

Economic Impact of Trail Development

05.17.19





**PUBLIC SECTOR
CONSULTANTS**

Prepared by

Public Sector Consultants
Lansing, Michigan
www.publicsectorconsultants.com

Prepared for

Community Foundation of St. Clair County
Port Huron, Michigan
www.stclairfoundation.org

Table of Contents

EXECUTIVE SUMMARY	4
Background and Purpose	4
Summary of Findings	4
Lessons Learned from Leading Practice Communities	7
Conclusion	10
BACKGROUND AND PURPOSE	11
RESEARCH APPROACH	11
Selection Criteria	12
KEY FINDINGS	13
Who Uses Trails?	13
How Do Trails Benefit the Economy?	15
LESSONS LEARNED FROM LEADING PRACTICE COMMUNITIES	19
Trail Organization Consortia	19
Planning and Process	20
Trail Systems Serve Multiple Purposes	21
Demonstrating Value through Data	21
Common Misconceptions	22
Branding and Wayfinding	22
Long-term Maintenance	23
Success Requires Sustained Effort	24
APPENDIX A: LEADING PRACTICE REGION PROFILES	25
Erie County, Pennsylvania	26
Fayette County, Pennsylvania	29
Grand Traverse County, Michigan	33
Midland County, Michigan	37
Northwest Arkansas	41
Wright County, Minnesota	45
APPENDIX B: COUNTY COMPARISON TABLE	49
REFERENCES	50

Executive Summary

Background and Purpose

St. Clair County has a rare opportunity to substantially advance its trail network due to a confluence of events that will likely result in both an infusion of funding and an increased focus on development from regional and statewide trail organizations. These efforts will build off existing routes and plans developed by local leaders.

Against this backdrop, the Community Foundation of St. Clair County, with funding support provided by the Ralph C. Wilson, Jr. Foundation (RCWJRF), commissioned Public Sector Consultants (PSC) to evaluate the user patterns and economic significance of trail systems in similar communities. This effort will help partners in the county evaluate the potential value of further developing its own system. PSC researched lessons learned from leading practice communities to identify successful strategies that could be used in St. Clair County.

Summary of Findings

Trail development can be a meaningful component of a region's community and economic development strategy. The user patterns and economic significance of such systems are largely determined by their physical design, including location, length, and route. Considerations include a trail's proximity and connectivity to community assets, like neighborhoods, business districts, cultural amenities, and unique natural features. These trends and economic impacts are discussed below.

Who Uses Trails?

Of the communities studied, user groups, rates, and patterns vary greatly. Some trail systems primarily serve residents, while others have become nationally renowned tourist destinations for those seeking natural resource-based recreation opportunities. Trails that cater primarily to residents, such as the Paint Creek Trail in Oakland County, tend to be shorter in length and connect to fewer community assets. Users cite recreation, exercise, and transportation as their primary reasons for use. For example, the Paint Creek Trail served approximately 6,000 users an estimated 66,420 times in a summer. Almost all of these people, 94 percent, either resided or worked in Oakland County.

However, trails that cater primarily to tourists, such as the Great Allegheny Passage (GAP) in Pennsylvania, tend to feature longer routes that provide opportunities for multiday trips, leverage unique natural features, and connect to business districts of communities along the route. In a single season, the GAP attracts an estimated one million users, of which 250,000 are from out of state.

The most impactful trail systems, such as the Razorback Regional Greenway in Northwest Arkansas, are designed to meet the needs of both residents and tourists by providing long-distance routes, unique recreation experiences (such as paved routes and mountain biking), and connectivity to neighborhood-level assets.

What Is the Demand for Outdoor Recreation in Michigan?

Outdoor recreation, particularly walking outdoors and bicycling, is highly valued by residents in Michigan and St. Clair County. A 2017 survey commissioned by the Michigan Department of Natural Resources and conducted by PSC assessed residents' views and perceptions of outdoor recreation amenities across the state and in subregions. For the purpose of the survey, St. Clair County is located within the Central/East Michigan region.¹ Within the region, the survey results show:

- 82.5 percent of residents said that outdoor recreation is very important or moderately important to their household
- 77.6 percent participated in walking outdoors
- 31.9 percent participated in road biking, which includes biking on paved trails
- 22.4 percent reported that walking outdoors was the most important recreational activity to them. This was 13.6 percent higher than the next-most important recreational activity—big-game hunting.

While residents cite the importance of recreation, including walking and biking, the region underperforms every other in the state for the amount of recreation opportunities within a half hour of home, and all but one region for the quality of these opportunities within the same vicinity. The Central/East Michigan region also has the greatest disparity between satisfaction levels close to home and statewide, which may indicate that residents may be more likely to travel to other areas to recreate.

How Do Trails Benefit the Economy?

Trail development can be a meaningful component of a community's economic development strategy. The value of a trail is driven by its location, length, and route, including its proximity and connectivity to community assets, like business districts, cultural amenities, and unique natural features. These aspects will impact the extent to which trails improve property values, draw tourists, spur business creation and expansion, and support community and workforce development goals.

Increase Property Value

Relatively few communities have assessed how trail development affects property value because it is a challenging task that requires controlling for multiple variables. However, the Land Policy Institute at Michigan State University (MSU) completed such a study in 2008 for Oakland County, Michigan, that compared properties with and without walkable infrastructure. MSU found that most properties close to walking and biking infrastructure, such as sidewalks, bike lanes, and trails, have a higher property value than houses without these amenities. According to this study, houses within 100 meters experienced no change in property value; houses 100 to 500 meters saw values increase by 4.6 percent; houses 500 to 1,000 meters saw values increase 2.3 percent; and houses 1,000 to 1,500 meters saw property values increase 6.3 percent.

¹ The Central/East Michigan region comprises Arenac, Bay, Clare, Clinton, Eaton, Genesee, Gratiot, Gladwin, Huron, Ingham, Isabella, Lapeer, Midland, Saginaw, Sanilac, Shiawassee, St. Clair, and Tuscola Counties.

In Northwest Arkansas, studies have shown that houses within a quarter mile of the regional trail system sell for approximately \$15,000 more than properties two miles away from the trail system. When considering houses within one mile of bike trails, homeowners in the region experience a cumulative increase of approximately \$1.2 million of property value per mile of trail construction (BBC Research and Consulting 2018). Due to the complexity of the analysis, however, the study did not establish a causal relationship between property value and trail development. Yet, government planners in the region highlight that property developers are prioritizing locating projects in areas with connectivity to the trail system (NWARPC, pers. comm.).

Increase Tourist Activity

Trail systems can attract a variety of tourists, including event-oriented, long-distance, and more casual day users. Many communities have quantified the economic significance of these visitors.

- Trail events, such as run-walks, marathons, and triathlons, can attract people from outside of the region. In Traverse City, events held on the Vasa Pathway are estimated to draw 13,000 people from outside the region each year. These visitors contributed \$2.6 million to the local economy through direct spending. The overall economic impact, which included the ripple effect of secondary spending, was estimated at \$3.5 million in a single year.
- Long-distance trails can attract cyclists and hikers who seek multiday experiences. The GAP trail in Pennsylvania is estimated to draw one million trail visits annually, 250,000 of which are from out-of-state users. Of all visitors, 62 percent planned on staying overnight. Moreover, the average user group spent \$125 on lodging and \$60 per day at restaurants, with the majority staying for multiple nights, further increasing the economic impact to the economy.
- Shorter-distance trails, particularly those leveraging unique natural features, can also serve as a draw for tourists. The Duluth, Minnesota region has developed a series of trails along the north shore of Lake Superior, which attracted 96,456 visitors from outside the region over one summer. The most heavily used trail is only 7.5 miles long but travels along the Lake Superior shoreline within the city of Duluth. Surveys showed that 74 percent of users indicated that trails were a major factor for their trip. Furthermore, these visitors spent an estimate \$17.8 million in the region during their stays.

Support Business Creation and Expansion

Increased tourism and residential use from trail development can support a variety of local businesses, including those in the hospitality sector, as well as trail-oriented businesses, such as bicycling shops and guide services. Businesses along the GAP are periodically surveyed to assess the trail's significance to their establishment. As the GAP has become more prominent and better promoted, businesses continue to experience growth:

- In 2011, 31 percent of annual business was attributed to the trail, and 30 percent of businesses indicated that they expected to expand. Just three years later, 41 percent of business was attributed to the trail, and 40 percent indicated that they planned on expanding. Of these businesses, 67 percent indicated that the GAP influenced their decision to expand operations.
- In Connellsville, Pennsylvania, trail tourism increased so much that the local trail consortium commissioned a market study to evaluate the potential development of a new hotel. The study showed that demand from trail-oriented tourism would support this effort. The hotel was later constructed and

featured a business model that intentionally caters to trail users, offering close proximity to the GAP and providing a bicycle service station. The majority of the hotel's business comes from these users.

- In Pittsburgh, Pennsylvania, at the northern end of the GAP, Golden Triangle Bike Rental shifted its entire business model from daily rentals in the city to multiday rentals along the trail. Approximately 90 percent of these customers fly into the region to travel the GAP.

Support Community and Workforce Development Goals

While it is much more difficult to quantify, trail development can support community and workforce development goals. In the 21st century economy, quality of place matters to potential employees when deciding where to live and work. Communities that succeed increasingly focus on providing a high quality of life for residents, which can be supported by trail development. Businesses are responding by locating in communities with a higher quality of life and with an existing labor pool. For example, in Northwest Arkansas, employers take prospective employees out onto the Razorback Regional Greenway as part of their talent attraction strategy, as trails are often cited as an important factor in residents' quality of life.

Moreover, well-designed trail systems can also support workforce development goals when they connect residential and employment centers. Trails can provide viable transportation alternatives to lower-income residents who may not have access to a car or public transportation. This is evidenced in Northwest Arkansas where trails in dense, low- and medium-income neighborhoods experience the highest use from people traveling to and from work and school.

Lessons Learned from Leading Practice Communities

PSC analyzed six communities from across the country with best-in-class trail systems and management models to identify user trends, the economic significance of trails, and common practices for successful trail development to determine whether these approaches can be replicated in St. Clair County. The six communities are:

- Erie County, Pennsylvania
- Fayette County, Pennsylvania
- Grand Traverse County, Michigan
- Midland County, Michigan
- Northwest Arkansas
- Wright County, Minnesota

Each region features unique characteristics and organizations with varying levels of capacity and interest in trail development. Organizational structures have emerged in each region that reflect and respond to these differences. Though each is distinct, many common themes emerged as leading practices for communities seeking to transition from a series of independent, disconnected trails to an interconnected system. These findings are described briefly below and in greater detail in the “Lessons Learned from Leading Practice Communities” section. Profiles of each region are provided in Appendix A.

Trail Organization Consortiums

Trail organization consortiums guide development and implementation of trail systems. Best-in-class trail systems are often led by a consortium of trail-oriented organizations that comprise a team of partners that can advance development and respond to unique challenges a region may face. Partners are cognizant of their respective roles (funding, advocacy, planning, etc.) and complete tasks without duplication

or overlap of efforts to the extent possible. These groups often include meaningful partnerships between governmental, nonprofit, and philanthropic entities—regional and county planning organizations are often a common leading partner. The specific role and composition of consortiums differ for each community based on the presence and capacity of entities within the region. A consortium provides the forum to establish consensus-based priorities and guide and support every aspect of the development of the trail system.

Planning and Process

Robust engagement processes and planning position communities for success. Regions that lack these critical processes may seek to achieve expedient outcomes but often experience setbacks due to resistance from local decision makers and opinion leaders. Furthermore, lack of robust planning can result in trail systems that do not respond to community needs and priorities, failing to serve the very people who use them.

Engagement and planning often occur in multiple stages across the development process. Many communities begin by mapping existing and planned trail routes, identifying where connections are needed, and determining where revisions are appropriate. This mapping process often serves as the basis for community engagement, where residents and local leaders decide which assets to connect through a trail system and establish priorities for implementation.

Many communities use this process to establish a long-term regional trail master plan. Once this plan is developed, trail routes are integrated into other planning documents, such as long-range transportation, comprehensive, and five-year recreation plans, to better position communities for future funding and codify agreed-upon routes into municipal and county planning documents. When individual trail segments are advanced, more detailed plans are developed. During this process, additional community engagement often occurs to determine the precise location of potential routes.

Trail Systems Serve Multiple Purposes

Trail systems are intended to serve multiple purposes. The highest-value trail systems advance multiple community and economic development goals by serving both residents and tourists. The specific features of these systems differ among communities, but commonly include a primary long-distance route that enables multiday experiences, travels along unique natural features, and provides connectivity to downtowns. Secondary routes are typically designed to support resident use by connecting to neighborhoods, employment centers, schools, and other community assets, such as environmental and cultural amenities. Designing a trail system in this manner supports tourism and maximizes the benefit for residents.

Demonstrating Value through Data

Collecting data and information from local users and businesses helps make the case for continued trail development. In many of the communities studied, local decision makers and opinion leaders were skeptical of the benefits trails provide and their relative priority compared to other community needs. Collecting robust data on trail use and business impact can help foster support for continued

development. Many of the trail systems examined completed at least one user study since their establishment that demonstrated user demographics. The most robust systems, however, complete user and economic impact studies on a periodic basis, using this information to adjust development and promotional strategies.

Common Misconceptions

In many communities, there is often concern that trails can increase public safety issues, but these concerns rarely come to fruition. Every community studied experienced concerns from residents about public safety along the trail. These concerns are perhaps most pronounced from property owners adjacent to and in the immediate vicinity of planned routes. Once the trails are developed, however, these concerns are often not realized. Every community indicated that crime along the trail is no more pronounced than any other area of their community. Furthermore, many suggested that trails actually enhance public safety due to the formation of user groups, which deters potential negative behavior.

Branding and Wayfinding

Developing a brand and consistent wayfinding standards yields dividends for trail systems.

Leading practice communities develop cohesive brands for their trail network. For the purposes of this report, wayfinding refers to information systems that guide people through a physical environment and enhance their understanding and experience of the space; branding is a multifaceted approach that includes marketing and promotional materials, wayfinding signage, and the trails' physical design, including width and surface type. Developing a consistent brand improves communications, fosters a common sense of identity among trail partners, builds support for funding requests, and enhances user experience.

Communities have taken different approaches regarding the specific information included on wayfinding signage and promotional materials. Generally, initiatives led by governmental entities are less likely to promote individual businesses, while those led by nongovernmental entities are more likely to. Using an inclusive process to develop consensus standards is one of the most important elements of a branding strategy. Ultimately, there is no right or wrong approach for what information to include—other than what community partners agree is appropriate.

Long-term Maintenance

Establishing maintenance endowments that are capitalized during initial trail development provides sustainable funding to maintain quality trail systems.

Many regions expressed concerns regarding long-term maintenance expenses. Many regions internalize general maintenance expenses within the owner or managing entity's operating budget, but these budgets can be strained when facing higher-expense repairs. To overcome this challenge, one community developed a new model that could set the standard for sustainable maintenance funding. Endowed funds were established at the local community foundation to generate revenue for maintenance. In this community, funding for the endowment is included within the original capital campaign to construct the trail. This practice has been met with great support within the community, which recognizes that long-term sustainability is just as important as securing funding for initial construction.

Success Requires Sustained Effort

Achieving a best-in-class trail system requires sustained efforts. Most of the regions studied have developed their trail systems over the course of many decades, which is sustained through leadership provided by the trail organization consortium. Often, smaller segments are built incrementally, gradually building a more comprehensive system. As the trails continue to be developed and individual segments are connected, its value and impact grows.

Conclusion

Developing a trail system can be a meaningful component of a community and economic development strategy. However, it is important to consider various factors: The system's physical design, how it serves tourists and residents, the inclusion of both central long-distance and secondary connecting routes, and how the system improves the community's quality of life.

Beyond these considerations, the most successful trail systems are advanced by consortiums of trail-oriented organizations that guide every aspect of development. This includes creating regional master plans, identifying and prioritizing routes, considering branding, developing consensus wayfinding standards, and promoting the trail system. Focusing on forming consensus strategies and robust engagement can provide a strong foundation to not only develop—but also to sustain—a best-in-class trail system, which oftentimes takes many years to achieve.

Background and Purpose

A confluence of events presents a rare opportunity to support the development of nonmotorized pathways, or trail systems, in St. Clair County. In 2018, the Ralph C. Wilson Jr. Foundation announced that it will invest \$50 million in trail development in Southeast Michigan as part of its initiative to enhance the livability of communities within its service region, which includes St. Clair County. Simultaneously, efforts to develop statewide trails are increasing focus on trail development in the county.

Currently, St. Clair County is home to a terminal end of the Great Lake-to-Lake Trail's first route, which will travel approximately 315 miles from South Haven to Port Huron (Michigan Trails and Greenways Alliance 2017). This initiative is garnering support from statewide trail and bicycle organizations as well as local partners. The community already features a series of significant trail segments, and plans are underway to complete the Bridge to Bay Trail, which will extend 54 miles mostly along the coast from Lakeport State Park to New Baltimore (St. Clair County, Michigan n.d.).

Furthermore, in his final days in office, Gov. Rick Snyder signed a bill that may provide additional state funding for trail development by altering the funding allocations made by the Michigan Natural Resources Trust Fund (MNRTF). This change would give the MNRTF greater flexibility on how it allocates funds, enabling it to direct less funding toward the purchase of land and more toward the development of recreation infrastructure, including trails. Because the MNRTF is protected by the Michigan Constitution, these changes must be approved by voters and will appear on the ballot in 2020 (Gibbons 2019). If voters approve the change, it is anticipated that additional trail funding may become available as soon as 2021.

Against the backdrop of anticipated funding, communities preparing trail development plans will be well positioned to implement them in the coming years. To that end, the Community Foundation of St. Clair County is taking a leading role—in partnership with county and local government as well as community partners—to evaluate how St. Clair County will proceed with trail development.

The Community Foundation of St. Clair County contracted with PSC to support these efforts by evaluating trail user patterns, assessing the economic significance of trails, and researching practices utilized by similar communities with best-in-class trail systems to better understand the lessons they learned to inform a trail development strategy in St. Clair County.

Research Approach

PSC identified six communities in Michigan and across the country with well-developed trail systems to research. Three of these communities were selected from PSC's previous work with the RCWJRF and are recognized as having a best-in-class trail network. The remaining three were selected based on relevant criteria, such as demographic, economic, and land-use characteristics, which were identified in conjunction with the project team.

Selection Criteria

To identify communities to include in the study, PSC evaluated a range of demographic information and other important characteristics. U.S. Census Bureau data were used to identify counties with similar median household income, population size, and economic sectors. Communities were then evaluated using the following additional criteria:

- Presence of a regional trail network
- Location along the coast of a Great Lake
- Location within the Midwest/Great Lakes region
- Percentage of farmland
- Proximity to a large city/metropolitan area similar to Detroit
- Availability of trail user and economic impact studies
- Philanthropic involvement in trail development

These criteria were reviewed to identify communities that would provide robust information for St. Clair County. Drawing on this information, the project team reached consensus to research the following locations:

- Erie County, Pennsylvania
- Fayette County, Pennsylvania
- Grand Traverse County, Michigan
- Midland County, Michigan
- Northwest Arkansas
- Wright County, Minnesota

To identify key traits of regions with best-in-class trail systems, PSC conducted a series of in-depth telephone interviews with representatives from these communities, focusing on user patterns and the economic significance of trail development. In total, PSC interviewed 20 representatives from 17 organizations actively involved in trail development in the leading practice communities. Interviewees included representatives from state, regional, county, and municipal trail, park, and planning organizations, as well as nonprofit entities, philanthropic organizations, and visitor and convention bureaus. Multiple participants were interviewed from each region to ensure diversity of perspectives.

Through these efforts, PSC obtained and reviewed a wide range of studies on trail systems in these regions. Summaries of each community and the findings are provided in Appendix A.

Key Findings

Six regions from across the country with best-in-class trail systems and management models were analyzed to identify common trends that lead to successful trail development and to determine what approaches could be applied in St. Clair County. This research included a focus on user rates, the economic significance of trails, and other points of interest to community partners. The information included in this study may inform trail development in St. Clair County by providing information about these factors; however, use patterns and the economic impact of trail systems vary among communities.

Each evaluated region features unique community characteristics and organizations with varying levels of capacity and interest in trail development. Organizational structures have emerged in each region that reflect and respond to these differences. While each region is distinct, many common themes emerged as leading practices for those communities seeking to transition from housing a series disconnected trails to featuring an integrated regional system. These themes are discussed below.

Who Uses Trails?

Throughout Michigan and the rest of the country, trail systems have been developed to serve a variety of purposes. The physical design and location of trails significantly influence usage patterns, including the type, frequency, and volume of users. Communities with the highest-value trail systems intentionally design them for transportation, recreation, and health benefits, and locate them within population centers to support economic and community development.

Many communities begin their trail program with a goal of serving residents. Trail systems can provide a viable transportation option for people of all ages and income levels to commute from their homes to work, school, business districts, and other significant community assets. Systems intentionally designed to connect these areas experience higher use and better serve community and economic development purposes.

Trails can also draw significant tourist activity by catering to different types of users, including long-distance, event-oriented, and more casual day users. Many of the most successful trails leverage a region's unique natural resource assets and provide connectivity to commercial districts. Furthermore, adding trails to the portfolio of recreation assets can strengthen a community's draw for visitors who may seek a variety of recreational and cultural amenities. Furthermore, different trail types can cater to different user groups such as road/paved surface cyclists, mountain bikers, casual riders, walkers, runners, equestrians, and others.

The regions studied showed a variety of use patterns for their trail systems. However, all trails had significant use by residents and/or tourists. For example:

- In the Grand Traverse region, the VASA Pathway—managed by the Traverse Area Recreation and Transportation (TART) Trails organization—is used 55,000 times by at least 6,200 unique visitors in a year. Nonlocal users represented 19 percent of day use but 77 percent of event participation (Avenue ISR 2014).
- In Pennsylvania, approximately one million trail visits occur on the GAP annually. User studies show that the trail serves as a tourist destination: Approximately 25 percent of users are from another state, drawing people from 35 states and three countries outside of the U.S. Of all users, between one-

quarter and one-third use the trail for multiday trips and have a greater impact on the local economy than local users (Trail Town Program 2015).

- The Paint Creek Trail is an 8.5-mile nonmotorized pathway that extends from Rochester to Lake Orion, Michigan, in Oakland County. A 2004 study estimated 66,420 uses between May 1 to September 30. Distinct visitors used the trail 11 times per year, on average, which indicates that approximately 6,000 individuals use the trail annually. Of these, almost all (94 percent) lived or worked in Oakland County (Vogt et al. 2004).
- The Pere Marquette Rail Trail extends 22 miles through Midland County. In 2002, an estimated 178,000 individual uses occurred between April and September. Of trail users, 77 percent lived or worked in Midland County, and 23 percent were tourists. Looking only at weekends, the number of tourists increased to 31 percent. Most users (61 percent) cited exercise or health benefits as their primary reason for using the trail; 35 percent reported recreation; and 3 percent indicated transportation. Users reported a satisfaction rate of 97 percent (Nelson et al. 2002). Through an interview with the city parks department, it was noted that the trail route itself does not extend well into urbanized areas and commercial districts, which may contribute to the relative proportion of users using the trail for transportation purposes.
- The Northwest Arkansas region has become a national tourist destination for mountain biking by designing bike trails that leverage the local terrain. The Razorback Regional Greenway also regularly serves residents. During the week, the highest use rates on the greenway occurred in the morning and evening, as people utilized the trail to commute from home to work and school. The most used trail portions are located in areas with high population density and low-to-medium household incomes. During the weekend, trails are predominantly used for recreational purposes by both residents and tourists (San Diego State University 2017).

What Is the Demand for Outdoor Recreation in Michigan?

Residents in St. Clair County—and throughout Michigan—highly value outdoor recreation, particularly walking outdoors and bicycling, which is facilitated by trail development. A 2017 survey of Michigan residents completed by the Michigan Department of Natural Resources reveals a wealth of information regarding the importance of and demand for recreation infrastructure across the state and subregions. St. Clair County is located within the Central/East Michigan region for the purpose of the survey (PSC 2017). Within the region, the survey results show:

- 82.5 percent of residents said outdoor recreation is very or moderately important to their household
- 83.4 percent participated in outdoor recreation in the previous year
- 8.6 percent participated in outdoor recreation activities less than once a week; 24.3 percent participated more than four times a week; 37.5 percent participated two to four times a week; and 29.4 percent participated once a week
- 77.6 percent participated in walking outdoors
- 31.9 percent participated in road biking (which includes biking on paved trails)
- 27.1 percent participated in off-road biking (which includes mountain biking)
- 6.7 percent said they participate in horseback riding, and 1.4 percent said it was the most important recreational activity to them
- 22.4 percent said that walking outdoors was the most important recreational activity to them. This is significantly higher than the second-most important activity—big-game hunting—which 8.8 percent of people identified as the most important recreational activity to them.

While outdoor recreation is clearly important to residents in Central/East Michigan, the region underperforms every other in the state for the amount of recreation opportunities within a half hour of home and all but one for the quality of these opportunities within the same vicinity. The region also has the greatest disparity between satisfaction levels close to home and statewide, which may indicate that residents may be more likely to travel to other areas of the state to recreate. Furthermore, 37.3 percent noted that they would be unwilling to travel more than one hour for outdoor recreation, which may indicate that there is unmet demand for outdoor recreation opportunities closer to home within the region. Exhibit 1 compares the satisfaction rates with the amount and quality of recreation opportunities within a half hour of their home and statewide.

EXHIBIT 1. Outdoor Recreation Opportunity Satisfaction Rates by Region

Region	Quality of Outdoor Recreation Opportunities (percentage of residents very satisfied or satisfied)		Amount of Outdoor Recreation Opportunities (percentage of residents very satisfied or satisfied)	
	Close to Home	Statewide	Close to Home	Statewide
Central/East Michigan (includes St. Clair County)	73.1%	87.3%	70.0%	83.8%
Upper Peninsula	81.5%	85.2%	81.1%	85.6%
Northern Michigan	82.1%	89.6%	81.7%	86.8%
West Michigan	81.1%	83.8%	81.8%	82.8%
Detroit Metro	70.6%	78.4%	70.6%	82.4%

Source: Public Sector Consultants 2017.

How Do Trails Benefit the Economy?

Trails have been shown to stimulate business creation, increase property values, and boost spending at local businesses. These economic benefits are largely driven by a trail system’s location, length, route, and proximity to community assets and unique natural features. Systems that are likely to have the highest impact feature a primary route that is long enough to enable multiday trips that draw people for overnight stays, are built along unique natural assets, such as rivers and lakes, and provide easy connectivity to downtown districts. Secondary routes, designed especially to serve local users, connect important nodes in the community, such as schools, residential and employment centers, as well as cultural and environmental assets. The economic impact of a trail system is realized in a variety of ways and may include increasing property values and tourist activity, supporting business creation and expansion, and bolstering community and workforce development goals.

Increase Property Values

Trail development has been shown to increase property values. For example, a 2008 study completed by the Land Policy Institute at MSU compared properties with and without walkable infrastructure. This study found that most houses in Oakland County, Michigan, that are close to walking and biking infrastructure (sidewalks, bike lanes, and trails) have a higher property value than houses without these assets. Houses within 100 meters experienced no change in property value; houses 100 to 500 meters saw values increase by 4.6 percent; houses 500 to 1,000 meters saw values increase by 2.3 percent; and houses 1,000 to 1,500 meters saw property values increase 6.3 percent (Land Policy Institute 2008).

Similarly, a study completed in Northwest Arkansas demonstrated that houses within a quarter mile of the regional trail system sell for approximately \$15,000 more than properties two miles away.² When considering houses within one mile of bike trails, regional homeowners see approximately \$1.2 million of increased property value per mile of trail construction (BBC Research and Consulting 2018). This study, however, did not establish a causal relationship between property value and trail development. In other words, these trails could be located and developed in areas that already have higher property values. Finally, John Crompton—a professor at Texas A&M and one of the nation’s leading experts on the impact of greenspace on property value—conducted a literature review that assessed views and perceptions of property owners adjacent to, and in the vicinity of, greenways. This review found that trails do not hinder the marketability of a property. In fact, the study showed that between 20 and 40 percent of people near the trails believed greenways have a positive impact on marketability and value (Crompton 2001). Considering the multitude of studies that have been completed, it is well documented that trails can improve property values.

Increase Tourist Activity

Trail systems can attract a variety of tourists, including event-oriented, long-distance, and more casual day users who value trails as an additional amenity, which can enhance the appeal of vacationing in a community.

Trail Events

Many regional trail systems are utilized to support events such as 5k run-walks, marathons, triathlons, and multiday cycling events. These events can serve as a draw for overnight trips into the community. In the Grand Traverse region, events held on the Vasa Pathway are estimated to draw more than 13,000 visitors from outside the region each year. Of these visitors, 88 percent stayed an average of 1.77 nights; thus, the total individual overnight stays in the region is more than 23,000 annually. These visitors also rely on local hospitality services during their visit, as only 13 percent stayed with a friend or family member. The remaining visitors stayed in hotels, motels, bed and breakfasts (67.1 percent), rental properties/second homes (12.2 percent), and campgrounds (7.4 percent). These visitors contributed \$2.6 million to the local economy through direct spending. The overall economic impact, including the ripple effect of secondary spending, was estimated at \$3.5 million in a single year (Avenue ISR 2014).

Long-distance and Visiting Day Users

Long-distance trails draw cyclists and hikers who seek multiday experiences and are willing to travel from far-off locations to find the experiences they desire. Along the GAP, an estimated one million trail visits occur annually. Of these, approximately 25 percent, or 250,000, are from out-of-state users (Herr 2018). Trail surveys indicate that, in a single year, the trail drew visitors from 35 states, Canada, the Czech Republic, and Spain. In 2014, 62 percent of all trail users planned an overnight stay and spent an average of \$125 per night. Of these, 7 percent stayed for one night, 32 percent stayed for two to three, 40 percent stayed for four to six, and 22 percent stayed for seven or more. The remaining 38 percent of day users spent an average of \$18 per day (Trail Town Program 2015). While long-distance trails cater to those who seek multiday experiences, they also serve single-day users, which includes residents and visitors.

² This study did not identify the percentage by which property values were increased.

Additionally, visiting trail users indicated the average group spending at restaurants was approximately \$60 per day.

Outside of the communities selected for in-depth research, a user and economic impact study of four paved multiuse trails along the north shore of Lake Superior in the Duluth, Minnesota region demonstrates how each trail's location and length impact user demographics and economic significance (see Exhibit 2).

EXHIBIT 2. Use Rates of Trails in Northern Minnesota

Trail	Length	Description	Percent Local	Percent Visitor	Daily Average Use (Summer)	Average Daily Spending by Visitors
Duluth Lakewalk	7.5 miles	Located within downtown Duluth along the coast of Lake Superior	77%	23 %	630	\$230
Gitchi-Gami State Trail	30 of 89 miles completed in various segments	Located along the coast of Lake Superior in more remote areas and connects towns	25%	75%	80	\$210
Willard Munger State Trail	16 miles	Located mostly inland; connects Duluth and Carlton	73%	23%	228	\$115
Saint Louis River Trail	3.4 miles	Located inland; connects Carlton and Scanlon	100%	0%	56	N/A

Source: PSC compiled this data from the Arrowhead Regional Development Commission.

This study demonstrates that shorter trails tend to serve local users over tourists, while longer trails draw a greater portion of people from outside the region. The Duluth Lakewalk, located along the shoreline and in the downtown area, had the highest total usage and greatest daily spending among the four trails. The Gitchi-Gami State Trail, which has the longest route and is located in a more remote area, had the greatest proportion of users from outside the region. This trail is currently under development, with significant segments awaiting completion; however, once completed and longer segments are made available, rates may continue to increase. The Saint Louis River Trail is the shortest trail in the region, is located inland from the coast, and did not draw any tourists.

Of visitors to the region, 74 percent indicated that the trail was a major factor for their trip. They cited scenery, location, proximity to lodging and businesses, and trail conditions as important factors in drawing them to the area. On average, visitors from outside the region spent \$184.86 per day and stayed for three nights. The direct spending in the region from tourists was estimated at \$17.8 million for a single recreation season.

Support Business Creation and Expansion

Enhanced tourism and local use from trail development can support the hospitality sector and the creation and expansion of trail-oriented businesses, such as bicycle shops and guide services. This growth is most pronounced in communities with longer-distance trails that serve as a tourist destination, such as the GAP. The GAP has demonstrated that building long-distance trails can support the development of new businesses and the growth of existing ones. The increased tourism generated by the trail has become an economic driver in the community. Businesses along the GAP are periodically surveyed to assess the significance of the trail to their establishment. As the trail has become more prominent and better promoted, businesses continue to experience growth. For example, in 2011, 31 percent of annual business was attributed to the trail. At that time, 30 percent of businesses indicated that they expected to expand; in 2014, 41 percent of business was attributed to the trail, and 40 percent indicated that they planned on expanding. Of these businesses, 67 percent indicated that the GAP trail influenced their decision to expand (Trail Town Program 2015).

Increased trail usage has also supported the creation of new businesses. For example, in Connellsville, Pennsylvania, tourism increased so much that the Allegheny Trail Alliance (ATA) conducted a market study that demonstrated the need for a new hotel (PKF Consulting 2013). The study specifically referenced the importance of the trail to the business model and recommended locating the hotel within three “easily traveled miles” of the GAP and including onsite bicycle storage and a self-service bicycle maintenance station. Moreover, the GAP also spurred the creation of trail-oriented businesses, such as outfitters and guides. For example, Ohiopyle, Pennsylvania, a town of 57 people, is home to four outfitting businesses that serve outdoor recreation users in the community, according to the ATA.

Golden Triangle Bike Rental, based in Pittsburgh, draws the majority of its business from tourism along the GAP. Tom Demagall, the owner, began renting bikes to customers interested in touring Pittsburgh. As the GAP was completed and connected to the city, customers requested bike rentals for longer periods of time to traverse the trail. Golden Triangle Bike Rental updated its business model to accommodate these requests and began offering additional services, such as route and trip planning, transportation services to different trail portions, and luggage transportation to enable people to take one-way trips along the trail. Demagall stated that 70–75 percent of his business now comes from the GAP—a stark contrast to when it was 100 percent based on the city. Of his clients, 90 percent fly in from out of state to travel the GAP, representing a complete shift in the shop’s original business model (Golden Triangle Bike Rental, pers. comm.).

Support Community and Workforce Development Goals

While less tangible than the number of businesses created, visitor spending, or property value increases, trails can strengthen a local economy by supporting community and workforce development goals. As 21st century workers prioritize quality of life when determining where to live and work, traditional business attraction and retention models are changing. Rather than solely focusing on attracting businesses, communities also need to ensure that the region will draw potential employees. Businesses are responding to these trends by locating in communities with a higher quality of life and with a sufficient labor pool. Thus, for a community to be attractive to businesses, it must also be attractive to potential employees by providing the amenities they desire.

Furthermore, technological advances increasingly enable employees in some sectors to work remotely, providing them the luxury of choosing where to live without any consideration of where their employer is located. Trail development can support placemaking efforts that enhance the overall quality of life within a community by providing desired amenities. For example, Northwest Arkansas is home to the world headquarters of Walmart, Tyson Foods, and J.B. Hunt Transportation services. These employers use the trails as part of their talent attraction and retention strategies by offering prospective candidates tours of the system. Similarly, trails are often cited as being an important factor in the overall quality of life among residents who choose to live in the region, according to the Northwest Arkansas Regional Planning Commission (NWARPC).

A well-designed trail system can also support workforce development goals when they connect residential and employment centers. In addition to improving the overall quality of life, trails can also provide viable transportation alternatives to lower-income residents who may not have access to a car or public transportation. In Northwest Arkansas, trail user studies indicate that, during the week, the highest use of the Razorback Regional Greenway occurs before and after work and school. The use rates along the trail are the highest in dense, low- and medium-income neighborhoods, suggesting that these populations utilize the trail for transportation purposes (San Diego State University 2017).

Lessons Learned from Leading Practice Communities

Six regions from across the country with best-in-class trail systems and management models were analyzed to identify common trends that lead to successful trail development and to determine what approaches could be applied in St. Clair County to foster development of a best-in-class, interconnected regional trail system.

Each region evaluated has a unique landscape of community characteristics and organizations with varying levels of capacity and interest in trail development. Organizational structures have emerged in each region that reflect and respond to these differences. While each region is distinct, many common themes emerged as leading practices for communities seeking to transition from a set of disconnected trails to an integrated regional system. These themes are discussed below.

Trail Organization Consortia

Trail organization consortia guide development and implementation of trail systems.

Successful regional trail systems are usually led by a consortium of trail-oriented organizations that include meaningful partnerships between governmental, nonprofit, and philanthropic entities. The specific role and composition of consortia differ for each community based on the presence and capacity of entities within the region. These consortia provide a forum to establish consensus-based priorities as well as guide and support every aspect of trail system development. This group leads efforts to develop long-term strategic plans, identify routes for the trail system, prioritize implementation endeavors, fundraise, coordinate with local units of government to develop trail segments, provide technical support, coordinate community engagement and public outreach, acquire land, design wayfinding materials, engage in marketing and promotion, and develop strategies for trail operations and maintenance. These groups are also critical to creating innovative solutions that respond to unique challenges of the region.

In some areas, governmental agencies play the leading role, and in others, nonprofits fulfill this position. Philanthropic organizations are often active partners, serve as conveners, fund consortium operations, and fund elements of trail development. Regional and county planning organizations frequently partner with trail consortiums and are uniquely positioned to fill important roles in the development of a trail system because they coordinate planning among multiple jurisdictions within their communities. As a result, these entities also serve as a forum to mediate differences among jurisdictions and advance local-level priorities.

While decision making is guided by trail organization consortiums, individual member organizations tend to lead individual aspects of implementation. For example, planning entities often serve as a convener; provide technical support for planning, mapping, engineering, and design; and coordinate funding opportunities with development of individual trail segments. In many communities, planning entities do not attempt to set trail priorities themselves but rather serve as a neutral broker among stakeholders and units of government. A convention and visitors bureau may be represented as a member of the trail organization consortium and could lead efforts to market and promote a trail. Similarly, a nonprofit entity, such as a land conservancy, could oversee negotiations to acquire property or easements for a new trail segment.

Planning and Process

Robust engagement processes and planning position communities for success. Regions with best-in-class trail systems prioritize robust processes over speedy outcomes that risk developing a trail plan that does not have stakeholder support or respond to the needs of people who will ultimately use the trail. Leaders of the highest-value and best-developed systems go to exceeding lengths to ensure there is meaningful community and stakeholder engagement throughout the trail development process. These efforts are led by the trail organization consortium.

Many communities begin planning and community engagement efforts with extensive mapping processes, which serve as the foundation of a long-term regional master trail plan. This mapping process includes two key elements. First, all existing trails are integrated into a single map. Second, all pending and planned trails that have been vetted through a formal planning process—such as regional master, comprehensive, five-year recreation, or long-range transportation plans—are incorporated into a single map. This often requires a substantial level of effort to collect and compile planning documents from every unit of government within the region. In most communities, planning bodies serve as a critical partner to collect and compile this information, while local philanthropies provide funding for these efforts. This process involves engaging trail-oriented organizations to develop a long-term regional master trail plan, enabling trail groups to better visualize existing and planned trails, identify where key connecting routes are necessary, and determine where revisions are appropriate.

In Wright County, the parks department led such an effort to establish its 25-year Trail and Bikeway Plan. As part of the planning process, a community survey identified priorities and preferences of likely users, identified existing and planned routes, and considered significant trails in neighboring counties. This plan was used to set high-level goals and general route locations. When the county advances the development of an individual trail route or segment, it prepares a more detailed, individual plan. A similar approach is used in Grand Traverse County, where TART Trails, Inc. maintains a five-year strategic plan but develops an annual workplan to direct its activity.

This planning process should provide an opportunity for the community and stakeholders to identify what community assets it seeks to connect through its trail network as well as a forum to develop shared priorities for which new segments should be advanced first. In many regions, these organizations concluded that completing a central trail route is a top priority and focus their efforts on advancing the most impactful segments first, such as those that connect existing segments and downtown districts.

Once a regional trail plan is developed, municipal, county, and regional planning entities frequently incorporate the routes into multiple planning documents, such as long-range transportation, five-year recreation, comprehensive, and regional master plans. This better positions the region and its individual jurisdictions to be eligible for greater state and federal resources for trail development.

Trail Systems Serve Multiple Purposes

Regional trail systems are intended to serve multiple purposes. The highest-functioning trail networks are intentionally designed to integrate recreation, transportation, health, community development, and economic development goals. Intentionally designing trail systems to serve each of these purposes enhances the potential funding sources that can be used to support trail development. The form and function that this takes in each community may differ, but networks commonly include developing a primary trail route that traverses long distances along unique natural features and provides easy connectivity to central business districts. In addition to the primary route, secondary routes—which primarily serve residents—are developed that connect neighborhoods, employment centers, schools, and other community assets, such as parks and cultural institutions. This approach can leverage the impact of tourism while also providing high value to residents.

Demonstrating Value through Data

Collecting data and information from local users and businesses helps make the case for continued trail development. In some communities, municipal officials, business leaders, and other opinion leaders are sometimes skeptical of the benefit of trails and the relative priority of this development compared to other community needs. Some communities have responded to these concerns by conducting robust studies of trail users and analyzing the economic impact following the completion of a system or significant portions of individual segments. This has enabled trail organization consortiums to provide meaningful data to local opinion leaders and decision makers that has proven to enhance support for the network.

In Northwest Arkansas, at the onset of the development of the Razorback Regional Greenway, some communities and community leaders were less receptive to trail investment than others. Once significant and impactful segments were completed, however, the communities began to better understand the value. At first, much of the information was experiential and anecdotal. To address these concerns, the primary philanthropic funder of the trail system invested in user studies that are completed annually and commissioned an economic impact study. This has provided a wealth of information to local leaders that provides tangible benefits of the Razorback Regional Greenway and has resulted in increased support for trail development (NWARPC, pers. comm.; Walton Family Foundation, pers. comm.). Similarly, the GAP in Pennsylvania is routinely assessed to track the user trends and business impact, which continues to provide the trail organization consortium with information to demonstrate the return on investment of development (ATA, pers. comm.).

Common Misconceptions

In many communities, there is often concern that trails can increase public safety issues, but these concerns rarely come to fruition. In the early stages of developing a trail segment, most communities experience concerns among residents—particularly those adjacent to and near potential trail routes—about public safety issues and loss of privacy. Every community included in this study indicated that they had experienced these concerns, but they have not borne out. Of the six communities, none track crime along their trail systems because any occurrences are no more frequent than is generally observed in the community. Furthermore, many communities suggested that occurrences of crime along the trail are actually lower than other parts of the region due to the increased presence of people, which deters potential negative behavior.

While public safety concerns have not come to fruition in these communities, the views of affected residents are no less valid. Two communities expressed that trail development partners work diligently to understand the concerns of individual land owners and collaboratively develop strategies with them to overcome their concern. This was often accomplished by working closely with property owners to incorporate site design that decreases the prominence of the trail on or near the property.

Branding and Wayfinding

Developing a brand and consistent wayfinding standards yields dividends for trail systems. Best-in-class trail systems often include a cohesive brand for the network that fully encompasses the physical design of the trail (including its width and surface type), wayfinding signage, as well as promotional and marketing materials. Communities that developed cohesive brands indicated that it was an important factor in their success. These regions realized multiple benefits, including forming a shared identity among trail partners, improving communications and public relations, increasing use among residents and tourists, and strengthening support for funding requests.

The specific components of a branded trail system vary among communities. Many develop wayfinding standards that stipulate sign requirements (placement, material type, size) and establish guidelines for what community amenities will be promoted. Several trail systems also include mile and confidence markers, which enhance user experience and public safety. These markers are designed to provide a specific location if emergency personnel need to respond to a safety concern, such as an accident along the trail.

Neutral brokers represented on the trail organization consortium, or hired consultants, often lead efforts to develop a consensus strategy for branding and wayfinding standards and work closely with local government units to ensure consistency. Many communities indicated that developing consistent wayfinding standards for trails that traverse multiple political jurisdictions is a challenging and time-consuming endeavor. This is especially true when some jurisdictions or existing trail systems already have standards in place that may conflict with one another. For example, in Wright County, the 620-mile Mississippi River Trail (MRT), which is led by the state, comprises a portion of the local trail system and has a unique brand that is used statewide. To overcome this challenge, Wright County and the state cobrand these trail segments.

Many regions noted that consistent signage improves the user experience of a trail system that traverses multiple jurisdictions. Ultimately, users want to know where they are, when routes change directions at intersections, and what attractions are nearby. Most people pay little attention to which entity owns the segment of trail they are on.

Business Promotion

The communities studied take various approaches to promoting individual businesses along the trail. Generally speaking, initiatives led by governmental entities promote business districts without identifying specific commercial operations due to policy concerns of promoting one business over another. These entities also indicated identifying individual businesses would increase operational costs, as signs would need to be updated with business turnover.

In communities where wayfinding and promotional activities are led by nonprofit entities, there is generally more willingness to identify individual businesses along the trail and in promotional materials. For example, the ATA—the trail organization consortium for the GAP—develops an annual guide in which they sell advertisements for trail-oriented businesses and include maps of each town along the trail; however, businesses must pay to be included on the map (ATA 2018). Revenue generated from these sales are used to support the ATA's operations and maintain the trail. Robust community engagement is one of the most important elements in deciding what to include on wayfinding signs and in promotional materials. Ultimately, there is not a single approach that is better than what community partners collectively agree is appropriate.

Considerations for St. Clair County

Developing a comprehensive brand and wayfinding standards may be a challenging but worthwhile endeavor. Community partners should be aware that sign standards already exist for the Great Lake-to-Lake Trail and consider the extent to which the county desires to be included in efforts for establishing a larger regional trail system throughout Southeast Michigan. Partners in St. Clair County should continue to engage trail organizations from outside of the county as it develops a brand and sign standards.

Long-term Maintenance

Establishing maintenance endowments that are capitalized during initial trail development provides sustainable funding to maintain quality trail systems. Regions included within the analysis are at different stages in the development process of a trail system. Some, like Wright County, are in the initial development stage; others, such as Midland County, Northwest Arkansas, and Grand Traverse County, are well established but are continual works in progress as new sections are added and previously developed sections require maintenance.

Regions use various ownership and maintenance models to respond to organizational characteristics and constraints faced by jurisdictions within their region. The most common ownership and maintenance model is for a local municipality or county parks agency to own and maintain segments of the trail system that extend through their jurisdiction. For example, in Northwest Arkansas, municipalities must commit to maintaining segments in their jurisdiction to the design standard of the trail organization consortium to be eligible for funding.

Generally, the local parks agency funds maintenance through the respective park system's operating budget. These funds originate from a variety of sources, including user fees to enter parks, general fund dollars from local or county government, and, sometimes, dedicated property tax levies.

In Grand Traverse County, a nonprofit trail organization coordinates maintenance activity and uses a combination of volunteer labor as well as municipal and local philanthropic funding to maintain trails. In Fayette County, local "friends of" trail groups provide a significant amount of support for these efforts. In Midland County, the city and county parks departments fund daily operations and maintenance through their park budgets (originating from general fund dollars and user fees). They also established an endowed fund through the community foundation to support higher-cost activities. In this region, trail partners identified long-term maintenance expenses as a priority to address when developing a new trail segment. These costs are anticipated and budgeted for during the initial design and included in fundraising activities, with a goal of developing a sustainable funding source to maintain the trails in perpetuity.

There is an important distinction between daily operations and maintenance activities that are critical to a well-functioning trail system and longer-term, higher-cost activities, such as resurfacing trails and reconstructing bridges. Most regions have developed solutions to fulfill regular upkeep, but many expressed concerns about the longer-term, higher-cost activities. Considering that most trail systems have been developed through a combination of philanthropic and government grants, continued funding will be critical to sustaining these networks. Establishing maintenance endowments also has the potential to provide long-term sustainable funding for these systems.

Success Requires Sustained Effort

Achieving a best-in-class trail system requires sustained efforts. Most of the regions studied have been working to develop their systems for many decades. In many communities, usership and tourist interest began slowly and grew over time as awareness of the trail grew and more significant segments were completed. For example, the original idea for the GAP in Pennsylvania was conceived more than 40 years ago, and relatively little progress was made in the first decade (ATA, pers. comm.). Over time, interest grew, and trail development continued. As the primary route of the trail was completed, usership grew to approximately one million trail visits annually. The increased use continues to support local businesses, which are following suit by expanding their operations.

Northwest Arkansas provides a similar example: In this region, there were a series of existing regionally significant trails that were disconnected. Local leaders began focusing efforts on developing a trail system that would connect these routes. After forming an initial plan in 2009, the region received a large federal grant and matching funds from the Walton Family Foundation, which supported investments from local municipalities. Over the course of the following decade, the Razorback Regional Greenway was developed. Trail user studies demonstrate that, as the system continues to expand, usership also grows (San Diego State University 2017).

Appendix A: Leading Practice Region Profiles

Public Sector Consultants extends sincere gratitude to the professionals from the following six regions for lending their talent, time, and expertise to this process. Their overwhelming support and enthusiasm to share their experiences made this research possible. The individuals below participated in telephone interviews. Profiles detailing the organizational landscape and key lessons learned from each region follow.

Erie County, Pennsylvania

- Emily Beck, Director of Tourism Development, VisitErie
- Jessica Horan-Kunco, Executive Director, Erie Area Council of Governments
- Amy Murdock, Director, Erie County Planning Department
- David Skellie, Coastal Land Use and Economic Specialist, Sea Grant Pennsylvania

Fayette County, Pennsylvania

- Darla Cravotta, President, Allegheny Trail Alliance
- Tom Demagall, Owner, Golden Triangle Bike Rental
- Ann Nemanic, Executive Director, Laurel Highlands Visitors Bureau

Grand Traverse County, Michigan

- Julie Clark, Executive Director, Traverse Area Recreational Trails, Inc.
- Becky Ewing, Executive Director, Rotary Charities of Traverse City
- Trevor Tkach, President and CEO, Traverse City Tourism

Midland County, Michigan

- Sharon Mortensen, President and CEO, Midland Area Community Foundation
- Grant Murschel, Director of Planning and Community Development, City of Midland
- John Schmude, Director, Midland County Parks and Recreation

Northwest Arkansas

- Elizabeth Bowen, Project Manager, Northwest Arkansas Regional Planning Commission
- Jeff Dean, Senior Officer, Strategy, Learning, and Evaluation Department, Walton Family Foundation
- Jeff Hawkins, Executive Director, Northwest Arkansas Regional Planning Commission
- John McLarty, Assistant Director, Northwest Arkansas Regional Planning Commission
- Jeremy Pate, Program Officer, Home Region Program, Walton Family Foundation

Wright County, Minnesota

- Marc Mattice, Director, Wright County Parks and Recreation Department
- Liz Walton, Landscape Architect, Minnesota Department of Transportation

Erie County, Pennsylvania

Erie County was selected because it is beginning to expand its trail network, recently formed the Greater Erie Regional Trails (GERT) initiative, and is similar to St. Clair County, Michigan. Erie County is a coastal Great Lake community located on the southern shore of Lake Erie, sharing a similar tourism advantage to St. Clair County and Lake Huron. As Great Lakes communities, both counties have similar climates, which can influence trail design requirements and tourism patterns. Moreover, their median incomes are relatively similar, although St. Clair County's is larger by approximately \$5,500 (U.S. Census Bureau, 2018b). However, Erie County has a much larger population (U.S. Census Bureau 2018a).

Erie County is home to multiple trails and other outdoor recreational amenities, including the 15 trails identified by GERT, Presque Isle State Park, and multiple U.S. bike routes (Greater Erie Regional Trail n.d.; VisitErie, pers. comm.). The existing trails are maintained by local municipal governments, the State of Pennsylvania, and the port authority, depending on trail ownership and geographical location (Erie County Planning Department, pers. comm.). The county is in the early stages of planning its trail network and connecting routes, which will continue to evolve as they complete this effort and stakeholders move into the development stage. Multiple initiatives, including GERT and the county planning effort, are focusing on how to connect the gaps in the current network and connect to destination areas, such as the U.S. bike routes, larger regional trails, and other destination areas (Erie Area Council of Governments, pers. comm.).

Organizational Landscape

The GERT initiative is a driving force behind Erie County's regional trail network. Its current focus is on branding, communications, and wayfinding to create momentum for the system in the future. While GERT focuses on this campaign, the Erie County Planning Department is creating a county trail plan with input from local municipalities, so the entire county has a strategy toward a regional network.

Erie County Planning Department

The county is currently conducting a regional planning process to generate municipal and stakeholder support for connecting individual trails throughout the area. This process will catalog who owns, operates, and maintains the varying sections of the county trail network. By cataloging these different trails and partners, the county can begin generating a plan to close gaps and connect destinations.

Erie County supports GERT with geographic information system mapping and planning services and also partners with municipalities in different capacities depending on the needs of each. The county does not own or maintain any portion of the trail network. Due to limited financial resources, the county prioritizes engaging with local municipalities that take an active role in their local trail networks, as county staff noted these municipalities were more likely to contribute to planning, grant writing, and other trail development and management efforts (Erie County Planning Department, pers. comm.).

The Greater Erie Regional Trails Initiative

The GERT initiative was launched in December 2017 by the Erie Area Council of Governments (EACOG) and serves as a virtual connection of the county trails (Greater Erie Regional Trail network n.d.; EACOG, pers. comm.). EACOG comprises 14 members total—13 municipalities and Erie County—that collaborate for the advancement of the regional trail network (EACOG n.d.b.). Currently, the individual trails are not physically connected, and because of this, the county lacks any trails with significant length.

The GERT initiative was created to promote and enhance awareness of the local trails that do or could exist. Erie County has already demonstrated interest and support for increased trails and greenways, as documented in *Destination Erie: A Regional Vision*—a common vision and action plan to meet the challenges facing the region in the 21st century. This county-wide plan was developed with input from regional stakeholders and prioritizes developing and linking the region’s trail network (Peter J. Smith and Company, Inc. 2015).

One of GERT’s primary goals is to advertise the infant trail network to build regional support and generate action (EACOG, pers. comm.). Phase one of the GERT project developed a trail brand with a logo, created a trail mapping website, and installed 26 wayfinding signs. Phase two will focus on marketing and promotion efforts as well as activities for shared programming among communities and other stakeholders (Greater Erie Regional Trails n.d.). As part of the brand marketing campaign, GERT mapped all existing trails in the county and placed them on a Web-accessible map for public access.

VisitErie

VisitErie is the county’s designated visitor bureau and receives approximately \$2 million from hotel tax revenue for tourism initiatives (VisitErie, pers. comm.). In terms of trail amenities, VisitErie currently prioritizes advertisement of Presque Isle State Park, a 3,200-acre sandy peninsula in Lake Erie that serves as one of the county’s largest recreational draws and contains a 13.5-mile bike circuit (Pennsylvania DCNR n.d.b.; Pennsylvania DCNR n.d.a.). The county is also home to three state-designated bike routes—A, Y, and Z—which also attract tourists (Pennsylvania DCNR n.d.c.). The current trail initiative may be able to build off the existing trail recreational amenities, but significant work will need to be spent connecting the routes and increasing public awareness about these activities.

Areas of Interest

PSC researched topics of particular interest to trail partners in St. Clair County, including common misconceptions, maintenance approaches, trail users and economic significance, and wayfinding. These topics were explored with local leaders in Erie County; their experiences are summarized below.

Common Misconceptions

Interviewees suggested that there is no evidence for increased public safety concerns on trails that have been developed in the region. Erie County emphasized the idea of working and communicating with local governments and individual property owners to ease local concerns about a potential trail before construction (Erie County Planning Department, pers. comm.).

Maintenance Approaches

The current trail network lacks a sustainable maintenance funding source; moreover, individual trail owners are responsible for maintaining their trail sections. The county’s planning department hopes to catalog which organizations maintain the individual sections of the network and how this will play into future funding strategies (Erie County Planning Department, pers. comm.).

Act 13, which imposes a fee on unconventional gas wells, can be used for trail maintenance (State of Pennsylvania 2012). The county receives approximately \$200,000 of Act 13 funds and had previously been granting these monies for local municipal projects. Erie County is currently restructuring expenditures of these funds but will need to generate additional revenue to develop and maintain a robust trail network (Erie County Planning Department, pers. comm.).

Trail Users and Economic Significance

Erie County is in the beginning stages of a drafting recreational trail plan, and the creation and connectivity of a regional network is a relatively new priority. As such, no economic impact or usage studies have been performed on the existing trails. Presque Isle State Park sees approximately 4.2 million visitors a year separate from the county trail system (Mowen et al. 2013).

Wayfinding

Wayfinding is an important aspect in developing and consistently advertising a trail network brand. The EACOG currently maintains the Erie County Signing Region Trust—a wayfinding initiative established in 2004 that contracts with the Pennsylvania Department of Transportation to provide and maintain signs on state and local roads (EACOG n.d.a.). The effort first prioritized downtown areas and then spread to the broader county. Multiple destinations can be placed on one sign, at a cost of \$125 per message. The signs do not currently advertise downtown businesses or specific establishments; however, neighboring states, like New York and Ohio, have installed increasingly descriptive signage, which the trust is encouraging in Pennsylvania (VisitErie, pers. comm.). The trust, in collaboration with GERT, has installed 26 signs directing people to the trail network, and both organizations are managed by the EACOG. According to regional partners, these efforts bring consistency and legitimacy to the trail network, which will enhance the network and position the region for future funding opportunities.

Lessons Learned

PSC identified the following lessons learned from Erie County, Pennsylvania:

- **Strong leadership drives results.** Multiple stakeholders identified the need for stronger leadership in the region to support trail development. In Erie County, this could include hiring a trail coordinator housed at either the EACOG or the county’s planning department.
- **Municipal support is key to creating a long-lasting, collaborative trail network.** Without local community support, the best-laid plans are less likely to be implemented. As stated above, the Erie County Planning Department is currently participating in a second regional planning process because the county government declined to adopt the first regional plan. Local municipal plans are often integrated into those of the broader county to encourage local stakeholder buy-in.
- **Funding is one of the largest barriers to building and maintaining a regional trail network.** In an ideal situation, any trail network should have a sustainable funding source for maintenance. Examples include municipal general funds, endowment revenue, tax revenue, or other types of sustainable funding.
- **A trail or greenway plan should have achievable goals to mark progress and growth during the trail development process.** The plan and goals should be developed with the input of community stakeholders.
- **Naming a regional trail network can be a difficult process.** However, municipal governments and regional stakeholders should be involved to increase support.

Fayette County, Pennsylvania

Fayette County was selected as a research community primarily due to the presence of the GAP, a nationally recognized long-distance trail. Fayette County also lies approximately 60 miles outside of Pittsburgh, which is a similar to the distance between St. Clair County and Detroit. Both counties have many similar experiences as a smaller community within the vicinity of a large population hub. Of the four Pennsylvania counties that host the GAP, Fayette most resembled St. Clair County in population size and median income, although there were some differences. Fayette County has a noticeably lower median income and population size than St. Clair County—a difference of over \$10,000 and 26,601 people, respectively (U.S. Census Bureau 2018a; U.S. Census Bureau 2018b). Moreover, the counties' economic compositions are also similar. In Fayette County, the three largest sectors are educational services and healthcare and social assistance; retail trade; and manufacturing. In St. Clair County, the largest sectors are manufacturing; educational services and healthcare and social assistance; and retail trade (U.S. Census Bureau 2018c).

The GAP starts in Pittsburgh, Pennsylvania, and spans 150 miles to Cumberland, Maryland. Given its proximity to large population centers on the East Coast, the trail experiences extremely high use: Approximately one million people in 2014 (Trail Town Program 2015). The GAP travels south through Pennsylvania's coke, coal, mining, and steel-making corridor and connects cities throughout the region, although the trail runs predominantly through the countryside (ATA n.d.a.). Another factor in choosing the GAP, and thereby Fayette County, was the abundance of economic impact, user, and other studies performed on the trail. Fayette County is also home to other county and local trails, but PSC's research focused largely on the GAP and the resulting lessons learned from its development and management.

A major focus of the GAP is the trail's connectivity from Pittsburgh to Maryland. The trail features long expanses of countryside and was often built in retired rail beds, enabling easier connections across this expansive geography. The GAP also connects to nine cities in Pennsylvania as it travels south (ATA n.d.b.). Although one of the GAP's greatest assets is its connectivity to downtown areas, these can be the most difficult portions to build. Long expanses of countryside often have fewer property owners, and urban areas, and downtowns present challenges with multiple municipal jurisdictions, property owners, and governance structures that may have unique trail or transportation laws. For example, one section of the trail spans 28 properties in ten miles, with the addition of a river and an active rail line (ATA, pers. comm.).

Organizational Landscape

The ATA is the coordinating agency for the GAP and is primarily a volunteer organization. The ATA maintains the GAP website, coordinates volunteer activities along the trail, and is the primary marketing body for the GAP; however, it does not own any portions of the trail. Instead, the trail has seven distinct owners, including the Regional Trail Corporation, which owns the portion through Fayette County and will be described in the next section. The following organizations are not the only entities involved in the GAP, but they do provide important history and context for the key findings in Fayette County.

The Regional Trail Corporation

The initial idea for the GAP started 40 years ago as a small bike trail in Ohio State Park in Fayette County. Originally, interest in the trail was guided by a goal to create an avenue for bringing more recreational activities to surrounding communities (ATA, pers. comm.). The Regional Trail Corporation

was created in 1991 to purchase an initial portion of the GAP in Fayette County—the Youghiogheny River Trail North—which spans 43 miles from Connellsville to McKeesport (Regional Trail Corporation n.d.). The corporation owns the majority of the GAP in Allegheny, Fayette, and Westmoreland Counties (ATA, pers. comm.) Although the Regional Trail Corporation was one of the first investors for the GAP network, the Western Pennsylvania Conservancy purchased the first 27 miles of abandoned railroad, from Connellsville to Confluence, a portion of which would be one of the first segments open to the public (ATA n.d.d.). After the initial purchase, support for a regional trail began to blossom, and a master planning effort was undertaken to complete the trail from Pittsburgh, Pennsylvania, to Cumberland, Maryland. Volunteer organizations provided much of the initial support for the GAP, and the trail was officially named in 1996 (ATA, pers. comm.).

Allegheny Trail Alliance

The ATA was originally founded in 1995 and is a coalition of seven trail organizations located in the southwestern portion of Pennsylvania and the western portion of Maryland where the two states border one another (ATA n.d.e.). The organization began as a loose coalition of owners and trail organizations whose main goal was to drive a more robust trail development agenda for the GAP. Now that the GAP has been completed, the ATA has restructured, revised its bylaws, and hired an executive director.

Following the initial planning effort in 1996, one of the challenges was deciding which portion of the trail received funding and support first. The ATA began prioritizing sections by their potential impact on the overall trail, considering feasibility, cost, and connectivity. A segment was prioritized for initial funding if the route was possible to construct, relatively less costly to build, and connected to existing portions of the trail. The portion of the GAP that runs through Allegheny County was chosen last because it was not part of an abandoned railroad and located in an urban area. These two factors raised property acquisition and construction costs (ATA, pers. comm.).

Laurel Highlands Visitors Bureau

The Laurel Highlands Visitors Bureau (LHVB) is the appointed organization for marketing tourism assets in Somerset, Fayette, and Westmoreland Counties. While, the LHVB does not individually market Fayette County or the trail system in the three-county region on its own, regional trails are often referenced as amenities for other tourism draws. The organization focuses on an all-encompassing approach to advertise all regional attractions, including restaurants, distilleries, and hotels. The trail system plays into the other recreational amenities by drawing people to the area and providing transportation avenues to many attractions in each of the three counties (LHVB, pers. comm.).

Areas of Interest

PSC researched multiple topics of particular interest to trail partners in St. Clair County, including common misconceptions, maintenance approaches, trails users and economic significance, and wayfinding. These topics were explored with local leaders in Fayette County; their experiences are summarized below.

Common Misconceptions

During the GAP's inception in the early 1990s, local communities expressed great concern regarding public safety. Since its development, crime has not been actively tracked because, anecdotally, it has not been an issue. Interviewees suggested that there are no more instances of crime along the trail than in other areas of the community. Furthermore, the ATA suggested that crime may actually be lower on the trail because high user rates create a community of people that deters criminal activity (ATA, pers. comm.).

Maintenance Approaches

The GAP lacks a sustainable funding source for maintenance, and, as with many communities, raising this money is an ongoing challenge. The majority of maintenance is performed by volunteer groups partially coordinated by the ATA. Local philanthropy has donated some funding, but with portions of the GAP approaching 30 years old, upkeep will be an ongoing priority. The ATA annually publishes the TrailGuide, selling ads to generate revenue for an emergency trail fund (ATA 2018; ATA, pers. comm.). Of the \$100,000 in total revenue generated, approximately \$50,000 a year is used to fund the salary of the individual who promotes this guide and sells ad space. The other \$50,000 is placed into the emergency trail fund to address catastrophic events (ATA, pers. comm.)

Trail Users and Economic Significance

A wealth of user statistics and economic information exists for the GAP. The first user survey was conducted as early as 2002, and the first economic impact study was conducted as early as 2008 (ATA n.d.c.). Quantitative studies can often serve as a powerful tool when requesting additional funding or when talking to municipal leaders. They often yield positive results and allow users to speak to the benefits a trail brings to the region, both as a recreational amenity and as an economic driver (ATA, pers. comm.). One study of note is the Connellsville, Pennsylvania, Market Demand Study for a proposed hotel in Fayette County (PKF Consulting 2013). Partly due to this study's findings, a hotel was constructed in the county and is the only one on the GAP within the county (LHVB, pers. comm.). Other studies completed include trail usage pattern studies from 2015 to 2017, a 2015 trail user and business survey, and an economic impact study in 2012 (ATA n.d.c.).

Wayfinding

The Graphic Identity & Sign Guidelines Manual sets standards for signage along the GAP and is an important part of the trail brand. The manual includes guidelines and specifications for use of the GAP logo and general graphic requirements, such as typeface, locations for signs, kiosks along the trail, and parking lot and roadway signs. The manual also contains sections that emphasize what a community should not do when developing and using its logo (Trail Town Program 2011). A trail brand can be an important messaging tool to portray the regional identity of a network or multijurisdictional trail.

Despite this regional brand, difficulties still arise when producing signage. Due to multiple groups owning portions of the trail, wayfinding continues to be a collaborative effort, and the brand can sometimes conflict with city or other sign standards (ATA, pers. comm.). Another potential challenge for the GAP is signage directing individuals to the trail. While cities often have signs marking a bike trail, the signs do not identify the trail as the GAP due to municipal standards, losing the name recognition established by the brand (LHVB, pers. comm.).

Lessons Learned

PSC identified the following lessons learned from Fayette County, Pennsylvania:

- **Branding and signage are an important aspect of a trail network.** A singular brand can help promote the trail and shows a combined regional effort to potential funders, future trail locations, and other important stakeholders in the trail's sphere of influence. Branding also helps advertise a trail to potential users and enables them to traverse a trail much more easily.
- **A large part of the branding is consistent wayfinding signage along the trail.** Difficulties may arise because trails throughout the network may be unwilling to emphasize a larger regional trail over their own. Other potential difficulties may include city or state signage guidelines and competing signage priorities.
- **It is important to have a regional leader who focuses on the trail or trail network.** An individual dedicated to building the trail or trail network is a valuable resource that can help garner support.
- **The ATA serves as the region's trail organization consortium and played a major role in trail planning.** Specifically, the consortium was responsible for identifying which portions received the initial funding and prioritizing certain sections to complete before others. The stakeholder planning process included many different organizations competing for funding. Constant communication plays a key role in the consortium because a clear message is needed to inform stakeholders how priorities are chosen, what portions of the trail will be funded, and when those portions will be completed.
- **Larger regional trails or trail networks often draw additional connectors in the form of other regional or local trails.** Once a network has been established, local trail groups or municipalities often see the benefit of connecting to that network, bringing additional routes after the initial network has been completed.
- **Property acquisition is often the most difficult part of the trail building process.** It is ideal when large stretches of land can be bought from a single entity, as this lowers transaction costs. However, single-owner situations for long stretches of land are often not possible, especially in urban areas where the trail may connect to downtowns or other significant locations within population centers. Individual land owners, local municipalities, and businesses along the trail should be contacted often and early and be brought in during the first stages of planning.
- **The trail consortium has had success using local businesses as visitor centers at important locations along the trail.** Local businesses are given maps and trail books to promote the GAP, but they also provide trail users with amenities, such as bathrooms or drinking water.

Grand Traverse County, Michigan

Grand Traverse County was selected as a research community primarily due the existence of the Traverse Area Recreational Trails network and PSC's recent project with the RCWJRF. The area is cited as a regional best practice community by many in Michigan and has received national recognition from trail groups in other states.

Grand Traverse County is situated in Michigan's Northwest Lower Peninsula on the shores of Lake Michigan. The TART Trail network—managed by TART Trails, Inc.—spans multiple jurisdictions across Grand Traverse and Leelanau Counties and consists of eight multiuse trails as well as a bike route across Traverse City, totaling over 100 miles in the region (TART Trails, Inc. n.d.b.). The Grand Traverse region also shares many similarities with St. Clair County. The household median incomes for these communities differ by approximately \$4,500, although St. Clair County's population is significantly larger by more than 60,000 people (U.S. Census Bureau 2018a; U.S. Census Bureau 2018b).

Organizational Landscape

Multiple organizations play a significant role in the region's trail network. TART Trails, Inc. provides a variety of advocacy as well as trail management and development services; Rotary Charities of Traverse City serves as a primary funding partner for the trail network; and Traverse City Tourism promotes the network, often in conjunction with events or other community assets. Many other local and regional organizations own portions of the network or provide services to maintain or develop it; however, TART Trails, Inc. serves as the coordinating body.

Traverse Area Recreational Trails, Inc.

TART Trails, Inc. manages the county's trail network and provides a multitude of services, such as technical expertise, fundraising, advocacy efforts, and maintenance (TART Trails, Inc. pers. comm.). The group formed in 1998 when three nonprofit trail advocacy groups and a group of volunteers from the Boardman Valley Trail combined efforts to advocate for a regional trail network (TART Trails, Inc., n.d.a.; TART Trails, Inc. pers. comm.). The four volunteer groups have since evolved into an organization with seven paid staff and a 14-member volunteer board (TART Trails, Inc. 2018).

Regional priorities are developed using a three- to five-year strategic plan maintained by TART trails, Inc. that outlines broad regional goals and an annual workplan based on local community input and critical infrastructure needs (TART Trails, Inc. pers. comm.; TART Trails, Inc. 2014). Success in the region is largely due to the relationships developed with the local municipalities and other regional stakeholders.

Rotary Charities of Traverse City

The TART Trails network owes much of its regional success to the early actions of Rotary Charities of Traverse City. Before the network's formation, local organizations rarely collaborated and lacked an overall regional view of the trails. Applications requesting funding for trail development often had no regional connectivity or planning component to ensure efforts were not duplicated and that the project would contribute to the overall network (Rotary Charities of Traverse City, pers. comm.).

In response to this challenge, Rotary Charities of Traverse City convened local governments to review a map of the network, enabling these governments to see both the fragmentation and the potential for a regional system. Following the first meeting, Rotary Charities of Traverse City incited collaboration by

only funding projects that demonstrated a regional planning component and included input from trail stakeholders. This allowed for coordinated planning and funding efforts to create regional opportunities for trails and to achieve the greatest impact for each grant (Rotary Charities of Traverse City, pers. comm.). After this initial collaboration effort, with support from Rotary Charities of Traverse City and staff at the local trail groups, TART Trails, Inc. was formed (TART Trails, Inc., pers. comm.).

Traverse City Tourism

Traverse City Tourism is the convention and visitors bureau for Grand Traverse County, and while it is not primarily focused on trails, it often plays a role in marketing the trail network to outside interests. The organization markets a five-county region to attract potential visitors and has previously partnered with Pure Michigan to advertise throughout the state and on a national level. According to the group, the trail network has been an important part of their messaging, especially within the last ten years. In combination with the marketing push from the State of Michigan on trails, Traverse City Tourism has been able to fold their message into those efforts and partner with Pure Michigan on many statewide initiatives. Although the total trail benefit to the region is hard to quantify, the group stated there is a definite value-add that draws people from around the state, country, and even internationally (Traverse City Tourism, pers. comm.).

Areas of Interest

PSC researched multiple topics of particular interest to trail partners in St. Clair County, including common misconceptions, maintenance approaches, trails users and economic significance, and wayfinding. These topics were explored with local leaders in Grand Traverse County; their experiences are summarized below.

Common Misconceptions

In the Grand Traverse region, public perception of public safety issues and privacy concerns persist when additions to the TART Trails network are created. However, these concerns are not supported. When developing a trail, TART Trails, Inc. will consider these concerns and work with trail-adjacent property owners to address them, sometimes providing a physical buffer. TART Trails, Inc. noted that this process takes time and individual involvement, but it is crucial to foster local support. As with many of the other communities that PSC researched, public safety does not appear to be a problem. The local county sheriff's department even states that the trail creates a community of users, which often deters crime because more people are present on the trail (TART Trails, Inc. pers. comm.).

Maintenance Approaches

Of the current 100-mile network, TART Trails, Inc. owns the 17-mile Leelanau Trail between Traverse City and Suttons Bay and maintains more than 60 miles of trail in collaboration with the Michigan Department of Natural Resources, Traverse City, local cities and townships, and Grand Traverse County, which own the other portions (TART Trails, Inc. n.d.a.). According to TART Trails, Inc.'s 2017 annual report, over 1,500 donors across Michigan and 34 other states donated more than \$800,000 to the organization during fiscal year 2017. Some donors have contributed for over 15 years and are documented in the annual report (TART Trails, Inc., 2018). TART Trails, Inc. is a nonprofit organization funded primarily through private contribution funding; however, it continually fundraises to replenish its operating budget to support ongoing efforts. A portion of the organization's budget goes toward maintenance for multiple trails in the TART Trails network.

Trail Users and Economic Significance

There are a multitude of user studies on the TART Trails network, but the majority of these were completed in 2002. The most recent report, completed in 2014, consists of a combined user study and economic impact report based on trail use. TART Trails, Inc. used a combination of daily user counts and onsite surveys to estimate the economic impact of the VASA Pathway in 2013. This pathway is maintained by TART Trails, Inc. under an agreement with the Michigan Department of Natural Resources, which owns the trail. The economic impact report found that events held along the Vasa Pathway generated \$2.6 million in direct spending. On average, each group spent \$718 on event-related expenses, including accommodations, restaurant meals, groceries, concessions, fuel, sporting goods, souvenirs, and entertainment (Avenue ISR 2014). With these findings, TART Trails, Inc. was able to determine a typical daily user: A local person who lives within five to ten miles of the trail, travels to the trail by private car, and spends between one and two hours on the network. Local users made up 81 percent of total users but only 23 percent of event participants, which means that the 19 percent of nonlocal users represent over two-thirds of event participants, showing that these events serve as a considerable recreational draw for the region (Avenue ISR 2014).

Wayfinding

TART Trails, Inc. maintains robust wayfinding signage along their network, which is cataloged in an official sign array. The array details the types of signs across various uses, such as a mile marker or intersection sign. TART Trails, Inc. began placing these signs on its Leelanau Trail, discovering most users are unaware of the specific trail they are on and where it begins and ends. For users, access to a trail network through the connection of multiple trails is more important than the trail's individual identity.

After implementing signage on its Leelanau Trail, TART Trails, Inc. began installing signs in the broader network. Individual trail names play an important role for emergency services and law enforcement in case of a health incident, but consistent branding gives users a seamless, more enjoyable experience.

To sustain maintenance efforts, TART Trails, Inc. enters into memorandum of agreements with the local municipalities for local governments to upkeep signage. TART Trails, Inc. installed this signage at no cost to the local governments, but the municipalities must maintain and replace it if damaged. TART Trails, Inc. provides 25 percent of the revenues generated by signage sponsors back to the local municipalities for this maintenance (TART Trails, Inc., pers. comm.).

Lessons Learned

PSC identified the following lessons learned from Grand Traverse County, Michigan:

- **Rotary Charities of Traverse City played a crucial role in the development of the trail network.** They did this by limiting funding to only those organizations whose project showed regional collaboration and consistency with the trail network.
- **A single, passionate individual can be beneficial in developing the network and directing its mission.** TART Trails, Inc. has realized this benefit through its two executive directors, who each employ a different leadership style that best supports efforts across different stages of trail completion.

- **TART Trails, Inc. is the region’s trail organization consortium and has played an instrumental role in creating the TART Trails network, which recognized as a best practice example nationally.** Since its inception, TART Trails, Inc. has worked with the local municipalities and other regional stakeholders to plan, fundraise, and develop the network. It continues to maintain relationships with the various organizations involved in these efforts to ensure continuous development and maintenance.
- **A coordinating group helps build regional partnerships for trail collaboration.** This group can also provide services, such as technical expertise, engineering services, or fundraising advice.
- **Collaboration between trail organizations within a community increases the effectiveness of the initiative.** Partnerships allow for efficient operations by avoiding duplication of services; moreover, the sharing of information allows individual groups to operate with a higher level of understanding of the network as a whole.
- **Events on the trail are a significant draw for visitors and generate revenue for the community.** Events also provide a way to advertise the trail network and collaborate with the region’s visitor bureau.
- **Partnerships with Traverse City Tourism have created opportunities to advertise and build support for the trail network.** The regional convention and visitors bureau partners with trails groups to advertise trail systems as part of its efforts to market the region to potential tourists. Traverse City Tourism is also an active partner by promoting events that occur on trails.

Midland County, Michigan

Midland County was selected as a research community primarily due to its similarities with St. Clair County, its solution to sustainable trail maintenance funding, and PSC's previous research for its project with the RCWJRF. The county is located in the central-eastern portion of Michigan's Lower Peninsula, approximately 130 miles northwest of St. Clair County, making it the closest geographically to St. Clair. It was also identified as having a well-developed trail system and a successful funding model for long-term, ongoing trail maintenance through endowments at the Midland Area Community Foundation (MACF).

The county is home to multiple trail assets, the most notable of which is the Pere Marquette Rail Trail, which stretches 30 miles from Midland to Clare—with a 22-mile portion that runs through Midland County—and serves as the spine of the network by connecting multiple city and county parks. According to the county master plan, the Pere Marquette Rail Trail is a linear park trail and covers 278 acres over its 22 miles (Midland County Parks and Recreation Commission 2014).

Beyond this, Midland and St. Clair Counties share similar median incomes, differing by less than \$3,500, but St. Clair County's population is almost double that of Midland County's (U.S. Census Bureau 2018a; U.S. Census Bureau 2018b). Manufacturing is also the number one industry in each, differing by only 1.3 percentage points (U.S. Census Bureau 2018c).

Organizational Landscape

The Midland County Parks and Recreation Department is the primary manager of the Pere Marquette Rail Trail, but the City of Midland maintains the small portion that runs through its limits as well as multiple connecting routes. The MACF manages the endowment to fund maintenance for this trail, as well as multiple smaller trail endowments. Together, these three entities collaborate on trail development and maintenance.

Midland County Parks and Recreation Department

The county manages the longest portion of the 30-mile Pere Marquette Rail Trail, which runs a total of 22 miles from the city limits to Isabella County. The original portion was opened to the public in June 1993, but the 30-mile trail of today was not completed until 2001 (Friends of the Pere Marquette Rail Trail 2015; Midland County Parks and Recreation, pers. comm.). The Midland County Parks and Recreation Department is currently focused on refurbishing the Pere Marquette Rail Trail before additional trails are developed in the region. Replacement or major resurfacing efforts, however, may require more funding than can be provided by the current maintenance endowment (Midland Community Foundation, pers. comm.).

The City of Midland

The City of Midland is home to over 11 miles of various trail types, including the Grand Curve Trail that spans 4.25 miles from the Tridge—a three-legged wooden footbridge spanning the Tittabawassee and Chippewa Rivers to the corner of East Patrick Road and Illinois Drive. The paved four-mile Chippewa Trail also starts at the Tridge but extends southwest to the Chippewa Nature Center. As stated above, the City of Midland also manages the portion of the Pere Marquette Rail Trail that is located within its limits (City of Midland n.d.).

The city and the county have a unique maintenance relationship, sharing staff and equipment on an informal basis without billing for services or a contract. Each government has specialized equipment and trained staff to perform multiple job duties, both of which are shared among the two entities at request. For example, the county may utilize the city's forestry division, which is better equipped for activities such as cutting down trees (Midland County Parks and Recreation Department, pers. comm.). The city also maintains its own nonmotorized transportation plan, which was updated in 2013 and is separate from the county (City of Midland, pers. comm.).

Midland Area Community Foundation

The MACF is a key funding partner for trail development and maintenance. Both the city and county maintain a good relationship with the foundation, which often acts as a convener on trail-related issues. A key to the foundation's success is that it can serve as an unbiased partner outside of government. According to the MACF, part of the county's past success has been community willingness to embrace trails. The foundation helped establish a community mindset toward trail funding. Through the foundation, funds are set aside in perpetuity for maintenance purposes when a trail is originally developed. This approach has proven effective for partners in the county. In their experience, it is easier to raise this funding in the before developing a trail, rather than when it needs repair.

Great Lakes Bay Regional Alliance

The Great Lakes Bay Regional Alliance was created in 2008 and largely focuses on Bay, Midland, and Saginaw Counties, while the Great Lakes Bay Regional Trail Committee specifically advances trail and greenway priorities. The committee includes regional nonprofits, corporations, and governmental entities (Go Great Lakes Bay n.d.). Currently, they are working on creating trail connections in and between the three counties to develop a connected Great Lakes Bay Regional Trail (Great Lakes Bay Regional Alliance 2016).

Areas of Interest

PSC researched topics of particular interest to trail partners in St. Clair County, including common misconceptions, maintenance approaches, trail users and economic significance, and wayfinding. These topics were explored with local leaders in Midland County; their experiences are summarized below.

Common Misconceptions

Like other regions PSC interviewed, residents had concerns about privacy and public safety. These concerns, however, were not borne out after the trail was developed, and, anecdotally, public safety issues on the trail are minimal. Because of this, neither the county nor the city tracks incidents. High user rates are also believed to enhance safety due to increased presence of people (Midland County Parks and Recreation, pers. comm.). Moreover, trail users are physically separated from cars and crosswalks that are prevalent in city environments, which also enhances safety. However, invasion of privacy and concerns about potential criminal activity remain in some parts of the community. This perception has even caused some developers not to create connections to the Pere Marquette Rail Trail (MACF, pers. comm.).

Maintenance Approaches

The Midland County Parks and Recreation Department completes 95 percent of trail maintenance using in-house staff and county-owned equipment. As stated above, the county also allows the City of Midland and Isabella County to borrow any equipment that the parks and recreation department has at its disposal

The county does not have a parks millage, so maintenance funding comes from the county general fund and endowments set up through the MACF. County general funds are used for smaller services, such as mowing, and funds from the community foundation are used for more specialized services, such as crack and seal coating (Midland County Parks and Recreation Department, pers. comm.).

Trail Users and Economic Significance

A study on the Pere Marquette Rail Trail observed users from April through September in 2000 and 2001. In conjunction with these observations, surveys were also administered to gather additional information about users. Two sections of the trail, which cover three miles in the city of Midland, accounted for 51 percent of the estimated 178,000 annual visits. Bicycling was cited as the number one activity, accounting for 54 percent of visits, and 61 percent cited exercise as their main reason for trail use. Of the 710 individuals who completed the survey, 77 percent resided and or worked in Midland County, and 23 percent were tourists. The typical user spent two hours on the trail and averaged 15 visits in 12 months (Nelson et al. 2002).

Wayfinding

The Midland region does not have a comprehensive trail signage guide, but the three jurisdictions that operate portions of the trail—Midland and Isabella Counties and the City of Midland—generally install consistent signage, which was developed more than 20 years ago during the inception of the Pere Marquette Rail Trail. The City of Midland has taken the lead on advertising locations on the trail, including nonprofits, downtown areas, and natural landmarks; however, for-profit businesses are not advertised (City of Midland, pers. comm.). The city’s comprehensive wayfinding signing master plan lists the eligible types of signage attractions (Gannett Fleming, Inc. 2005).

Lessons Learned

PSC identified the following lessons learned from Midland County, Michigan:

- **Midland County’s approach to funding maintenance has enhanced its success.** The community has developed a mindset around sustainable maintenance, taking the burden off future generations to fundraise for upkeep. When trails are initially developed, funds are placed in an endowment at the MACF. Community partners have learned that it is often easier to raise these funds when a trail is being developed, rather than when it needs repair.
- **Interpersonal relationships between trail organizations play a large role in coordinating services and collaborating to the benefit of the community.** The personal and professional relationships among the staff at the city and county as well as the community foundation have enhanced success of trail development in the region.
- **A nongovernmental partner, such as the MACF, is often needed to serve as a convener on important topics.** This allows a neutral party to help discuss solutions and priorities between the county, local municipalities, and other potential stakeholders.
- **Once neighboring communities see the benefit of trails to a region, it can drive them to prioritize trails as well.** Developing trail sections that are highly impactful, in receptive communities, can demonstrate the success of trail development to neighboring communities that may be more skeptical of the return on investment.

- **To build a trail network throughout a larger region, the counties and county stakeholders must work together.** Stakeholders must collaborate to increase the connectivity and length of their individual trails or trail networks.
- **Counties with robust parks departments can provide maintenance for trails that span multiple jurisdictions, particularly in rural areas where local municipalities may have limited capacity.** This approach has proven to be an effective solution in Midland County.

Northwest Arkansas

PSC selected Northwest Arkansas primarily due to the presence of the Razorback Regional Greenway—the region’s premier trail—and its recent work with the RCWJRF. The region was also selected because of the role and involvement of the Walton Family Foundation, which may be similar to the role the RCWJRF will play in Southeast Michigan. Moreover, the Razorback Regional Greenway, which connects downtown areas of six communities in Northwest Arkansas, is similar to the planned route of the Bridge to Bay Trail in St. Clair County, which will connect the downtowns of multiple communities.

Benton County lies in the northwestern corner of Arkansas, bordering Missouri and Oklahoma, and falls under the jurisdiction of the Northwest Arkansas Regional Planning Commission. It also contains the northern portion of the Razorback Regional Greenway, a 37.5-mile shared-use trail that connects the central business districts of six cities, four of which are the largest in the region (NWARPC n.d.a.). Washington County, also located under NWARPC’s jurisdiction, is directly south of Benton County, bordering Oklahoma to the west, and contains the southern portion of the greenway.

As of May 2018, there were 219 miles of off-road and 132 miles of paved trails in Benton and Washington Counties (Northwest Arkansas Tourism Association 2018). The Razorback Regional Greenway serves as a major transportation hub and connects six downtown areas, three hospitals, 23 schools, the University of Arkansas campus, and the headquarters of Walmart, Tyson Foods, and J.B. Hunt Transportation services, with shopping, recreation, and historic sites along the trail (Northwest Arkansas Trails n.d.).

PSC analyzed both counties that house a portion of the greenway for a direct comparison to the other counties in this report. Benton, Washington, and St. Clair Counties have a significant agricultural presence, although Benton and Washington have a larger percentage of agricultural land (U.S. Department of Agriculture 2012). These counties also have substantially larger populations, but St. Clair County’s median income is almost directly between them. The median incomes for Benton, St. Clair, and Washington Counties are \$61,271, \$53,641, \$47,452, respectively (U.S. Census Bureau 2018a; U.S. Census Bureau 2018b).

Organizational Landscape

The Razorback Regional Greenway was developed through regional partnerships between the NWARPC, the Walton Family Foundation, and multiple local municipalities throughout the region (NWARPC n.d.a.). The NWARPC led the plan development of the greenway, while the Walton Family Foundation served as a primary funder for both planning and development efforts—with local municipalities acting as partners. After the greenway was completed, the NWARPC adopted a community-wide plan in December 2015 to build on previous regional trail initiatives. This effort included the development of 25 action plans for communities located in Northwest Arkansas with populations over 1,000 people (NWARPC n.d.b.).

Northwest Arkansas Regional Planning Commission

The NWARPC is the region’s metropolitan planning organization and was the initial planning leader for both the Razorback Regional Greenway and the 2015 bicycle and pedestrian master plan. The Razorback Regional Greenway grew from a NWARPC Heritage Trail planning effort that was initially a way to connect three historic trail routes—the Butterfield Stagecoach route, the Civil War routes, and the Trail of Tears (NWARPC 2015). In 2009, a concept was created for a larger off-road regional trail network linking

the six communities in Northwest Arkansas. The Walton Family Foundation contributed funding to this effort and included funding to hire a planning and design consultant to guide and help set priorities for the region's trail development.

In 2010, a series of community workshops were held to develop the greenway's route (Northwest Arkansas Trails n.d.). Existing trails served as the basis for a central spine that connects the downtowns of the four largest cities in the region (Walton Family Foundation, pers. comm.). Once consensus was built, the planning documents created through this effort were integrated into regional planning documents required by the federal government, such as the long-range transportation plan. Integration positioned the region for greater access to federal transportation funding to implement the trail system (NWARPC, pers. comm.). In November 2010, the NWARPC received a \$15 million Transportation Investment Generating Economic Recovery (TIGER) grant to support design, acquisition, and construction of the Razorback Regional Greenway (Northwest Arkansas Trails n.d.).

Walton Family Foundation

The Walton Family Foundation focuses on Northwest Arkansas through its home region program. The foundation supported the NWARPC planning effort and pledged \$15 million in 2009 as one-to-one match funding for the initial trail development (Walton Family Foundation, pers. comm.; Northwest Arkansas Trails n.d.). This funding was further leveraged with a TIGER grant and other federal funding sources to develop the greenway. Through 2018, the foundation has provided \$74 million to support the development of the Razorback Regional Greenway and other trails within its home region (Walton Family Foundation 2018). The foundation is also one of the primary sponsors for many of the current use and economic impact surveys, which will be discussed in further detail later in this section.

Areas of Interest

PSC researched multiple topics of particular interest to trail partners in St. Clair County, including criminal activity and safety, maintenance approaches, trail users and economic significance, and wayfinding. These topics were explored with local leaders in Northwest Arkansas; their experiences are summarized below.

Common Misconceptions

When the Razorback Regional Greenway was originally conceived, community members did have concerns about public safety and decreased privacy, but once the trail was built, there was no evidence to suggest an increased crime rate. According to the Walton Family Foundation, the community perspective on trails has changed dramatically, to the point that regional builders now try to connect to the trail. However, community input remains a priority for trail development stakeholders because public perception has not risen to the same degree throughout the region, as evidenced by the City of Cave Springs, Arkansas. From the end of 2017 to the beginning of 2018, the City of Cave Springs had access to nearly \$2 million through multiple funding sources to develop an east-to-west connector from the Razorback Regional Greenway. This connector became a political issue due to public perception of the trail, and, ultimately, the community declined to proceed with the project (Walton Family Foundation, pers. comm.).

Maintenance Approaches

Each municipality along the Razorback Regional Greenway was required to adopt an ordinance that guaranteed it would maintain its geographic portion of the trail in perpetuity. Many of the cities set aside general fund budgets for the required trail maintenance (NWARPC, pers. comm.).

Trail Users and Economic Significance

Trails in Northwest Arkansas increase property values and generate spending in the regional economy, benefitting local business. The region has also become a mountain-biking destination, which has significantly increased tourism and produced economic benefits. Increasingly, businesses and housing developments are even locating near the trail because they can leverage it as a recreational amenity to attract potential employees and residents. Beyond these anecdotal benefits, local municipalities were interested in their own return on investment for the trail, so the Walton Family Foundation sponsored a study on the economic benefits of bicycling in Northwest Arkansas (Walton Family Foundation, pers. comm.).

The study focused solely on the benefits of cycling and projected economic figures based on trail user expenditures and healthcare dollars saved due to the trail's residual health benefits. The study found that Northwest Arkansas residents spend more than \$20 million on bicycling annually. Bicycling generates \$51 million in total business benefits to the region: \$21.3 million from household and resident spending, \$26.9 million from tourism, and \$2.8 million from bicycle retail and retail sales tax.

The report also suggests a positive relationship between the average distance a trail is from a house and the house's value. In this region, a home was worth approximately \$6,300 more within a quarter mile of a paved shared-use trail versus an identical home one mile from the trail and \$14,800 more than a home two miles from the same type of trail (BBC Research & Consulting 2018).

In 2017, the Walton Family Foundation also sponsored a trail usage monitoring study in Northwest Arkansas. This study found that, from 2015 to 2017, average trail use increased for pedestrians and cyclists both during the week and on the weekend. The study relied on 24-hour infrared counters and 24-hour pneumatic tubes to calculate the pedestrian and bicycle activity along the trail at predetermined sites. Sites were chosen using the following three criteria: Presence of existing trail facilities, achieving a representative sample of locations, and even geographic distribution of count sites across the system. The study reported that bicycle weekday volumes per study site increased by approximately 32 percent while weekend volumes increased by 14 percent. The study estimated an average of 83,718 annual cyclists per site across the system, a 24 percent increase from 2015; it also shows a 10 percent increase in annual use for pedestrians, up from 58,900 in 2015 to 65,000 in 2017 per year, per site (San Diego State University 2017).

Wayfinding

Regional partners developed a wayfinding master plan as well as engineering documents and a sign selection guidance document for the greenway. This design effort was led by the NWARPC, which convened municipalities and other stakeholders to reach consensus on a consistent approach. Trail leaders in the community emphasized the challenge but importance of this task. While it was difficult to reach consensus among the municipalities, consistent signage helps establish a brand and improves user experiences. The signs include information about downtown centers, shopping destinations, landmarks, cities, and other geographic locations. Named establishments are not advertised due to the potential

policy concerns of the government advertising certain businesses over another. The trail also includes mile- and confidence markers that enhance safety in the event that emergency personnel need to respond to a health- or safety-related situation (NWARPC, pers. comm.).

Lessons Learned

PSC identified the following lessons learned from Northwest Arkansas:

- **A well-developed trail system can substantially impact the economy and increase residents' quality of life.** Northwest Arkansas has become a tourist destination for mountain bikers across the country as well as a quality-of-life benefit to local users.
- **Mapping existing and potential connecting trail routes is a critical first step that serves as the basis to engage stakeholders and build consensus.** The Walton Family Foundation's support in the planning and development process was integral throughout the project.
- **Input from local municipalities is critical to the success of trail development.** The most recent effort even included the development and adoption of 25 individual community action plans.
- **Investing in studies that assess economic significance and user trends helps build support and inform decision making.** It is important to highlight the key benefits of the trail after it has been built, including the municipal return on investment through economic development studies.
- **Local municipalities have built additional connectors to the primary route, which enhanced the utility of the trail.** These local connectors not only add to the trail network as a whole, but they provide a transportation avenue to the local communities that install these connectors.
- **Evidence suggests that a trail's presence increases property values in the region.** Properties located near the greenway have a higher value than similar properties located farther from the trail.
- **Businesses along the Razorback Regional Greenway use the trail as a recruitment tool for potential employees.** The trail has become a significant asset within the community that enhances quality of life, drawing talent to the region.

Wright County, Minnesota

Located directly northeast of the Twin Cities region in southern central Minnesota, Wright County was selected primarily due to its proximity to the Twin Cities region, which is consistently cited as having best-in-class trail systems. The county lies just outside of the seven-county metropolitan region surrounding the Twin Cities. Wright county is located approximately 50 miles from the Twin cities, a major population hub in the area, mirroring St. Clair County's relationship with Detroit. Though Wright County has a significantly larger median income, the populations are comparable, differing by an estimated 28,631 individuals (U.S. Census Bureau 2018a; U.S. Census Bureau 2018b). Wright County's manufacturing percentage is slightly smaller than St. Clair County's, but it is the largest economic sector for both. According to the Minnesota Department of Transportation (MnDOT), the county features multiple hiking, biking, and equestrian trails and is home to a portion of the 620-mile Mississippi River Trail, which runs from Itasca State Park to the Iowa border. In 2011, Wright County developed a county-wide 25-year strategic plan for trail development. Since the creation of the plan, close to 15 miles of top-priority trails have been completed, and plans are underway to build on additional 64 miles of trails (Wright County Parks and Recreation Department, pers. comm.).

Organizational Landscape

Wright County developed a strategic plan to guide trail development in the county, which lays out potential routes and recommended policies. When the county advances a particular route, it develops an individual trail master plan for that segment—a strategy that garnered support for trail development from the local municipalities at the onset of the development process and is more effective when developing individual segments as circumstances may have changed from the initial planning process.

The county is currently leading fundraising efforts for development and completion of the trails identified as potential routes in the county-wide 25-year plan. The county is leading this effort, partnering with local municipalities to implement the strategic plan and construct the remaining 64 miles of trails. Wright County has also partnered with MnDOT to develop a route for the MRT (Wright County Parks and Recreation Department, pers. comm.).

Wright County Parks and Recreation Department

The Wright County Parks and Recreation Department partners with local municipalities for the majority of projects, including master planning activities, project funding, and local park and trail maintenance (Wright County Parks and Recreation Department, pers. comm.).

In 2011, the county led a 25-year trail and bikeway planning effort as a first step to begin developing their trail network. The plan's goal is to connect the county with nonmotorized trails and bikeways to complement cities and townships (Wright County, Minnesota 2011). The plan cites resident need, increased property values, improved public health, lower healthcare costs, enhanced safety, and increased economic development as the driving factors for the effort.

Local Municipalities

The local governments in Wright County participated in the 2011 trail planning effort and continue to be substantial partners. Memoranda of understanding are completed with the cities when partnering for trail development or maintenance. Local municipalities contribute to the local planning processes by clarifying details for specific trails, generating cost estimates, and developing bid documents. As an example, the

Crow River Regional Trail Master Plan was completed in 2017, which will cross three counties and nine municipalities (Three Rivers Park District 2017). Cities may also have existing trails or recreation plans of their own that the county can build off when adding to the regional trail network.

Minnesota Department of Transportation

MnDOT plays a minimal role in trail development in Wright County and does not maintain any local or county trails in the region. The state's involvement is centered around the regional bike routes in Minnesota, one of which is located in Wright County. The MRT, designated as U.S. Bicycle Route 45 by the federal government, runs through the northeastern portion of Wright County. MnDOT worked with the Wright County Planning and Zoning Office for the initial development of this trail. The two agencies developed a general route for the trail and gathered public input for where the trail would be located. MnDOT participated in much the same process as Wright County when working with the city and county governments for the MRT and other U.S. Bicycle Routes in the state. MnDOT communicated with potential trail property owners early and regularly to ensure that they were informed throughout the process. This early communication allowed problems to be resolved before they became a barrier to trail development or construction.

Areas of Interest

PSC researched multiple topics of particular interest to trail partners in St. Clair County, including common misconceptions, maintenance approaches, trail users and economic significance, and wayfinding. These topics were explored with local leaders in Wright County; their answers are summarized below.

Common Misconceptions

The county commits a full-time park ranger to monitor the trails throughout its jurisdiction, with part-time help as needed. Anecdotally, public safety concerns along the trail are miniscule and consist of minor infractions, such as littering. The trail actually may increase users' safety due to the lack of automobile traffic. Moreover, when discussing the trail with local elected officials, it is often beneficial to point out how the trail increases safety by providing residents a designated path for recreational activity (Wright County Parks and Recreation Department pers. comm.).

Maintenance Approaches

Wright County estimates that it costs \$5,700 annually to maintain a mile of paved trail. This includes expenses such as equipment, labor, materials, landscaping, and trash collection. A trail that consists of crushed aggregate (coarse material used in construction) is less expensive to maintain and costs approximately \$4,100 per mile each year. These costs do not include significant maintenance, such as resealing or repaving. According to the Wright County Parks and Recreation Department, it costs approximately \$90,000 per mile to reclaim three-inch pavement whose subgrade support structure is still in good condition. In the past, Wright County has used a cost-sharing program between the county and local municipalities for trail projects. The program was structured similar to the county road construction formula, but the funds were used for trail development. County cost sharing is considered on a project basis for those trails identified in the 2011 Trail and Bikeway Plan (Wright County, Minnesota 2011).

Trail Users and Economic Significance

Wright County has not completed any economic impact or user studies, which may be because they are currently working on developing the network. However, a 2009 study published by the University of Minnesota highlights the impact of recreational trail use in five regions throughout the state, including the central region in which Wright County is located. The study determined that trails in the central region were used almost 24.4 million times annually, generating approximately \$258 million in direct spending. An additional \$102 million was spent on annual equipment purchases in the region (Venegas 2009).

Wayfinding

Wright County has developed consistent wayfinding standards that are outlined in their 25-year master plan. Trails signage provides general directions to downtown areas but does not advertise specific businesses or locations. According to the county's planning department, residents often request more detailed information about individual businesses on trail signage, but these requests are declined due to potential policy concerns about advertising individual businesses on a county- or municipal-owned trail.

Wayfinding is a vital component to an effective walkway and bicycle system. Signs along the trail show the current location, destinations, where routes change direction, and where routes split along the trail. MnDOT often cobrands with the smaller regional trails that comprise the MRT. The cobranding effort was handled on a case-by-case basis as the trail was built. For example, state signs are not installed in the City of Minneapolis because they do not align with the city's branding. The Paul Bunyan Trail, in northern Minnesota, and the MRT are cobranded to show the dual identity of the trail, allowing both to identify as part of a larger regional trail network but also maintain their local identity (MnDOT, pers. comm.).

Lessons Learned

PSC identified the following lessons learned from Wright County, Minnesota:

- **A master plan is an important first step in the development of a regional trail network.** Existing trails are first identified and cataloged; then, potential connectors are identified to complete the trail network. Local municipalities often play a crucial role in identifying the existing trails and connectors. Once a master plan is in place, communities often create individual ones for each development project.
- **A county-wide master trail plan that illustrates planned connectivity to regional trails is a valuable resource when applying for grant funding.** Potential funders often prefer to see that a project is part of a larger regional effort with strong community engagement.
- **Existing formulas for match can be applied to trail funding projects.** Wright County often applies its county road match-funding policy to trail development projects.
- **It is crucial to have support from local and regional elected officials.** Elected officials must be informed of the benefits that trails bring to a region. In many instances, trails are cited as one of the top recreational amenities, which can be used to garner support for a project (ETC Institute 2017). This also means regularly updating newly elected officials throughout the planning or project timeline.

- **Wayfinding is an important aspect of a trail.** Consistency throughout the network shows trail connectivity and advertises the network as a whole, and local municipalities' participation is integral to this consistency. Beyond this, wayfinding is also a recreational benefit to trail users, allowing safe navigation to their destination.

Appendix B: County Comparison Table

County Comparison Based on Chosen County Indicators

The following table presents county-level data on selected indicators to analyze similarities between St. Clair and other counties.

County	State	Median Income	Population Estimate	Great Lakes		Manufacturing Percentage	County Farmland
				Coastal County	Midwest County		
Benton*	AR	\$61,271	251,823	No	No	13.40%	56.20%
Erie	PA	\$48,192	277,794	Yes	No	17.30%	33.00%
Fayette	PA	\$41,632	133,160	No	No	12.10%	22.30%
Midland*	MI	\$57,117	83,489	No	Yes	22.50%	27.10%
Grand Traverse*	MI	\$58,229	91,222	Yes	Yes	11.00%	18.40%
St. Clair	MI	\$53,641	159,761	Yes	Yes	23.80%	39.00%
Washington*	AR	\$47,452	223,683	No	No	15.10%	51.70%
Wright	MN	\$77,953	131,130	No	Yes	17.00%	68.10%

Source: PSC compiled this data from the 2017 five-year American Community Survey estimates and the 2012 Census of Agriculture.

*Communities that PSC studied in its previous project with the Ralph C. Wilson Jr. Foundation.

Note: Median income was selected as an indicator of communities with similar standards of living. The 2017 population estimate is an indicator of the number of people in the county, and therefore the potential local user base of a regional trail. If the community is on the coast of one of the Great Lakes and located in the Midwest, this indicates a geographic similarity. St. Clair County's number one industry is manufacturing, according to the 2017 American Community Survey. This number was used to compare similar county economies. St. Clair County is also a large agricultural community, so farmland coverage as a percentage of total land area in a county was used as an agricultural presence indicator.

References

- Allegheny Trail Alliance. 2018. *TrailGuide, Fourteenth Edition, Official Guide to The C&O Canal Towpath and The Great Allegheny Passage*. West Newton: Great Allegheny Press.
- . n.d.a. “About the Trail.” *Great Allegheny Trail Alliance*. Accessed December 18, 2018. <https://gaptrail.org/>
- . n.d.b. “Explore.” *Great Allegheny Trail Alliance*. Accessed March 1, 2019. <https://gaptrail.org/explore>
- . n.d.c. “Studies.” *Great Allegheny Trail Alliance*. Accessed December 18, 2018. <https://gaptrail.org/about-us/economic-impact-studies>
- . n.d.d. “Trail History.” *Great Allegheny Trail Alliance*. Accessed December 18, 2018. <https://gaptrail.org/about-us/trail-history>
- . n.d.e. “Who We Are.” *Great Allegheny Trail Alliance*. Accessed February 25, 2019. <https://gaptrail.org/about-us/who-we-are>
- Arrowhead Regional Development Commission. January 7, 2019. *Paved Trail Economic Impact Assessment: Examining Usage of Minnesota’s Lake Superior Coastal Trails*. Duluth: Arrowhead Regional Development Commission. Accessed February 15, 2019. http://ardc.org/wp-content/uploads/2019/01/PavedTrailEconomicImpactAssessment2018_17-306-07_001.pdf
- Avenue ISR. July 14, 2014. *The Vasa Effect, Non-Motorized Use of the Vasa Pathway: A Case Study of Economic Impacts*. Traverse City: Avenue ISR. Accessed January 5, 2019. <https://traversetrails.org/wp-content/uploads/Vasa-Pathway-Use-Report-July-14-2014-FINAL.pdf>
- BBC Research & Consulting. March 21, 2018. *Economic and Health Benefits of Bicycling in Northwest Arkansas*. Denver: BBC Research & Consulting. Accessed March 5, 2019. <https://8ce82b94a8c4fdc3ea6d-b1d233e3bc3cb10858bea65ff05e18f2.ssl.cf2.rackcdn.com/do/97/cf26b21948308adae6828624729a/march-2018-nw-arkansas-final-report-corrected.pdf>
- City of Midland. n.d. “Trail Systems.” *City of Midland*. Accessed January 13, 2019. <https://cityofmidlandmi.gov/957/Trail-Systems>
- Crompton, John L. 2001. “Perceptions of How the Presence of Greenway Trails Affects the Value of Proximate Properties.” *Journal of Park and Recreation Administration* 19(3): 114–132
- Erie Area Council of Governments. n.d.a. “Erie County Signing Region Trust.” *Erie Area Council of Governments*. Accessed February 22, 2019. <https://www.erieareacog.org/erie-county-signing-region-trust>
- . n.d.b. “Members.” *Erie Area Council of Government*. Accessed February 25, 2019. <https://www.erieareacog.org/about-eacog/pages/members>

- ETC Institute. September 2017. *Oakland County Parks and Recreation Community Needs Assessment Survey*. Olathe: ETC Institute. Accessed March 1, 2019. <https://www.oakgov.com/parks/getinvolved/Documents/OCPR.AppendixA.Survey.pdf>
- Friends of the Pere Marquette Rail Trail. 2015. "Pere Marquette Rail Trail: Clare Staging Area." *Friends of the Pere Marquette Rail Trail*. Accessed February 1, 2019. <http://www.peremarquetterailtrail.org/about>
- Gannett Fleming, Inc. June 20, 2005. *Midland Wayfinding Signing Master Plan*. Ann Arbor: Gannett Fleming, Inc. Accessed March 4, 2019.
- Gibbons, Lauren. February 16, 2019. "Voters Will Decide whether DNR Trust Fund Money Can Be Put towards More Park Development." *MLive*. Accessed February 27, 2019. <https://www.mlive.com/news/2019/02/voters-will-decide-whether-dnr-trust-fund-money-can-be-put-towards-more-park-development.html>
- Go Great Lakes Bay. n.d. "About." *Go Great Lakes Bay*. Accessed March 7, 2019. <http://www.gogreat.com/things-to-do/trails/>
- Great Lakes Bay Regional Alliance. February 1, 2016. *Linking the Trails: Transforming Tomorrow Together*. Freeland: Great Lakes Bay Regional Trail Alliance. Accessed March 7, 2019. <http://www.gogreat.com/includes/content/docs/media/GLBRT-Linking-The-Trails-Plan.pdf>
- Greater Erie Regional Trails. n.d. "Greater Erie Regional Trails." *Greater Erie Regional Trails*. Accessed December 14, 2018. <https://erietrails.org>
- Herr, Andrew R. July 16, 2018. *Analysis of 2017 Trail Usage Patterns along the Great Allegheny Passage*. Latrobe: Saint Vincent College. Accessed March 8, 2019. <https://gaptrail.org/system/resources/W1siZiIsIjIwMTgvMDkvMTAvMjAvNTcvMDgvNTQoLzIwMTdfR3JlYXRfQWxsZWdoZW55X1Bhc3NhZ2VfVHJhaWxfQ291bnRfRmluYWxfUmVwb3JoLnBkZiJdXQ/2017%20Great%20Allegheny%20Passage%20Trail%20Count%20Final%20Report.pdf>
- Michigan Trails and Greenways Alliance. 2017. "Great Lake to Lake Trails." *Michigan Trails and Greenways Alliance*. Accessed March 7, 2019. <https://michigantrails.org/trails/great-lake-to-lake/>
- Midland County Parks and Recreation Commission. June 17, 2014. *Midland County Parks and Recreation Master Plan 2014–2018*. Midland: Midland County Parks and Recreation Commission. Accessed February 1, 2018. <https://www.co.midland.mi.us/Portals/o/Midland%20County/Documents/Parks/Adopted%20Master%20Plan%202014-2019.pdf>
- Minnesota Department of Transportation. n.d. "U.S. Bicycle Route 45." *Minnesota Department of Transportation*. Accessed December 14, 2018. <https://www.dot.state.mn.us/bike/mrt/maps.html>

- Mowen, Andrew J., Alan R. Graefe, Deborah L. Kerstetter, Michael D. Ferguson. September 9, 2013. *2012–2013 Presque Isle State Park Visitor Survey: Final Report*. Erie: Department of Recreation, Park and Tourism Management; The Pennsylvania State University. Accessed March 6, 2019. <http://seagrant.psu.edu/sites/default/files/PISP%20Visitor%20Survey%20Report%20%289-9-13%29.pdf>
- Nelson, Charles, Joel Lynch, Christine Vogt, Afke van der Woud. February 2002. *Use and Users of the Pere Marquette Rail Trail in Midland County Michigan*. East Lansing: Michigan State University Department of Park, Recreation, and Tourism. Accessed March 6, 2019. <https://www.americantrails.org/files/pdf/marquettettrailuse02.pdf>
- Northwest Arkansas Regional Planning Commission. 2015. *Walk Bike Northwest Arkansas*. Fayetteville: Northwest Arkansas Regional Planning Commission. Accessed February 26, 2019. <http://www.nwabikepedplan.com/final-plan-and-documents.html>
- . n.d.a. “NWA Razorback Regional Greenway.” *Northwest Arkansas Regional Planning Commission*. Accessed March 7, 2019. <http://nwarpc.org/bicycle-and-pedestrian/nwa-razorback-regional-greenway/>
- . n.d.b. “NWA Regional Bicycle/Pedestrian Master Plan.” *Northwest Arkansas Regional Planning Commission*. Accessed February 26, 2019. <http://nwarpc.org/bicycle-and-pedestrian/northwest-arkansas-bicyclepedestrian-master-plan/>
- Northwest Arkansas Tourism Association. May 31, 2018. “Off-Road and Paved: NWA’s Premier Bike Trails.” *Explore Northwest Arkansas*. Accessed March 8, 2019. <https://northwestarkansas.org/blog/off-road-and-paved-nwas-premier-bike-trails/>
- Northwest Arkansas Trails. n.d. “Razorback Regional Greenway.” *Northwest Arkansas Trails*. Accessed February 13, 2019. <https://www.nwatrails.org/trail/razorback-regional-greenway/>
- Pennsylvania Department of Conservation and Natural Resources (Pennsylvania DCNR). n.d.a. “Biking at Presque Isle State Park.” *Pennsylvania Department of Conservation and Natural Resources*. Accessed March 6, 2019. <https://www.dcnr.pa.gov/StateParks/FindAPark/PresqueIsleStatePark/Pages/Biking.aspx>
- . n.d.b. “Presque Isle State Park.” *Pennsylvania Department of Conservation and Natural Resources*. Accessed March 6, 2019. <https://www.dcnr.pa.gov/StateParks/FindAPark/PresqueIsleStatePark/Pages/default.aspx>
- . n.d.c. “Pennsylvania Bicycle Routes Map.” *Pennsylvania Department of Conservation and Natural Resources*. Accessed March 6, 2019. <https://www.dcnr.pa.gov/StateParks/FindAPark/PresqueIsleStatePark/Pages/default.aspx>
- Peter J. Smith and Company, Inc. March 2015. *Destination Erie: A Regional Vision*. Buffalo: Peter J. Smith and Company, Inc. Accessed February 22, 2019. <http://emerge2040.org/wp-content/uploads/2015/03/DE-Final-3-25-15.pdf>

- PKF Consulting. January 8, 2013. *Market Demand Study: Proposed Hotel Connellsville, Pennsylvania*. Philadelphia: PKF Consulting. Accessed February 15, 2019. <https://gaptrail.org/system/resources/W1siZiIsIjIwMTYvMDkvMTMvMjAvMzAvMDUvMjYoLoNvbm5lbGxzdm1sbGVQaGFzZTFFSZXBvenQucGRmIl1d/ConnellsvillePhase1Report.pdf>
- Public Sector Consultants. September 2017. *Michigan Statewide Comprehensive Outdoor Recreation Plan 2018–2022*. Lansing: Public Sector Consultants. Accessed March 8, 2019. https://www.michigan.gov/documents/dnr/SCORP2018-2022_Final2_609032_7.pdf
- Rails-to-Trails Conservancy. n.d. “Razorback Regional Greenway Arkansas.” *TrailLink*. Accessed February 26, 2019. <https://www.trailink.com/trail/razorback-regional-greenway/>
- Regional Trail Corporation. n.d. “About the Regional Trail Corporation.” *Regional Trail Corporation*. Accessed February 25, 2019. <http://www.regionaltrailcorp.com/about.html>
- San Diego State University. July 2017. *Northwest Arkansas Trail Usage Monitoring Report*. San Diego: San Diego State University. Accessed March 5, 2019. <https://8ce82b94a8c4fdc3ea6d-b1d233e3bc3cb10858bea65ff05e18f2.ssl.cf2.rackcdn.com/99/7b/c3d83bab42bab2054d68a04e1eb1/trails-usage-report-final-2017.pdf>
- St. Clair County, Michigan. n.d. “Bridge to Bay Trail.” *St. Clair County, Michigan*. Accessed March 8, 2019. <https://www.stclaircounty.org/offices/parks/btob.aspx>
- State of Pennsylvania. 2012. “Title 58.” *State of Pennsylvania*. Accessed March 6, 2019. <https://www.legis.state.pa.us/cfdocs/legis/LI/consCheck.cfm?txtType=HTM&ttl=58>
- Three Rivers Park District. April 20, 2017. *Crow River Regional Trail Master Plan*. Plymouth: Three Rivers Park District. Accessed February 25, 2019. <https://threerivers-drupal.s3.us-east-2.amazonaws.com/public/pdfs/construction/crow-river-master-plan.pdf>
- Trail Town Program. April 18, 2011. *Graphic Identity and Sign Guidelines Manual*. Greensburg: Trail Town Program. Accessed February 25, 2019. https://gaptrail.org/system/resources/W1siZiIsIjIwMTYvMDkvMTIvMjEvNTEvNTkvODYoLodBUf9HdWlkZWxpbnVzOm9va19FMl8xXy5wZGYiXVo/GAP_GuidelinesBook_E2%5B1%5D.pdf
- . March 2015. *Trail User Survey and Business Survey Report: Great Allegheny Passage*. Greensburg: Trail Town Program. Accessed February 20, 2019. <https://gaptrail.org/system/resources/W1siZiIsIjIwMTYvMDkvMTMvMjAvMjgvMzEvNDExLzIwMTVfRoFOX1JlcG9ydC5wZGYiXVo/2015-GAP-Report.pdf>
- Traverse Area Recreation and Transportation Trails, Inc. 2014. *TART Trails, Inc. 3–5 Year Plan*. Accessed February 4, 2019. https://traversetrails.org/wp-content/uploads/Pages-from-3-5-Year-Plan_Adopted.pdf
- . March 21, 2018. *TART Trails Annual Report 2016–2017*. Traverse City: Traverse Area Recreation and Transportation Trails, Inc. Accessed February 21, 2019. <https://traversetrails.org/wp-content/uploads/TART-Annual-Report-FINAL-3-21-18.pdf>
- . n.d.a. “About.” *Traverse Area Recreation and Transportation, Inc*. Accessed February 11, 2019. <https://traversetrails.org/about/>

- . n.d.b. “Trails.” *Traverse Area Recreation and Transportation, Inc.* Accessed February 4, 2019.
<https://traversetrails.org/trails/>
- U.S. Census Bureau. December 6, 2018a. “ACS Demographic and Housing Estimates, 2013–2017 American Community Survey Five-Year Estimates” *American Fact Finder*. Accessed February 24, 2019.
https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_DP05&prodType=table
- . December 6, 2018b. “Median Household Income in the Past 12 Months (In 2017 Inflation Adjusted Dollars), 2013–2017 American Community Survey Five-Year Estimates.” *American Fact Finder*. Accessed February 23, 2019.
https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_S1903&prodType=table
- . December 6, 2018c. “Selected Economic Characteristics, 2013–2017 American Community Survey Five-Year Estimates.” *American Fact Finder*. Accessed February 24, 2019.
https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_DP03&prodType=table
- United States Department of Agriculture, National Agricultural Statistics Service. May 2, 2014. “Census of Agriculture.” *United States Department of Agriculture, National Agricultural Statistics Service*. Accessed February 12, 2019.
https://www.nass.usda.gov/Publications/AgCensus/2012/Online_Resources/Ag_Census_Web_Maps/Data_download/index.php
- Venegas, Ernesto C. November 2009. *Economic Impact of Recreation Trail use In Different Regions of Minnesota*. Minneapolis: University of Minnesota Department of Employment and Economic Development. Accessed March 7, 2019.
https://files.dnr.state.mn.us/aboutdnr/reports/trails/econ_impact_trails.pdf
- Vogt, Christine, Charles Nelson, Joshua Pedersen. November 2004. *Use and Users of the Paint Creek Trail*. East Lansing: Michigan State University.
- Walton Family Foundation. March 29, 2018. “Bicycling Provides \$137 Million in Economic Benefits to Northwest Arkansas.” *Walton Family Foundation*. Accessed February 26, 2019.
<https://www.waltonfamilyfoundation.org/about-us/newsroom/bicycling-provides-137-million-in-economic-benefits-to-northwest-arkansas>
- Wright County, Minnesota. July 19, 2011. *Trail and Bikeway Plan: Pathways to Active Living*. Buffalo: Wright County, Minnesota. Accessed February 25, 2019.
<https://www.co.wright.mn.us/DocumentCenter/View/6967/FINAL-Wright-County-Trail-and-Bikeway-Plan>



**PUBLIC SECTOR
CONSULTANTS**

230 N. Washington Square
Suite 300
Lansing, MI 48933