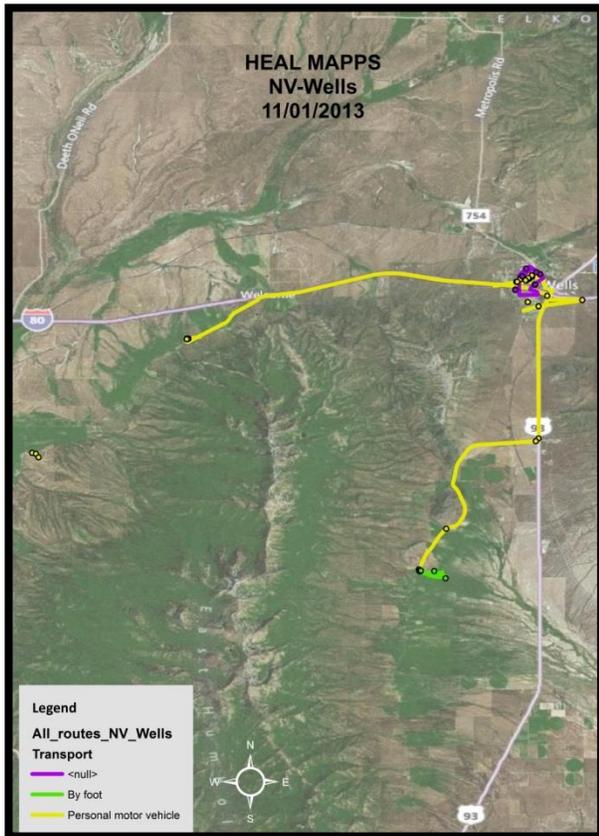


Wells Community HEAL MAPPS™ Report

Wells is a rural city located in Elko County, Nevada. The town of Wells was founded in 1869 by the Central Pacific Railroad; however, the use of Humboldt Wells dates back thousands of years to the Western Shoshone, who still live in a colony overlooking the town.¹

Located in northeast Nevada, the population of Wells is about 1,900. The median age of the population is 39 years with a median household income of \$56,548. The demographics of the community are 92.2% white, of which 21% are of Hispanic or Latino ethnicity, 5.1% American Indian and Alaska Native, and 1.4% African American, and 0.3% Asian.

Wells Combined School had a total enrollment of 370 students for the 2012-2013 school year, with 197 of them being elementary students. The Junior High School has an enrollment of 56 students and the High School has 117 students. Residents of Wells are serviced by one grocery store, Roy's Market, 4 convenience stores, 9 restaurants and 1 park. Attractions in Wells include the 49'er Trail Center, Angel Lake, Secret Pass and Metropolis ghost town; The Ruby Mountains, and other locations where community members can hunt, fish, and hike; a new indoor pool and a local golf course; community festivals like Art in the Park, Christmas Bazaar, Festival of Trees, Nevada State Fiddle Contest, Race to the Angel (1/2 marathon), rodeos, fishing derby, golf tournaments, 4th of July Family Picnic and the Ruby Mountain Relay Race.



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 Wells 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 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 along with

¹Wells NV Chamber of Commerce. *About Wells*. Retrieved on December 10, 2013 from <http://www.wellsnevada.com/about.shtml>

environmental and policy actions to make easier these obesity preventing behaviors.

HEAL MAPPS™ projects conducted in partnership with rural communities across several Western States (OR, WA, ID, NV, CO, NM) 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. In fact, rural residency tends to increase the risk and prevalence of overweight and obesity for children and adults².

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 the easy and preferred choice.

Relevance for Wells Community

According the U.S. Census bureau, 27.6% of the population living in Wells has children under the age of 18 years³, 4.2% of the population is living below the poverty level and about 37% of students are receiving free or reduced lunch⁴. According to a study conducted by the Nevada Institute for Children's Research and Policy, 29.6% of Nevada children entering kindergarten are overweight or obese. 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 Wells.

Methods and Preliminary Results

A HEAL MAPPS™ team (n= 8) comprised of Wells community members with an interest in creating a healthier community volunteered and were trained to individually photograph and map the Wells community features that they perceived as either supports or barriers to eating healthy and being

² Lutfiyya *et al.* (2012) Is rural residency a risk factor for Overweight and Obesity for U.S. Children. *Obesity*.**15**(9) <http://dx.doi.org/10.1038/oby.2007.278>

³ U.S. Census Bureau. ACS 2008-2012 5 year estimates. Selected economic characteristics.

⁴ Nevada Department of Education. Report Card, 2012-2013 Demographic profile.

physically active most every day. Collectively, over 130 photographs were taken and mapped along 17 routes that represented the community's active (i.e. walking, bicycling, skateboarding, etc.) and motor vehicle transportation system. The 'mappers' covered the land area included within the 6.9 square miles of the city of Wells as well as features in the surrounding unincorporated areas (see Figure 1).⁵ The HEAL MAPPS™ team reconvened to discuss the photographs and maps during a focus group meeting. The most relevant 60 photographs, based on group consensus, were included in a presentation to provoke a larger community conversation. A total of 15 Wells residents and stakeholders attended and participated in a community dinner and discussion held at the Wells Elementary School on November 7, 2013. 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. Child care was generously provided by University of Nevada Cooperative Extension (UNCE).

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 Model (CRM) was applied to the conversation narrative to gain an understanding of the Wells community's resources and readiness for obesity prevention efforts. The model is comprised of 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. Community readiness is issue specific and can vary across dimensions and community sectors. During the Wells Community Conversation, an Extension educator posed questions related to each of the dimensions and prompted discussion around Wells' resources as supports or barriers to weight healthy behaviors. The entire conversation narrative was transcribed verbatim and coded for themes by independent evaluators. The data related to each dimension was then scored by a researcher trained to utilize the CRM and combined to identify the overall stage of readiness.

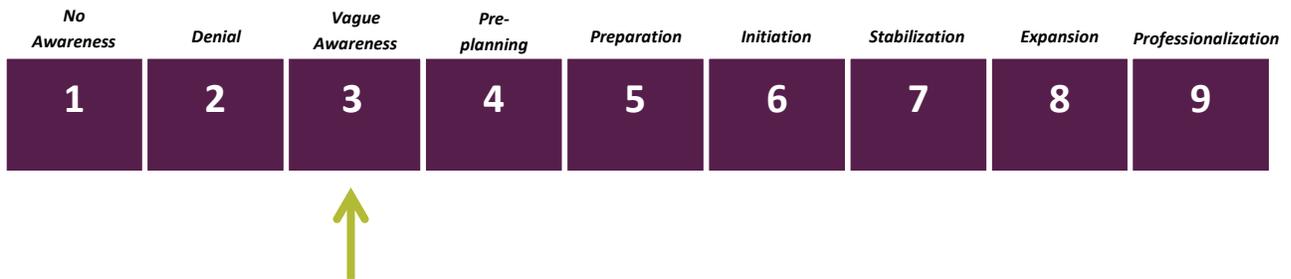
Several Wells community organizations such as the Elko County School district/Wells Combined School and local churches, as well as programs such as Communities in School, emerged as supports for healthy eating and physical activity; these programs and organizations contributed positively to the community readiness score given to Wells. Wells Community Center, the Intertribal Council Gym, youth recreation sports programs, and outdoor parks and trails support physical activity for community residents. The

⁵ The 'mappers' individually determined the community boundaries as within the city and unincorporated land approximately served by the Elko County school district.

Wells schools, food assistance programs and local food co-ops provide some opportunities for healthy eating in Elko County. Perceived barriers to physical activity include safety concerns at public parks and trails due to a lack of lighting, sidewalks and fencing. Other barriers to physical activity were mentioned in regards to the affordability of existing programs/facilities due to fee-based recreation centers which limit accessibility for some community members. The lack of fresh food and the expense of produce were also noted as limits to accessing healthy food options in Wells.

Wells community members reflected confidence in the local leadership and in the leadership support for certain efforts. However, there was evidence to suggest the need for increased engagement from local leaders to address issues such as walkability barriers and removing restrictions on business licensure. Regarding improving or increasing resources to support physical activity and healthy eating, there are organizations, individuals and space that could be used as resources to support a healthy community. Furthermore, due to the rural aspects of Wells, efforts to address the issue may require creativity, strong support from the community and an attitude of community empowerment toward change. Wells’ stage of readiness to implement environmental and policy strategies to prevent obesity is at stage 3, vague awareness, as indicated by the arrow on the Stages of Readiness graph.

Stages of Community Readiness



Based on the Community Readiness Assessment Model, community efforts should focus on:

- 1) Raise awareness that the community can do something about the problem by launching a media campaign, i.e. post flyers, posters, and billboard to advertise current efforts.
- 2) Provide suggestions on where and how efforts should be focused based on resident input and identified barriers, specifically as it relates to accessing and utilizing community resources.
- 3) Work with the Nevada GROW Healthy Kids and Communities HEAL MAPPS™ team and utilize Extension, GROW HKC, HEAL MAPPS™ and other resources.
 - a. Gather additional and ongoing input from others, including diverse groups of residents and community sectors.
 - b. Publish newspaper articles and editorials with general information related to the local food and physical activity situation and context.
 - c. Build and communicate Wells’ capacity to change – *Our Community can GROW Healthy Kids.*

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://triethniccenter.colostate.edu/communityReadiness.htm>

Summary of Results based on Wells Community Conversation

Physical Activity

Supports

- Youth recreation sports programs run year round.
- Active leisure supports include multiple recreation facilities (i.e. community center, Intertribal council gym, Chimney Rock Golf Course).
- Outdoor trails and parks include Indian country, sports courts, and parks with playgrounds among others.
- School recreation programs and facilities include recess and after school sports programs.
- Some sidewalks in Wells.

Barriers

- Lack of sidewalks, existing sidewalks are unmaintained.
- Affordability of existing exercise facilities- fee structure hinders accessibility for some community members.
- Safety concerns at public parks and trails due to lack of lighting, fencing and safety protocol.
- Recreation facilities need updating and increased variety for usage.

Healthy Eating

Supports

- Food assistance programs offered through the school and Utah Food Bank.
- Supports to the school food environment include hot lunch served at the elementary school which is made available to the high school students and vending machines include healthy snacks.
- Some local produce is available through farmers and the food co-op.
- Some healthy food retail options available at the grocery store and at fast food restaurants (i.e. Subway).

Barriers

- Barriers to the school food environment include no hot lunch offered at the middle and high school; participants perceive food offered through the school food assistance program as unhealthy.
- Lack of local food production.

- Limited access to healthy, fresh fruits and vegetables, produce is costly due to a lack of local production.

Resident-Informed Recommendations for Community Change

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

- Offer a sliding scale or reduced fee for community members to utilize recreation facilities.
- Offer health awareness/health education classes for community members.

Figures 1 through 4 represent the routes navigated by local residents as they mapped the physical features of the Wells community using participatory photographic survey methods. Include one route from each different mode of transportation the mappers used.

Figure 1. Represents all routes generated Wells community mappers.

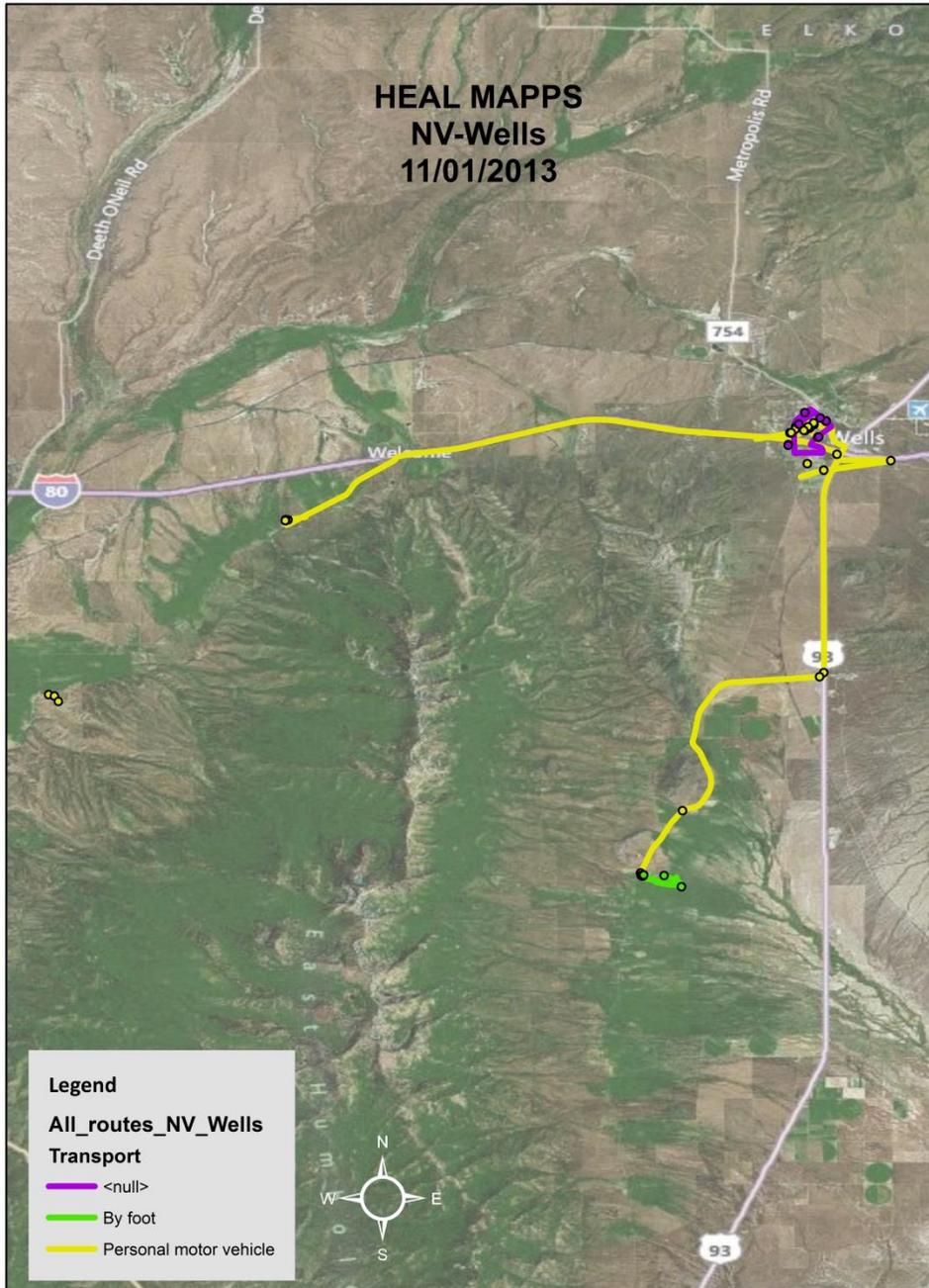


Figure 2. Represents an example of a route generated while using a personal motorized vehicle. All photograph location coordinates are in decimal degrees.

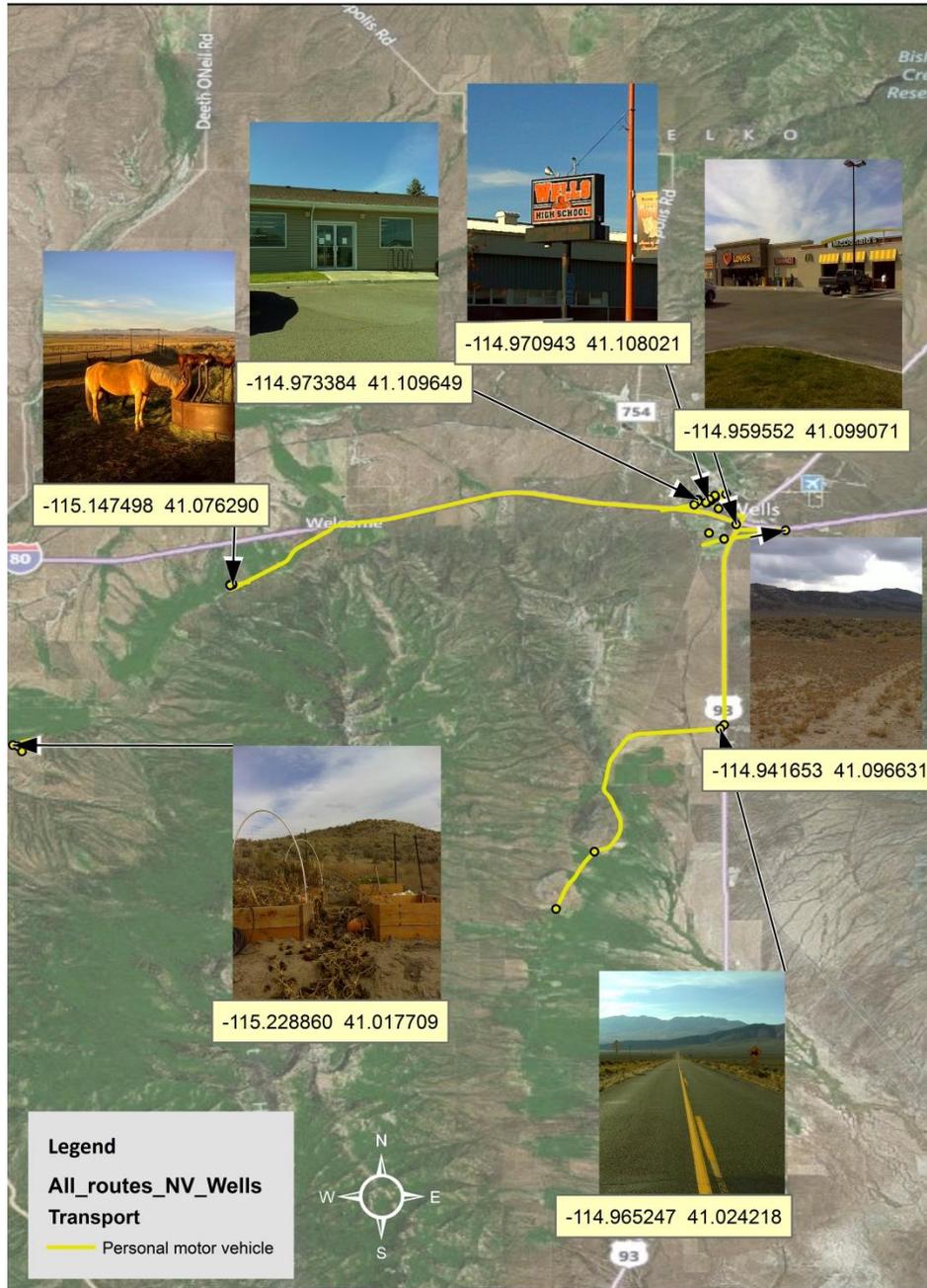


Figure 3. Represents a walking route and the features encountered along the route that enable or hinder healthy eating and/or physical activity.

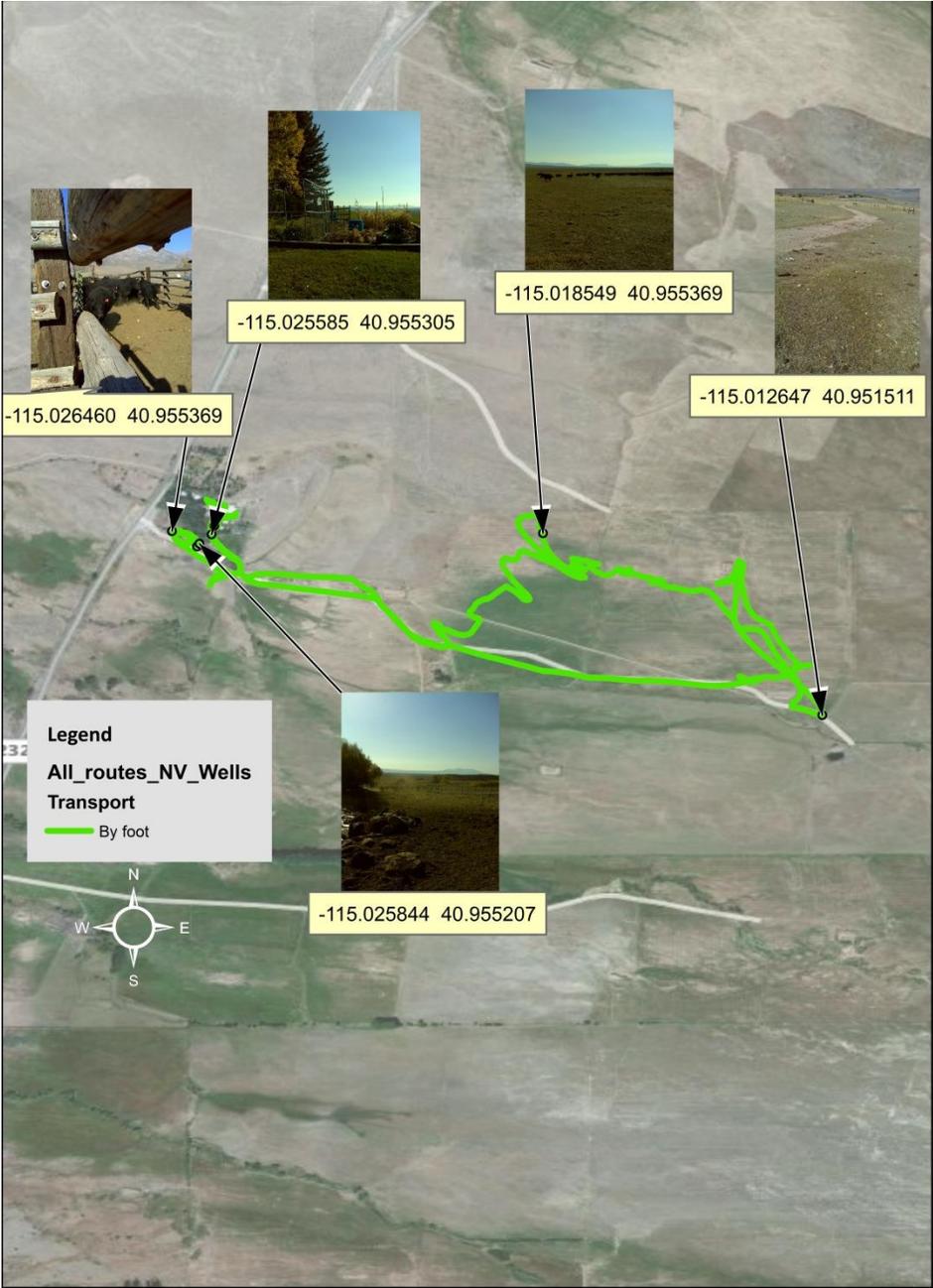


Figure 4. Represents a route with an unidentified mode of transportation.

