



Economic Impact of Trails in Kansas Communities

Trails: A Boost to Kansas Economy

Introduction of Speaker, Mike Scanlon



Educational Background and Professional Development

Educational Background

Mike has a Bachelor's and Master's degree in Public Administration from the University of Missouri - Columbia. His educational background and experiences have helped him understand the environmental impacts of trails and the economic benefits they can bring to communities.

Experiences include the communities of,

Columbia, MO

Kansas City, MO

Merriam, KS

Mission, KS

Basalt, CO (12 miles down valley of Aspen)

Osawatomie, KS

Passion for Community Service and the Athenian Oath



The Athenian Oath

The Athenian Oath is a pledge to serve the greater good and is a testament to the importance of community service.

Importance of Community Service

Community service is essential to building stronger, more resilient communities that can thrive and grow. By giving back to our communities, we can make a positive impact and help those who are most in need.

Economic Benefits of Community Projects

Community projects, such as the development of trails, can bring economic benefits to communities by attracting tourists and creating jobs. By investing in community projects, we can help our communities thrive and grow.

Trail Development Experience From MKT to KATY to Rio Grande to Flint Hills

Mike has experience in trail development, including the successful MKT (Columbia, MO) that was the first link to the KATY trail started in 1982. In Osawatomie he helped finish the connection of the Flint Hills Trail to the City of Osawatomie and the development of Walker Station. And in between all those he worked on connections to the Rio Grande Trail from the Town of Basalt.



**Grant From the
Sunflower
Foundation to
Begin the Work**

Overview of the Sunflower Foundation



The Sunflower Foundation is a non-profit organization that aims to improve the health and well-being of Kansans by providing grants to organizations working on projects that promote health and improve the quality of life in Kansas communities.

Grant Specifics and Project Goals



Grant Specifics

The Sunflower Foundation has provided a grant for researching the economic impact of trails in Kansas communities: **The First Four** Osawatomie, Ottawa, Council Grove, and Herington.

Economic Impact of Trails

The project aims to research the economic impact of trails in the Kansas communities, specifically looking at how trails can create jobs and attract tourism. What's the impact?

Barriers to Trail Usage

The project will also identify barriers to trail usage, including accessibility and safety concerns, and propose solutions for addressing these issues. What's in our way?

Trail Development Framework

The project will create a framework for future trail economic development impact studies, providing guidance for trail design and construction that maximizes economic impact and community benefits.

Initial Steps and Progress with the Grant

Gathering Survey Information with QR Codes and building a back end

To gather survey results, QR codes are being used to collect data from the various community. This has been an 18-month start and stop. We have preliminary data that we are analyzing to tune our surveys to be quick and easy to complete and that extend beyond the trail into the communities. It's that last piece that has been the hardest.

Trail Usage Validation

The Kansas Department of Wildlife and Parks will help us validate trail usage, providing insight into the impact of trails on the community through the TRAFx Counters that have been installed.



Evolving Methodology

Starting with four communities: Osawatomie, Ottawa, Council Grove, and Herington

Osawatomie – Ottawa – Council Grove – Herington

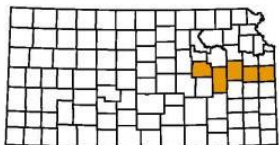
Why these four at the beginning?

- All these communities are along the Flint Hills State Park Trail
- All the communities have a City Manager – someone we could involve and would make sure the project was carried out.
- All these communities were founding members of Kansas Association of Trail Towns which has now morphed into Kansas Association of Trail Steward (Broader Interest Group)
- Flint Hills State Park Trail received large grant – \$24.8 million RAISE Grant that will impact the Flint Hills State Park Trail experience
- Osawatomie working with Mid-America Regional Council (MARC) is looking to tie the Flint Hills Trail into the KATY State Park Trail
- Flint Hills Trail is long enough that it ties together numerous communities

Flint Hills Trail State Park



- Developed Trail Head (Undeveloped access points located at many county roads)
- ▲ State Park
- Flint Hills Trail, Open Section
- Landon Trail, Open Section
- Prairie Spirit Trail State Park
- Flint Hills Trail, Closed Section
- Landon Trail, Closed Section



PREPARED BY THE
KANSAS DEPARTMENT OF TRANSPORTATION
BUREAU OF TRANSPORTATION PLANNING
MAP CREATED FRIDAY, SEPTEMBER 13, 2019
KDOT makes no warranties, guarantees, or representations for accuracy of this information and assumes no liability for errors or omissions.

Survey Information collected Using QR Codes



QR codes are used to collect survey information. Users can scan the QR codes placed at, along and around community connections to the Flint Hills trail. The goal is to have a big net to capture as much information as possible. But that's just a starting point. ***How do we validate the data?***

Photo gallery



TRAFx Infrared Trail Counter www.trafx.net

V100426

for counting traffic on trails and paths

A. GENERAL	B. INSTALLATION EXAMPLES	C. USE FOR....
 <p>What are the main steps? Step A – Install counter (see right for examples); collect data</p>   <p>Step B – In field, download data with dock</p>  <p>Step C – Return to office and transfer data from dock to PC</p>  <p>Step D – Analyze, manage, store and share data with TRAFx's DataNet software</p>  <p>Test drive DataNet live online at www.trafx.net/datanet/demo</p> <p><i>For details, please see product brochure.</i></p>	<p>A. Mounted on a tree beside trail</p>  <p>B. Inside a lockable box</p>  <p>C. Embedded inside a post</p>  <p>D. In a log or stump, under a rock pile, in a rock crack....</p>   	<p><i>Trails, tracks and paths of all kinds</i></p>  <p><i>(no visible beam)</i></p>   <p><i>Multi-use paths</i></p>  <p><i>(no visible beam)</i></p> <p><i>Winter trails</i></p> 

Trail Usage Validation by Kansas Department of Wildlife and Parks (KDWP)

KDWP Validation

The validation of trail usage data by the Kansas Department of Wildlife and Parks will be critical. In June and July of this year KDWP installed four TRAFx Infrared Trail Counters(see to your left) at four distinct locations along the Flint Hills Trail. Over the next several months using visual audits they will ensure the counters are working appropriately.

Trail Usage Insights

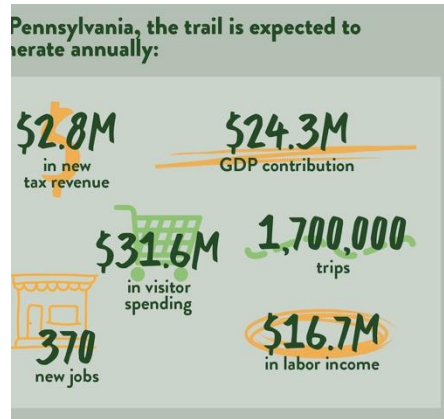
This validated data will help us tie the surveys to the actual activity seen on the trails as reported by KDWP. It will give us another data point in showing how trails are being used and how they can impact local businesses.

Ongoing Efforts to Validate Trail Impacts

Continuous Data Collection and Analysis

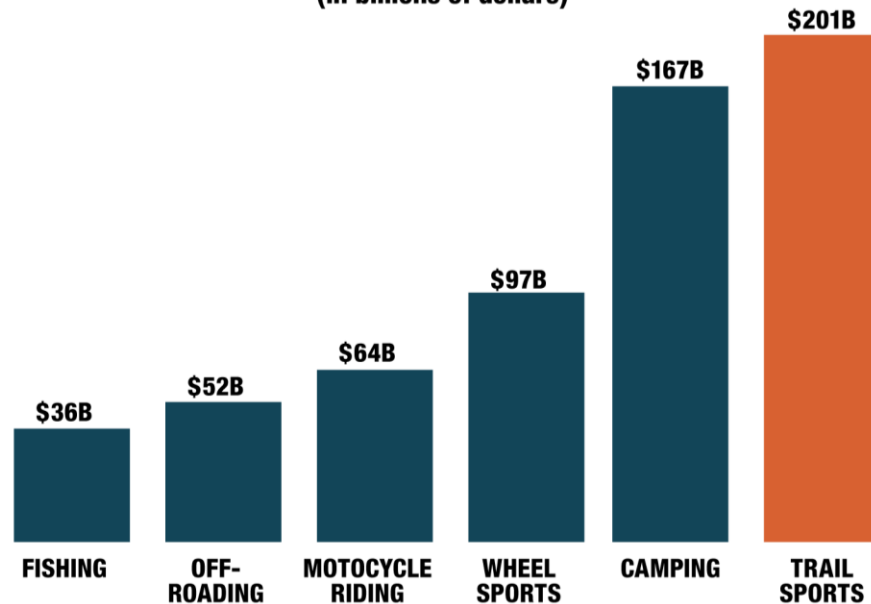


The overarching goal for this project is to create a framework for measuring economic impacts in an ongoing way. As the project collects data we would like the ability to produce an annual report that gets at the Big Economic Numbers. The infographics on the left come from the Rails to Trails Conservancy and provide a good framework for us to build on. Again, this is about building an ongoing system of data collection that benefits all Kansas communities.



What we know from the Outdoor Industry Association

Direct Impact of the Outdoor Recreation Economy
(in billions of dollars)



**Outdoor Industry Association*

Trail Sports are BIG and includes;

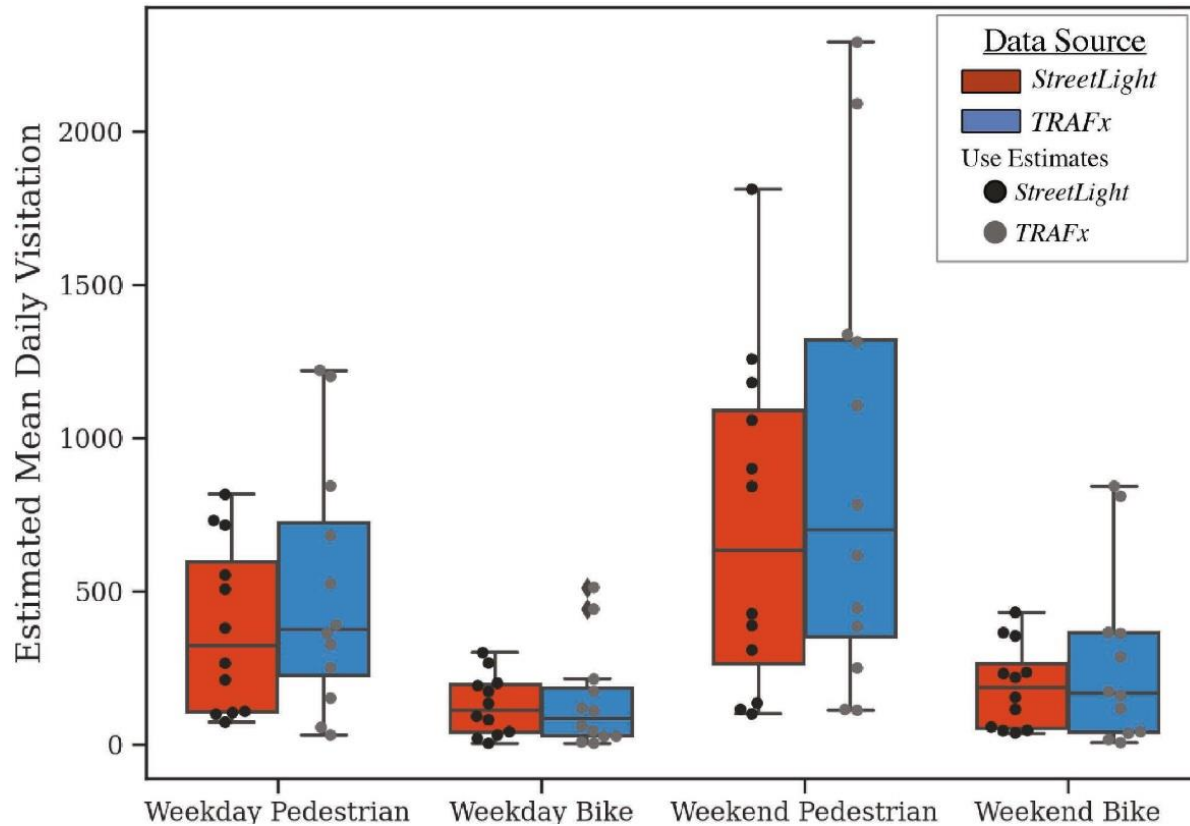
- **Hiking:** Exploring trails on foot, often in parks, forests, and mountain areas.
- **Trail Running:** Running on natural terrain, often on rugged paths and through various landscapes.
- **Mountain Biking:** Riding specialized bikes on off-road trails that can include steep climbs, descents, and obstacles.
- **Backpacking:** Multi-day hiking trips involving camping and carrying necessary supplies in a backpack.
- **Trail Horseback Riding:** Riding horses on designated trails, popular in areas with open land and equestrian-friendly paths.
- **Cross-Country Skiing:** Skiing on snow-covered trails during winter in colder regions.
- **Snowshoeing:** Walking or hiking with snowshoes over snow-covered trails
- **Bird Watching and Wildlife Observation:** Walking or hiking along trails with the purpose of observing local wildlife and bird species.
- **Geocaching:** Hiking or walking while searching for hidden "caches" as part of a GPS-based treasure hunt.

What a single event in Osawatomie shows - **Ultrapalooza**



- **Participation:** 150+ signups (and support teams of 350)
- **Races Included:** 100 Miler, 100K, 50 Miler, 50K, 1/2 Marathon, 10K, 5K
- **Participants came from ten states:** Kansas, Missouri, Iowa, Nebraska, Colorado, Oklahoma, Texas, Arkansas, Alabama, and New York
- **Dates held:** September 21-22, 2024

Incorporation of StreetLight Data Sets



Incorporation of StreetLight data sets provides a more in-depth analysis of the impact of trails on local businesses.

This will help identify the areas where trails can have the most significant economic impact. This is a tool we need to get into our state. KDOT at one time talked about a state-wide subscription. This could be a powerful tool. The example to the left shows it's application in Orange County, CA.

Those not familiar with StreetLight next slide.

How StreetLight Data is collected



Here's how it generally works:

Data Collection: StreetLight gathers anonymous, aggregated location data from mobile devices, primarily from smartphones. This data originates from GPS, apps, and navigation sources and represents pedestrian and cyclist movements, among other modes of travel.

Filtering for Active Transportation: StreetLight processes the raw data to differentiate pedestrians, cyclists, and other non-vehicular movements. The system filters out motor vehicle trips and focuses on active transportation patterns relevant to trails, sidewalks, and other pedestrian pathways.

Data Analysis and Metrics: For trail or pedestrian traffic analysis, StreetLight generates key metrics like:

- **Volume:** Estimates of pedestrian and cyclist traffic volumes over specific periods.
- **Origination and Destination:** Insight into where pedestrians enter and exit a particular trail or area.
- **Trip Paths:** Understanding the most commonly used paths, intersections, and segments of the trail or pedestrian network.
- **Trip Duration and Distance:** Average time spent on the trail and distances covered, which can indicate the popularity of different trail sections.

Data Visualization and Reporting: StreetLight translates the data into visualizations like heat maps, flow diagrams, or charts that show traffic patterns. This can be used to validate traffic counts on existing trails, support grant applications, and demonstrate need for maintenance or expansion.

Comparative Analysis: StreetLight also allows for comparisons over time, showing trends in usage due to seasonal variations, trail improvements, or new nearby developments. This can help validate investments in pedestrian infrastructure by illustrating changes in usage.



KANSAS

OFFICE OF RURAL PROSPERITY

Future Plans for Expanding Research

Expansion of Research

We plan to expand our research into the economic impact of trails in Kansas communities to include more communities and provide a more comprehensive understanding of the potential economic benefits of trail development projects. We believe this is key for rural communities especially.

Collaboration with Community Leaders

We will collaborate with community leaders to gather more data and insights on the economic impact of trail development projects in Kansas communities and will turn over our work to the newly formed Kansas Association of Trail Stewards.

Future Outlook and Invitation

We believe that our ongoing research will show that trail development projects have a significant economic benefit for Kansas communities. We invite you to follow up with us in a year to learn more about our research and the potential economic benefits of trails to your community. In the end we believe in one thing.....

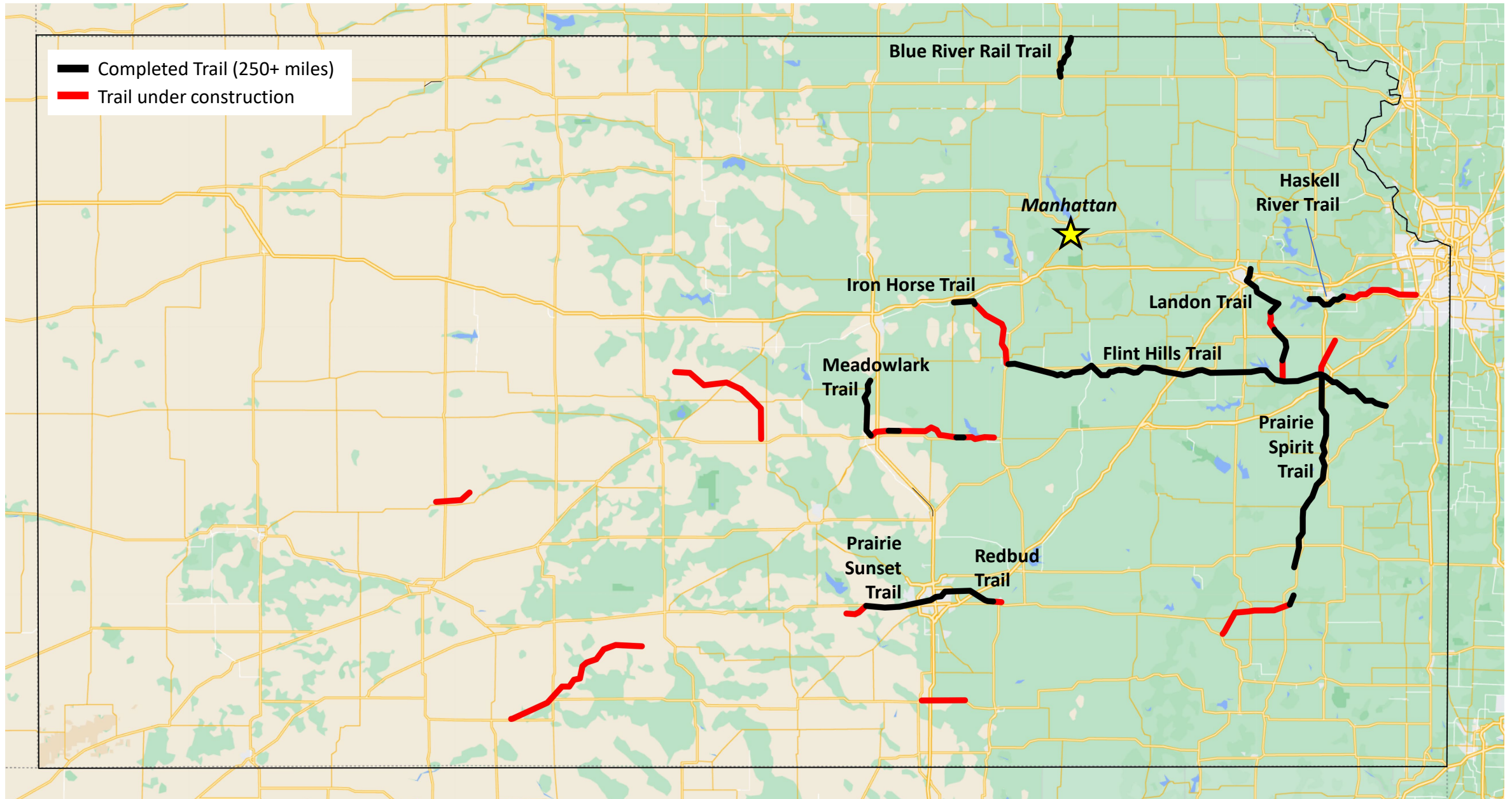
We will transmit this STATE not only not less but greater, better and more beautiful than it was transmitted to us.



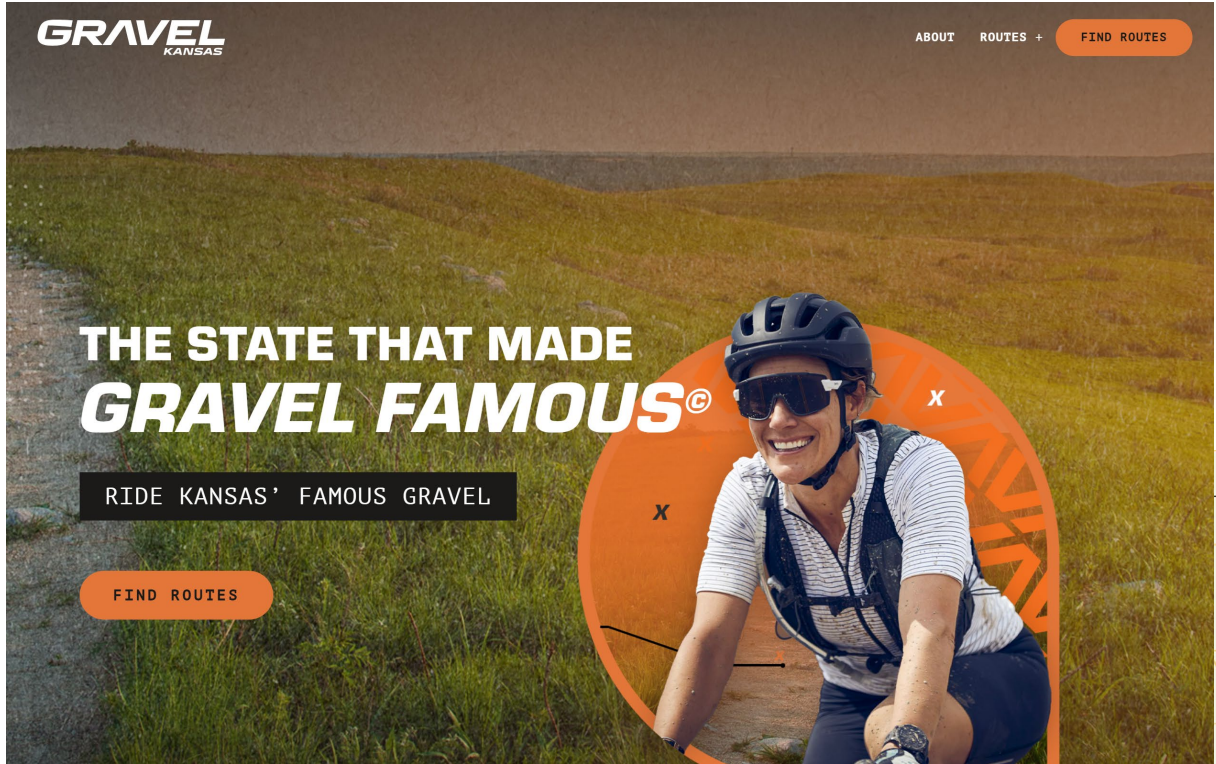
Questions

ACTIVE TRAVELER STUDY

INVESTMENTS IN KANSAS TRAILS



INVESTMENTS IN GRAVEL CYCLING



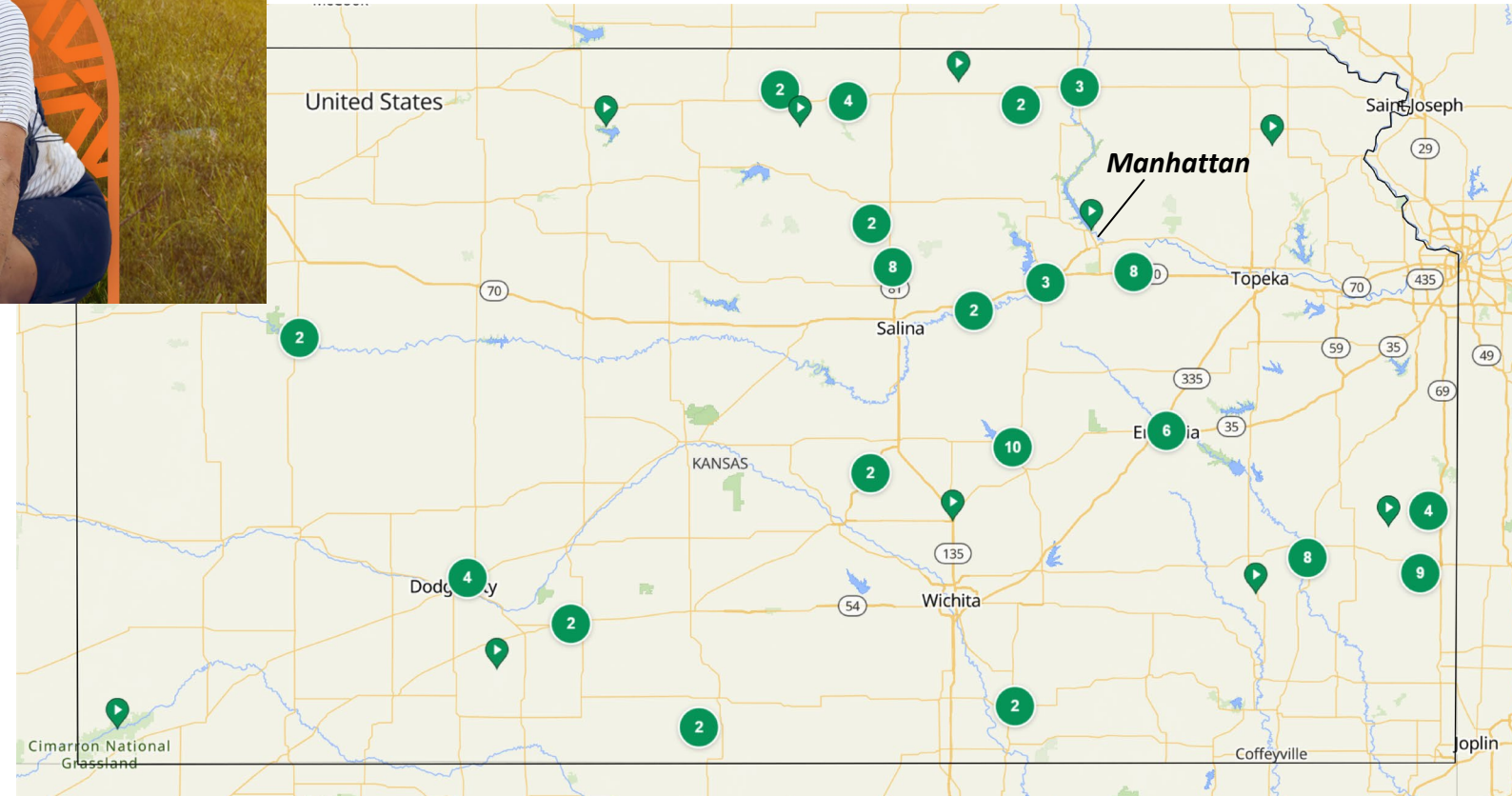
GravelKS.com

Gravel Routes do not require investment in infrastructure: the roads already exist



LIFETIME
UNBOUND
GRAVEL

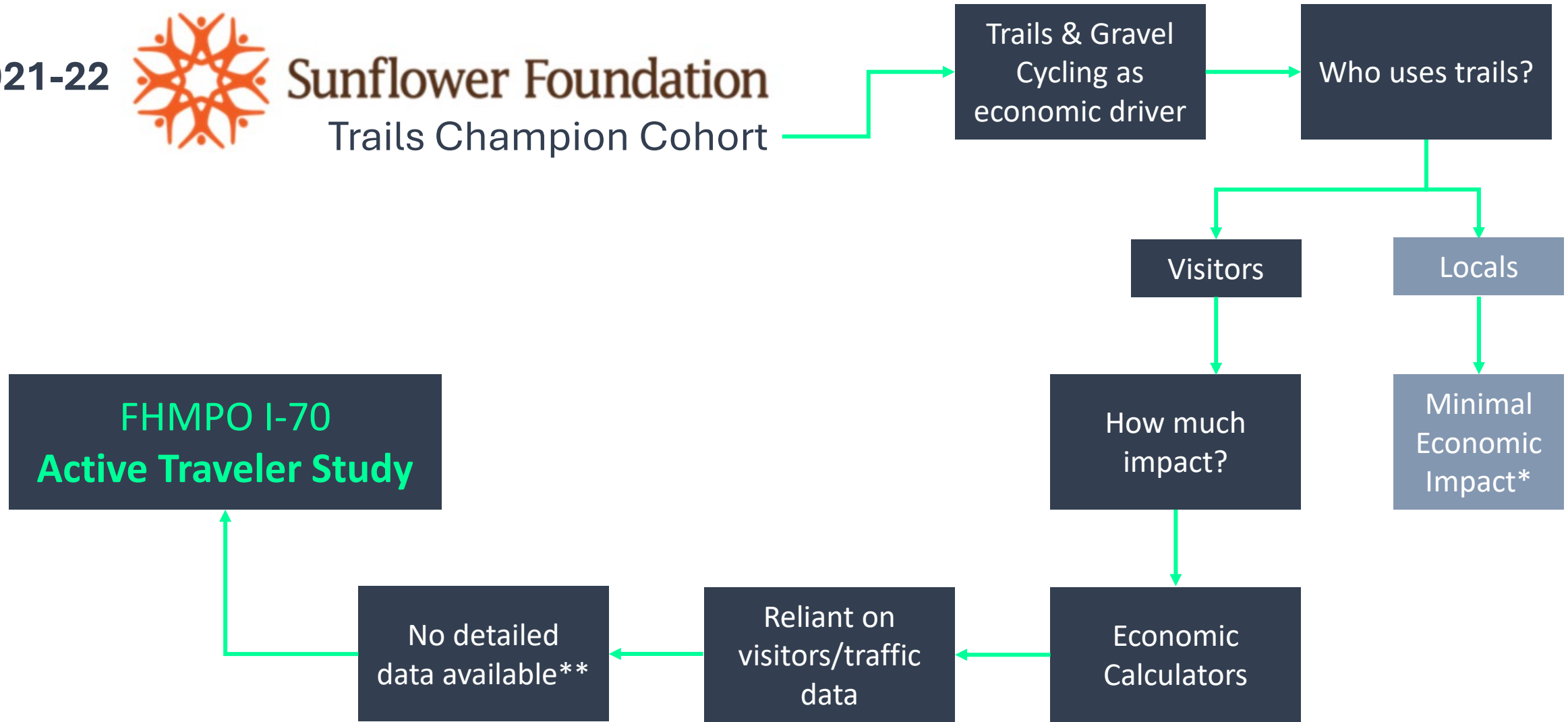
World's Largest Gravel Race:
4,000 Cyclists
All 50 States
38 Countries



2021-22



Sunflower Foundation
Trails Champion Cohort



* Trails do provide major quality of life and health impacts to communities **Only data available were basic highway KDOT ADT counts & general hotel booking info

Visitors

- Not every traveler is an outdoor enthusiast.
- However, many people are. Some enjoy their outdoor activities so much that they carry equipment on their vehicles as they travel to/from their vacations.
- Such vehicles were counted as “**Active Travelers**” in this study as these people could have interest in cycling on KS trails or gravel routes and kayaking on the KS River Trail or lakes.
- Active Traveler data was categorized into the groups below.

Active Travelers



Bikes



Luggage Racks & Skis

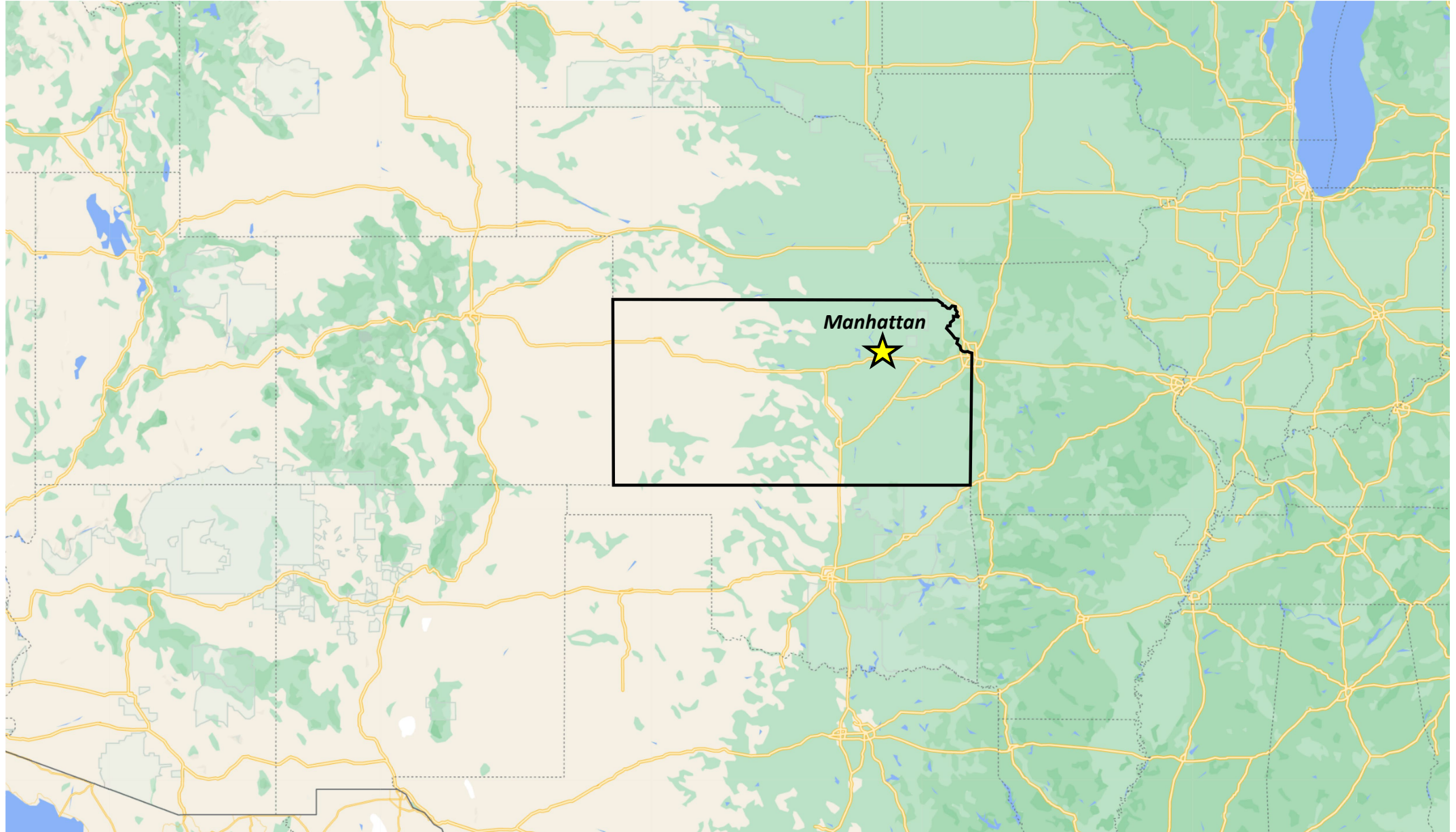


Kayaks & Canoes



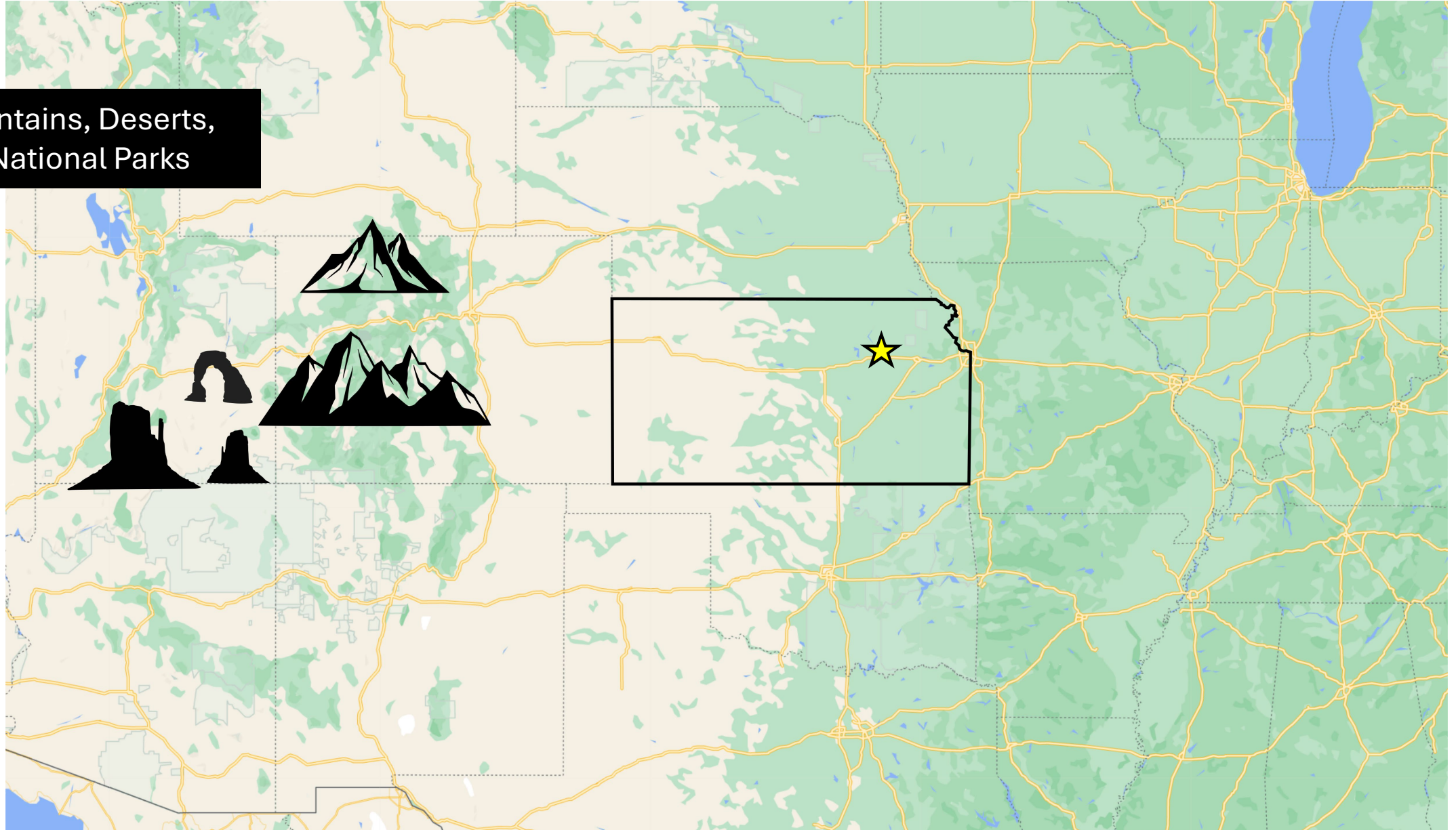
Trailer RVs & RVs

WHY ARE ACTIVE TRAVELERS CROSSING KANSAS?

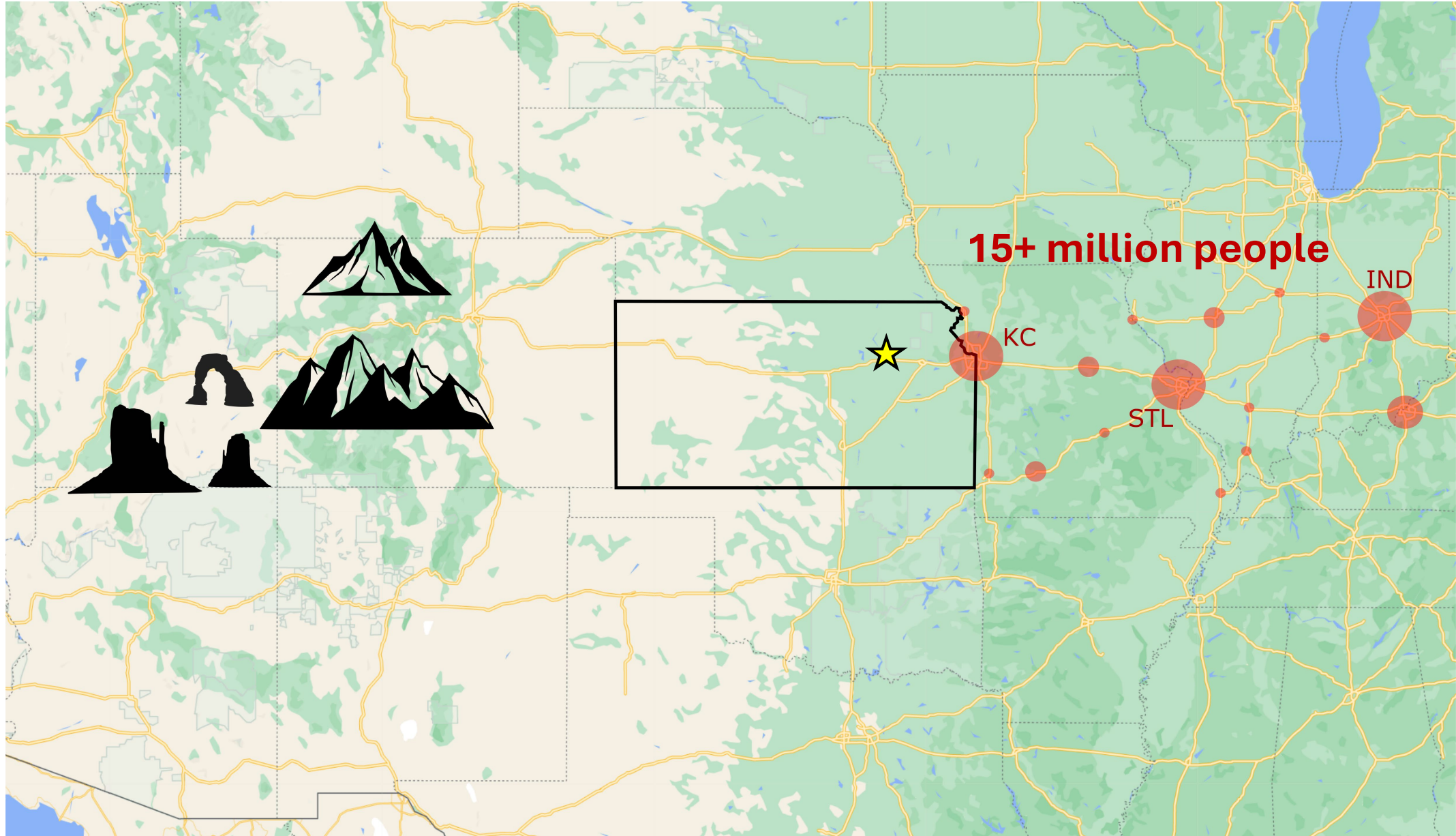


WHY ARE ACTIVE TRAVELERS CROSSING KANSAS?

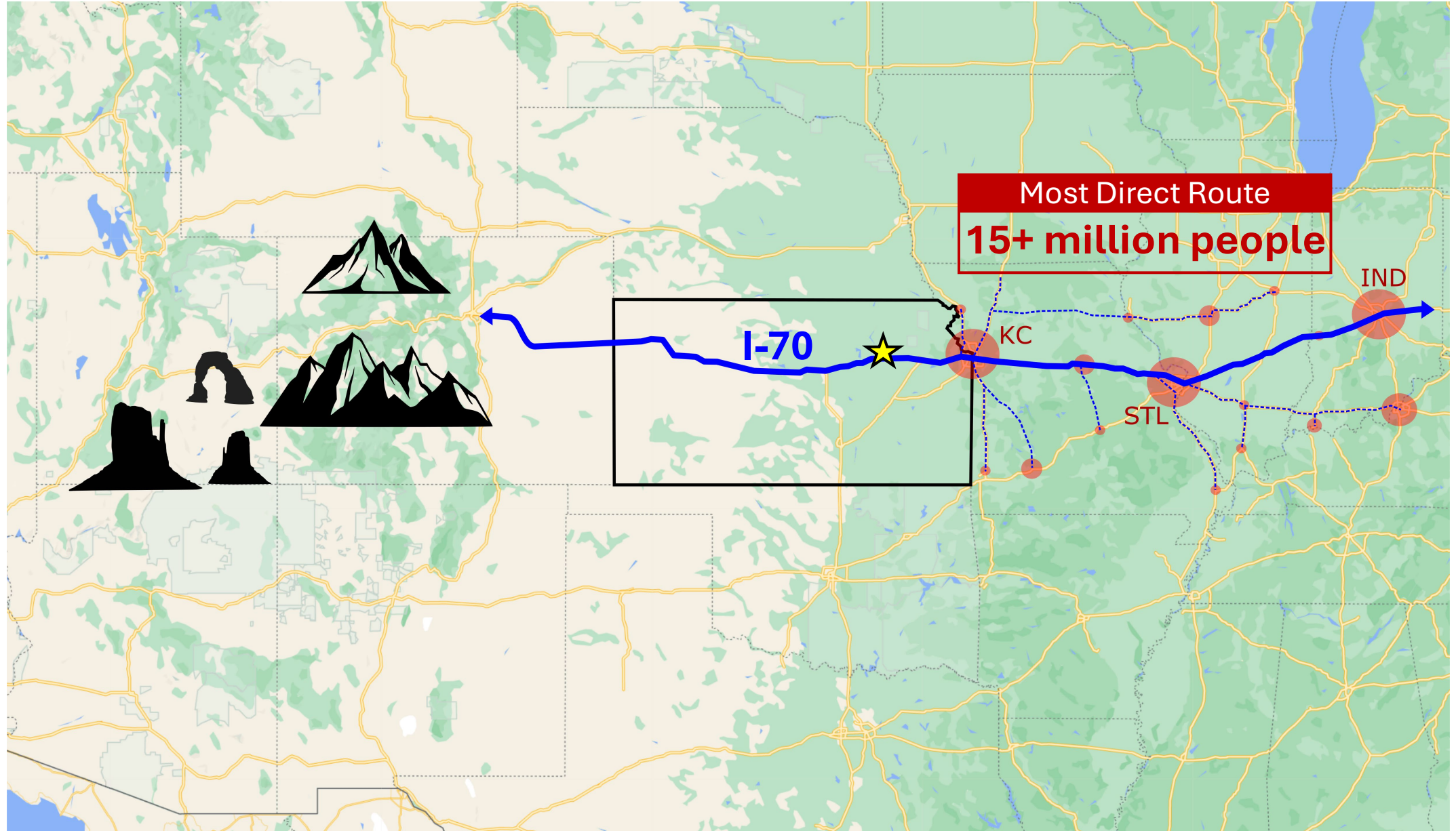
Mountains, Deserts,
& National Parks



WHY ARE ACTIVE TRAVELERS CROSSING KANSAS?



WHY ARE ACTIVE TRAVELERS CROSSING KANSAS?



Goal

Make KS **PART OF** an active vacation, not just a place to drive through

MHK
Goal

With proximity to I-70, good hotels, great bars, & restaurants

+

On doorstep of Flint Hills Gravel cycling (best place in the world to gravel ride & name recognition with cyclists)

+

Along Kansas River Trail (with multiple access points for convenient short paddles)

=

Be **THE** stop in Kansas for **Active Travelers**

Imagine if travelers to/from the Mountain West arrived in the afternoon, went for a gravel ride or a kayak on the river, had dinner & night out, and stayed in a hotel. MHK becomes part of the active vacation market; the vacation doesn't end when you leave the mountains!

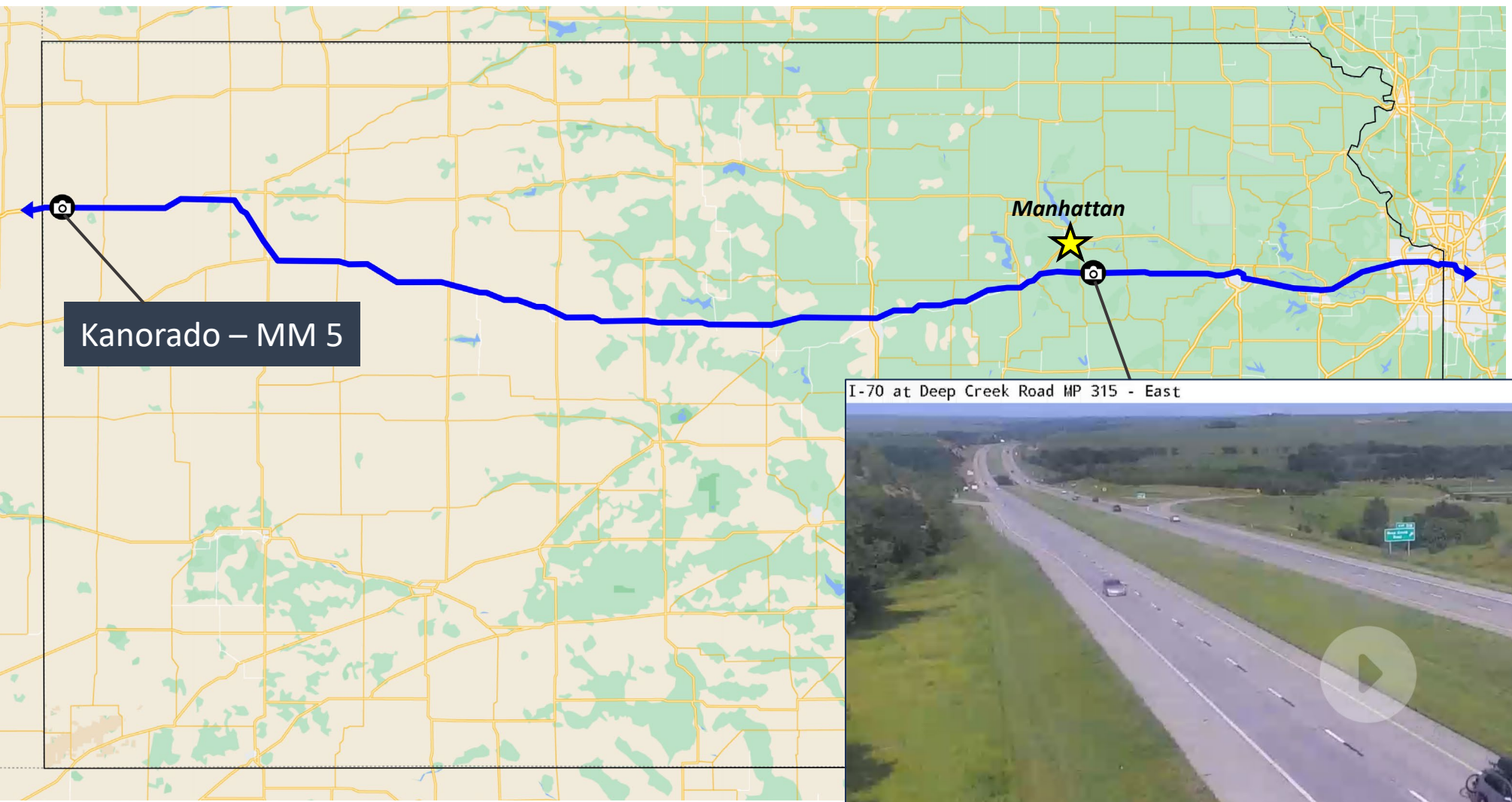
So how many Active Travelers are passing by MHK?

DATA COLLECTION METHOD

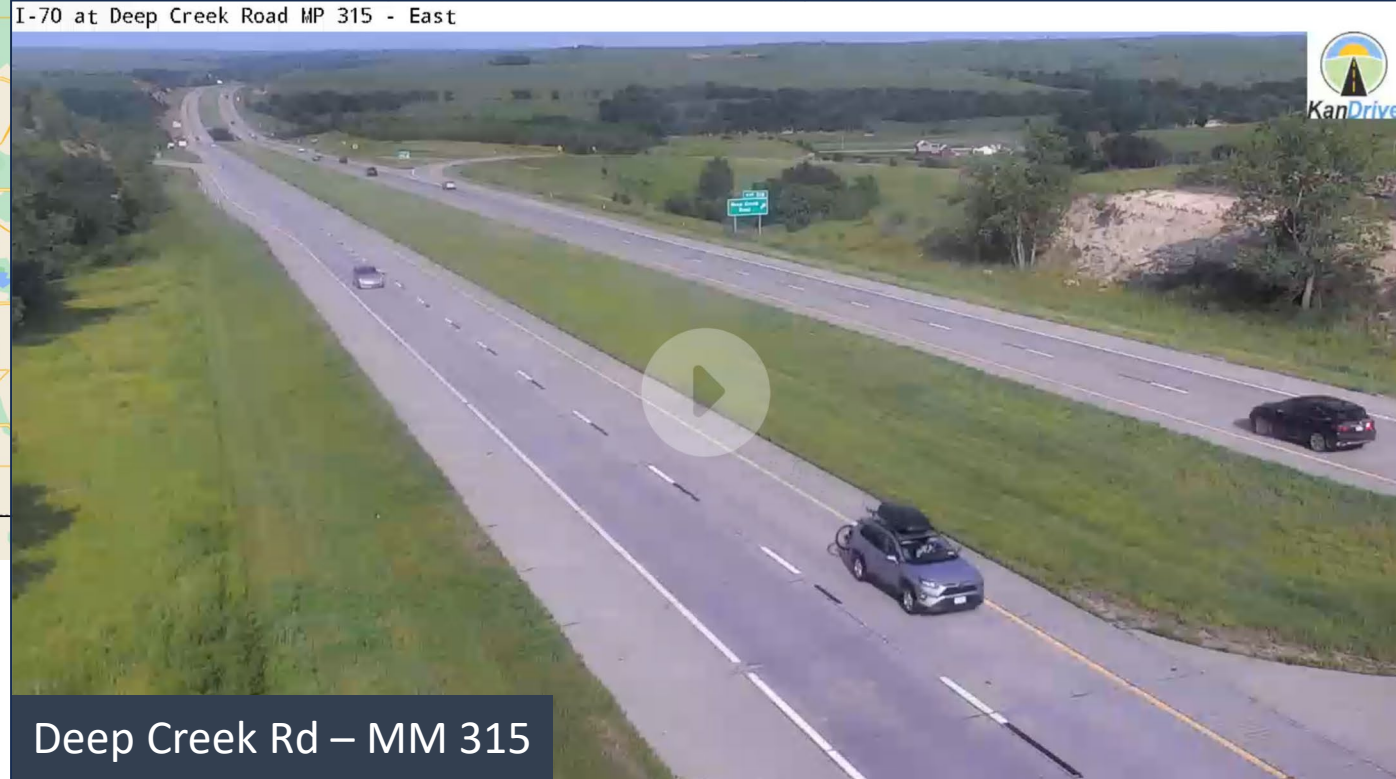


KanDrive.org

Live Video



I-70 at Deep Creek Road MP 315 - East



Deep Creek Rd - MM 315

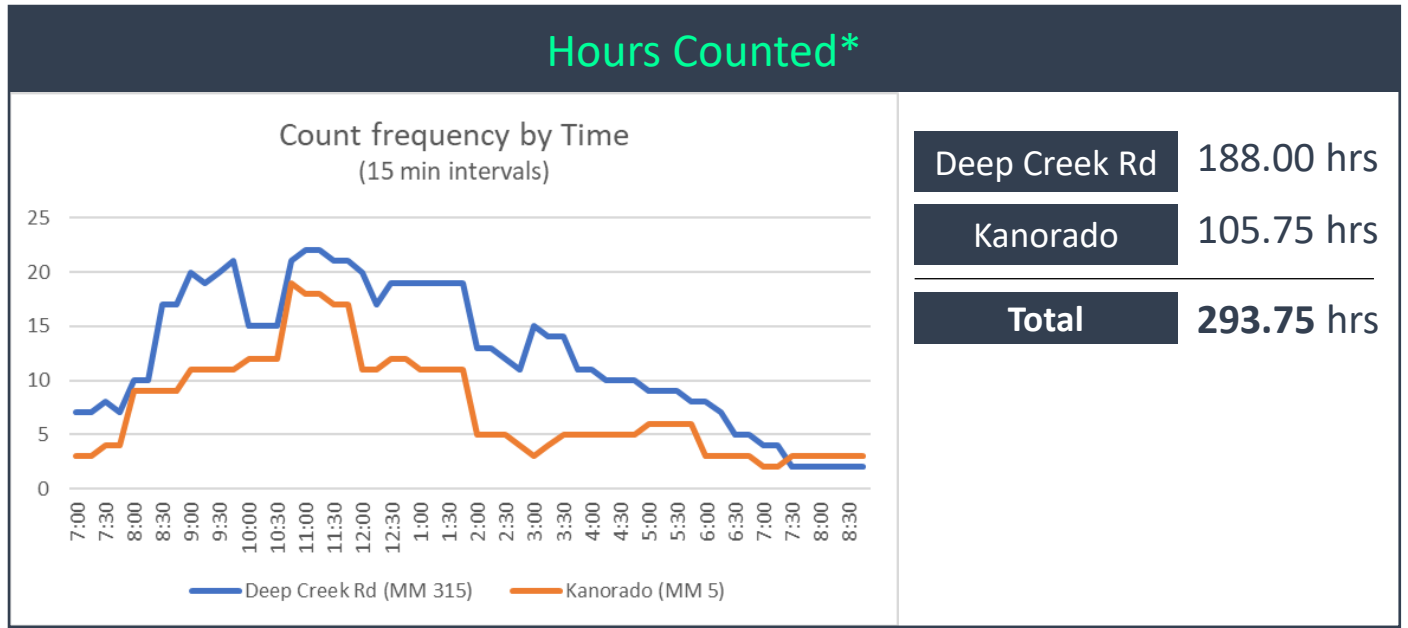
Manual data collection from video feed

DATA COLLECTION DATES & TIMES

	WINTER							SPRING														SUMMER														AUTUMN														WINTER																																																																					
	JANUARY							FEBRUARY							MARCH							APRIL							MAY							JUNE							JULY							AUGUST							SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER																																									
	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S																					
2022	2	3	4	5	6	7	8	6	7	8	9	10	11	12	6	7	8	9	10	11	12	3	4	5	6	7	8	9	1	2	3	4	5	6	7	5	6	7	8	9	10	11	3	4	5	6	7	8	9	1	2	3	4	5	6	7	7	8	9	10	11	12	13	1	2	3	4	5	6	7	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10
2023	1	2	3	4	5	6	7	5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
2024	1	2	3	4	5	6	7	4	5	6	7	8	9	10	3	4	5	6	7	8	9	1	2	3	4	5	6	7	7	8	9	10	11	12	13	2	3	4	5	6	7	8	1	2	3	4	5	6	7	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14	3	4	5	6	7	8	9	8	9	10	11	12	13	14	3	4	5	6	7	8	9							

of Days Counted by Season

	W	S	S	A	Total
Deep Creek Rd – MP 315	14	7	21	0	42
Kanorado – MM 5	15	4	7	0	26
Both Locations	2	1	0	0	3
Total	31	12	28	0	71








* Video counts only available during daylight hours. **Count schedule dictate by intern availability

SUMMARY NUMBERS

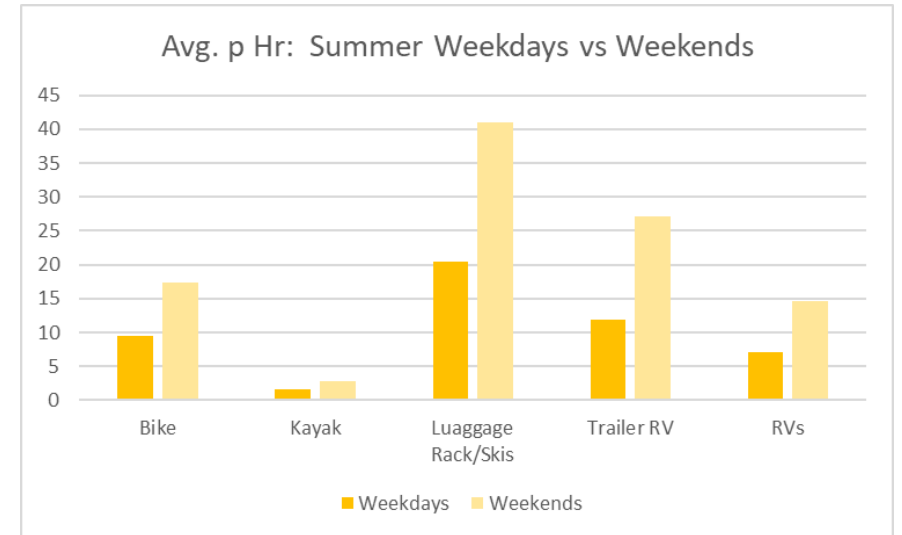
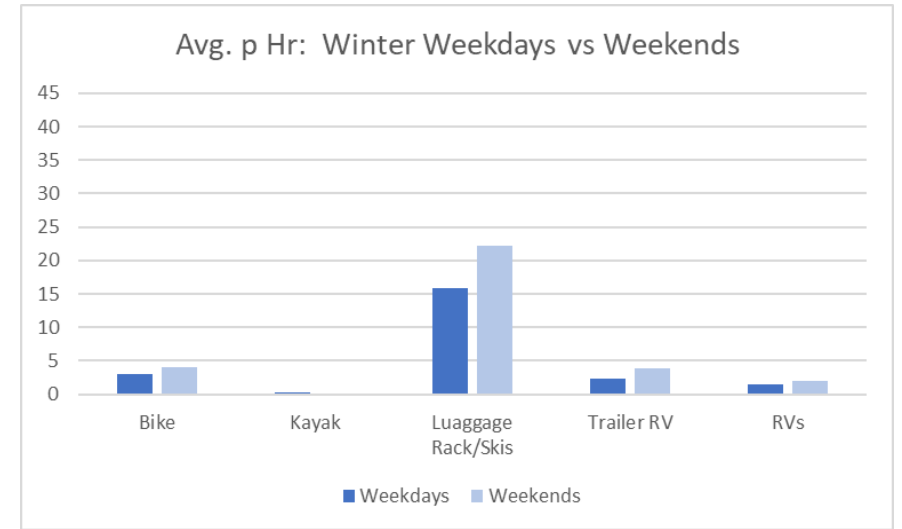
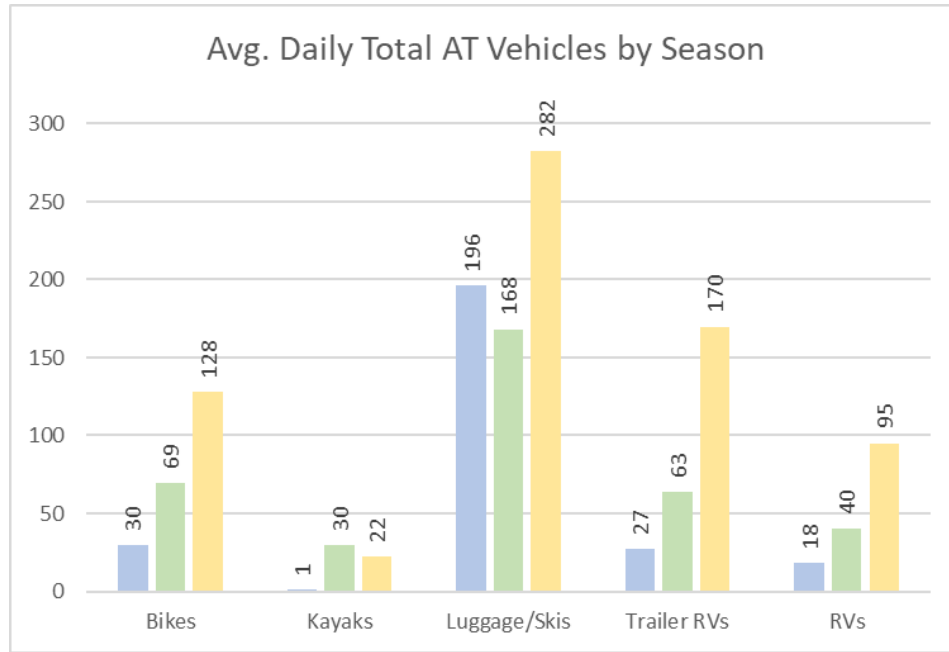
	Deep Creek Rd	Kanorado	Total
Total Vehicles Counted*	185,225	65,690	250,915
Total Active Travelers (AT) Vehicles	7,706	3,428	11,134
Avg. AT p Hour	41.0	32.4	-
AT % of Total Vehicles*	4.2%	5.2%	4.4%

	Avg. p Hour		% of Total Vehicles*	
	Deep Creek Rd	Kanorado	Deep Creek Rd	Kanorado

	7.4	4.6	0.7%	0.7%
	1.5	0.5	0.2%	0.1%
	18.6	18.2	1.9%	2.9%
	8.6	5.8	0.9%	0.9%
	4.9	3.4	0.5%	0.5%

* All vehicles on the roadway, including semi-trucks

HOW MANY ACTIVE TRAVELERS ARE PASSING MHK DAILY?



Summer Weekend*

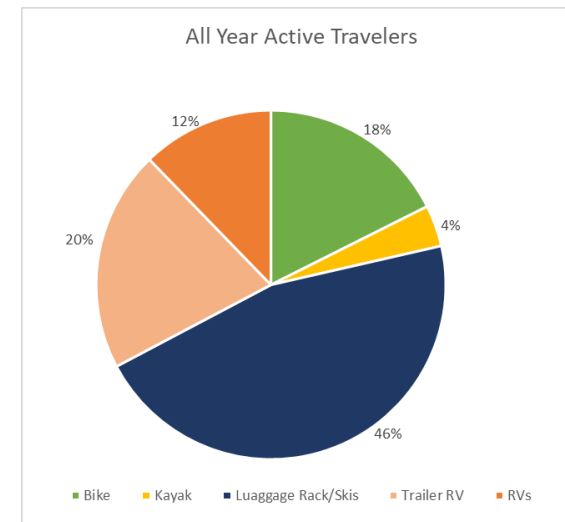
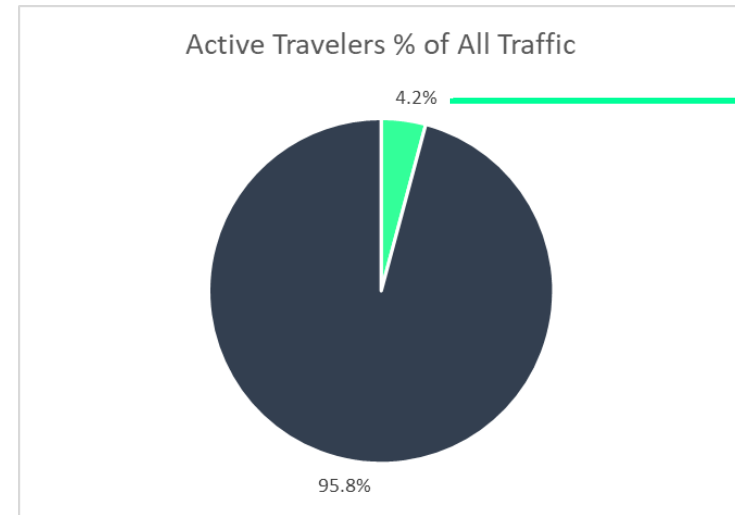
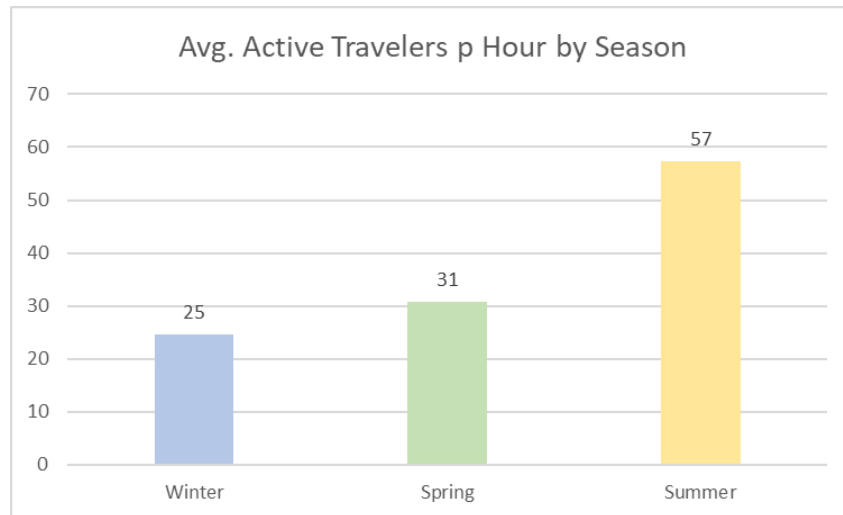
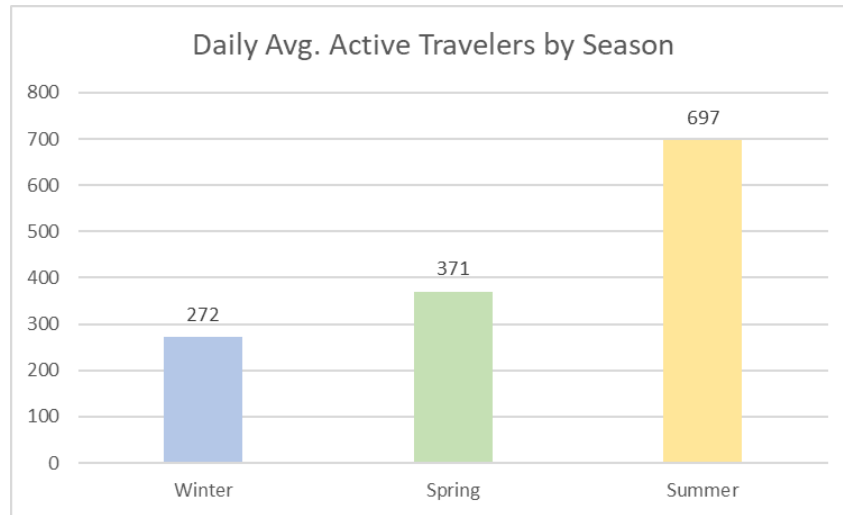
	Daily Active Traveler Vehicles	% of All Traffic	How many vehicles are AT?
Winter	272	3.3%	1 car in 30
Spring	371	3.25%	1 car in 31
Summer	697	4.8%	1 car in 21
	-	7.6%	1 car in 13

* Counts taken from 10a to 6p



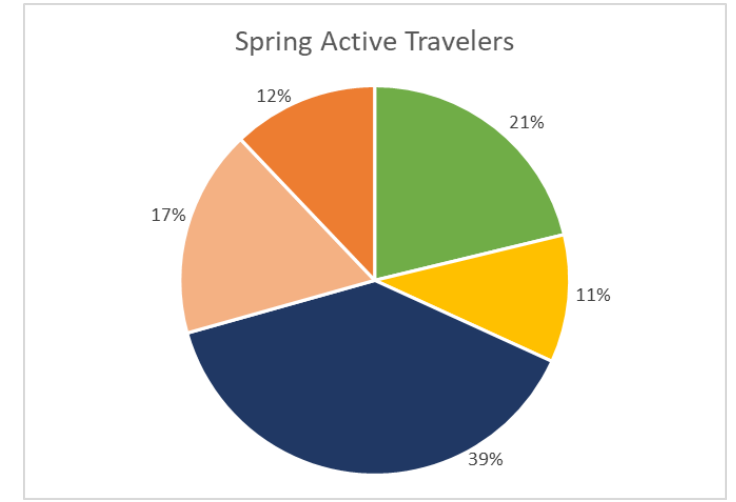
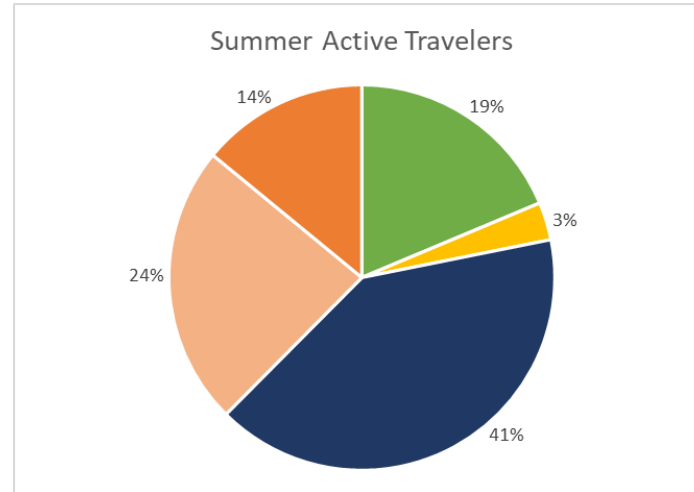
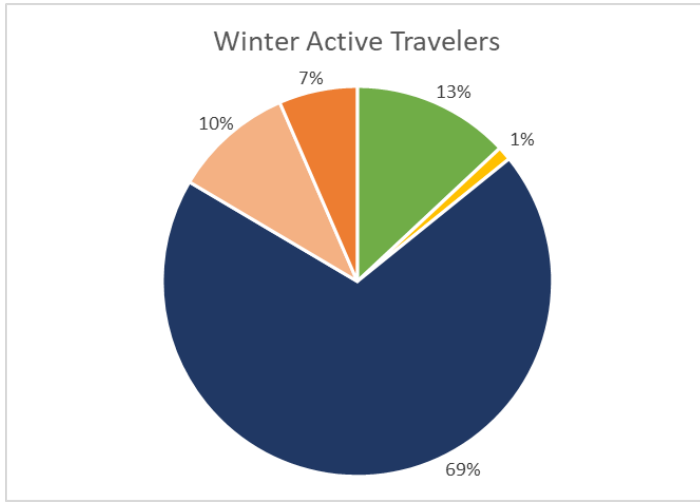
Be **THE** stop in Kansas for **Active Travelers**

- On an average summer day, **697** Active Traveler vehicles pass MHK on I-70
(that's 21,600+ a month)
- If we could begin to attract some of these people by marketing our unique qualities: easy access to Gravel Cycling & River Kayaking + great bars & restaurants...
- It could have an impact on hotels, bars, restaurants, & overall sales taxes during slower months when K-State and football are not in the mix



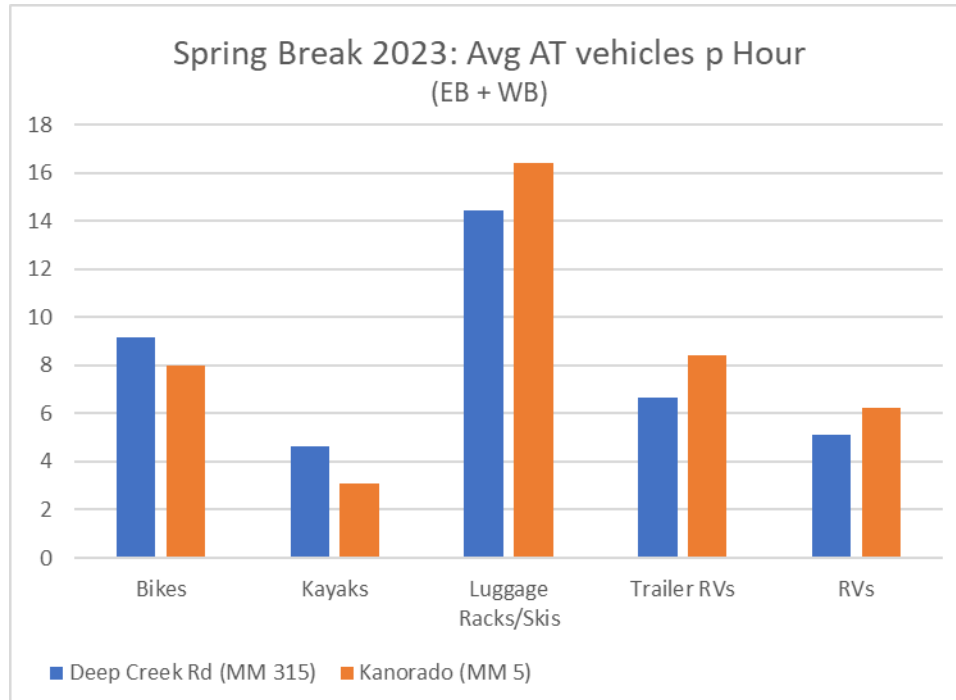
The 4.2% of total traffic (AT) is made up of these % by type

- As weather warms, Bike, Kayak, Trailer RVs & RV percentages greatly increase. While Luggage racks + Skis become a smaller percentage of Active Travelers.

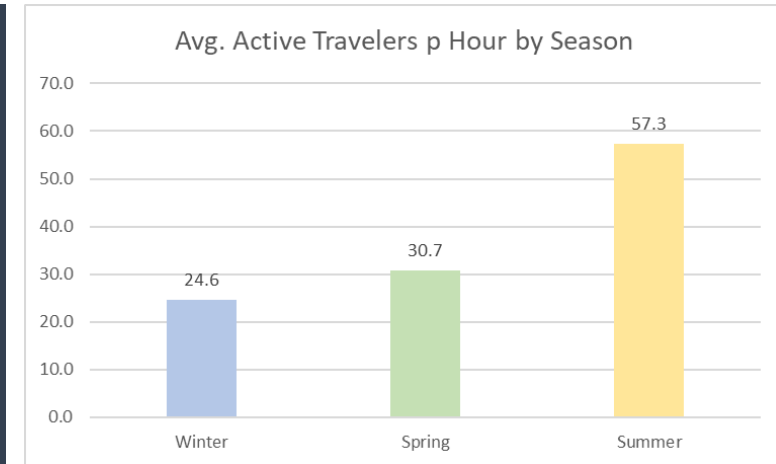


COMPARISON – KANORADO (MM 5) VS DEEP CREEK RD (MM 315)

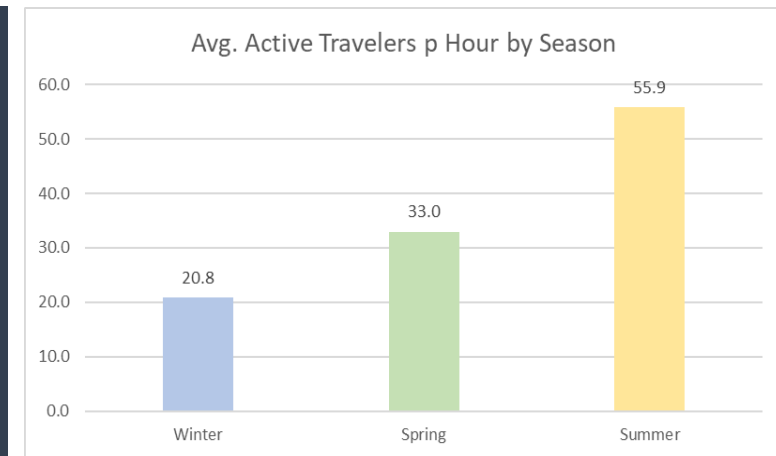
Closest comparison of dates & times in the Study



Deep Creek (MM 315)



Kanorado (MM 5)



- The graphs above show consistent numbers, with slightly higher figures at Kanorado (MM 5). This seems logical as traffic from Wichita and other parts of KS west of MHK would add to those counted at Deep Creek Rd (MM 315). Further, it supports the idea that many Active Travelers are not local, and are coming from at least the KC area or further east (as outlined in Why Are Active Travelers Crossing KS slides).

The data behind this report, while comprehensive is by no means complete. Data was captured around intern schedule availability, meaning gaps exist.

The Flint Hills MPO has reached out to **Google** and their developers have confirmed that running **AI** across the same **KDOT** video links would result in the ability to capture continuous Active Traveler data (AI would identify and count the same categories: bikes, kayaks, etc.).

Such a project would be eligible for Kansas State Transportation Innovation Council (STIC) funding, requiring only a 20% local match.

The complete Active Traveler dataset is available upon request:

FHMPO@FlintHillsMPO.org

