

Northeast Iowa Regional Trails

ECONOMIC IMPACT ANALYSIS

PREPARED BY:

upper
explorerland
regional planning commission

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Introduction

A vision for a regional “Backbone” trail

Upper Explorerland Regional Planning Commission (UERPC) serves as the Iowa Department of Transportation’s Regional Planning Affiliation 1 (RPA-1) and provides transportation planning and technical assistance for governments in a five-county region in northeast Iowa. The RPA-1 Transportation Enhancement Committee is an advisory committee of RPA-1’s governing body, the Transportation Policy Board. Part of the mission of the Enhancement Committee is to build a regional trail system to provide non-vehicular travel options for residents and visitors. Communities in our region are finding that improving quality of life is vital to attracting and retaining strong business and workforce members, as well as generating economic activity through tourism. Improving walkability and bikability through infrastructure such as multi-use trails is a key factor in improving community quality-of-life overall.

The Enhancement Committee has a goal of connecting five major trails in our region to create a border-to-border trail—from Minnesota to Wisconsin, through northeast Iowa—that will form the “backbone” for a greater regional trail system. The five trails are the Wapsi Great Western Line (WGWL) Trail (Howard and Mitchell Counties); the Prairie Farmer Trail (Howard and Winneshiek Counties); the Trout Run Trail (Winneshiek County); the Dry Run Trail (Winneshiek County); and the Turkey River Recreational Corridor (Fayette and Clayton Counties); collectively known as the Backbone Trail.

The Backbone Trail will require significant resources to close gaps in individual trails and achieve systemwide connectivity. As a region, our federal transportation dollars have been impacted by a declining population. What funds are available are in high demand and stretched thinly across regional partners. Further, it is hit-or-miss whether local trail funding is a priority for decision-makers. For this reason, the Committee sought help to tell the story of the importance and impact of a connected trail system to our local, regional, state, and federal stakeholders. Leaders at all levels responsible for the distribution of public funds need to be able to justify expenditures and show a positive return on investment. Committee members hope to help provide them with that justification through the development of this economic analysis, a study of the estimated economic impact of trail investments to help envision what a completed trail system might mean for the region and its communities. The Enhancement Committee hopes the findings will help to promote more investment in the region's trail infrastructure, and that it will better enable community leaders to apply and lobby for federal and state infrastructure funding.

The RPA-1 Enhancement Committee considered and pursued options for external funding to complete the Northeast Iowa Regional Trails Economic Impact Assessment, but ultimately requested assistance from Regional Planning Affiliation 1 when alternative funding resources did not materialize. The report that follows was researched and conducted in partnership with the RPA-1 Enhancement Committee from 2018 to 2021.



Regional Trail Overview

Our region has found success in leveraging federal Transportation Alternatives Program (TAP) funding—called “Iowa’s TAP” in Iowa—to make progress toward building out a regional network of paved, multi-use trails. Moreover, the Trout Run Trail in Decorah has become well-known statewide and in the tri-state region, and the Driftless Area of northeast Iowa has become a destination for hiking, bicycling, paddling, and other active forms of transportation and outdoor recreation. Funding for these regional trails has led to economic development opportunities that would not otherwise have existed.

There are over 135 miles of completed trails of different types within the five-county region. Currently, the region has five major regional trails that, when fully linked, will form the “backbone” of the area’s trail system. Currently there are approximately 76 miles of paved regional trails.

The map on the following page shows the regional “Backbone” trail network, illustrating completed/existing trail sections, planned trail segments that are in development, as well as proposed sections of trail. The map also shows roadways with paved shoulders that help provide regional trail connections.

UERPC Regional Trail Map

Updated 2021



Methodology

Overview

The Northeast Iowa Regional Trails Economic Impact Analysis is designed to estimate the quantified economic impact of four regional trails that form part of the larger, proposed “Backbone” trail network. The four trails looked at in this analysis are the **Pony Hollow Trail** in Clayton County; the **Prairie Farmer Recreation Trail** in Winneshiek and Howard Counties; the **Turkey River Recreational Corridor** in Fayette and Clayton Counties; and the **Trout Run Trail** in Winneshiek County.

UERPC created an input-output (I-O) model that utilizes economic “multipliers” that are specific to the five-county UERPC region of northeast Iowa. The multipliers—known as RIMS multipliers (Regional Input-output Modeling System)—are developed and provided by the Bureau of Economic Analysis of the U.S. Department of Commerce.

There are two primary data sources for the I-O model: trail-user count data from each of the four trails, and data from trail-user surveys regarding visitors’ spending in the region. Moreover, the multipliers used in the I-O model are specific to the industries that benefit most directly from trail-related travel (restaurants/bars, retail, lodging, etc.) based on spending reported by respondents to the trail-user surveys.

This analysis is only interested in the economic activity generated by non-local trail users visiting specifically to use the trails(s)—that is, the economic activity that would not have occurred in the region if not for the existence of these trails. Accordingly, a “Target Group”, or TG, was isolated for analysis from each of the four trail surveys by filtering the survey data based on the following factors:

- Only responses from zip codes outside of the county where the trail is located
- Only adult trail users (based on reported number of adults in party)
- Only trail users whose use of the trail was the primary reason for their trip (i.e., not incidental to their trip)

Only survey data from respondents who met all three criteria were included in the Target Group.

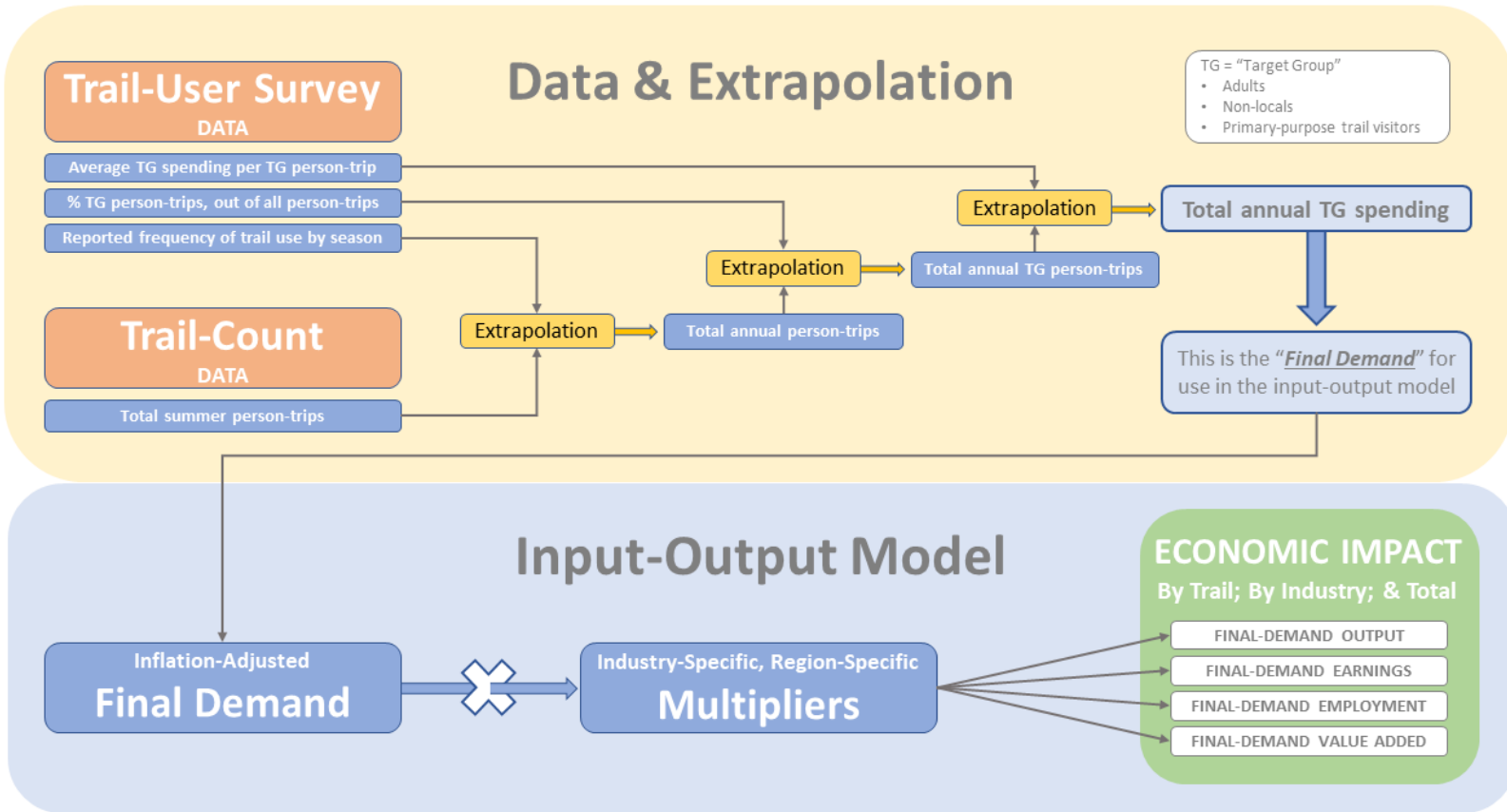
Trail survey respondents were asked to give the total number of adults in their travel party and to report the total dollar amount spent (or anticipated to be spent) during their trip by the entire travel party, within the county where the trail is located. Survey respondents also reported the number of nights stayed. For visitors that stayed multiple nights, a single trail “person-trip” was assigned for each adult in the travel party for each day of their trip; visitors who did not stay multiple nights were assigned a single person-trip for each adult in their party. For example, two visitors who stayed one night (two days) would equal four person-trips and one visitor who did not stay overnight would equal one person-trip, and so on.

Person-trips were calculated for all adult trail-users (including local and non-primary-purpose trail visitors). This allowed UERPC analysts to calculate the average spending per TG person-trip for each of the four trails; to calculate the percentage of all person-trips that were from the Target Group; to identify seasonal trail-use frequency (as reported by survey respondents), and more.

The use of the “person-trip” rather than total visitors is an important distinction because this is the metric that allows for the extrapolation of annual person-trips and spending amounts based on trail-user count data—because infrared trail-user counters count person-trips, not individual people.

The methodology used in the analysis is complex and involves extrapolation of multiple data variables from both the trail-user survey and from trail counts. **FIGURE 1** illustrates the data collection and extrapolation process to arrive at the “final demand” amounts for each of the four trails, and the role of the final demand amounts and economic multipliers in the I-O model. In this analysis, the final demand is the total annual TG spending for a given trail, or combined. The term “final demand” here actually represents the *change* in final demand; because the assessment uses a baseline of zero (i.e., the economic impact generated by the trail[s] compared to having no trail[s] at all), the terms “final demand” and “change in final demand” are synonymous and interchangeable in this analysis.

FIGURE 1: Diagram of data collection and extrapolation process and Input-Output Model



This process results in several key outputs, each representing an estimated economic impact for each of the four trails, over multiple key industries. The four types of economic multipliers, and a description of each associated output, are shown in **FIGURE 2**.

FIGURE 3 is a matrix of the UERPC-region-specific economic multipliers, outputs, and key industries as applied to each of the four trails.

FIGURE 2: RIMS economic multipliers and descriptions

Economic Multiplier	Description
Final-demand Output (dollars)	Value of goods and services provided by related industries per dollar change in final demand
Final-demand Earnings (dollars)	Wages, salaries, and benefits paid to workers per dollar of final demand change
Final-demand Employment (jobs)	Number of jobs (FT and PT) generated/supported in the local economy by change in final demand
Final-demand Value Added (dollars)	Change in local value added per dollar of final demand change; comparable to a “regional GDP”

FIGURE 3: UERPC-region-specific economic multipliers, outputs, and key industries, as applied to each trail

	Output (\$)	Earnings (\$)	Employment (Jobs*)	Value-Added (\$)	TOTAL
Restaurants, bars, breweries, wineries	1.3544	0.4125	20.4873	0.7122	#
Groceries, snacks, beverages	1.2917	0.4383	17.9427	0.8336	#
Retail, incl. bikes, equipment, fuel	1.2672	0.402	16.3839	0.7919	#
Entertainment	1.2792	0.3479	14.2053	0.7553	#
Lodging & Accommodations	1.2647	0.3512	13.0646	0.7792	#
TOTAL	#	#	#	#	#

*Per \$1 million in final-demand change

The sum of the three dollar-based outputs from a given industry (row) gives us an estimated, overall effect of that trail-related industry or activity on the economy as a whole, while the sum of each multiplier category (column) gives individual economic measures for each trail (i.e., total jobs, total earnings, etc. in all industries). We can then further sum the overall economic impacts for each trail (by industry and multiplier category) to look at the cumulative impact of the four trails as a regional measure of trail-related economic generation.

There are regional and local trails that were not included in this analysis due to data and scope limitations, but future analyses may include them for a more complete look at the economic impact of trails within the UERPC region. However, the four major regional trails analyzed here help to paint a picture of the economic benefits trails bring to individual communities and the region, in addition to their direct quality-of-life benefits.

Trail-user survey

Trail-user survey responses were collected during the summer of 2018. UERPC and trail managers and stakeholders promoted the surveys and posted flyers at trailheads for each trail. The flyers included the web address for the survey as well as scannable QR codes to take people directly to the survey. The survey collected data for both groups and individuals—meaning a single survey respondent would report data for all the adults in their party, if more than one. The total reported TG spending was divided by the number of TG person-trips (based on number of adults in the party and number of nights stayed) to produce an average spending amount per TG person-trip.

Because survey respondents reported their spending in 2018 and this analysis was completed in 2021, the reported target-group spending amounts (and, thus, the outputs of the analysis) have been adjusted for inflation using the U.S. Bureau of Labor Statistics consumer price index (CPI) inflation calculator. July 2018 and July 2021 were used as the standardized periods for converting 2018 dollars to 2021 dollars.

While we know, both anecdotally and empirically, that trail use increased during the ongoing COVID-19 pandemic, it is unclear whether visitors' spending behavior changed in any way without survey data from 2020 and 2021. Nevertheless, it is considered that the 2018 trail-user surveys provide a valid representation of trail use and visitors' spending patterns in the region under "normal" circumstances.

Trail-user counts

In early 2019, UERPC coordinated with regional trail and recreation stakeholders to purchase multiple infrared trail-user counters, to be deployed on various trails in the region in order to begin tracking trail-use rates over time. Various counts have been done since 2019 and up to the present on the four trails featured in this analysis. To achieve temporal consistency, different years were used in order to have complete count data for the months of June through August. This consistent period of time across trail-user count data for these four trails allowed for those three months to constitute the summer baseline count. This baseline was used for calculating estimated trail use during the three other seasons (based on reported seasonal frequency of use from the 2018 survey) in order to estimate total annual trail person-trips. The trail-user count periods for the four trails are as follows:

- Prairie Farmer Recreation Trail: June 1st through August 31st, 2019
- Pony Hollow Trail: June 1st through August 31st, 2019
- Turkey River Recreational Corridor: June 1st through August 31st, 2020
- Trout Run Trail: June 1st, through August 31st, 2021

Since the trail-user count data for the Prairie Farmer Recreation Trail and the Pony Hollow Trail predate the “pandemic spike” in outdoor recreation, we find it safe to assume that the economic-impact estimates derived from those counts are conservative, and that, had standardized trail-user count data been available for 2020 or 2021, the estimated economic impact would be greater. While completely standardized trail-user count data for all four trails would be ideal and most desirable (exact same time period, exact same counter placement methodology, etc.), the variation in the years that the data were collected may lend to a more holistic picture of regional trail use, combining the immediately pre-pandemic summer data for two trails (2019), with one pandemic summer trail-user count (2020), and one immediately post-pandemic (slash ongoing pandemic, slash waning pandemic) trail-user count (2021).

As noted previously, it is important to bear in mind that the infrared trail-user counters only count person-trips, not individual people; that is, every time a person passes the counter, that person is counted. For this reason, efforts were made to establish the “person-trip” metric from the trail-user survey in order to be able to calculate spending per TG person-trip.

As in all studies that extrapolate data, it must be duly noted that the process and methodology can be sound and transparent, while simultaneously imperfect; that analysts can do nothing more than utilize the best data available at the time; and that, while the findings of such analyses may be championed and promulgated, their limitations must also be considered.

Economic Impact Analysis

Overview

This section contains summaries of the results of the data extrapolation and economic input-output model for each of the four featured regional trails in northeast Iowa: the **Pony Hollow Trail** in Clayton County; the **Prairie Farmer Recreation Trail** in Winneshiek and Howard Counties; the **Turkey River Recreational Corridor** in Fayette and Clayton Counties; and the **Trout Run Trail** in Winneshiek County. Following the individual trail summary profiles is a section which summarizes the cumulative economic impact of these trails by combining the economic outputs of all four trail analyses. While this analysis does not include all of our region's trails, these estimates help paint a picture of the economic benefits trails bring to our overall region of northeast Iowa. Had other regional trails been included, the cumulative economic impact would be that much bigger.

Pony Hollow Trail

Clayton County

Total Annual Person-Trips:

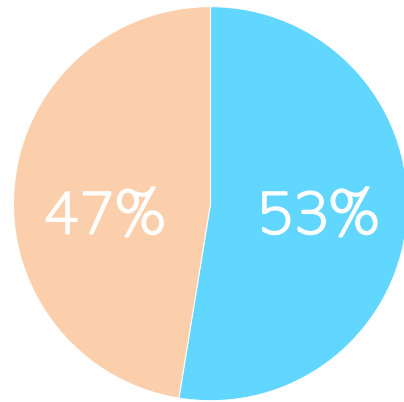
7,070

Total Annual TG Person-Trips:

3,716

Total Annual TG Spending:

\$121,856



■ TG PERSON-TRIPS ■ NON-TG PERSON-TRIPS

Total Annual Economic Impact:

\$300,163

Economic outputs by trail-related industries and totals for the Pony Hollow Trail (annual)

	Total Spent (Annual Extrapolation)	Final- demand Output	Final- demand Earnings	Final-demand Employment (Jobs)	Final- demand Value Added	TOTAL
Restaurants/Bars/ Breweries/Wineries	\$31,913	\$43,223	\$13,164	0.65	\$22,728	\$79,115
Groceries/Snacks/ Beverages	\$13,354	\$17,249	\$5,853	0.24	\$11,132	\$34,234
Retail (including bikes and gas)	\$53,024	\$67,192	\$21,316	0.87	\$41,989	\$130,497
Entertainment	\$9,819	\$12,561	\$3,416	0.14	\$7,416	\$23,393
Lodging/ Accommodation	\$13,747	\$17,385	\$4,828	0.18	\$10,711	\$32,924
TOTAL	\$121,856	\$157,609	\$48,576	2.08	\$93,977	\$300,163

TG = "Target Group": Adults, Non-locals, Primary-purpose trail visitors

Prairie Farmer Recreation Trail

Winneshieek & Howard Counties

Total Annual Person-Trips:

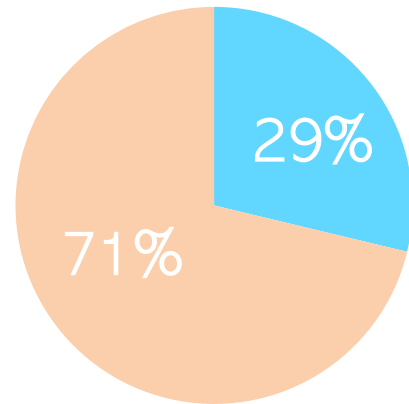
25,126

Total Annual TG Person-Trips:

7,224

Total Annual TG Spending:

\$176,926



■ TG PERSON-TRIPS ■ NON-TG PERSON-TRIPS

Total Annual Economic Impact:

\$441,299

Economic outputs by trail-related industries and totals for the Prairie Farmer Rec. Trail (annual)

	Total Spent (Annual Extrapolation)	Final- demand Output	Final- demand Earnings	Final-demand Employment (Jobs)	Final- demand Value Added	TOTAL
Restaurants/Bars/ Breweries/Wineries	\$103,094	\$139,631	\$42,526	2.11	\$73,424	\$255,580
Groceries/Snacks/ Beverages	\$39,127	\$50,540	\$17,149	0.70	\$32,616	\$100,306
Retail (including bikes and gas)	\$34,705	\$43,978	\$13,951	0.57	\$27,483	\$85,412
Entertainment	\$0	\$0	\$0	0	\$0	\$0
Lodging/ Accommodation	\$0	\$0	\$0	0	\$0	\$0
TOTAL	\$176,926	\$234,149	\$73,627	3.38	\$133,523	\$441,299

TG = "Target Group": Adults, Non-locals, Primary-purpose trail visitors

Turkey River Recreational Corridor

Fayette & Clayton Counties

Total Annual Person-Trips:

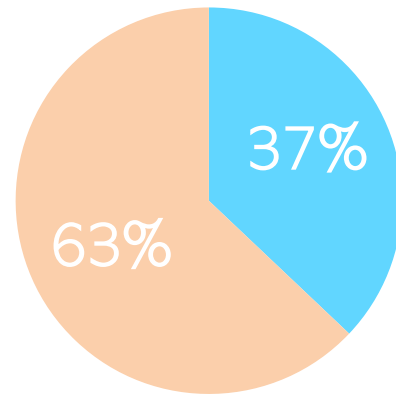
9,928

Total Annual TG Person-Trips:

3,680

Total Annual TG Spending:

\$442,246



■ TG PERSON-TRIPS ■ NON-TG PERSON-TRIPS

Total Annual Economic Impact:

\$1,089,625

Economic outputs by trail-related industries and totals for the Turkey River Rec. Corridor (annual)

	Total Spent (Annual Extrapolation)	Final- demand Output	Final- demand Earnings	Final-demand Employment (Jobs)	Final- demand Value Added	TOTAL
Restaurants/Bars/ Breweries/Wineries	\$66,754	\$90,412	\$27,536	1.37	\$47,542	\$165,490
Groceries/Snacks/ Beverages	\$70,648	\$91,256	\$30,965	1.27	\$58,892	\$181,113
Retail (including bikes and gas)	\$210,461	\$266,696	\$84,605	3.45	\$166,664	\$517,966
Entertainment	\$78,807	\$100,810	\$27,417	1.12	\$59,523	\$187,749
Lodging/ Accommodation	\$15,576	\$19,699	\$5,470	0.20	\$12,137	\$37,306
TOTAL	\$442,246	\$568,873	\$175,994	7.41	\$344,758	\$1,089,625

TG = "Target Group": Adults, Non-locals, Primary-purpose trail visitors

Trout Run Trail

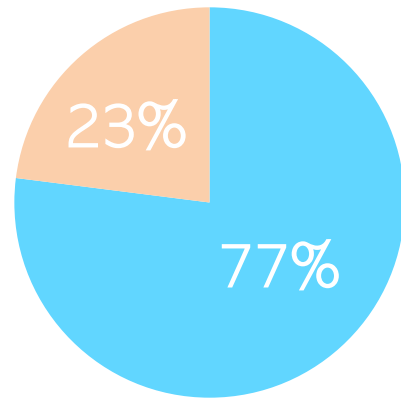
Winneshieek County

Total Annual Person-Trips:

78,022

Total Annual TG Person-Trips:

60,080



■ TG PERSON-TRIPS ■ NON-TG PERSON-TRIPS

Total Annual TG Spending:

\$5,321,690

Total Annual Economic Impact:

\$12,973,054

Economic outputs by trail-related industries and totals for the Trout Run Trail (annual)

	Total Spent (Annual Extrapolation)	Final- demand Output	Final- demand Earnings	Final-demand Employment (Jobs)	Final- demand Value Added	TOTAL
Restaurants/Bars/ Breweries/Wineries	\$1,200,608	\$1,626,103	\$495,251	24.60	\$855,073	\$2,976,426
Groceries/Snacks/ Beverages	\$392,832	\$507,421	\$172,178	7.05	\$327,464	\$1,007,063
Retail (including bikes and gas)	\$953,818	\$1,208,678	\$383,435	15.63	\$755,328	\$2,347,441
Entertainment	\$230,028	\$294,252	\$80,027	3.27	\$173,740	\$548,020
Lodging/ Accommodation	\$2,544,404	\$3,217,908	\$893,595	33.24	\$1,982,600	\$6,094,103
TOTAL	\$5,321,690	\$6,854,362	\$2,024,485	83.78	\$4,094,206	\$12,973,054

TG = "Target Group": Adults, Non-locals, Primary-purpose trail visitors

Regional Trail Totals

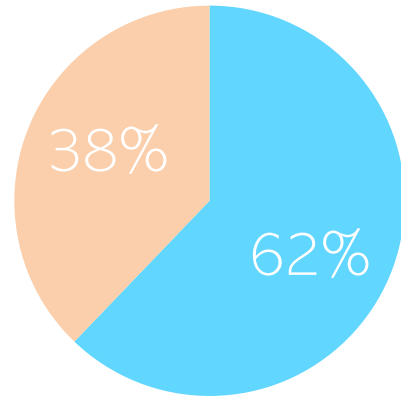
All Four Trails

Total Annual Person-Trips:

120,146

Total Annual TG Person-Trips:

74,700



■ TG PERSON-TRIPS ■ NON-TG PERSON-TRIPS

Total Annual TG Spending:

\$6,062,718

Total Annual Economic Impact:

\$14,810,406

Economic outputs by trail-related industries and totals for all four regional trails (annual)

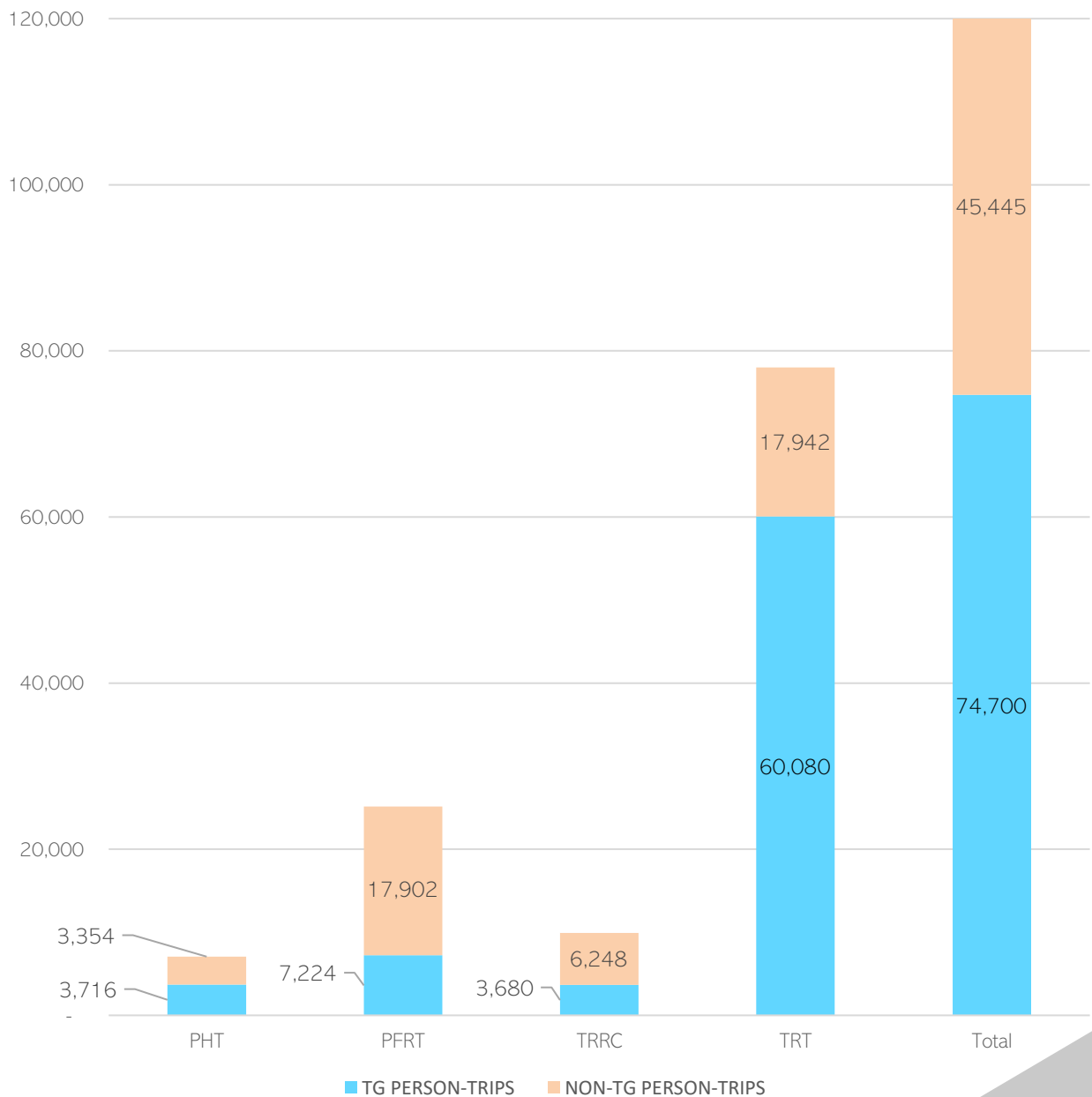
	Total Spent (Annual Extrapolation)	Final- demand Output	Final- demand Earnings	Final-demand Employment (Jobs)	Final- demand Value Added	TOTAL
Restaurants/Bars/ Breweries/Wineries	\$1,346,882	\$1,824,218	\$555,589	27.59	\$959,250	\$3,339,056
Groceries/Snacks/ Beverages	\$536,018	\$692,375	\$234,937	9.62	\$446,825	\$1,374,137
Retail (including bikes and gas)	\$1,376,884	\$1,744,787	\$553,507	22.56	\$1,090,354	\$3,388,649
Entertainment	\$373,346	\$477,584	\$129,887	5.30	\$281,988	\$889,459
Lodging/ Accommodation	\$2,429,587	\$3,072,699	\$853,271	31.74	\$1,893,135	\$5,819,105
TOTAL	\$6,062,718	\$7,811,663	\$2,327,191	96.82	\$4,671,552	\$14,810,406

TG = "Target Group": Adults, Non-locals, Primary-purpose trail visitors

Regional Trail Totals

All Four Trails

Total Annual Person-Trips by Regional Trail



TG = "Target Group": Adults, Non-locals, Primary-purpose trail visitors

Full Backbone Trail Network

Estimates for the Future System

The figures below are estimates based on the per-mile economic impacts of the regional totals on page 18. The four trails featured in this analysis combine for a total of 42 miles of existing trails. The per-mile economic impacts were then “scaled up” to the full, proposed Backbone trail network, consisting of 172 miles of multi-use trails across the region, connecting to the Shooting Star State Trail in Minnesota. Without question, this “scale-up” method is imperfect and has its flaws; but it is one simple way of estimating the future economic impact of a trail network that is not yet fully constructed. As with the four trails and regional totals on previous pages, economic impacts are expressed in 2021 dollars.

Total Annual Jobs:

396

Total Annual Person-Trips:

492,026

Total Annual TG Person-Trips:

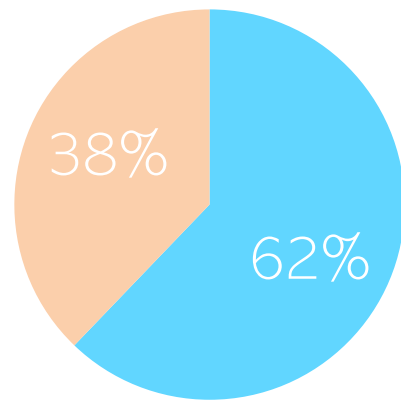
305,914

Total Annual TG Spending:

\$24,828,274

Total Annual Economic Impact:

\$60,652,139



■ TG PERSON-TRIPS ■ NON-TG PERSON-TRIPS

TG = “Target Group”: Adults, Non-locals, Primary-purpose trail visitors