

# Bicycle Tourism as a Rural Economic Development Vehicle

## Table of Contents

<b>Introduction .....</b>	<b>2</b>
<b>Literature Review .....</b>	<b>3</b>
<b>Methods.....</b>	<b>5</b>
<b>Daily Bicycle Ride .....</b>	<b>6</b>
Trip Planning .....	6
Daily Ride .....	8
<b>Community Evaluations .....</b>	<b>9</b>
<b>Interviews.....</b>	<b>10</b>
Community Member Interviews .....	10
Cyclist Interviews .....	11
<b>Log Books .....</b>	<b>12</b>
<b>Economic Estimates .....</b>	<b>12</b>
<b>Organizing Data .....</b>	<b>13</b>
<b>Data .....</b>	<b>15</b>
<b>Tourists.....</b>	<b>15</b>
Bicycle tourism definition .....	15
Bicycle tourist typology .....	16
<b>Findings.....</b>	<b>26</b>
<b>Age-Income Nexus .....</b>	<b>27</b>
Young Riders .....	27
Older Riders.....	28
Other Types.....	30
<b>REFUELING, RESTING &amp; SERVICE DISTRIBUTION .....</b>	<b>31</b>
Refueling .....	31
Resting.....	32
<b>MARKETING NETWORK.....</b>	<b>33</b>
Recommendations .....	33
Ride By .....	34
Cyclist Resources.....	34
Internet Searches .....	35
<b>RURAL CYCLING INFRASTRUCTURE.....</b>	<b>35</b>
Bicycle-only Roads.....	36
Bicycle Paths.....	37
Road Conditions .....	37
<b>Recommendations.....</b>	<b>40</b>
<b>HERITAGE JOURNEYS .....</b>	<b>41</b>
<b>EXPERIENTIAL CULTURAL RESOURCE JOURNEYS .....</b>	<b>42</b>
<b>JOURNEYS AS DESTINATION.....</b>	<b>43</b>
<b>IMPLEMENTATION APPROACH .....</b>	<b>43</b>

<b>Future Research .....</b>	<b>44</b>
<b>References .....</b>	<b>45</b>

## Bicycle Tourism as a Rural Economic Development Vehicle

### Introduction

The prevalence and escalation of risks in our country leads to an imperative among advocates and policy makers to reconsider how we respond to the global trends of industrial production. Western industrial production practices have led to scarcity of non-renewable resources, and the shadow side results of this production system – resource exhaustion, environmental toxins, and pollutants – indiscriminately threaten large portions of the human population. Petroleum, a concentrated form of energy and a non-renewable resource, fueled global economic production for over 50 years. The success of petroleum’s global economic role has profound negative effects on global ecological health through extraction, refining, and wide scale commercial use. Petroleum also wreaks havoc in global social health. Control of petroleum supply leads to competition, wars, and profound uncertainty for and destabilization of people. Fluctuations in the supply and price of oil create similar economic disturbance for nations, regions, communities, and individuals. Among other concerns brought on by oil consumption, communities struggle to manage traffic congestion and to upgrade and maintain existing roadways while supporting community health through economic activity and social welfare. In the wake of mounting risks and hazards generated from the petroleum industry, opportunities exist to reconsider U.S. oil demand by exploring sustainable transportation alternatives within the country. This project explores bicycle tourism as one strategy to adapt the U.S. transportation system to volatility in fossil fuel availability and to present options for shifting popular consumption patterns for domestic travel. As fuel prices rise, people drive less, and strategies that help communities diversify their economies assist resilient adaptations to large-scale transportation shifts.

Research on bicycle transportation generally focuses on urban environments and the ecological benefits the bicycle provides by replacing auto trips. This study of bicycle transportation outside of urban environments examines intercity bicycle tourism in rural areas and focuses on the economic and social benefits of cycling for rural communities. A dearth of both existing research on bicycle tourism in the U.S. and the effects of cycling in rural communities allows this research to explore, first, the definition of bicycle tourism and how people conduct the activity. Second, an evaluation of communities follows and examines communities’ readiness for bicycle tourism programs, their strengths, and their capacity to attract visitors. Third, this research explores interconnections between bicycle transportation and historic preservation and within opportunities for sustainable tourism and travel.

This research project integrates three distinct, interdisciplinary planning strategies – bicycle transportation, economic development, and historic preservation – and explores data that inform response to the following questions:

- What is bicycle tourism?
- What makes a community attractive to bicycle tourists?
- What makes an inviting bicycle tourism route?
- What particular facilities, services, and attractions that serve bicycle tourists contribute to the rural economy?

This study employs five primary methods to collect qualitative data. The researcher used personal experience as a bicycle tourist on a cross-country ride through rural America. She interviewed cyclists and community members along the way, photographed people, places, and infrastructure, reviewed cyclists' log books, and analyzed cyclists' daily expenditures. Methodology and Findings are presented in first person based upon the experiential nature of the research.

## Literature Review

With the Good Roads movement – begun in 1890 – underway nationally, cyclists played a fundamental role in developing roadways and highways across the nation. Invention and innovation of the bicycle in the 1880s and 1890s (the American bicycle craze) catalyzed the establishment of the League of American Wheelmen (LAW) in 1880. In the 1890s, the League effectively publicized Good Roads. Early in his description of the bicycle's evolution into a popular form of transportation, Robert Smith in *A Social History of the Bicycle* emphasizes the bicycle's biggest advantage – its speed – and disadvantage – the lack of good roads. Smith acknowledges that in the years following the development of a popularly usable bicycle, “the mania for speed and good roads would grow fantastically” (4). Smith in *A Social History* and David Herlihy in *Bicycle: A History* describe the effects of bicycle technology on road building. One accomplishment of the Good Roads movement was the establishment of a unique civil engineering position at Massachusetts Institute of Technology (MIT) – in highway construction. In addition to helping create the MIT position, Alexander Pope, a great driver of the bicycle industry in the late 19<sup>th</sup> century, petitioned the federal government to establish a highway department and study a national roadway network. Added to their portfolio of roads, cyclists also fostered the development of road maps, highway signage, and right-of-way laws.

More specific to Oregon, a 1940 Highway Commission Report singled out bicycles as the early impetus to develop a paved roadway network in the state by guiding the development of the Oregon State Highway financing system. The 1901 legislature passed a law providing for construction of bike lanes on either or both sides of all public highways. Cyclists were taxed \$1 and given a tag. This exchange was the forebear of automotive licenses, gasoline taxes, fines, and penalties – state revenues that all contributed to building Oregon's highways (Highway Commission Report 1940, 4). In fact, the gasoline tax originated in Oregon, modeling the federal gas tax that became the primary mechanism of funding the national Highway Trust Fund – the source of today's federal roadway building funds (Forman et al. 2003, 30; Kay 1997, 164).

Apart from early infrastructure developments, touring cyclists contributed notably to rural economies. Steam trains replaced stagecoach lines, and as a result, the towns that benefitted from the coaches began to fail. With the new fervor for cycling, these same towns experienced a resurgence of economic activity from cyclists in need of lodging and food. The mass influence of cyclists in the country led the LAW to develop a list of bike-friendly businesses for its members. Participating businesses benefitted from cyclists patronizing their establishments, and the cyclists benefitted from discounts these businesses gave to card-carrying LAW members (Smith 1972).

After nearly seventy years of minimal activity and little innovation in the U.S. regarding bicycle technology, the bicycle regained popularity in the 1970s with notable connections to rural communities. The signature event in Iowa, *The Register's* Annual Great Bicycle Ride Across Iowa (RAGBRAI), directs 10,000 riders annually on a week-long ride through different rural communities in the state. Close on the heels of RAGBRAI, Adventure Cycling Association established the first cross country cycling route, the TransAmerica Bicycle Trail (TransAm). In the inaugural 1976 ride to celebrate the U.S. Bicentennial, 4,000 riders completed the TransAm. Adventure Cycling Association continued to develop long-distance cycling trails across the U.S. and succeeded in 1982 in cooperation with the Association of American State Highway Officials (AASHTO) to designate two multi-state highway segments as U.S. Bicycle Routes. Their efforts to establish a nationwide network of bicycle trails continue today with specific attention devoted to the connection between bicycle tourism and rural economic development. Numerous other cycling clubs and groups have followed these models. In 1987, Cycle Oregon formed a partnership with the Oregon Tourism Commission and *The Oregonian* to link bicycle tourism with rural economic development. Cycle Oregon operates its annual rides while also advocating for cycling at the state level. The organization's efforts in collaboration with others, led to establishment of the nation's first state Scenic Bikeway program in 2009.

Despite the activity of cycling organizations to pair rural economic development and cycling, few studies exist that examine the relationship between bicycle tourism and rural economic development. Studies of bicycle tourism come mainly from Australasia and Western Europe with the most notable studies focused in New Zealand, the United Kingdom, and Denmark. (Ritchie 1998; Lumsdon 2000; Simonsen & Jorgensen) One New Zealand study (Ritchie 1998) explores bicycle-touring preferences of roadways, presence of other people, and types of services and compensatory expenses. In the U.S., the Rails-to-Trails Conservancy conducted surveys of specific bicycle trails to measure visitor use patterns and economic revenues for communities (*Ghost Town Trail* 2009; *Trail User Surveys and Economic Impact* 2009).

Studies of the economic effects of tourism in rural communities are likewise slim. One anthology collects studies of a variety of rural tourism programs, but, again, the U.S. has no presence in this collection (Hall & Mitchell 2005). While research of U.S. rural community economies exist, planners remain uncertain about best practices or strategies to economically revitalize these communities. Researchers have determined that rural community and economic development involves a complex web of relationships among markets, resources,

society, culture, rules, institutions, decision-making, and space. This vast field of influence makes challenging measurements of community and economic development (Hawkins 2010; Lindberg 2010; Humstone 2010; Agarwal et al. 2009; Shaffer et al 2006).

Despite the unwieldy measurement options for rural economies, the connection between historic preservation and economic development is clear and plentifully studied. Donovan Rypkema, preservation economist, details the benefits of old buildings for thriving local economies, place making and identity, and fostering an attractive authenticity that transforms places into destinations (Rypkema 1991, 1996, 2003). Historic resources figure prominently in discussions of cultural and heritage tourism. A review of *Forum Journal*, the journal of the National Trust for Historic Preservation, evidences a variety of these topics from the cover alone: *Fleeting Landscapes and the Challenge for Historic Preservation* (May/June 1994), *New Directions in Heritage Tourism* (Summer 1999), *Historic Preservation and Transportation* (Summer 2000), *Investing in Our Rural Heritage* (Summer 2006), and *Heritage Corridors: Pathways to History* (Fall 2007). To assist communities in optimizing economic synergy with tourism and historic resources, the National Trust established a permanent Heritage Tourism Program and developed – in 1993 – a primer called *Getting Started in Heritage Tourism*. The primer offers practical guidelines to develop place-based experiences that focus on the built environment and cultural landscapes of small towns and rural areas.

While still an emerging field, applications of preservation concepts and practices to historic roadways are beginning to receive more notice. A field of study conceptualized in the U.S., historic roadway preservation attracts international scholars as well and includes America's National Scenic Byways program and is supported by two seminal texts on the subject, *Saving Historic Roads, Design and Policy Guidelines* and *From Milestones to Mile-Markers, Understanding Historic Roads*. Among historic road preservationists, heritage tourism specialists, bicycle advocates and touring organizations, rural tourism specialists, and rural economic development planners, none has connected bicycle tourism along historic roadways as a rural economic development strategy.

## Methods

The TransAm, which I selected as my study area, is the oldest established cross-country bicycle touring route in the U.S., follows many scenic byways, and passes through numerous towns and sites of historical interest. I wanted a better understanding of popular definitions of 'bicycle tourism' in these environments. Lacking a concrete, operationalized definition, I used the activity itself to explore how other participants understand the term.

This exploratory study employs heuristic or interpretive methods deployed within a framework of reflexive modernization (Beck 1992; Beck et al. 1994; Kaplan 1993; Rein and Schön 1993) to develop findings based on researcher observation and experience. Interpretive methods allow the researcher to form naïve hypotheses based on preliminary research and personal experience that are then revised and refined through further research and data collecting. The researcher then uses narrative to tell a story supported by the collected data. The method

allows that the subjectivity of the researcher renders the study and results impossible to replicate; however, the benefit of direct observation of an activity provides valuable information. The framework operates on the assumption that there is no singular, discoverable truth. Rather, the researcher assumes a socially constructed reality in which truth is experienced at a particular place and a particular time from a particular perspective. The findings, consequently, are based on this particular socially constructed perspective, one that is not completely relative because the activity and norms guiding interpretation limit the number of legitimate interpretations. In the absence of a positivist context, findings are intended to guide projects rather than provide universal evaluation metrics.

A qualitative research project, this study employs five primary methods:

1. Field study of bicycle tourism during a 3,500-mile, cross-country solo bicycle ride from Eugene, OR, to Washington, DC,
2. Interviews with approximately 50 cyclists encountered along the TransAmerica Bicycle Trail,
3. Interviews with approximately 50 community members and business owners in towns along the TransAmerica Bicycle Trail,
4. Review of cyclists' log books in businesses along the TransAmerica Bicycle Trail in eastern Colorado and in Golden City, Missouri, and
5. Analysis of cyclist expenditures to arrive at typical daily expense totals.

Interviews were conversational and conducted in an open-ended question format.

Photographs document many interviewees and field observations of communities, the bicycle touring route, and roadway infrastructure.

## Daily Bicycle Ride

### Trip Planning

As a researcher, I was interested in all phases and aspects of the trip. Why do people choose to undertake journeys of this kind? How do they get ready for it? How long does it take? What are the important considerations? Where do they find information? What resources do they use? While my research examines exchanges people make in the context of a particular activity, the activity does not exist in a vacuum. Already-established pathways of infrastructure and information guide the activity to particular locations. While I had specific questions to ask during the process, I let existing resources guide me from the start.

My first bicycle tour (summer 2009) originated in Eugene, OR, and took me south on the Pacific coast along US 101 in Oregon and Highway 1 in California to San Francisco. I particularly enjoyed exploring the rural communities on my journey and staying at historic hotels. My most memorable experience came my last night on the road in Tomales, CA, a town with a population of 210. The only guest in the historic hotel that night, I had an engaging conversation with the innkeeper, used the wifi, and watched a movie after the town's businesses closed at 6 p.m.

The memory of my accomplishment of that tour fostered the leap to ride my bicycle to the national 2010 Preserving the Historic Road conference in Washington, DC. I already had a positive bicycle touring experience, and although the ride to Washington would cover considerably greater distance, it would take me through parts of the country I had never traveled by bicycle or otherwise.

During my first tour, I used Adventure Cycling Association bicycle touring maps and came to rely on the valuable information that they offer touring cyclists. The other touring books I carried with me received relatively little use. I decided to travel an established Adventure Cycling route. In a review of their routes, the TransAmerica Bicycle Trail went through Eugene and ended in Yorktown, VA, about two hundred miles south of Washington. Another Adventure Cycling route, Tidewater—Potomac, followed a path around Chesapeake Bay. I determined to follow the TransAm to Yorktown and then connect with the Tidewater—Potomac route into Washington. Following these routes would remove considerable guesswork and uncertainty regarding my route, its conditions, and the available services.

Preparation for a tour of this scale made me aware of training and conditioning involved in physically preparing for such an endurance activity, a need for equipment preparation, allocating time for planning and undertaking the trip, securing funding, and identifying resources available for cyclists. I chose to study the effect of bicycle tourism on rural economies during the ride. This research mission required sufficient funding to permit expenditures in the communities. Philosophically, asking community members about the economic benefit of cycling in their communities defeated the purpose unless I also modeled what I hypothesized was the case: when cyclists spend at least one night on tour, their average spending per day increases significantly. From research in tourism literature and some cycling organizations, it seemed that cyclists would spend approximately \$98 per day. Reflecting on my first tour to San Francisco, I found this a reasonable expense guideline to plan my budget.

I planned 80 days from when I left Eugene to my arrival in Washington. Recommended travel times to complete the entire 4,200-mile TransAm route use a measure of 50 miles per day for 90 days, which allows for some rest days. I would not be traveling the entire route (it begins in Astoria, OR), but I would ride extra miles at the end of the trip to get from Yorktown to Washington. I estimated my trip would cover 4,000 miles. I knew from my first tour that I could cover more than 50 miles per day, and I would need to cover more than 50 miles per day if I expected to arrive in Washington in 80 days. Extra mileage per day would allow me to take a rest day from time to time and give me a contingency for unexpected occurrences. My academic schedule allowed a summer break of 90 days, which was sufficient time to allow for an 80-day bicycle tour. My work environment enabled me to use the trip as a training and research opportunity for the activities I would undertake once I returned. Between research for my academic program and research for work, this trip became field research and consequently did not require me to take time away from work. Using 80 days and \$100 per day, I budgeted \$8000 as a fundraising target.

Early in my planning process for the trip, I contacted Adventure Cycling. My activities supported one of Adventure Cycling's planned projects for the summer to deliver window decals to businesses along the TransAm. Our two projects matched well, and I received 35 decals to distribute during my ride. The decals would provide an opportunity to engage business owners in a discussion about bicycle tourists, and decal delivery provided Adventure Cycling with valuable face-to-face interaction and relationship building with businesses along this touring route.

With a route and timeline determined, a fundraising goal in place, and an outreach plan developed, the remainder of my trip planning involved fundraising and logistics. The week before I left on the trip, I assembled my gear (Eugene has a number of outdoor gear shops, bike shops, and a thriving bicycle culture which also includes rack manufacturers; I had resources I needed in easy access). I began training on my bicycle in January for a late June departure. For fundraising, I created partnerships, applied for fellowships and awards, requested travel funds, discussed my trip with people and organizations, and asked for and secured financial support.

I needed a communications base, so I set up a website, [enroutetransport.org](http://enroutetransport.org), that enabled people to track my activities and enabled me to readily communicate with others. The website included a map where I could mark my progress and record the towns where I stopped. The site also included a donation page. I wasn't sure if I would raise enough money for the trip to DC, and this page made it convenient for people to donate if they chose. I used a daily updates page to blog about my experiences. Blog entries also provided a way for me to immediately share my research: who I talked to, the stories they told me, and pictures of them and the communities. A gallery page also collected the images, making them browsable without text. I included a mailbox on the site for people to contact me via email or postal mail. I took a laptop and a smartphone to facilitate communication and documentation.

### Daily Ride

Geared up and pedaling, I kept my camera and phone easily accessible. Most of the time I turned off my phone because the lack of cell service in most places drained the battery quickly. I turned it on when I stopped somewhere, particularly in towns. Easy access to my camera allowed me to take pictures of people or landscapes quickly, serving as a visual record. I also kept some cards with my contact information handy. Generally, it's too much effort to even open a pannier while on the road, so having small, necessary items accessible greatly enhanced easy communication. A little less accessible but still relatively handy, I had a small 'go bag' attached to my rack. This bag contained my wallet, my day's supply of TransAmerica Bicycle Trail decals, a couple of energy gels and an energy bar, and my glasses. My map was within easy reach in a shirt pocket on my back. The Adventure Cycling maps are printed on plastic to make them weatherproof during rain and durable with high use. I found them quite durable against sweat too and very handy when I needed to consult them for route guidance while in motion.

A typical day began early, in the dark. I would often write my blog post at this time. If I had internet access, I would also post before packing. If I had to travel to internet, I would post



once I found a connection. After writing, I would pack my panniers, dress for the day's riding, resupply my go bag, have a quick breakfast, and check my maps. I followed the trail on the maps without much deviation. Each map section covers approximately 25 miles, and I needed to average three map sections per day if I wanted to arrive in D.C. on time. Early in my ride I learned that it was easier for me to do big climbs early in the day, so I would also check the elevation profile of the route to make sure I didn't end the day on a major climb. I would also count the number of passes I would climb in one day to gauge where and when I would need to refuel. I planned major refueling stops for locations with the full service and library map icons because I knew I could find food and wifi in these locations. Often the towns or refuel stops did not appear in 25-mile increments. I would adjust my fuel intake and stops to match available services, but generally I would stop for a major break only twice a day, the second of which would most often be my rest stop for the night. Full service towns offer: restaurant, motel/hotel, post office, grocery store, and service stations (gas station stores). Every full service town where I stayed offered wifi. If wifi wasn't available at my lodging, it was often available at the library (also a map icon separate from full service towns). As I entered further into hot and humid climates, full service towns or independent motel/hotel icons were the only assurance I had of air-conditioned lodging. During the day, I could ride from service station to service station to escape the heat, but I chose air-conditioned lodging to restore my energy for the next day of riding.

I usually started riding between eight and nine a.m., on the western portions of my route and between six and eight a.m. from Pueblo, CO, east. I started later than most cyclists I encountered because of the time in the morning I dedicated to blogging. Once riding, I observed the scenery, traffic, and road conditions. I stopped to take pictures and talk to people.

### Community Evaluations

Most communities along the TransAm have populations between 600 and 100 people with an occasional town over 1,000 people and rarely towns with 7,000 people or more. These towns' size provided few to no choices regarding services. Usually there was one place to stay, one or two places to eat, and one place to get supplies. Businesses do not stay open late in these small towns, so I made purchases earlier rather than later in the day and planned ahead during weekend travel when services were sometimes not available at all.

As I entered a town, I would evaluate it:

- Why do people live here?
- What do they do for fun?
- Who are they?
- Is there identifiable industry?
- What kinds of shops, stores, or restaurants are here?
- Are there any historic resources or attractions?
- How vital is this town?
- How are the existing businesses supported?
- How bike-friendly is this community?

- What in this community is bike-friendly?

If there were particular elements of the community that caught my attention, I would take a picture or make a mental note. Sometimes I would enter a town with a clear mission such as “Find a coffee shop with wifi,” “Locate lodging,” or a higher-level, verbless imperative, “Food.” If I entered a town with that kind of focus, I would explore after taking care of my immediate needs. In the smaller towns, I could easily find what I needed simply by riding through. In larger towns where I hadn’t arranged to meet anyone, I used the Adventure Cycling maps for lodging recommendations and relied upon a Google search on my phone to locate it. If I needed direction beyond lodging, I would ask for recommendations at the motel front desk.

## Interviews

Interviews were collected from two different groups encountered along the TransAmerica Bicycle Trail: cyclists and community members. I interviewed approximately 100 people to capture a diversity of perspectives that also included non-bicycling travelers. I selected the TransAm to conduct interviews because of its status as the oldest established cross-country cycling route in the U.S., known participation on the route, and directness from my origin to destination, all of which ensured an available sample both of cyclists on tours and of community members within the project’s interview timeframe.

## Community Member Interviews

As a cyclist wanting to speak with local residents, the few open businesses facilitated easy conversation with locals, and purchasing services or supplies created a conversational opportunity. Interviewed community members, most often proprietors at lodging establishments, also included employees at local restaurants and convenience stores. Questions asked of community members include:

- What do you like about living in this community?
- How long have you lived here?
- Is there anything cyclists can do to be better guests at your business or in your community?
- What do you think your community needs to be economically healthy?

These conversations often included the presentation of a TransAm decal. When I purchased lodging, I would complete a transaction and then ask whoever staffed the desk if they received much business from cyclists, and if so, what kind of guests they were and if we as cyclists could do anything to be better guests. Then I would mention that I was delivering window decals to businesses along the TransAmerica Bicycle Trail to signal to cyclists that this was a bicycle-friendly business and to alert drivers that they were on an established bicycle trail. I would then ask if the business would be interested in posting a decal.

I would also encounter community members at cafes and convenience store parking lots. Often, in these locations, community members would begin conversations with me. If I found a restaurant, café, or library particularly friendly toward cyclists, I would have the window decal conversation with them. I had 35 decals to deliver and a list of businesses (lodging) and libraries along the route that were likely matches with decals. I focused delivering decals to

businesses on the list; however, I occasionally gave a decal to a business that was not on the list. Adventure Cycling provided both the list and the window decals, and I recorded the locations where I delivered decals and returned the list to Adventure Cycling.

### Cyclist Interviews

Interviewed cyclists most often included people I met while riding, mostly people heading the opposite direction as I. Questions asked of cyclists included:

- How many miles do you typically ride per day?
- How much money do you spend per day and what do you spend it on?
- Is this your first tour and/or how frequently do you engage in this kind of activity?
- What does 'bicycle touring' mean to you, or how would you define it?
- What kind of road and traffic conditions do you prefer when riding?
- What kind of resources do you use for route planning/navigation?
- What is your work at home?
- What motivated you to undertake this ride?

Interviews with cyclists generally occurred on the road although I did have a few conversations at campgrounds, convenience stores, and restaurants. Touring cyclists are easy to identify by their head to toe attire, and loaded bicycles parked outside of businesses are the first indicator that uniquely clad individuals may be found inside. Touring cyclists in motion are also distinguishable from other cyclists primarily in how their bikes are loaded. Except in areas of high recreational cycling (the reservoir near Silverthorne, Frisco, and Breckenridge, Colorado, was a notable example of high recreational cycling presence), I encountered few non-touring cyclists. If recreational cyclists were interested in talking, I would speak with them. There were very few non-touring recreational cyclists that I encountered, and of those few all but one were at one recreational facility in Colorado.

For cyclists heading the opposite direction, not every cyclist or group of cyclists would want to stop to talk, so I would make quick observations of the people traveling including gender, numbers, general age, and quantity of gear. As we approached one another, I would assess if I had interest in stopping. If I had just stopped and felt a need to press on, I would not think about stopping to talk. Sometimes other cyclists wanted to stop and talk. For cyclists who seemed interested in stopping because they were slowing down and looking my direction or slowing and waving or on very rare occasion calling out, we would have a conversation on one side of the road, most often I would cross the road and stop facing in front of the cyclist who signaled. Sometimes the conversations were brief, other times long. I rarely asked people their age or income but attempted to glean that information from appearance and information relating to work. Much of the time, I was interested in talking to cyclists. It was easiest to send the signals to stop if one or the other of us was already stopped. If that were the case, the moving cyclist would cross the road to where the stopped cyclist stood. I learned from a cyclist in Missoula, MT, who leads group rides that stopping on the road in this way is a breach of etiquette. Unfortunately, many roads did not allow options for getting further off the road. Neither I nor other cyclists would stop while descending quickly. About half the climbing

cyclists would stop to talk. Once, a solo cyclist made a point of crossing the road well ahead of me on a climb as I was descending, which clarified for me that I would be stopping.

For cyclists heading the same direction, we would have longer conversations as we pedaled, but I did not often encounter cyclists traveling the same direction. All cyclists headed the same direction with whom I rode I met while stopped. We engaged in conversation during the stop and then continued riding together. I met one couple numerous times even though we rode at fairly different speeds. Eventually we exchanged email addresses and kept in touch during the ride.

### *Interview Documentation*

Because of the extremely conversational nature of my interactions with interviewees and the limitations created by interviewing while in motion, I did not take notes during interviews. Details of interactions with cyclists and community members were recorded in photographs, in summary notes/narrative, or frequently as a combination of the two on the research trip blog, [enroutetransport.org](http://enroutetransport.org). Results are reported in summary narrative. My camera was the most accessible documentation tool I had apart from my memory, and I used it mostly in my interactions with cyclists. Some cyclists documented the people they encountered with photographs, and it was natural to exchange permission to photograph one another. Other times I asked directly if the cyclist or community member would let me photograph her or him. Sometimes the conversation would be over before I had a chance to ask about a photograph, and I also did not photograph people I passed on the road.

### **Log Books**

Log books at businesses in communities along the TransAmerica Bicycle Trail collect and contain information from and about bicycle tourists (names, home location, points of origin and destination, direction of travel, number in party, observations, recommendations, cautions, and feelings). Businesses where log books are available encourage cyclists to sign in. I would sign the books and survey previous entries. Many people I encountered during my trip also signed the log books.

### **Economic Estimates**

Economic estimates came from daily expense amounts collected during interviews, daily expense figures provided by organizations measuring economic impact from cyclists staying overnight, and from a detailed personal expense log recorded during the research trip. These different sources are summarized as a daily expenditure range for people traveling by bicycle for more than one night.

Originally, I planned to survey cyclists from recreational-based member cycling organizations. As I developed the survey, I realized that I did not know enough about bicycle touring in the U.S. and no research existed about this particular market to write a survey that would accurately distinguish between recreational day trips of a non-touring nature and those that fit a definition of "bicycle tourism." Studies conducted of the Ghost Town and Town Trails in Pennsylvania provide some guidance; however, the geographic specificity and trail character challenge applying touring activities that could occur on any road anywhere in the nation for

any duration (Campos 2008; Tomes & Knoch 2009). Consequently, one aspect of my research became a study of how touring cyclists in the U.S. define bicycle tourism while simultaneously exploring how touring cyclists spend money and what they spend it on.

I did not distinguish between cyclists who travel with or without vehicle support; however, none of the cyclists interviewed who gave daily expenditure amounts traveled with vehicular support.

I recorded personal daily expenditure information in a spreadsheet in real time.

### Organizing Data

Throughout field research, I collected and recorded data chronologically. I recorded data in a journal and electronically. Of the data recorded electronically, I used photographs, Google maps, and narrative posted online.

With hardcopy data collection, I counted touring cyclists I passed but to whom I did not stop to talk. I made notes of these counts along with location and observations related to age and gender in a journal. I would make this observation and record it in the journal later. Eventually, I stopped this record-keeping method with the last date recorded July 21, 2010. Stopping this method derived in part from focusing my energy on what I could reasonably accomplish in one day. I also encountered fewer and fewer other touring cyclists with whom I did not engage except one day in Missouri when a number of different touring groups passed me going the opposite direction. Fewer cyclists would begin journeys late in the summer season. Consequently, I passed most of the riders headed west during the earlier part of my journey.

For electronic data collection, I used my blog, [enroutetransport.org](http://enroutetransport.org), to organize my photographs, progress on the Google map, and stories. Because of the public nature of the blog, this information became immediately available for people to access.

For photographs, I took pictures of the people I met and places I saw. The blog evolved over time, and I responded to reader feedback. The blog was an opportunity for me to share the visual richness of the bicycle touring experience while also recording for immediate reference observations about the people, communities, and cyclists I encountered.

I learned that I had to see the experience for people who were not there, and I used my camera as eyes for my audience. Generally, I did not have a particular theme or organizing narrative for each day, but I would take pictures as the day unfolded. I took pictures of the road, scenery, people, towns, food, things that caught my eye. In some ways, I was out on a treasure hunt, and the pictures narrated my discoveries. They also organized my recollections of a day's ride because I did not and notes. Cycling and real-time writing are mutually exclusive activities. My audience wanted to see me also, not just what I saw. I realize now that my audience wasn't with me inside my head, which is how I viewed imaging the ride, but they were riding along with me. Electronically, I definitely had company, but in reality, I rode solo and taking pictures

of myself proved challenging. Yet, learning I needed to ask people to photograph me became another opportunity to engage.

Along with photographs, I recorded real time daily updates on the trip map on my site. This linked Google map enabled me to mark my location and record short observations of the places where I stopped. My audience could see how far I'd pedaled on a particular day and the daily post would tell more detailed stories from previous days. The map also allowed me to mark the route in advance, so people could anticipate my future destinations.

Fairly early in my ride, daily updates lagged with real time and recorded a day and then two days after the events and observations. I did not always have a clear idea what I would write about on a given day even as it wound down. Reflection allowed me to consider how I would frame my experience. I wanted to record conversations in as much detail as possible and yet creating a readable story necessitated some artistic license. Reflecting a day or two on my experiences helped me sift through the massive amount of information and details to settle on the salient points from a day or conversation. Also, once I fell behind in my storytelling, I couldn't get caught up to the present partly because rest days were preceded by a backlog of untold stories and unrecorded data.

Riding all day left me with little time and energy to write, but I soon understood that the research project I undertook was a riding and writing journey. During my daily ride, I took pictures and made observations. In the evenings I prepared my story by updating the Google map and reviewing my pictures for the subject-day story. If wifi were not available, then I would tether my phone to my computer and accomplish this Google map update. I would write notes about the pictures as I looked through them, evaluate how many I could use for a post, and then select which ones illustrated my experience or important data of the day. I cropped and sized the selected photographs and saved them in folders named by my start and stop towns (i.e. White Bird to Twin Bridges). I would sleep for a bit and then wake three to four hours before I intended to depart in the morning and write. Each blog post took shape from a blank Word document, the list of photographs I made in my journal the night before, and my personal recall capacity.

I greatly appreciated when lodging provided wifi because the next part of the process could happen seamlessly. If I were not in wifi range, I would either walk or ride to a wifi spot (generally outside the library, lodging office, or at a restaurant) if one existed nearby. If the community had no wifi, I would pack up and ride to the next available wifi location. Once connected to the Internet, I would paste my story onto my blog, insert pictures, check the layout of images and text, correct anything that wasn't working properly, and then publish it. Following publication, I would pack quickly and return to the road. Posting an update always took longer than I anticipated, and the panic to get moving in the morning meant that I didn't necessarily reread what I wrote before publishing.

The blog's chronological and spatial organization often obscures research themes. This document organizes the research recorded in my blog thematically. Several activities helped me review and topically organize the research:

- Responding to questions people asked about my trip.
- Presenting to different audiences about my trip, experiences, and research.
- Writing about the project for different audiences.
- Discussing related and tangentially related topics with other people clarified or illuminated applicability of findings or focused my theoretical approach.
- Applying what I learned to problems or other projects.
- Synthesizing my project experience with additional research.

Through these different interactional, dialogic, and rhetorical opportunities, I articulated my experience for particular audiences. Each audience has a specific kind of information that is most meaningful for their individual context. Implicit in the research project are three categories of findings that also correspond with the different interests of my audiences. People wanted to know:

- How does this research apply to me as a cyclist?
- What does this research mean for my community?
- How does this research apply to planning?

To answer one of these questions, I had to answer all three. Through the process of articulating responses to my audiences, I developed three thematic, nested and interrelated categories: riders, routes, and destinations.

## Data

The following data present and describe frequencies of and expenditures generated by bicycle tourism through a description of the people who go on cycling tours, the services and infrastructure they use, their spending patterns, and types of cycling they do in rural areas.

## Tourists

From the perspective of someone undertaking a self-guided road cycling tour, I explore the kinds of people who engage in bicycle tourism. First, I consider how researchers define bicycle tourism and explore how cyclists define bicycle tourism. Second, I describe a typology of bicycle tourists based on people I encountered during field research and their travel characteristics. The specific self-selected sample on the TransAm caused nearly all interviewed cyclists to present as self-guided and self-supported road bicycle travelers like me. Third, I discuss bicycle tourist spending patterns, and finally, I conclude with a description of three types of cycling tourism people undertake in rural areas.

## Bicycle tourism definition

A need exists for a commonly acceptable definition bicycle tourism to assist comparable measurements for participation and appropriately-sized infrastructure and services to meet

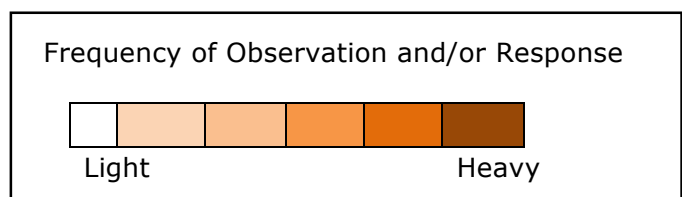
demand. Researchers disagree on elements to be included in an operationalized definition for the activity, yet they acknowledge that different definitions will be suitable in different locations. Matthew Lamont (2009) posits an all-encompassing definition of bicycle tourism that includes day and overnight trips, minimum distance and duration, competition, recreation, leisure, vacation, and active participation in and passive observation of cycling. Lamont's definition, which synthesizes other definitions in the literature, gave me a starting place to explore how people participating in the activity in the U.S. define it. Through my discussions with cyclists, I gained a better sense of which aspects of Lamont's definition apply. For an exploratory study, the value of learning how people define bicycle tourism comes later – in developing assessments of the affects on economic growth and community livability attributable to bicycle tourism – however using the definition helps guide the exploratory inquiry.

Interviewees gave no common answer for the definition of “bicycle tour.” Generally, they perceive bicycle touring as an activity that involves substantial commitment and long duration. Nearly all cyclists interviewed planned and/or completed hundreds or thousands of miles on their tour and did not consider training or preparatory rides, particularly those that included an overnight, ‘tours.’ Weekend rides that included one overnight, especially, did not rise to the level of ‘touring’ in minds of the interviewees.<sup>1</sup> Most interviewees identified the tour they were on as their first bicycle tour.

The vague definitions of bicycle touring offered by interviewees suggest that focus on what touring cyclists do and how they conduct the activity reveals a clearer picture of who does what and what kind of bicycle tourism definition might fit best with touring in rural America.

### Bicycle tourist typology

Touring cyclists exhibit some distinct characteristics related to who they are, how they travel, and what kinds of roadway conditions they prefer. Throughout this section, I use color to describe frequency. Frequency measures the relative number of interviewee responses, observations, or other data collected since not all data was gathered from a single sample nor numerically tabulated.



### Who Are They?

#### DEMOGRAPHICS

<sup>1</sup> As a researcher, I counted any overnight trip (or a day trip of at least four hours or 50 miles from home) with cycling as its primary mode of transportation as a bicycle tour. I was particularly interested in cycling trips that included an overnight. Yet, in conversation with interviewees, I realized that I, too, did not generally consider short trips from home that included an overnight a “tour.”



Much of the demographic information collected from cyclists derived from observations rather than direct questions. Cyclists responded readily to “Where are you from?” and after some conversation to frame the question relevantly, “What do you do for work?” or “What’s your profession?” These latter two questions addressed income. Age was mostly observed although younger cyclists were more willing and curious to discuss age.

On the whole, more men conduct bicycle tours than women, and

**Table 1: Bicycle Tourist Age and Gender Frequency**

		Age in Years					
		Under 16	16-25	26-40	41-55	56-65	Over 65
Gender	Men						
	Women						

considerably more older men engage in the activity than older women. Bicycle tourists journey from all over the U.S. and internationally to engage in the activity. Many cyclists, about three-quarters of those interviewed, are employed in professions, and approximately one-quarter of interviewed touring cyclists were students, transitioning their work, or retired.

**MOTIVATION, RESOURCES, & TRIP TYPE**

Cyclists have many different reasons for embarking on a tour. The kind of planning they do and the types of resources they use to support that planning and the kind of trip they take vary.

Motivations:

Interviewees expressed a variety of reasons for undertaking a bicycle tour. Most cyclists expressed singular or unique, circumstantial motivations.<sup>2</sup> While they enjoyed the opportunity to recreate and the sense of adventure generated from cycling, recreational motivations remained secondary. The main reasons cyclists reported for undertaking their tour included:

- Lifelong dream,
- Complete an undertaking with grand sense of accomplishment,
- Family-related opportunity,
- Health reasons,
- Career change,
- Relational change,
- Commemoration or Celebration, and
- Recreation and/or Adventure.

Resources:

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<sup>2</sup> My motivations were unique among respondents. No other cyclists were conducting research or studying cycling.

Most interviewees actively planned their trips six months to a year in advance, including physical training, gear outfitting, route planning, fundraising, and scheduling. Some interviewees wanted to bicycle tour for years or nearly their entire lives before having an opportunity to actually take the tour. Others made more spontaneous decisions to tour.

Two categories of resources assisted interviewees in planning and conducting their tours.

#### Planning Resources

- Online sites and reviews
- Print resources: books, brochures, and articles
- Blogs
- Other cyclists

#### Touring Resources

- Adventure Cycling Association bicycle touring maps
- Crazyguyonabike.com blog information
- Government issued bicycle maps (i.e. State, County, Department of Transportation)
- Road maps

#### Kind of Trip:

Interviewees participated in two kinds of trips: do-it-yourself trips assisted in varying degrees by developed or preexisting resources or organized tours where participants paid a group leader or a commercial enterprise that managed planning, logistics, and other details of the ride.

- Self-guided
  - Developed resource guides (touring maps, touring guidebooks)
  - Combination of resources
  - Cause

People traveling in this category comprise most of the cyclists who I interviewed and observed. They traveled solo, in couples, and in larger groups. Different groups will also ride together for periods of time.<sup>3</sup> Solo cyclists were mostly males. Couples were mostly male-female teams with some male-male teams. Groups larger than two were a majority male if not entirely male comprised.

- Organized or guided groups
  - Cause rides
  - Commercial trips
  - Interest groups

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<sup>3</sup> At a coffee shop in Saratoga, WY, I met a group that merged three independent groups that included a solo male, two males, and a female riding with two males. I rode with others on occasion, solo men and a couple several times. It would be difficult to distinguish merged groups except by nuances in group composition, touring style, and/or gear or by asking.

Organized or guided groups were distinguishable by the number of cyclists encountered in an area traveling with a minimal amount of gear. I talked to very few people participating in these larger group rides, and I observed only two of these groups. Most participants were men in the 41-65 age range. From conversation with touring guides and innkeepers, I learned that these groups travel with vehicle support and do not carry all of their traveling gear on bicycle, only what they need for a day’s ride.<sup>4</sup>

**SPECIALIZATION**

Interviewed cyclists comprise five general categories of cyclist with some overlap. In order to capture the kind of cycling people do regularly and to rule out the singular circumstances that lead people to undertake a long-distance cycling tour, frequency of response does not capture respondents as “touring” unless they mentioned touring other times as part of their cycling experience. Touring cyclists, particularly, exhibit characteristics of one or more of the other categories. To go along with the specialization in each of these categories, most interviewed touring cyclists own three or fewer bicycles – usually a combination of road bike, mountain bike, touring bike, or commuter/hybrid bike and have only basic bicycle maintenance experience (can fix a flat).

<b>Non-Cyclist</b>	<b>Recreation</b>	<b>Utility</b>	<b>Touring</b>	<b>Racing</b>
A few interviewees do not ride bicycles regularly outside of the context for this tour.	Many interviewees ride bicycles for recreation.	Many interviewees ride bicycles for commuting.	Some interviewees tour annually, with regular frequency, or occasionally.  A few interviewees previously raced but now tour.	A few interviewees ride bicycles to race.  Racing cyclists do not tend to tour with loaded bicycles but travel with support vehicles instead.

**What Do They Do?**

**DISTANCE & DURATION**

In the U.S., established long-distance cycling routes crisscross the country north-south and east-west. Like long-distance hiking trails such as the Appalachian Trail, Continental Divide Trail, and

<sup>4</sup> Not all commercial groups use vehicle support, but I did not encounter any people during this trip who could speak to organized/guided touring without vehicle support.

Pacific Crest Trail, these cycling routes cover significant terrain. They also intersect with other cycling routes, enabling riders to link routes together. For example, riding the 10,000-mile circuit of cycling routes that circumnavigate the U.S. is a popular route combination.

Terrain and community distribution affect how much time cyclists spend on the road per day and per trip. The TransAm covers 4,200 miles, rises to over 11,000', and crosses the Continental Divide eleven times from start to finish (Astoria, OR to Yorktown, VA). For the average touring cyclist, Adventure Cycling recommends 90 days to complete the route. At 90 days, this sets cyclists on a 50-miles-per-day pace and allows for some rest days (days cyclists do not ride). Not every travel day will comprise a neat, 50-mile segment because some areas of the route do not have towns or services at such regular intervals. Not all cyclists travel from town to town or services to services; however, most touring cyclists do. Topography can also affect daily mileages.<sup>5</sup> Despite variation based on topography, distance between communities and services, and total trip mileage, a 50-miles-per-day pace can be used to estimate most tours, which typically last from 10 days to three months.

**Most cyclists  
ride 50-75  
miles per day**

The combination of vast terrain, abundant services, and challenging scale provides touring cyclists with a wide spectrum of touring options to suit their individual needs and interests.

Had I traveled another route, the responses people offered for total trip mileages might have varied considerably. Yet, among the touring cyclists I met, total trip mileages also varied considerably but were most dependent on the amount of time available for the cyclists to tour.

**Typical cross-  
country cyclists  
ride  
3,000-4,500  
miles**

For trips of 10 days or fewer, cyclists generally ride 799 miles or fewer. Cyclists on a two-week trip (with a day of travel to and from their start and end points) solidly travel 800-1,000 miles. Many people riding the TransAm may have a month devoted to the trip and consequently will cover half the distance – 2,000 to 2,500 miles. Cyclists on a full cross country journey, more than half the cyclists I encountered, typically travel between 3,000 and 4,500 miles on bicycle regardless of route. Cyclists may undertake epic

bike rides in excess of 4,500 miles such as those taking a year to pedal the 10,000 miles of bike routes that circumnavigate the U.S.

#### ROUTE INFRASTRUCTURE

Touring cyclists choose routes for a number of different reasons. If they travel established routes like the TransAm, the research on road infrastructure is already available. For cyclists traveling more individualized routes, they secure condition information from blogs and other sources.

<sup>5</sup> I preferred doing major climbs in the morning and would ride to the base of the climbs the day before, if possible. While not all cyclists organized their trips this way, substantial climbs at the end of a long day usually created opportunities for cyclists to stop for the night.

For cyclists traveling on established cycling routes, some features characterize the infrastructure.

<b>Types of Routes</b>	<b>Description</b>	<b>Example</b>
Bicycle-only roads	Open seasonally with periods of bicycle-only access.	Highway 242, the McKenzie Highway between McKenzie Bridge and Sisters, OR, opens for auto use only in the summer. Bicycles are allowed on the road for a couple of weeks before motorized vehicles.
Bicycle paths	Paved, off-street pathways for non-motorized use.	Between Silverthorne and Breckenridge, CO, a well-used recreational, multi-use path skirts the reservoir.
Roads with shoulders	Any roadway with more than twelve inches of roadway between the white fog line and the rideable pavement edge.	Interstates typically have 10' shoulders, often wider than most bicycle paths. Lesser highways typically have 4' to 6' shoulders.
Roads without shoulders	Any roadway with fewer than twelve inches between the travel lane edge and the roadway edge.	On the McKenzie Highway, 242, in Oregon and Highway 1 in California, there is no extra roadway space for bicycles. On many of these roads, traffic is low and cyclists ride in the lane, moving to the right when vehicles approach. On other shoulderless roads, like Highway 1, bicycles mix at the roadway edge with fairly high volume vehicle traffic.

Each of the above route types all have some form of paved surface and can have a combination of rumble strip, signage, or debris features that enhance or detract from the cycling experience.

<b>Table 4: Rural Bicycle Route Infrastructure Features and Importance</b>		
<b>Route Features</b>	<b>Description</b>	<b>Importance</b>
Roadway surface	Asphalt, concrete, cracked, patched, oiled, chip seal, dirt, or gravel.	Smooth road surfaces foster pleasant riding experiences. Cracks, holes, and patches on the road can cause flat tires and other damage to bicycles or gear, particularly bicycles loaded for touring. Unpaved surfaces lead to the same issues and increase chances for falls. Oiled roadways create unpleasant environmental effects, can damage bicycles, and pose danger for slips. Chip seal creates a rough road surface (often ending in the middle of the rideable shoulder making the shoulder an undesirable place to ride), and loose, flying rocks can injure cyclists.
Rumble strips	Cuts in pavement located on the shoulder line, in the shoulder, or on the centerline.	Rumble strips alert drivers when they have strayed beyond the designated lane of travel. For cyclists, rumble strips can alert them to vehicles approaching from behind. With center lane rumble strips, cyclists know that vehicles are giving room and passing. With shoulder strips, cyclists know if vehicles are approaching too closely. Sometimes, rumble strips consume the rideable shoulder. While the effect for vehicles driving on rumble strips is a noise alert, they can render a shoulder unrideable for cycling.
Signage	Bicycle route, share the road, scenic byway, trail, bicycle path/crossing, and other bicycle-specific signage.	Bicycle-related signage alerts motorists to bicycle presence on roadways and crossings. Similarly, this same signage signals to cyclists that they are in a cycling area or on a cycling trail. Specific trail signage helps cyclists navigate. Preferred auto and preferred cycling routes often use different access points at shared intersections and travel different roadways.

Debris	Glass, dirt, rocks, metal, tires, trash, road kill.	Cyclists try to avoid all debris on the roadway. Debris can damage bicycles and gear and cause slips and falls. Cyclists do not want to fall in the roadway because of the potential for injury or fatality. Cyclists may swerve or move into the roadway to avoid debris, likewise putting them at risk for falls or collisions, both of which could have injurious or fatal consequences.
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Generally speaking, low-traffic-volume roads do not have shoulders, so the preference for low-traffic-volume roads contradicts the preference for roads with wide shoulders. Low-traffic-volume roads with wide shoulders can make for ideal riding conditions; however, the presence of one or the other feature provides for touring-friendly conditions.

**ACCOMMODATIONS**

Touring cyclists use a variety of lodging options. On the TransAm, communities presented the following frequency of options. On different routes, the frequency mix will likely be different.

<b>Table 5: Frequency of Rural Route Accommodations Type</b>					
<b>Homestays</b>	<b>Camping</b>	<b>Hostels</b>	<b>Motels</b>	<b>Hotels</b>	<b>Bed &amp; Breakfasts</b>

Variation among cyclists exists regarding lodging preferences; however, all cyclists need some place to rest for the night, even if that means – at one extreme – sleeping in a ditch or under a bridge.

**OTHER SERVICES**

In addition to accommodations, cyclists need other services in varying degrees of importance. The following list prioritizes these services.

- Water
- Restrooms
- Food (restaurants, grocery stores, convenience stores, pubs/bars)
- Cell phone service
- Internet (library/wifi)
- Showers
- Bicycle shops/service
- Laundry
- Information (Ranger Station, Visitor Center)
- Local maps
- Emergency services

Some services, such as bicycle shops and emergency services, are not frequently used by cyclists; however, when cyclists need access to these services, their need is generally great.

**How Much Money Do They Spend?**

Communities, planners, and tourism agencies want to know how much money bicycle tourists actually spend in communities and if it makes economic sense to invest in bicycle tourism infrastructure, amenities, and marketing as a community and economic development strategy. Among the cyclists interviewed, two distinct and one less distinct type of touring cyclist emerged. Distinctions among these different types relate to either or both age and income, and other distinctive touring patterns stem from these two characteristics. In brief, the amount of money cyclists spend in communities depends in large part on how old they are and how much money they earn.

Research conducted in 2009 of Rails-to-Trails’ Ghost Town Trail, a 36-mile multi-use path connecting Pennsylvania’s Cambria and Indiana Counties, measured daily expense figures for visitors on the Trail to quantify the economic impact of Trail users. Average expenses on food (restaurant meals, snacks, and beverages) came to \$13.62 and average spending on overnight accommodation measured \$78.04, equaling a total daily expenditure of \$91.66 for overnight Trail visitors. A similar study conducted in 2008 of the Great Allegheny Passage Trail in Pennsylvania measured the spending of trail users: those staying overnight spent \$98 per day including lodging, whereas day-only trail users spent an average of \$13 during each trail use (Campos 2008).

	<b>Day Trips</b>	<b>Overnight Trips</b>
<b>Ghost Town Town Trail</b>	\$13.62	\$91.66
	\$13.00	\$98.00

Other measures of bicycle tourist spending include tracking from individual business owners, such as bike shops, and industry reports from bicycle touring companies, such as Cycle Oregon. While these economic figures help assess how much money bicycle tourists contribute to local economies, they represent only small segments of the overall economic benefits to communities from bicycle tourism. In Oregon, discussions are underway to conduct an economic assessment of bicycle tourism in the state although the assessment is still in a scoping phase.

Based on cyclist interviews, the following frequency chart of lodging types includes average cost for the different lodging options along the TransAm.



<b>Homestays</b>	<b>Camping</b>	<b>Hostels</b>	<b>Motels</b>	<b>Hotels</b>	<b>Bed &amp; Breakfasts</b>
\$0	\$0-\$10	\$10-\$28	\$50-\$75	\$75-\$100	\$75
	sometimes this can be as much as \$20  hiker-biker camps generally cost \$5		sometimes motel rooms can be as inexpensive as \$30	hotel rooms for over \$100 can be common depending on location	

The following log records 23 days of full travel during the beginning of my ride from Eugene, OR, to Saratoga, WY. For ease of identifying lodging expense groups, the chronological presentation of the data has been sorted from least to most expensive. Lodging includes all the above-listed lodging types at least once with the exception of bed and breakfasts that are not included in this expenditure detail. Lodging with a cost of \$0 includes a combination of homestays and camping. Two of the camping experiences involved unplanned stops when I could not find or reach more traditional lodging. Another \$0 lodging expense day involved a hotel stay for which a friend paid. While her contribution to my trip included tourism revenue for the community, I do not know how much she spent. Food includes purchases made at restaurants and cafes, grocery stores, and convenience stores. Cost of food also includes tips. The Other category includes all other purchases and donations including postcards and postage, cycling gear, office supplies, body care products, and entertainment items.

<b>Lodging</b>	<b>Food</b>	<b>Other</b>	<b>Per day total</b>
0	15.75		15.75
0	18.54		18.54
0	24.21	2	26.21
0	23.5	7.99	31.49
0	11		11
0	12	2.58	14.58
5	14.75	1.73	21.48
5	30.04		35.04
6	22.84	3	31.84
8	6.19	2	16.19

	8.64	13	4.5	26.14
	10	31.29	0.75	42.04
	12	39.03	34.5	85.53
	28.89	18.04	17.35	64.28
	28.89	45.65		74.54
	41	16	3	60
	42.12	34.2	4.97	81.29
	48.6	24.83		73.43
	53.5	12.5	20	86
	54.9	43.53	4.25	102.68
	56.16	48.22		104.38
	59.4	57.61	12.33	129.34
	76.32	35.97		112.29
	117.72	22.62		140.34
<b>TOTAL</b>	<b>662.14</b>	<b>621.31</b>	<b>120.95</b>	<b>1404.4</b>

The following summary table identifies for the respective expense category the average, maximum, and minimum expenditures as well as the median expenditure, the middle value in the list. Because of inconsistent spending in "Other," these expense details are captured in summary information for the daily totals.

**Table 9: Summary Expenditures**

	<b>Lodging</b>	<b>Food</b>	<b>Other</b>	<b>Per day total</b>
<b>Average</b>	\$27.59	\$25.89		\$58.52
<b>Max</b>	\$117.72	\$57.61		\$142.92
<b>Min</b>	\$0.00	\$6.19		\$11.00
<b>Median</b>	\$11.00	\$23.17		\$45.49

For the expense detail presented here, my low-end daily spending patterns ranged from \$11 to \$28.29, and my high-end daily spending patterns ranged from \$87.13 to \$142.92.

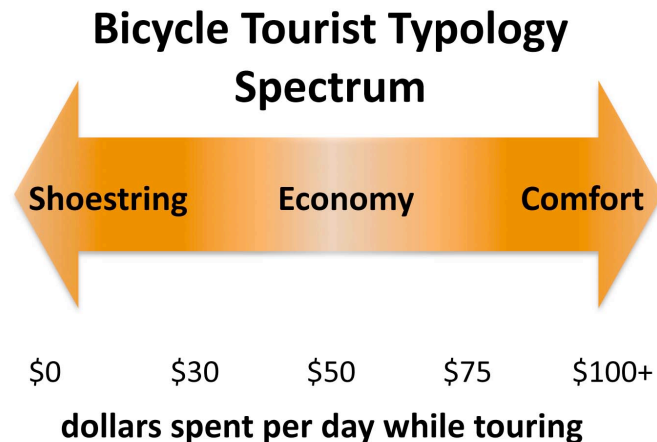
## Findings

The following findings and their associated implications describe the importance of developing bicycle tourism programs and strengthening rural economies through transportation-based planning strategies.

### Age-Income Nexus

Age correlates with a considerable difference in how much money touring cyclists spend in rural communities. Younger cyclists tended to be students or recent graduates with low income.<sup>6</sup> Older cyclists represented a range of professions with higher incomes (lawyer, doctor, entrepreneur, teacher/professor). I encountered no touring cyclists with children.<sup>7</sup> While gender influences the demographics regarding who goes bicycle touring, this factor does not affect how much money cyclists spend while touring.

Given these different factors related to touring cyclist behaviors, age and income appear to have the closest correlations in terms of different touring styles. However, age and income do not necessarily match for demographic groups across the board, and some cyclists who fit a demographic norm do not behave in ways typical for that norm. Generally speaking, three types of long-distance bicycle tourists emerge, two that correlate closely with both age and income and one that exhibits touring characteristics that disregard age or income as a type determinant. Touring cyclists tend to fall into the two main categories on either end of the spectrum that are age-correlated, and a few individuals in the median range.



### Young Riders

#### **SHOESTRING CYCLISTS**

With limited budgets and perhaps lifestyle patterns of frugality, these tourists see bicycle tourism as an inexpensive way to travel that matches the modest budget they have for undertaking a lengthy journey. Two strategies make the minimal budget go further: 1) pay as little for lodging as possible, and 2) ride long days to cover more terrain and thereby reduce the number of costly lodging nights. Young cyclists also ride consistently longer days with uncertain sleeping arrangements at the end of the day. These cyclists ride solo or with small, self-organized groups of no more than four cyclists.

**Young riders or  
Shoestring cyclists  
generally spend no  
more than \$15-\$30  
per day.**

<sup>6</sup> One exception was a 30-year old software engineer from San Francisco.

<sup>7</sup> While I did not encounter any cyclists touring with children, I read about one group, a parent team that rode with their six children aged 11 years to 8 months, in Dayville, OR, and learned they were headed to South Carolina.

Because the cost of lodging is their primary constraint, young cyclists are more likely to camp than older cyclists, use homestays, and camp in free or unconventional places. For example, a young cyclist will much more likely camp under a bridge or off the side of a road to avoid spending money on lodging. Additionally, securing a campsite in this way adds adventure to a ride. I talked to one cyclist who made a habit of stopping at the local bar when he arrived in a town because he had considerable success receiving lodging invitations from bar patrons.

For young cyclists, food becomes the major expense category, and they may also be more likely to carry cooking gear than their older counterparts, spending as little in restaurants as possible. They will, however, patronize grocery stores and gas stations for cold beverages and supplies. I shared a campsite with two young cyclists at Paradise Campground in Oregon.<sup>8</sup> As I munched on convenience store snacks for dinner (because I had no cooking gear), they made pasta with tuna and had a trailer full of similar such inexpensive and fare. I asked what their budget was for the trip, and one replied, "I have \$263. That's it." and the other said, "Not much." The more experienced cyclist pulled the trailer, saying the trip was his friend's introduction to touring and distance riding. They planned to ride for approximately one week.

**7 days x \$30 per day = \$210 per week**

While these cyclists may have carried sufficient food for their entire trip, they did not have much extra for cold drinks, treats, or the unlikely surprise of needing to pay more for lodging or campsites than anticipated.

Based on my trip expense log, it is possible to travel on a \$15-\$30 per day budget if the cyclist pays nothing or minimally for lodging. The two young cyclists from Paradise offset expenses by paying less for food. This strategy can apply to tourists on longer journeys who may resupply at a grocery once a week. Still, a large grocery purchase on the road will contribute to the local economy, whereas money spent at the home destination does not contribute to rural tourism revenues.

### Older Riders

#### **COMFORT CYCLISTS**

These cyclists enjoy adventure, activity, and getting fresh air, but they can't ride like they once did. They want a good night's sleep, a hot shower, and good food when they get to a community. For many of them, comfort rises above other interests to take first priority. These cyclists are much more likely to ride from town to town and much less likely to camp. They

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<sup>8</sup> I met these cyclists at the campground fee station while I tried to decide if I wanted to pay \$18 for a campsite or go down the road and find a nice ditch in which to sleep. Among the three of us, the campsite seemed a more reasonable expense at \$6 per person.

prefer sleeping in a bed (staying in a motel) and may carry only minimal gear. While they spend more money than younger cyclists, they still enjoy discounts on lodging.<sup>9</sup>

To eliminate some uncertainty around comfort, this type of touring cyclist is more likely to join organized rides. Cyclists traveling with a group often only carry what they need for the day and ride further distances. For example, I encountered a group like this riding across the country, but the riders had no gear on their bikes. Later, I learned from an innkeeper that this 50-person group traveled with vehicle support in the form of a moving truck. During the day, the truck carried all their baggage, and at night, the cyclists stored their bicycles in the truck. In this particular part of the country, the towns were few and far between, and the riders covered over 100 miles per day.<sup>10</sup>

**Older riders or  
Comfort cyclists  
generally spend  
between \$75-\$100  
per day.**

Older cyclists on self-supported rides travel solo, as two-rider teams, or in small groups of no more than four. I encountered very few of this age group riding in teams larger than two. These cyclists tend to limit the amount of gear they carry on their bicycles and tend to spend more money in communities to compensate for their needs. At most, they carry minimal camping gear for emergencies or the infrequent occasion when beds and sheets are unavailable. This group rarely carries cooking gear, finds their meals in restaurants and cafes, and stops for breaks at convenience stores or coffee shops. Generally speaking, this type of cyclist travels 50-75 miles per day or wherever the town or lodging services make a convenient or desirable stop in their target daily distance.

Given the average TransAm tour described on p. 20, a Comfort cyclist contributes \$6,750 to rural communities during his trip.

**7 days x \$75 per day = \$525 per week**

Because this group tends to ride shorter days than younger riders and have a more robust budget for traveling, they spend more time in towns. The more time cyclists spend in a town, the more likely they are to spend money in that community. One couple I met from Southern California mentioned stopping an extra day in a small Idaho town to go whitewater rafting.

When spending money on entertainment, this cycling group prefers sight-seeing and activities because these services enable them to enjoy the experience without having to carry anything

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<sup>9</sup> One couple I encountered crowed about getting a motel room for \$30 for the two of them. They didn't always find their lodging pleasant, but that became part of the adventure too, finding the cheapest lodging and surviving questionable accommodations. While roughing it in a motel wasn't sleeping in a ditch, it had its own flair and contributed to small community economies.

<sup>10</sup> For example, Cycle Oregon charges \$850 per rider for a fully-supported week-long ride, i.e. \$850/7 days = \$121.43 per day.

down the road. In other words, cyclists do not tend to go shopping while touring because they dislike carrying extra weight in their bags and because they may not have room on their bicycles to carry anything extra. Depending on the kind of tour they undertake, having options to ship items can be one way to overcome porting challenges derived from shopping. Cyclists do mail items ahead to themselves and back home if they no longer want to carry them. If cyclists travel with vehicle support, transporting purchases may be less of a concern. On the whole, however, touring cyclists make significant investment in the activity and experience of touring, so the extra items they purchase generally support touring.

During a tour, cyclists may purchase:

- Entertainment or tours
  - Rafting trip
  - Museum visit
  - Theater visit
  - Movie rental
- Postcards and postage
- Books
- Cycling gear or services

## Other Types

### *ECONOMY CYCLISTS*

Between young cyclists on a budget and older cyclists traveling in comfort is another type of touring cyclist. These cyclists have more money than riders on a shoestring budget, but they don't necessarily want to spend it. These touring cyclists tend to camp or stay in hostels and may or may not carry cooking gear. They are most likely to purchase food from grocery stores or eat cold items that don't require cooking or refrigeration.

I encountered two men at a hostel who were traveling together, one fit the Comfort cyclist type and the other who fit this Economy type. Both of them compromised their touring preferences for the duration their planned travel together. The Economy tourist began his tour two weeks earlier from California before meeting his friend in Oregon so he could ride a lot of miles and be "out there." I pedaled with this cyclist to the grocery store one morning, and during the ride he excitedly shared all his tips on how to turn a touring kit into a mobile refrigerator. I met another cyclist between Lowell, ID, and Lolo Pass at the Idaho-Montana border. He lauded the inexpensive church hostel options in the eastern part of the US and reiterated the value of dispersed camping on forestlands (this free forest camping is equivalent to sleeping on the side of the road only more sanctioned, comfortable, and legal). This older cyclist gave me the distinct impression that his "adventure" involved spending as little money as possible even though he lived in Boulder, CO, and worked in higher education and presumably could spend more.

### *RACERS*

I interviewed two racing cyclists in Baker City, OR, who provided some insight into racing cyclists' travel and recreation patterns. For cyclists in a racing mode, touring can seem boring because of the slow pace. Racers do not necessarily have robust budgets for travel or racing, but competition encourages them to travel to ride. Racers do not want to encumber their rides with gear, so they will travel with support vehicle, camper, and/or a camping trailer/RV. They drive to locations and spend the day riding long distances at high speed. Some may travel in

caravan-type groups and alternate drivers if they all want to ride and don't have a designated driver.

More than once, I talked to men and women touring who formerly raced. A racing cyclist does have a "racing life," but when that concludes, the love of cycling does not necessarily end. Touring is gentler on the body than hammering the pedals for miles and miles at high speed. These cyclists often express the appreciation they have for encountering terrain at a more leisurely pace. They take time to stop and smell the flowers where before they may not have noticed the flowers much, if at all, and they certainly weren't going to stop to take any pictures or take a break even if they weren't tired to appreciate a view. These cyclists are generally out to have fun on a bicycle and recreate, or they may have transformed their racing ambitions into distance and duration ambitions. On the economic spectrum, they could be anywhere from Shoestring to Comfort.

### REFUELING, RESTING & SERVICE DISTRIBUTION

Good cycling routes offer a mix of refueling and lodging services that provide for the needs of a full spectrum of bicycle tourist types. Because cyclists on different parts of the spectrum require different services, an area or regional approach to services affords the greatest opportunity for small communities to experience economic benefit from encouraging bicycle tourism.

#### Refueling

Regardless of where cyclists land on the spectrum of average daily expenditures while touring, they all must refuel. Cyclists can be particular about where they eat and what they eat. At the same time, the imperative to eat can often override particularities.

Considering the typology spectrum, a community that has a convenience store, a café or restaurant, and a grocery will have some sort of refueling service for all cyclist types. Important for communities, cyclists do not stop in every town they go through nor do they purchase consumable items every town where they stop. If towns with multiple services have regular spacing, bicycle tourists' spending power disperses among those many businesses. In areas where there are fewer towns with services or further distances between towns, the spending power of cyclists concentrates, creating a more reliable flow of income from this traveling type. While Comfort cyclists, for example, may cringe at the thought of eating dinner from a convenience store, when that is the only available option, they will.<sup>11</sup>

**Touring cyclists  
spend approximately  
\$10-\$30 on  
food and beverages  
per day**

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<sup>11</sup> While I was not incredibly particular about the food I ate during my tour, refueling at a convenience store did not provide the kind of food I preferred or desired to replenish my energy stores. I found myself in this situation twice, once in Muddy Gap, WY, and another time in Elk Garden, MO. Other cyclists expressed the same unwillingness and acquiescence I had regarding convenience store meals.

Consequently, as a community evaluates how best to serve touring cyclists in an area, examining the services available in a 50- or 100-mile radius (or specifically along an established cycling route if there is one) can help them gauge the potential market demand and potential expenditure for refueling services from bicycle tourists.

### Resting

The same principle of service distribution applies to lodging; however, lodging represents a more negotiable expense category than food for reasons mentioned above. Lodging type will have a significant effect on what kind of touring cyclists stop in a community. Residents may also assist cyclists who have no affordable or available lodging option by offering homestays or allowing cyclists to camp in their yards.<sup>12</sup>

Without question, Comfort cyclists and many toward the Comfort-Economy end of the spectrum will choose motel or hotel lodging over camping. They will even stay in a hostel without beds if this is the only option. These cyclists do not carry a tent or other shelter, sleeping pad, and, often, even a sleeping bag, ruling out camping as an alternative. These cyclists may also travel a short day if the available lodging is too far for them to reasonably reach in one day of riding.

Shoestring and Shoestring-Economy cyclists (camping cyclists) prefer camping. In areas with abundant natural areas, there are usually plenty of options. In more developed or agricultural areas, there are fewer opportunities for camping. In Kansas and many other locales with few camping areas, city parks are often made available for cyclists needing a place to sleep for the night.

**Comfort cyclists  
spend three to four  
times as much  
per day than  
Shoestring cyclists  
because of lodging**

Unlike providing for refueling options, cyclists do not require lodging services every 25 miles. Lodging services spaced more than 65 miles apart, however, can put Comfort cyclists in the position of making an emergency camp. When lodging is completely sold out at a location, this can also put cyclists in a difficult situation. While they may not be pleased with the situation, they are more likely to spend more money than normal for a room if the only available room were quite expensive than they would be to make an emergency camp. Of the cyclists I met, a little more than half stayed primarily in motels.

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<sup>12</sup> In Eminence, MO, there was no available lodging in town the day I arrived because an annual trail riding event booked all available beds. A postal employee directed me to the Hawkins House B & B where they too were full for the night. I planned to stay two days in the community to let traffic from the trail rides abate. The host and hostess invited me to camp in their yard for the day I could find no lodging, and I did, happily. They also reserved their last available room for me the second day.



In summary, communities stand to benefit more economically from providing motel or similar lodging than they do from providing only refueling service. However, regions need fewer of these types of services to support touring cyclists than they need to provide refueling services. Consequently, there is less cyclist demand and economic support for abundant lodging services. The most economically advantageous mix of services includes both refueling and lodging options, but this may be an infeasible mix of services given the quantity and quality of nearby services and attractions.

## MARKETING NETWORK

Once a community has established lodging or refueling services, marketing these services to cyclists, if this is a priority market for businesses, will ensure patronage by the two-wheeled visitors. Many different factors may affect cyclists' speed or distance traveled per day. These unknowns keep cyclists' planning to a minimum with many cyclists planning a day ahead, for the day ahead, or not at all, choosing instead to follow a more spontaneous trajectory. Whether they plan ahead or not, cyclists use four main strategies to locate services and make a purchase decision. Strongest recommendations come from other cyclists and are most often passed word-of-mouth or through cyclists' individual communication networks. Second, cyclists will ride by businesses and formulate purchase decisions based on external features or appearance. Third, specific cyclist resources provide recommendations for bike-friendly establishments. Fourth, online resources provide invaluable opportunities for cyclists to locate services.

### Recommendations

Cyclists share information word of mouth. Two stories exemplify how memorable experiences for cyclists transmit along the trail, sometimes even thousands of miles from where the experience occurred. Returning to one of my example Economy cyclists, the man I met on my way to Lolo Pass shared much about Virginia and other places far east of Idaho, not least of which was his recommendation to lodge at eastern church hostels. Another cyclist I met outside of Breckenridge, CO, told me to look for the upright freezer at the little shops in Missouri, "They have ice cream, you just need to know what to look for." He also offered some hard-won advice about the food in Missouri and Kentucky, "You have to tell them: 'No gravy on ANYTHING.' Otherwise, they won't put gravy on one part, but they'll drown the rest of your food in it." In these examples, other cyclists offered recommendations for both food and lodging thousands of miles ahead on the trail.

Businesses or communities that understand the cyclists' word-of-mouth strategy can use it to their advantage if they want to draw cyclists to their place of business. I also often relied upon recommendations from lodging staff. The best example I found of word-of-mouth marketing came, for me, at the Kansas-Missouri state line. A friendly resident had just finished fueling his truck at a gas station when I realized I was about to cross into Missouri and stopped to take a picture of the "Welcome to the Show Me State" sign. He offered to take my picture, and when I returned to the road he said, "All men are friendly in Missouri, and anyone who's anyone stops at Cooky's in Golden City and has some pie." Golden City was the next town down the road, and even though I hadn't planned on stopping, I decided to follow his recommendation.

Cooky's had a number of bicycle-friendly elements including a cyclists' logbook. After I finished breakfast and one piece of pie, the waitress asked, "Would you like another piece of pie?" I declined politely to which she responded, "All cyclists get at least two pieces." From the contents of the logbook, all the TransAm cyclists I had passed stopped at Cooky's, and a number of them mentioned having heard about Cooky's from quite a distance away. Two cyclists with whom I traveled a number of times said they'd heard about Cooky's long before they pedaled there.

### Ride By

In addition to word-of-mouth, I found a number of successful techniques that businesses used to draw in passing cyclists. A simple sign that says "Bikers Welcome" drew me to establishments multiple times. For lodging, this sign of welcome applies to cyclists and motorcyclists, both of whom innkeepers described as the best, most courteous customers. As one innkeeper in Dubois, WY, commented, "Cyclists are great guests. All they want to do is take a shower, eat, and go to sleep. Then they leave quietly in the morning." I found another "Bikers Welcome" sign above a bike rack at a café in Hartville, MO. Although I was quite wet from riding in the rain, the proprietor invited me in and let me order a burger at 9 a.m.

Like "Bikers Welcome," the window decals I delivered to businesses along the TransAm let passing cyclists know the businesses were bike-friendly. Most of the decals I delivered went to lodging establishments. Some went to libraries where helpful staff directed me to needed services or provided free Internet access/wifi. I gave decals to some businesses that provide food. I was particularly pleased to give my last window decal to Cooky's.

In rural America, I found few bicycle racks, but wherever they were located signaled a bicycle-friendly establishment – like the café in Hartville, MO. As a cyclist, I scanned for these details as I rode through towns to inform my decisions about which businesses to support. Other details, such as bicycle décor, made me feel welcome as a cyclist to a business or a community. In many places, these small touches signaled to me like a beacon.

### Cyclist Resources

I traveled with Adventure Cycling maps and found their keys quite helpful in determining which towns I would stop in to eat or lodge. The maps also include a service directory that lists select camping and lodging options along with emergency services, bike shops, and libraries. I consulted the service directory a number of times. Another resource, the Cyclist Yellow Pages, provides similar information. I didn't use this resource, and I do not know if other cyclists use it, but I did hear about it during my trip.

One other touring cyclist-specific resource I used deserves mention even though it does not necessarily contribute to local economies. Warmshowers.org is a free member site to coordinate homestays for touring cyclists. One of the rules of Warmshowers hosting is that hosts cannot charge for cyclists to stay. Communities that have at least one host member on Warmshowers ensure that cyclists will overnight in the community and likely have a memorably

pleasant experience of the community. Cyclists may stay more than one day in these towns and spend money on other services during their stay.

### Internet Searches

Last, but certainly not least, cyclists use a variety of internet searches and services to locate lodging, food, and entertainment. Most cyclists travel with a mobile internet device, facilitating searches. In few places along the TransAm, there was neither cell service nor wifi, so readily accessible searches became a viable and often-used method to locate businesses and inform purchasing decisions.

Combining marketing methods can help direct cyclists to businesses, create positive experiences that cyclists will share with others, and result in cyclists staying longer and/or spending more money in these bike-friendly communities.

### RURAL CYCLING INFRASTRUCTURE

Research on cycling in rural communities essentially does not exist. An extremely recent study of women's cycling patterns includes some analysis that identifies rural areas as an independent variable related to women's cycling behaviors (Sibley 2010; Women Can Change the World through Cycling 2011). Rural communities may have bike plans or cycling infrastructure, but the small communities (towns with populations between 7,000 and 100 people) through which I traveled did not appear to have many, if any, planned cycling facilities. If a community had bicycle-friendly features, they were almost entirely the product of one community member spearheading a locally organized project, and in some cases paying for it as well.

From the tourist perspective, whether a community has a bike plan is irrelevant, but what cyclists do in rural areas or how they approach touring is important. If, for example, a community has cycling facilities and infrastructure, then these facilities can encourage a cyclist to stay longer in a community; however, infrastructure is not a precondition for cyclists to visit and/or enjoy an area as can be evidenced from the demand and marketing discussion above.

I have assumed rural communities support bicycle tourism in part because my tours take me through them. Not all bicycle tours are rural tours; however, features of good touring infrastructure occur mainly in rural areas and less in urban areas. Preferred cycling routes provide:

- Adequate travel space and a corresponding sense of safety on the roadway,
- Travel through scenic, heritage, quiet or natural areas with clean, fresh air,
- Sensory appeal or interest,
- Topographical diversity,
- Smooth pavement, and
- Reasonably accessible services.

All interviewees expressed preferences for similar route features:

- Low-traffic-volume roads
- Roads with wide shoulders
- Courteous drivers
- Scenic routes
- Regularly spaced towns and/or services (water, restrooms, food/restaurants, accommodation/lodging)

Like the marketing strategies that help draw cyclists into a business, dedicated bicycle ways such as bicycle paths and lanes and bicycle-only roads signal an area's bicycle-friendliness. These facilities address the spatial and safety needs of cyclists. Preferred cycling routes have little to no space competition with vehicles. In urban areas cycling space must be shared with or ceded to vehicles. Safety stands as the primary concern for both cyclists and motorists with shared roadways. In scenic areas, which are mostly rural, multiple visitor demands compete for space on roadways that most often do not allow ample room for mixing modes. Narrow roadways that follow landscape contours are part of what lends scenic character to these areas.

### **Bicycle-only Roads**

Bicycle-only roads may exist in modest numbers in urban environments. Like the bicycle-only roads in rural areas, they do not tend to be bicycle-only roads all of the time. For urban areas, these bicycle-only places usually are located in high-traffic areas and/or areas with high levels of pedestrian use. Vehicles may be allowed access during less busy times of the morning or evening, but during the day bikers and walkers predominate. In rural areas, bicycle-only roads tend to be located in topographically extreme, scenic, or difficult to access areas. The narrowness and maneuverability of bicycles affords them access in areas that may close seasonally or that do not allow for the inflated volumes and widths of many of today's vehicles.

I encountered few of these roads, but when I found them, they added considerably to my cycling experience. Two examples from Oregon exemplify bicycle-only roads and also happen to be historic roads: the Columbia River Highway (US 30) and McKenzie Pass (Hwy 242).

The Columbia River Highway is a National Historic Landmark and was the first scenic highway developed in the U.S. and opened for use in 1922. This road traverses and winds through cliffy terrain of the Columbia Gorge. From the 1950s to the 1970s, development of Interstate 84 destroyed portions of the Columbia River Highway. The historic value of this cultural resource spurred restoration and reconstruction efforts. Some segments of the restored roadway were not developed to contemporary roadway design standards because the standards would have compromised the aesthetic and historic integrity of the scenic roadway during its period of significance. To keep the roadway in functional use for visitors while maintaining its integrity, portions of the restored and reconstructed road are open only for bicycle and pedestrian use. In some sense, these roadway portions could be considered bike paths; however, roadway designs for vintage 1920s and 1930s vehicles approximate the standards for today's multi-use paths.

McKenzie Pass recently received listing in the National Register of Historic Places (February 2011). Planning for the road began in the 1920s and construction completed in 1935. McKenzie Pass was the only route east of Eugene across to cross the Cascades until construction of the Santiam Pass road in 1962. This highway climbs to an elevation over 5,000' from about 2,000' in the upper valley and closes autumn through to summer because of snowy conditions. For some weeks before the road reopens to auto traffic, the upper reaches of the roadway on both sides of the pass open for cyclists' use. Having an opportunity to enjoy the scenery, quiet, and fresh air with as much space and time as is needed to climb to and descend from the summit is a rare treat for road cyclists.

### Bicycle Paths

Bicycle paths exist within urban areas as well as rural areas. In rural areas, the paths link communities together or facilitate recreation in natural areas and parks. This contrasts with urban areas where the paths assist bicycle and pedestrian movement within towns or to scenic parts of the urban environment. Many rural paths are Rails-to-Trails projects that repurpose decommissioned railroad beds for recreational purposes. Not all of these paths are paved, however, so touring cyclists may or may not use them.

The well-used bicycle path between Silverthorne and Breckenridge, CO, took a slightly more scenic route around a reservoir and through the communities. The path appeared to have a two-part purpose:

1. Increasing recreational opportunities of the reservoir by providing a desirable route for people biking and walking and
2. Separating cyclists from vehicular traffic.

In this example, it may have been that increased numbers of cyclists on the road led to increasing safety concerns for both drivers and cyclists. Given the family-oriented, all-ages, all-abilities character of most trail users, I speculate that these cyclists did not recreate in this area until the path was developed. Lycra-clad cyclists, a faster, more specialized type of trail user than people riding in an upright position and wearing street clothes frequented this path in higher numbers. Here, the path has a primarily recreational function, and separation from vehicular traffic increases less specialized cyclists' comfort levels by reducing their physical vulnerability and increasing their perception of safety.

### Road Conditions

Within urban areas, bike lanes rise to heights of great importance for cyclists. Lanes create dedicated space for bicycles and reduce space-based conflicts between cyclists and motorists while streamlining infrastructure costs and maintenance and spatial allocation for roads. In rural communities, bike lanes are less prevalent. The fewer numbers of cars in these communities predispose rural environments to having low-traffic-volume roadways, more shared roadways, and fewer cyclist-motorist conflicts. Consequently, the rural roadways of concern in this study connect towns (provide for intercity travel) rather than create bicycle-specific routes within population nodes (inner-city travel) – the opposite focus of urban bicycle

infrastructure planning and development. In other words, the demand for bicycling infrastructure within rural town is less than the demand in urban areas.<sup>13</sup>

Rural areas are in part characterized by low-traffic-volume roadways. These roadways appeal to cyclists because they permit more freedom of movement while offering pleasant outdoor experiences through visual, olfactory, and auditory senses. The noise, exhaust, and presence of vehicles diminishes cyclists' sensory engagement with place. Quiet roads with no shoulders allow cyclists the freedom of movement allowed by bicycle-only roads. Cyclists will ride the entire road if they choose and then move to the roadside during the approach of vehicles, which occurs infrequently. In many cases, these are optimal cycling conditions and enhance the touring experience. As an example, the TransAm through Eastern Colorado rides these extremely low-traffic, shoulderless roads. Quiet roads with shoulders provide more roadway for cyclists to use and more roadway for infrequent vehicles to use when approaching. Most of the roads the TransAm travels through Kansas follow the orthogonal agricultural pattern, have shoulders, and carry little traffic.

For roads with regular or high vehicular traffic, shoulders enhance the experience for both cyclists and motorists. While cyclists may not enjoy the sensory effects on busy roads as much as quiet roads, dedicated space to travel allows room to maneuver.

Touring cyclists generally carry panniers on their bicycles that widen the bicycle cross section. On roads without shoulders, this can mean that even riding the wheel at the furthest edge of the roadway, a touring cyclist may still occupy part of the travel lane. Motorists can pass with room although they may not necessarily allow for the extra width of loaded bicycles. In some instances, busier roads do not allow passing vehicles to move across the centerline when passing. In this instance, either the car slows behind the cyclist and waits for a safe passage or will pass uncomfortably and unsafely close to the rider.

On roads with curbs or walls (like a rock or embankment) at the road edge, cyclists cannot ride their wheel at the road edge because their panniers could easily catch the road edge obstruction. In these situations, they must ride further into the travel lane, creating more opportunities for conflict or to impede vehicular passage. While courtesy may suggest cyclists stop and/or remove to the edge of the roadway when vehicles want to pass, this practice may be entirely impractical for cyclists given energy expenditure, momentum, topography, and traffic levels.

With the increased number of potential hazards on busy, shoulderless roadways, cyclists prefer riding busy roadways with shoulders. In extreme cases, riding on interstates provides the most comfortable infrastructure choice while it offers the least desirable aesthetic environment.

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<sup>13</sup> Rural communities may not be without need for bicycling infrastructure; however, this study focuses on infrastructure between population nodes rather than within them. I cannot speak to the dynamic between vehicles and bicycles in rural towns other than cyclists touring in rural areas spend more time between towns and population nodes than within them.

Along with the presence or absence of shoulders or low- or high-traffic auto volumes, the condition of the road itself can be a significant factor of cyclists' enjoyment of a route and/or a major contributing factor to their choice of route. The sensory experience of cycling also translates into the sense of touch where the bicycle enables riders to "touch" and "feel" the road surface every inch of their tour. Road surface conditions transmit through the bicycle and affect the bicycle itself, the gear attached to the bicycle, and the rider. Unpleasant surface conditions include rough surface, roadway cracks, rumble strips, and debris. These surface conditions can be likened to rubbing your fingers over sandpaper for hours. Cracks and rumble strips have the effect of "shaking" the body for extended periods of time or at high frequency. In a short amount of time, a person will want to stop abrading and rubbing raw the surface of their sensitive finger tips, and the shaken person will want to stop the sickening feeling caused by the concussive effects of shaking. When these unpleasant effects are produced from the allowable or designated riding area, cyclists will avoid the unpleasant areas. In most cases, cyclists will ride into the travel lane for smoother riding surface.

During my ride, the shoulder from Jeffrey City, WY, to Muddy Gap, WY, had large, patched cracks about four inches wide every ten feet along the chip sealed roadway. The shoulder also had rumble strips inside the shoulder but close enough to the travel lane to allow bicycling use of the shoulder. The road had relatively little traffic, so I rode the travel lane, which had no cracks and a smoother surface from the weight of vehicles flattening the chip seal surface, when I could.

Existing infrastructure and conditions of rural roads should factor into communities' evaluation of their bicycle tourism assets. In one respect, providing friendly and supportive services for cyclists who have been traveling unpleasant roadways can give cyclists a glowing impression of the community because it stands in stark contrast to the unpleasant road conditions. Similarly, communities situated along pleasant roadways can have an equally positive effect on cyclists' experiences since cyclists could likely equate a community's bike-friendliness with the quality of surrounding roadways. Both of these effects lead cyclists to stay longer in a community or spend more money while they are there. Communities with few or insufficient services along unpleasant roadways may be least able to capture tourist dollars. However, in locations where there are no alternative choices, service providers can capture more revenue from cyclists than cyclists might ordinarily spend even if the conditions suggest otherwise.<sup>14</sup>

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<sup>14</sup> This last point held true for Muddy Gap, WY, which is basically a gas station at a T-junction of two highways with no other services for more than 50 miles in any direction (Jeffrey City is closer than 50 miles, but it is a functional ghost town and the local residents give the impression there are no services, and they often frighten cyclists down the road). The only food available is convenience store fare. I paid \$12 to camp in the scrubby, wind-scoured "lawn" at the edge of the service area parking lot. Other touring cyclists I encountered mentioned they were able to stay at Muddy Gap in a room in the proprietor's guest mobile home for \$30 per person that offered as clean and as comfortable an experience as my campsite.

## Recommendations

Throughout this study, I capture some of the best and most challenging aspects of undertaking a long-distance, road cycling tour from a programming perspective and conducted analysis to help communities plan for or enhance bicycle tourism in their town or region. The data and findings provide key pieces to help construct the puzzle of information that answers the question:

Does it make economic sense for communities to invest in bicycle tourism as an economic development strategy?

Through study and practice, I recognize that community economic development strategies involve a complex set of factors that all must be addressed to grow and sustain a local economy at a viable pace and scale. In some communities, bicycle tourism might be a singular strategy to catalyze and support growth. In other communities, local assets or priorities may not train such an exclusive focus on bicycle tourism. For these communities, framing bicycle tourism as a component of larger community and economic development strategies might result in a better fit for localities or regions. In consideration of this broader scope, I might ask the question another way:

Does it make sense for rural communities to consider bicycle tourism as a method to implement a sustainable development or sustainable transportation strategy?

What is compelling about rural areas? With increasingly greater numbers of people settling in urban areas, rural environments can struggle to maintain themselves. At the same time, the rarity of the rural experience captures the interest of urban denizens for many reasons – whether that be the slower pace of life, remoteness, scenic value, or other reasons. Regardless of the reason, time spent in rural environments gives people another perspective from which to view their lives, particularly those people who live in urban centers. Apart from their personal reasons for doing so (see p. 17 of this report for motivations), people who take long-distance bicycle tours appreciate the uniqueness of rural environments and have an affinity for perspective renewal, otherwise they would have not last long on the tour.

Part of the renewal offered by rural communities comes from their commanding sense of authenticity. While authenticity is an entirely subjective term, elements of a rural community naturally express it, from the historic buildings to the unique enterprises that local residents sustain with situational flavor to the surrounding environment to the people who live there. Each aspect of these communities contributes to an enduring sense of place. As Gertrude Stein said, “There’s a there there.”

One of the key contributing elements to both authenticity and sense of place derives from communities’ connection to the past whether that is through the artifacts of culture, such as historic buildings and museum objects, or through a more manifest and alive version of the past, like a venerable road or trail that continues in use today. In most, if not all cases, rural



communities are living history because they established during earlier times as a functional piece of our nation's growth and facilitated the movement of goods and services. Many communities in rural America are spaced in accord with historic transportation patterns. Communities established along coasts, rivers, canals, and at ports and bays. Over land, communities are spaced the distance a horse could travel in one day: 25 miles in one direction, 14 miles for an out and return day trip. As transportation technologies changed, so did the siting of communities. Communities grew to support stagecoach stops, then the arrival of railroads and rural trolleys brought economic opportunity and assisted community development along the rail lines. Bicycles brought life back to stagecoach communities that the railroads bypassed. The development of roads and highways assisted the growth of communities along these transportation arteries and led to the establishment of new towns at major transportation intersections. Towns along rail lines struggled if they weren't also located in proximity to the new highways. The interstate system locked community development to these main nationwide thoroughfares and again eclipsed many rural communities.

A community's relationship to the development of our transportation network is not the only factor that affects rural community vitality. One significant asset of rural communities for bicycle tourists is that they are not sited along major ground transportation corridors. For road cyclists, this means rural communities have the best of what road cycling can offer – big distances on paved roads with little to no traffic. Rural cyclists don't breathe automobile exhaust; they aren't limited to narrow ribbons of space; they don't negotiate through the only accessible green space dodging, dogs, toddlers, couples, teens walking three and four abreast. Riding the open roads is freedom – pure, unadulterated, essential liberation. What rural communities do have that dovetails incredibly well with the freedom found in cycling is a spatial heritage and cultural resource in pre-auto-dominance settlement patterns. The bicycle itself is a kind of living history par excellence, having been a key form of transportation in the late nineteenth and early twentieth centuries that today continues in important utilitarian and recreational function. Pairing the aliveness of the bicycle with the heritage of rural living activates the historically functional economic relationship between rural towns and transportation and promotes rural livability.

I propose three kinds of journeys that bicycle tourists undertake as part of their overall contextual motivations that synergize with rural assets: heritage journeys, experiential cultural resource journeys, and journeys as destination.

### HERITAGE JOURNEYS

Whether they are aware of it or not, bicycle tourists conduct living heritage journeys. Some cyclists may choose to explore the heritage dimensions of their rides. Rural communities generally have much to offer heritage cyclists, such as visiting gold mining towns, following native or historic trails, tracing their ancestry, photographing historic barns, staying at historic hotels, seeing historic buildings, or visiting downtown historic districts. Also, the overlap of established bicycle routes with scenic byways is another indication of the active link between bicycle transportation and heritage travel

Heritage interests spur many different market groups to travel, and rural communities can broaden their visitor market for heritage cycling to include groups not studied during my long-distance tour. To accommodate a more diverse market, communities may want to develop heritage tours that include short and medium distance bike rides either as day trips, weekend overnight trips, or part of larger, coordinated regional travel strategies oriented to a week or ten days in length. Families may find this kind of journey particularly appealing, especially if they can travel on priority bike routes – such as Rails-to-Trails paths, extremely quiet rural roads, or bike-only roads – and have easy access to rest services (food, water, bathrooms, shade, and accommodations). People in their 30s-40s as well as active seniors may also find these kinds of journeys appealing. The younger demographic would take less time away from work but still have a rewarding vacation, and active seniors could take the trip at their own speed while challenging intellectual faculties through the heritage focus and interpretation of the environment.

Heritage visitors have more money to spend during their travel than other visitors, stay longer in communities than other visitors, and choose Comfort lodging. Some decade-old data about heritage tourists indicates they spend \$250 more per visit and make total trip duration about two days longer with more locations than non-heritage tourists. In most communities I visited, historic hotels still function as hotels, and some communities add to historic lodging services with historic residences converted into bed and breakfasts.<sup>15</sup> For bicycle touring, Adventure Cycling understands that heritage may be a primary motivation. To support heritage bicycle touring, they have developed two heritage specific touring routes, the Lewis and Clark Trail and the Underground Railroad Trail. Adventure Cycling also includes historical narrative about the areas their trails travel and identifies points of historical interest on their touring maps.

### EXPERIENTIAL CULTURAL RESOURCE JOURNEYS

These journeys focus on full sensory engagement of the environment, and the more fully the experience engages all the senses, the richer the reward. Cultural resources encompass a broad range of activities, but the essence of this kind of cycling is active engagement with cultural items and/or artifacts. Examples of this type of ride include: visiting national and state parks, wildlife refuges, and other scenic places; attending local events and festivals; eating local cuisine; sampling local beer or wine; listening to live music or other entertainment; staying at bed and breakfasts; or soaking at hot springs, to name only a few.

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<sup>15</sup> As an example, I stayed at the Geiser Grand Hotel in Baker City, OR, a recently restored three-story hotel in the historic downtown, and spent \$117 on lodging for one night. I planned to stay two nights at the hotel, but all the rooms were sold out the day I arrived. (I stayed at the kitschy Modern era Oregon Trail Motel for \$50 the other night.)

On another occasion, I stayed at the Brass Pineapple in Charleston, WV, during a detour that required a train ride. In Charleston, I rode two days to return to the TransAm. I spent \$118 lodging at this bed and breakfast in a historic residential building and neighborhood.

Developing these kinds of journeys may require nothing more than what a community already does to enrich and entertain itself. Some targeted marketing to cyclists or event packages can help increase the numbers of people traveling to a community or region to experience local culture. With bicycle tourism, the experiences tend to be framed in terms of cycling and include the consumption of experiences and food and focus less on purchasing items.

Journeys to experience cultural resources present great opportunities for travel as much as difficulties. If the community or area where the resources are is a great distance from major transportation corridors, how will people get to the area? Even if they travel by bicycle, visitors from outside a region may not likely find the community accessible. And for visitors who may visit from abroad or urban areas and either do not drive or choose not to, how will they be able to access the resources in or nearby a community? Rural communities that give consideration to how people can access them and their resources without a car stand to benefit immeasurably from transportation challenged visitors (such as urban teens or seniors who no longer drive) who value and need opportunities to access and recreate in rural destinations. Similarly, a community that offers non-auto or ridesharing transportation options can begin to draw visitors who value sustainability. These visitors may place higher value on environmental or social sustainability, but because these are focal areas for a community, they will stay and spend money. Positive experiences reinforce economic benefit. When a community problem solves transportation challenges in this way, they create economic pathways into their locality and region while creating social good.

In this same way, a community that considers how rising gasoline prices can negatively affect distances people travel or the vehicles in which they travel will have planned for an uncertain economic future. A community linked to numerous transportation modes provides economical transportation options for all types of visitors. In the face of rising fuel costs, the only communities that receive visitation in the future could be the ones that are relatively easy to access through a variety of transportation modes matched for a variety of economic means.

## JOURNEYS AS DESTINATION

Journey-as-destination rides are for the pure enjoyment of the activity, of being on a journey. The final destination in this kind of riding may be a pleasant place to arrive; however, the real arrival is on the bike; the where of the ride is of almost no consequence.

## IMPLEMENTATION APPROACH

Assuming a community wants to develop or enhance bicycle tourism programming. Here are some prompts to begin the process.

**Identify assets:** is the community already part of a bicycle tourism network? What bicycle tourism support services are available locally, within a 25-mile radius, within a 65-mile radius, and regionally? What programs throughout the state support bicycle tourism? What events already exist to encourage bicycle tourism? What are the local and regional amenities and

destination sites, and/or why do people visit or would want to visit the area? Which businesses are doing well and why? Who are their target markets? Do synergies with bicycle tourism exist among existing businesses and visitor markets? Who are the area partners? Is there a program champion?

**Identify service gaps and infrastructural needs:** Can visitors stay here? Can visitors find food and water here? What quality of experience would cyclists have from the surrounding roadways? Do they need to be improved? Can cyclists easily find their way to town and services? How do cyclists get here? What are the nearest transportation options (such as train or bus)? How far must cyclists travel from transportation hubs to get here?

**Create a marketing strategy:** Who is your target market? What are your key messages? How will you reach your market?

## Future Research

Additional studies from bicycle tour routes of either a qualitative or quantitative nature could further support these findings. Additionally, collecting data regarding numbers of cyclists traveling on long-distance routes would further support and substantiate the economic impact of this particular activity in communities.

Family-friendly routes may include more heritage components and interpretation than routes designed to take travelers great distances. On the other hand, people who are likely to travel scenic byways by car may be encouraged to travel them by bicycle with sufficient support services. Additional research on scenic byway target markets and populations could further support the connection between bicycle tourism and historic roadways.

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