

# Examining Rural Resources and Readiness to Change the Context for Obesity Prevention

Anne Marie Richards, URAP Apprentice Introduction

GROW Healthy Kids & Communities aims to prevent obesity in rural children. The project targets changing family home, school, and community environments to support children’s weight healthy behaviors by “default.” My URAP apprenticeship is at the community level studying residents’ perceptions of the healthy eating and activity resources in rural communities and community readiness to improve the contexts for obesity prevention. My role is to learn qualitative research methods and data management.

Objectives: Two Aims

1. Explore and explain the rural obesogenic environment.

2. Plan, implement, and evaluate a multi-level intervention targeting rural home, school, and community behavioral settings to promote healthful eating and increase physical activity, and thus improve the body mass index among rural elementary school age children.

**Background Information**

The obesity rates in the U.S. and in developed countries worldwide have continued to rise and are especially high in under-resourced geographical areas. Rural areas are set apart from urban places because of different social, economic, and cultural aspects, which may lead to differing resources and attitudes in regards to childhood obesity prevention. Researching the differences in resources and readiness to address environmental barriers to healthy lifestyles is vital to understanding how communities must move forward and invoke change in order for childhood obesity rates to plateau and eventually begin to decline.

**URAP Apprentice Methods**

The community-based participatory research team, which includes community residents as mappers and discussants, collects and analyzes qualitative information in rural communities using community photomapping and reflective dialogue. Residents participate in community conversations and discuss photos that represent available resources. Data sources (i.e. photographs, maps, narratives) are coded as barriers and supports for healthy eating and activity, and analyzed to provide an overall readiness score based on the six dimension community readiness model.

For this project, NVivo10, a software program that researchers use to organize, analyze, and interpret qualitative data, was employed. The software allows researchers to code data and run queries about common words and themes that emerge from the data. Researchers are also able to code data into certain topic areas within the project model, which helps to organize many sources of data including quotes, polls, transcripts, pictures, maps, or websites.

**Community Readiness Model Framework**

The community is scored on six dimensions of community readiness and overall readiness to address the issue based on the responses during the community gathering to talk about the photo mapping data:

- Existing Community Efforts, includes perceptions of supports and barriers
- Community Knowledge of the Efforts
- Leadership (appointed leaders and influential community members)
- Community Climate
- Community Knowledge about the Issue
- Resources Related to the Issue (people, money, time, space, etc.) incudes nutrition and physical activity resources.

Our pharmacy serves as our grocery store, the closest grocery stores are over 15 and 18 and 22 miles away. There is variety of milk, it is 50 cents more per gallon than Costco. Some people don't take into account the cost of going into town. There is not any whole grain bread or noodles. Those who can afford it can order from Royal Produce, the CSA in Tekoa and have produce delivered to home.

Examples from the Fairfield Community Narrative

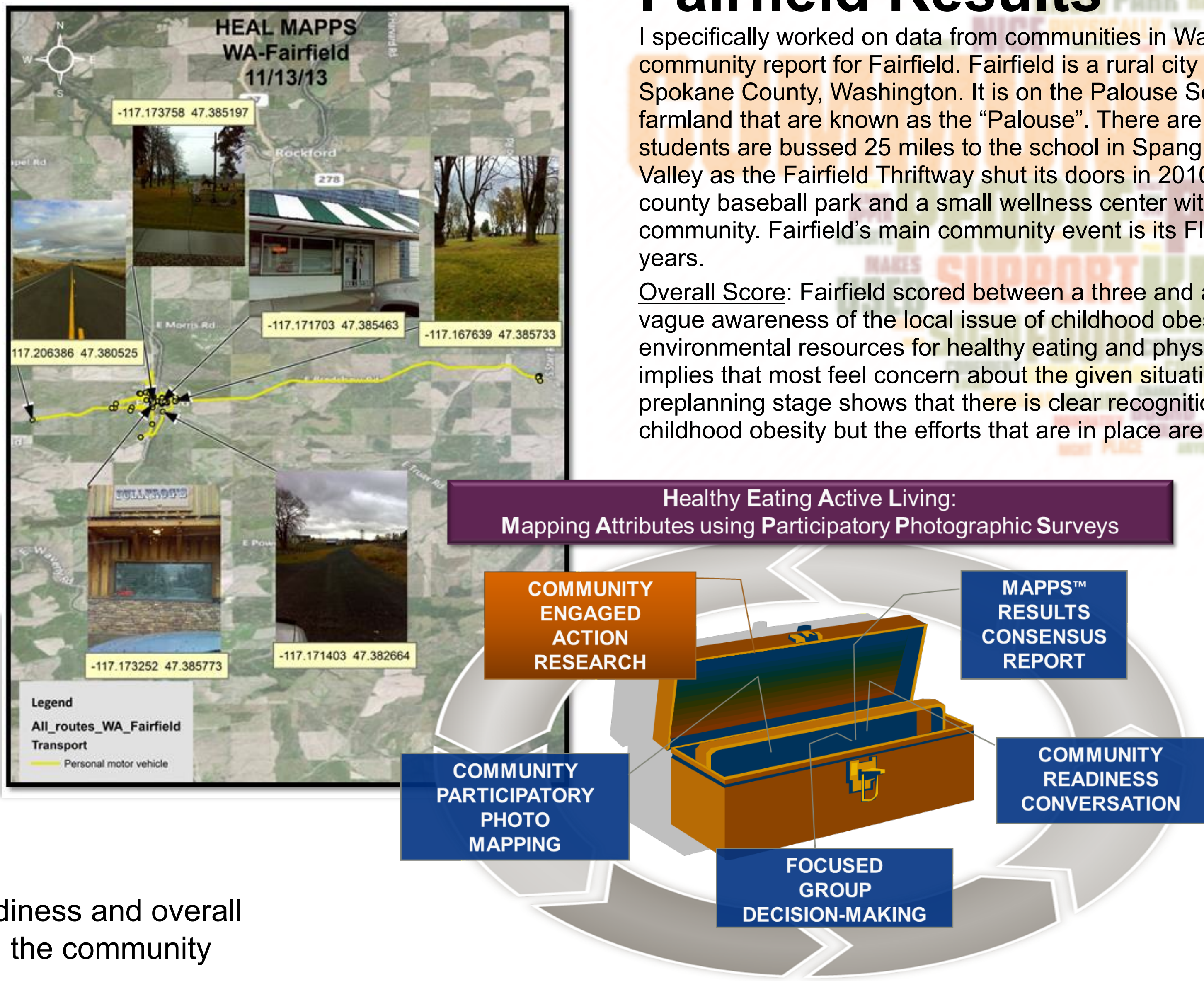


- Fairfield Community Nutrition and Physical Activity Supports:**
  - Food assistance programs
  - Some healthy food retail options
  - Outdoor trails and parks
- Fairfield Community Nutrition and Physical Activity Barriers:**
  - Lack of safe transportation
  - Pedestrian safety
  - Community aesthetics
  - Unsafe play structures
  - No grocery store
  - Absence of local food resource center bridging local food production with distribution.

This is upper and Thiel park from different angles-Upper park has tennis courts that no one uses. Upper park does not have multiple things to do for families and is harder to be active. It would be good if other things were available. There is not any signage around to tell people that it is here. Tennis court is left over from school that is gone. You see kids in Thiel park a lot. The space is not used as well as it could be.

**Acknowledgements**

I have been a type one diabetic for thirteen years. Through my own experiences and those that I have observed through my work with children with diabetes at Legacy Emmanuel Children's Hospital and Gales Creek Camp, I have developed a passion for diabetes education and pediatric endocrinology. I have become intrigued with the prevailing issue of obesity prevention research through my URAP apprenticeship and plan to continue to study the role of the nutrition and activity environment on children's weight health and behaviors. I would like to thank Dr. Deborah John and my graduate student mentor, Alinna Ghavami, for all of their time and effort on the project that has lead to my personal growth. They have worked so much with me, one on one, in order to get the most out of this experience and I am forever grateful for that. I have gotten a glimpse of what research is like at Oregon State University and research has captured my heart. I can't wait to see what the future holds in research for me as an undergraduate and beyond.



**Fairfield Results**

I specifically worked on data from communities in Washington: Connell, Makah, Fairfield, and completed a community report for Fairfield. Fairfield is a rural city located about 30 miles southeast of the City of Spokane in Spokane County, Washington. It is on the Palouse Scenic Byway, and is a part of the 208 miles of rolling hills and farmland that are known as the “Palouse”. There are no schools in Fairfield, they were torn down several years ago; students are bussed 25 miles to the school in Spangle. The nearest grocery store is 25 miles away in Spokane Valley as the Fairfield Thriftway shut its doors in 2010. Local recreational opportunities include 2 small town parks, a county baseball park and a small wellness center with a pool 10 miles south in Tekoa, the nearest neighboring community. Fairfield’s main community event is its Flag Day Celebration that has been well attended for over 100 years.

Overall Score: Fairfield scored between a three and a four, which signifies that the community readiness is between vague awareness of the local issue of childhood obesity and preplanning stages for change towards increasing environmental resources for healthy eating and physical activity resources in their community. Vague awareness implies that most feel concern about the given situation but there is no to immediate motivation for action. The preplanning stage shows that there is clear recognition that something needs to be done to address the issue of childhood obesity but the efforts that are in place are not focused or detailed.

No Awareness	Denial	Vague Awareness	Pre-planning	Preparation	Initiation	Stabilization	Expansion	Professional-ization
1	2	3	4	5	6	7	8	9

**Molalla Community Garden Field Trip Impact**

Molalla is a community that is one of the sites of the GROW research study. The community has taken the information that they generated with the GROW team regarding the community’s resources and readiness for change – they were ready! The Molalla Community Garden is the 500<sup>th</sup> school garden in Oregon. The 4H Culture Club, made up of multicultural students at the school, hosted the photographed event for their sponsors and supporters.

I valued the efforts that were put into this community project to benefit the overall health of the community members. The students that I met were looking forward to the future improvements in their community. They were excited to be a part of one of the first steps the community is taking in order to combat childhood obesity.

Pictures taken at the Molalla Community Garden Reveal Event



GROW Healthy Kids and Communities is generating rural options for weight-healthy children, families, and communities!

