
- One bike lane and crosswalk in town.
- Some joint-use agreements related to public access to private land.

### Barriers/Concerns

- Limited walkability due to a lack of sidewalks and crosswalks.
- Outdoor trails and parks are not well resourced, due to a lack of parking, water fountains, open restroom facilities, and signage.
- Barriers to active leisure include a lack of indoor recreation and exercise facilities.
- Active transportation barriers include few/no options walking or bicycling to/from destinations due to a lack of bike lanes and road shoulders and the distance to schools and work from outlying areas creates a strong dependence on personal motorized vehicle.
- Lack of recreational programs and organizations for adults and children, including a lack of support and volunteers for rec programs, and organizations and existing programs are fee based.
- Lack of school-based recreation programs and initiatives, including no jr. high athletics and no late bus option for children who stay after school for sports or recreation.
- Lack of policies and public knowledge related to public/private land and joint-use agreements.
- School gym facilities are not open to community due to a lack of funds in the school budget to pay a school employee to be on site.

### ***Healthy Eating***

#### Supports/Strengths

- Food assistance programs and services including the food pantry and food bank.
- Food resource centers which bridge local food production with distribution, including the farmers market and vegetable stand.

#### Barriers/Concerns

- Participants perceive a concern in food assistance programs including a lack of healthy food options at the food pantry.
- Limited access to affordable fresh fruits and vegetables due to the cost of transporting these items and short shelf life, along with isolation from healthy food/grocery store.
- Lack of neighborhood availability of affordable, healthy food/beverage options.
- Seasonal influence on access, availability and affordability of locally grown/produced food.

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

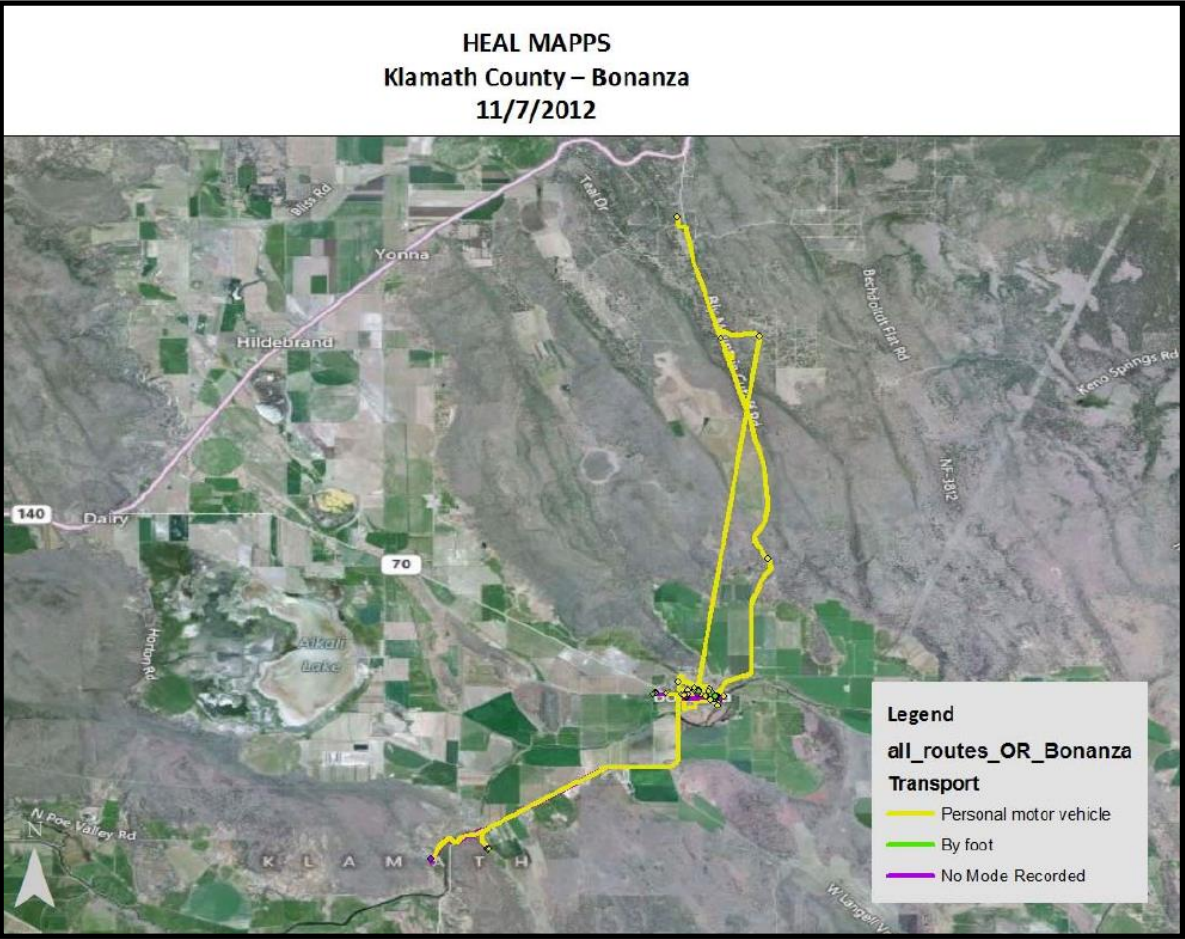
The following recommendations emerged from the data generated during the Bonanza community conversation and represent those of the Bonanza community members who shared their ideas during the facilitated discussion of the photographed community features. These recommendations do not represent those of the GROW Healthy Kids and Communities project staff or Oregon State University.

- Create maps and signs indicating public/private areas and walking paths in the community, including features such as the distance and difficulty of a trail or route.
- Create indoor recreation facility. Participants suggested constructing a pole barn over basketball and tennis courts to serve as an indoor rec facility and a community center.
- Add exercise stations to parks and walking paths.
- Increase activities for Bonanza youth and include an activity bus to transport youth.
- Residents are interested in Master Gardener and cooking classes to be taught by OSU Extension.
- Incorporate more walking paths at parks.
- Create recreation leagues or organized groups to participate in sport activities.
- Park board should open restroom facilities in parks.

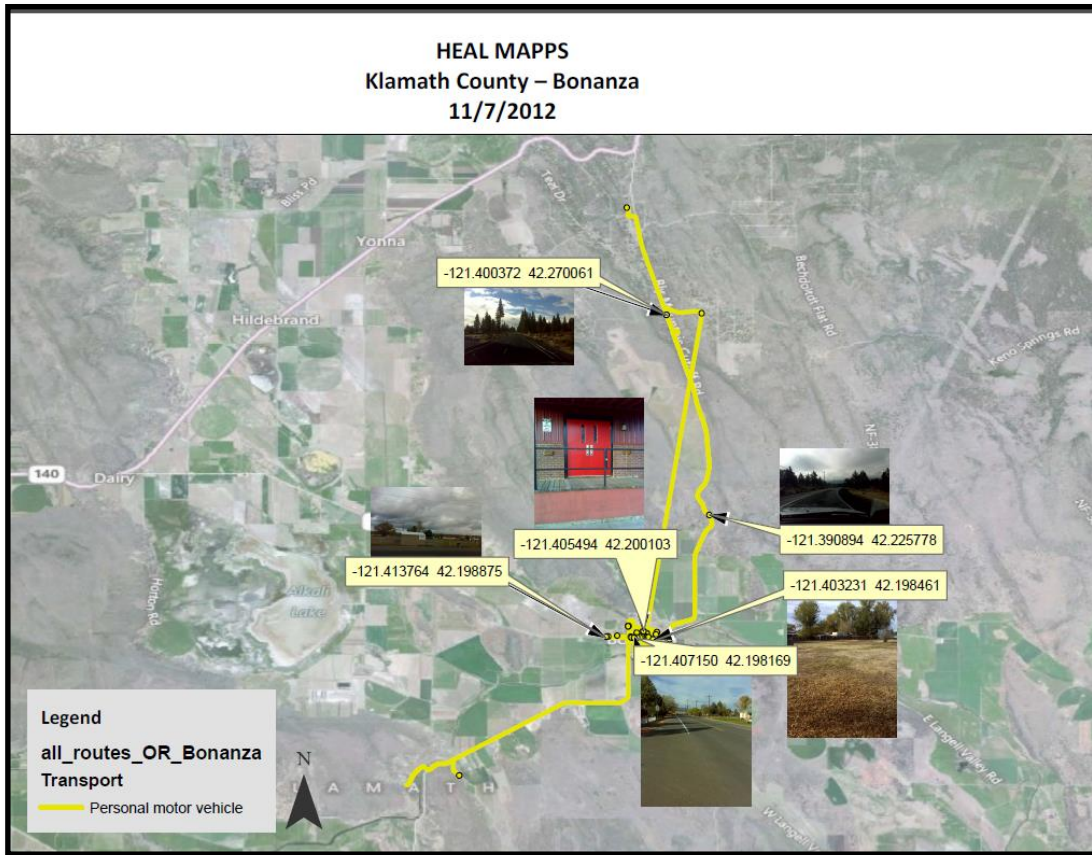


Figures 1 through 3 represent the routes navigated by local residents as they mapped the physical features of the Bonanza community using participatory photographic survey methods. Include one route from each different mode of transportation the mappers used.

Figure 1. Represents all routes generated by the Bonanza community mappers.



**Figure 2.** Represents an example of a route generated while using a personal motorized vehicle. All photograph location coordinates are in decimal degrees.



**Figure 3.** Represents a walking route and the features encountered along the route that enable or hinder healthy eating and/or physical activity.

