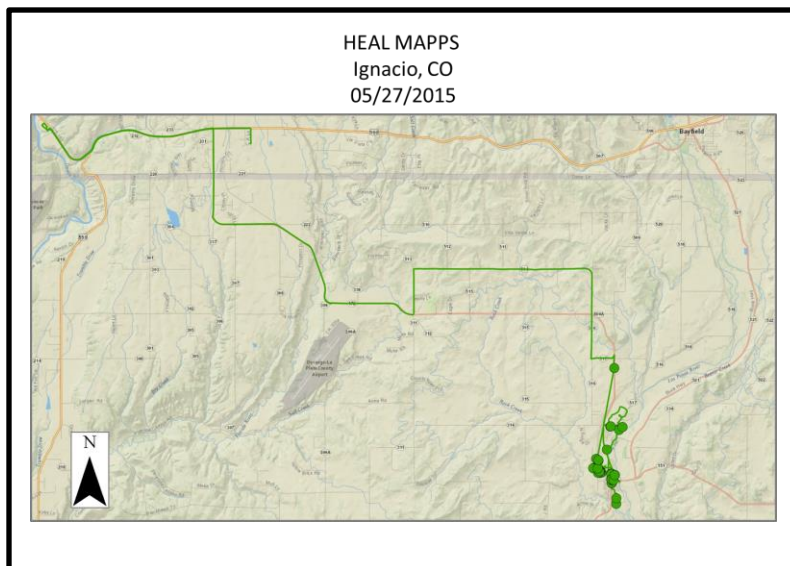


Ignacio Community HEAL MAPPS™ Report

Ignacio is a rural town in LaPlata County, CO. Ignacio is located in the southeast corner of La Plata County and is situated near the Navajo Lake State Park, the San Juan Mountains and National Forest, the Mesa Verde National Park, and the Four Corners Region. Ignacio is home to the Southern Ute Indian Reservation and was named for their nineteenth-century leader, Chief Ignacio.^{1,2} The average annual high temperature in Ignacio is 63.6 degrees Fahrenheit and the average annual low temperature is 29.6 degrees Fahrenheit with an annual average precipitation in rainfall of 14.0 inches.³

Ignacio is a tri-ethnic community with a total population of 697. The population is 59.0% white, 16.9% American Indian and Alaska Native, 1.0% Black or African American, .10% Asian, 9.8% some other race, and 13.2% are two or more races. 47.1% are Hispanic or Latino of any race.⁴ Ignacio is home to different businesses that include local family run restaurants, art galleries, grocery stores, banks, and clinics.¹ The Ignacio School District 11-JT, including Elementary School, Middle School, and High School, serves hundreds of children from the Town all the way to the Colorado New Mexico Border.⁵



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 Ignacio community have 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

¹ <https://www.colorado.gov/pacific/ignacio/about-ignacio>

² https://en.wikipedia.org/wiki/Ignacio,_Colorado

³ <http://www.usclimatedata.com/climate/ignacio/colorado/united-states/usco0203>

⁴ <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

⁵ <http://www.ignacioschools.org/IES/>

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 (CO, ID, 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 Ignacio Community

The median household income in Ignacio is \$49,375, and 16.3% of the population is below the poverty line. The median age in Ignacio is 38.4 – 33.5% of households in Ignacio have children under the age of 18.⁶ The obesity rate for adults in LaPlata County is 16.2% compared to the state rate of 20.6%, and the percent of children aged 2-14 years in LaPlata County who are overweight or obese is 21.9% compared to the state rate of 28.1%. In 2013, 26.1% of children in LaPlata County reported eating fruits and vegetables five or more times per day, and 47.4% of them reported eating fast food one or more times in the past week. While physical activity data

⁶ http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

is limited for LaPlata County, data suggests that in Region 9 of CO, nearly 50% of children are not getting recommended amounts of physical activity.⁷

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 Ignacio.

Methods and Preliminary Results

A HEAL MAPPS™ team (n=8) comprised of Ignacio community members with an interest in creating a healthier community volunteered and were first trained to individually photograph and map the Ignacio community features that they perceived as either supports or barriers to eating healthy and being physically active most every day. Collectively, over 60 photographs were taken and mapped along 3 routes that represented the community's active (i.e. walking, bicycling, skateboarding, etc.) and motor vehicle transportation system. The 'mappers' covered approximately 47 linear miles included within the 0.3 square miles of the city of Ignacio and included features in the surrounding unincorporated areas (see Figure 1).⁸ The HEAL MAPPS™ team reconvened to discuss the photographs and maps during a focus group meeting. The most relevant 34 photographs, based on group consensus, were included in a presentation to provoke a larger community conversation. Five Ignacio residents and stakeholders attended and participated in a community dinner and discussion held at the Ignacio School District Administration Building on May, 5 2015. 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.

⁷ <http://www.chd.dphe.state.co.us/HealthIndicators/home/index>

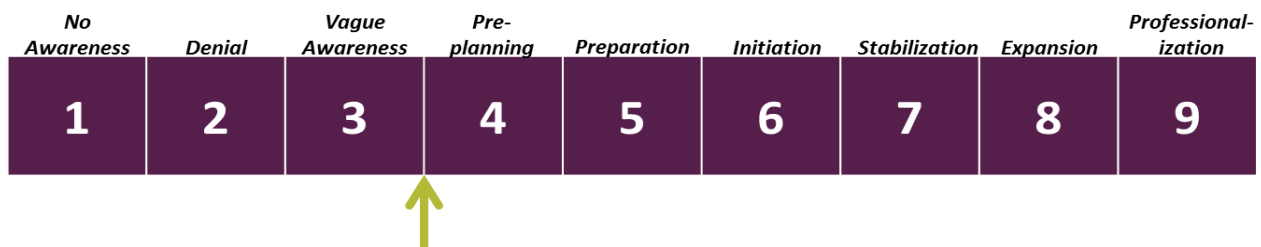
⁸ The 'mappers' individually determined the community boundaries as within the city and unincorporated land approximately served by the Ignacio school district.

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.

The Community Readiness Assessment Model is a tool we used to gain an understanding of the Ignacio community's resources and collective 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. During the Ignacio Community Conversation, the audience was asked to focus on and discuss the photographed features, and were polled confidentially, prompted to share their opinions, and asked open-ended questions representing the various dimensions. Thus the discussion narrative revealed the collective perceptions of Ignacio's community readiness and preparedness for change. Two independent evaluators coded the narrative and conversation photographs into physical activity and nutrition resources and readiness dimensions. The data were organized according to an anchored rating scale and scored independently by evaluators and combined to provide a score for the overall stage of readiness to enact change.

Overall Stage of Community Readiness



Resources and Efforts

Several Ignacio community organizations and individuals emerged as resources and supportive efforts for healthy eating and physical activity. Schools emerged as a supportive resource for both physical activity and healthy eating. Specifically, the elementary school PE program and PE teacher reinforces physical activity by running with the kids and helping them mark their progress using pedometers. Additionally, there is a fresh fruit and vegetable program grades K-5, which insures at least one serving a day of fruits or vegetables for every child. The Tribe also

emerged as a support: they are aware of the benefits of being physically active and endorse efforts in that arena. For example, they support the schools and the community by awarding grant funding to the elementary school PE teacher for healthy eating and active living education and the school garden; they also administer the shining mountain diabetes program. Finally, the recreation center also emerged as a support for physical activity for both adults and children alike. All of these resources positively influenced the community readiness scores for Ignacio.

Some of the resource gaps and major barriers to eating healthy and being physically active that emerged from the data were the lack of a full service grocery store and transportation. While a grocery store is being built in the community, the community is currently without a full service grocery store, causing many to shop at convenience stores. Transportation is an issue that is largely related to the rurality of the community and spatial access. For example, students who live far outside of city limits are bused to school. Families rely on personal motor vehicles to access resources. Those who don't or can't drive themselves may have no other means of transportation. The narrative data revealed the level of training (of community leaders), community knowledge of effective community strategies to address the issue of childhood obesity and prevent unhealthy weight gain as a barrier to community weight health.

Supports and barriers were considered together and influenced Ignacio's community readiness scores. Ignacio's overall stage of readiness to implement environmental and policy strategies to reduce rural obesity risk and prevent unhealthy weight gain among the community's children and families falls somewhere between stage **3** (Vague Awareness) and **4** (Pre-planning) as indicated by the arrow on the Stages of Readiness graph. Based on the Community Readiness Assessment Model, community efforts should focus on: 1) raising awareness that the community can do something about the problem, and 2) prioritizing where and how community efforts should be focused.

Vague Awareness: Get on the agendas and present HEAL MAPPS™ information at local community events and to unrelated community groups. Post results flyers, posters, and billboards. Begin to initiate your own events (potlucks, etc.) and use those opportunities to present information on and discuss the issue. Conduct informal local surveys and community readiness interviews with community people. Publish newspaper editorials and articles with general HEAL MAPPS™ findings and local implications.

Preplanning: Introduce HEAL MAPPS™ findings and other information about the issue through presentations and media. Visit and invest community leaders in the cause – share the results. Review existing efforts in the community (curriculum, programs, activities, etc.) to determine who the target populations are and consider the degree of success of the efforts. Utilize HEAL MAPPS™ outcomes - data, reports, and presentations, to conduct local focus groups to discuss

issues and expand partnerships to develop strategies. Increase media exposure through radio and television public service announcements.

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 the Community Tool Box at <http://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/community-readiness/main>.

Summary of Results based on Ignacio Community Conversation

Physical Activity (10 references)

Supports – 7 references

- Tribal
 - Facilities including the recreation center
 - Summer games, fun run and Pow Wows held by Southern Utes
 - Grant funding for education and garden support
- Schools
 - New track and field at High School
 - PE teacher leads runs with students
 - School Garden
- Outdoor parks and playgrounds

Barriers – 3 references

- Built Environment
 - Most children ride bus to school instead of walking or biking
 - Unsafe to walk and bike on some roads
- Economics and education level are barriers to be physically active for some

Healthy Eating (13 references)

Supports – 8 references

- Elementary school
 - Garden program at the Academy, including education on healthy lifestyles and eating
 - Fresh fruit and vegetable program
- Tribal
 - Diabetes program
 - Grant support for education programs and school garden

- Retail Environment
 - Health food store
 - New grocery store being built
 - Some healthy options at local restaurants
- Local food
 - Cattle Farms

Barriers – 5 references

- Retail Environment
 - Community members forced to shop at convenience stores because grocery store is under construction
 - The food wagons have acceptable choices as well as less than acceptable choices
- School Environment
 - Teachers reward students with candy
 - Some elementary, middle, and high school students are given unhealthy food by parents. High school students are allowed to leave campus to purchase unhealthy foods
- Social determinants - income and education level – emerged as barriers to eating healthy for some (lower levels).

Resident-Informed Recommendations for Community Change

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

- Return to old style of local grocer with local, fresh, non-processed beef and other foods

Figures 1 through 2 represent the routes navigated by local residents as they mapped the physical features of the Ignacio community using participatory photographic survey methods.

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

