

MARCH 2018



SINGING RIVER TRAIL

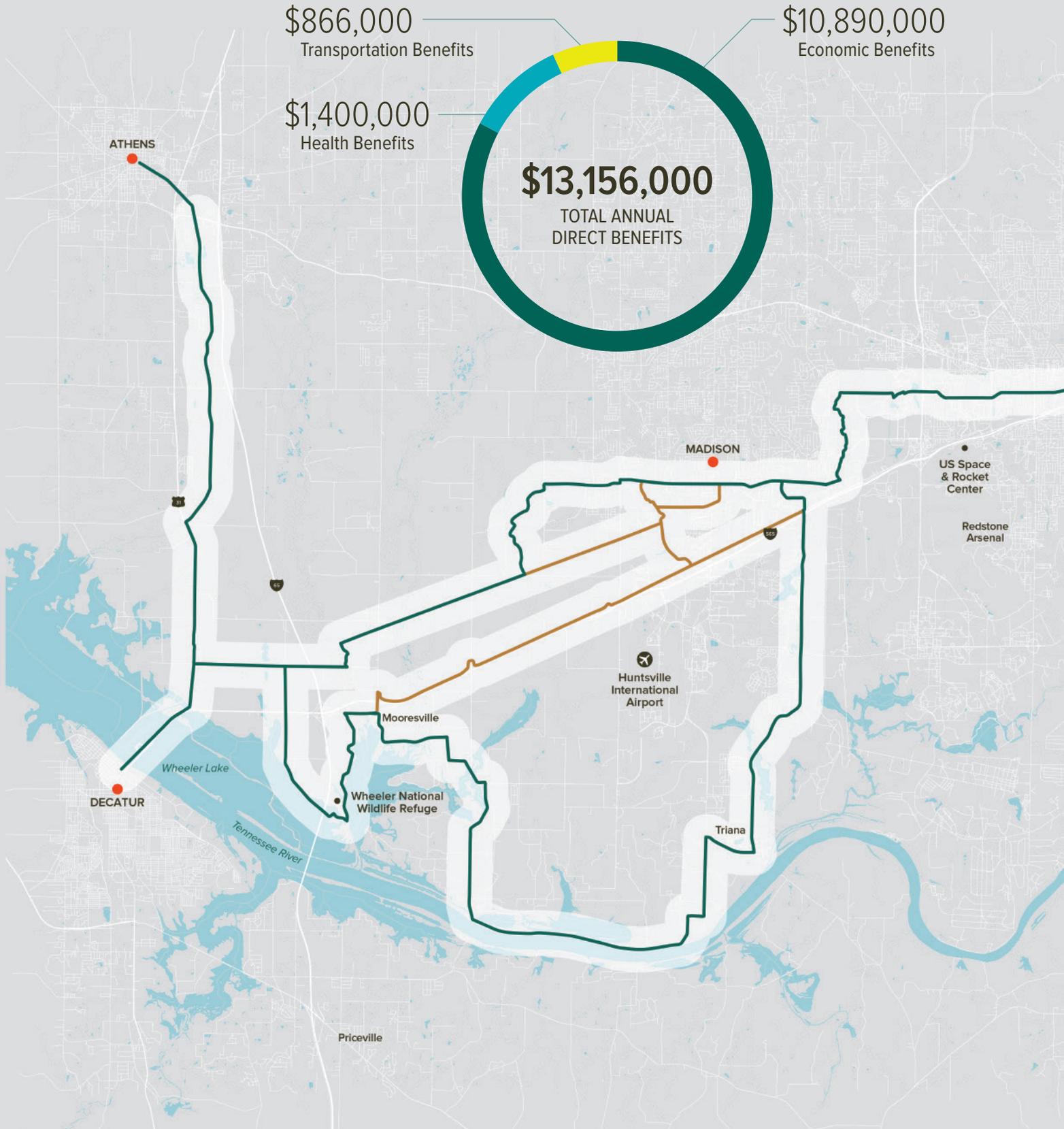
Economic and Health Impact Analysis

How the Singing River Trail will Benefit the
Health and Economies of Madison, Morgan,
and Limestone Counties



Direct Benefits

In total, it is estimated that the communities of North Alabama will experience \$13,156,000 in transportation, health, and direct economic benefits per year with the completed Singing River Trail.



Additional Benefits



\$23,631,000

Indirect Economic Spending



\$7,079,000

Earnings from Direct Economic Spending



900

Temporary Job-Years



100

Permanent Job-Years

DESTINATIONS

- Attraction
- City
- ✈ Airport

SINGING RIVER TRAIL

- Main Corridors
- Alternative Corridors
- Half Mile Buffer

0 0.5 1 2 Miles



Cover: Aldridge Creek, Huntsville, AL
Photo credit: Steven H. Gordon
www.stevenhgordon.com

The Singing River Trail in North Alabama will connect communities in three counties and serve as an approximately 70-mile trail spine linking to other trail systems throughout the region.

The trail will provide residents and visitors a fun and healthy way to explore parks, nature, historic sites, shopping, college campuses, and other regional destinations. It will also serve as an active transportation corridor providing a safe connection for travel between home, work, and play. When the trail is completed, residents of North Alabama will experience improvements in their quality of life, including transportation, health, and economic benefits.

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Introduction

This report contains an economic and health impact analysis of the proposed Singing River Trail in Madison, Morgan, and Limestone counties of Alabama. The analysis estimated the number of bicycle and pedestrian trips that might take place near the proposed trail alignment, approximated the corresponding reduction in vehicle trips and vehicle-miles traveled (VMT), and assessed the potential transportation, health, and economic benefits that might accrue if the proposed trail was constructed.

In total, it was estimated that the proposed trail could generate \$13,156,000 in annual transportation, health, and economic benefits. For the purpose of this report, the Singing River Trail will start in Huntsville and connect to the cities of Madison, Decatur, and Athens.

Estimated daily use:



3,000
walkers and runners



2,000
bicyclists

DEMAND

To understand the potential demand for the proposed trail, count data at 12 similar trails in Alabama, North Carolina, South Carolina, Tennessee, and Virginia were analyzed along with a collection of trails in Northwest Arkansas. When complete, the proposed main corridor of the trail would total 71 miles in length. If the proposed trail experienced the same number of bicyclists per mile as the average of the comparable trails, there would be an estimated 2,000 bicyclists per day (rounded to the nearest thousand). If the proposed trail experienced the same number of pedestrians per mile as the average of the comparable trails, there would be an estimated 3,000 pedestrians per day (rounded to the nearest thousand).

*Right: Wheeler National Wildlife Refuge, Decatur, AL
Photo credit: George Lee*



Methods

This impact analysis utilizes a standard methodology for calculating health, economic, and transportation benefits. All projections are based on trail usage estimates and survey results from 12 trails in the Southeast US. These estimates are then extrapolated through the use of various multipliers derived from national studies and quantified in terms of monetary value where appropriate.

HOW THE IMPACTS ARE CALCULATED

A series of over 50 factors developed from various studies around the US and peer-reviewed journal articles were used to convert the estimated number of bicycle and walking trips into dollar figures.

LIMITS OF THE ANALYSIS

The primary purpose of the analysis is to enable a more informed policy discussion on whether and how best to invest in the Singing River Trail in the state of Alabama. Even with extensive primary and secondary research incorporated into the impact analysis model, it is impossible to accurately predict the exact impacts of various factors. Accordingly, all estimated benefit values are rounded and should be considered order of magnitude estimates, rather than exact amounts. The estimated impacts reflect the benefits that may be experienced with the full build-out of the 71-mile trail.



Transportation Benefits

The most readily identifiable benefits of the proposed trail derive from its potential ability to connect residences and visitors to major activity centers in the region.

Ultimately, the proposed Singing River Trail spine would serve as a major investment in bicycling and walking for the region and could provide long-term transportation benefits to residents and visitors. While no money may change hands, real savings can be estimated from the cost savings associated with congestion, vehicle crashes, road maintenance, and household vehicle operations.

TRANSPORTATION CALCULATIONS

In addition to overall demand for bicycling and walking along the proposed trail, a review of survey data at similar trails in North Carolina and South Carolina provided insight into potential future trip patterns. There would be an estimated 4,000 people bicycling and walking for recreation and 1,000 bicycling and walking for commute or utilitarian purposes on the proposed trail each day. Conservatively extrapolated by the approximately 200 days of sunshine in Huntsville per year, there would be an estimated 400,000 annual bicycle and 600,000 annual pedestrian trips per year on the proposed trail (1,000,000 total trips per year).

If the proposed trail experiences an estimated 1,000,000 total trips per year and maintains a similar percent of commute and utilitarian trips as the average primary trip purpose of other southeastern US trails, then approximately 140,000 annual bicycle and pedestrian trips on the proposed trail would be for commute or utilitarian purposes.

*Above: Mooresville, AL
Photo credit: Brian Scott Bergeler*

*Right: Hays Nature Preserve
Photo credit: Steven H. Gordon
www.stevenhgordon.com*

Bicycle and pedestrian trips for commute and utilitarian purposes are likely to replace motor vehicle and transit trips.

Annual estimated transportation offsets



140,000
Motor vehicle trips



728,000
Motor vehicle miles

Associated annual savings



1. <https://trid.trb.org/view.aspx?id=261768>

2. http://nhts.ornl.gov/tables09/fatcat/2009/aptl_TRPTRANS_WHYTRPIS.html

3. <http://atri-online.org/wp-content/uploads/2016/10/ATRI-Operational-Costs-of-Trucking-2016-09-2016.pdf>

4. <http://exchange.aaa.com/automobiles-travel/automobiles/driving-costs/#.WVZdF02oupp>

5. http://www.camsys.com/pubs/2011_AAA_CrashvCongUpd.pdf



Health Benefits

The implementation of a well-designed, connected trail system in Madison, Morgan, and Limestone counties would encourage a shift from inactive modes of transportation such as cars and trucks to active modes such as bicycling and walking that help promote active lifestyles.

Table: Annual Health Benefits (estimated values)

Annual Bicycle Trips	400,000
Annual Miles Bicycled	2,080,000
Annual Walk Trips	600,000
Annual Miles Walked	3,120,000
Annual Hours of New Physical Activity	137,000
Annual Healthcare/Productivity Cost Savings	\$1,400,000

Above: US Space & Rocket Center
Photo credit: Brian Scott Bergeler

Right: Bradford Creek Greenway, Madison, AL
Photo credit: Steven H. Gordon
www.stevenhgordon.com

Alabama is in the bottom five states in terms of the overall health of its residents.



26%
of residents in the three counties report that they are physically inactive



25%
report that they do not have access to exercise opportunities



25%
of adults report that they are obese⁶

The proposed trail would contribute to 8,174,000 new minutes of physical activity annually.

3,750,000
Minutes of
bicycling



8,174,000
MINUTES OF
NEW PHYSICAL
ACTIVITY



4,424,000
Minutes of walking
and jogging

6. <http://www.countyhealthrankings.org/app/alabama/2017/rankings/madison/county/outcomes/overall/snapshot> >



410,000 

non-local trail users (estimated) would use the proposed trail each year.

Economic Benefits

Regional Input-Output Modeling System (RIMS II) is a regional economic model maintained by the U.S. Department of Commerce's Bureau of Economic Analysis, and multiplier data from this model helps quantify how money circulates through a regional economy. For the Huntsville-Decatur-Albertville, Alabama Combined Statistical Area, multiplier data from RIMS II estimates that a \$1 investment in the "arts, entertainment, and recreation" industry, which this analysis broadly considers all trail-related spending from non-local users to encompass, would result in \$2.17 in additional indirect regional spending (final-demand output multiplier) and \$0.65 in regional earnings (final-demand earnings multiplier). If there is an estimated \$10,890,000 per year in trail-related spending from non-local users, the Huntsville-Decatur-Albertville, Alabama Combined Statistical Area could see an additional \$23,631,000 in annual indirect spending and \$7,079,000 in annual earnings captured by employees within the region.

If the proposed trail contributes to \$10,890,000 in direct economic spending, then it may help support approximately 100 permanent job-years. The U.S. Department of Transportation's cost-benefit analysis resource guide suggests that one temporary job is supported by every \$76,900 in transportation-related investments. If the proposed 71-mile facility costs approximately \$1 million per mile to construct, then trail construction spending may help support approximately 900 temporary job-years during the construction process.

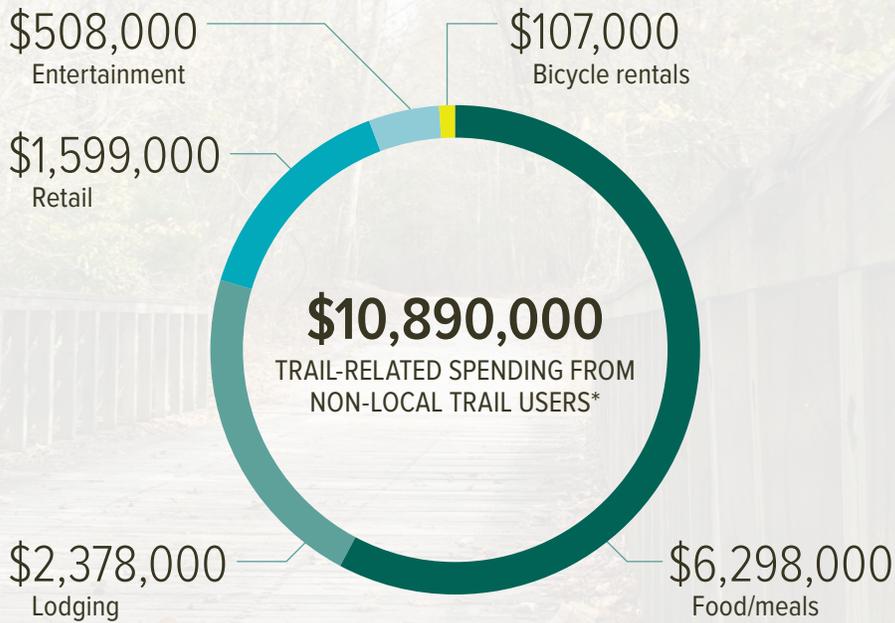
PROPERTY VALUES

Several studies conducted over the last two decades found that trails and greenways can have a positive impact on urban and suburban property values of residences near the facilities (ranging typically from 2-5%). If property values increased by 1 percent as a result of proximity to the proposed trail, then property owners could expect a one-time combined property value increase of \$16,000,000 in Madison County alone.

*Right: Richard Martin Trail, Elkmont, AL
Photo credit: Steven H. Gordon
www.stevenhgordon.com*

Trail-related spending from non-local users is expected to circulate through the economy, providing a multiplier effect.

Estimated annual direct spending



Estimated annual indirect benefits



\$23,631,000
Indirect spending



\$7,079,000
Earnings captured by employees within the region

**Excludes transportation spending*

Acknowledgements



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PREPARED BY

