

Permitting and Routing Oversize/Overweight Vehicles Through Kansas

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Important Definitions

- **Legal Load** – Any vehicle and the load it carries that meets the requirements set by Kansas' statutes
- **Permitted Load** – Any vehicle and the load it carries that travels in Kansas with permission from the State
- **Permit** – a form that allows a vehicle and the load it carries to travel in the state
- **Axle** – A line of tires or a group of tires that distributes the weight of the vehicle and the load it carries to the roadway (or bridge) beneath it
- **Escort Vehicle** – a vehicle that accompanies the load

Legal Loads



- **Maximum Width:** 102” (8’6”)
- **Maximum Height:** 14’ (14’6”)
- **Maximum Length:**
Depends on what is being towed

Federal Bridge Formula

$$W = 500 \frac{LN}{N + 1} + 12N + 36$$

What IS an OSOW load?

- Any size greater than statute
- Axles greater than statute
- More than 80,000 pounds (Interstate)
- More than 85,000 pounds on the State Highway System
- **NON-DIVISIBLE**



What permits are available?



- Annual
- Standard OSOW
- Large Structure
- Superload

Annual Permits: \$200

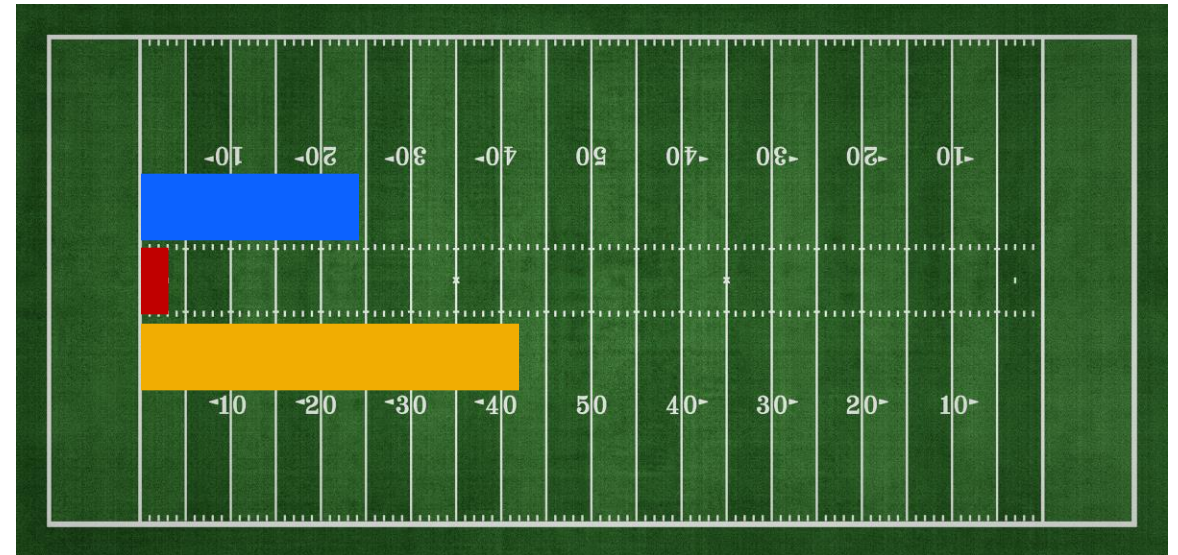
- **Oversize Only**
- **Oversize/Overweight**
- Special Vehicle Combinations
- Agricultural
- Farming – Implement Dealers
- Farming – Cotton Modules
- Oil Service Rigs
- Tow Trucks



Special Vehicle Combination

Annual Permits: \$200

- Annual Permits
 - Not Automatically Routed
 - Can be used unlimited times
- Annual Oversize/Overweight
 - Maximum Weight: 120,000 pounds
 - Maximum Width: 16 feet, 6 inches
 - Maximum Length: 126 feet
 - Maximum Height: 15 feet



Standard Permit: \$40

- Routed based on dimensions, weight restrictions
- No bridge analysis
- Maximum Weight: **150,000 pounds**
- Maximum Width: 16 feet, 6 inches
- Maximum Length: 126 feet
- Maximum Height: **18 feet**



Large Structure Permits: \$200

- Routed based on dimensions, weight restrictions
- **DISTRICT PERSONNEL HEAVILY INVOLVED**
- No bridge analysis
- Maximum Weight: **150,000 pounds**
- Width **GREATER THAN** 16 feet, 6 inches
- Length **GREATER THAN** 126 feet
- Height **GREATER THAN 18 feet**



Superload Permits - \$200

- Concentration of weight over a small distance
 - Axle Groups
 - Out-to-Out axle distance
 - Total Weight
- Routed based on dimensions, bridge analysis
- Route reviewed by staff



Superload Permits: \$200

Northbound K-7 over K-10



- Width 17'2"
- Length 227'0"
- Height: 18'0"
- Weight: 684,190 pounds
- Number of Axles: 21
- Required to cross at maximum speed of 5 mph

Escort Vehicles and Operators

- Beginning January 1, 2020
- Registration required by statute
 - Free Registration
 - Required to register yearly
- Certification required of all operators
 - Certified in a state accepted by Kansas.
 - Cost: \$250 - \$350
 - 8-hour course (in-person or online)
 - Valid for 3 years
- Defines the requirements of the escort vehicle, operators, and operations



FINISH THIS SLIDE – find a photo

Kansas Truck Routing Intelligent Permitting System

Kansas Truck Routing Intelligent Permitting System



K-TRIPS

Login Page

Welcome to the Kansas Truck Routing and Intelligent Permitting System (K-TRIPS)!

Please login below to order permits and manage your account.

If you do not have an account, you can [create a new account](#).

Enter your username and password

Username:


Password:

[I forgot my password.](#)

Submit

☐ Remember me on this computer

[Security and Privacy Statements](#)

Help is provided throughout the system. A question mark icon  is displayed if a field has a help message associated with it. Hovering over the icon displays a brief explanation of the field; clicking on the icon will display a detailed help message. For additional assistance, please contact the Kansas Department of Transportation Central Permitting Office at 785-368-6501, and continue to use the chat and call-back options if you need assistance after logging into your K-TRIPS account.

[Tutorial Videos](#) | [User Guide](#) | [Permit Fees](#) |
[Statutes and Regulations](#) |
[Escort Trip Report](#) | [Registered Escort Providers](#) |
[KanDrive Oversize Load Check-In](#)

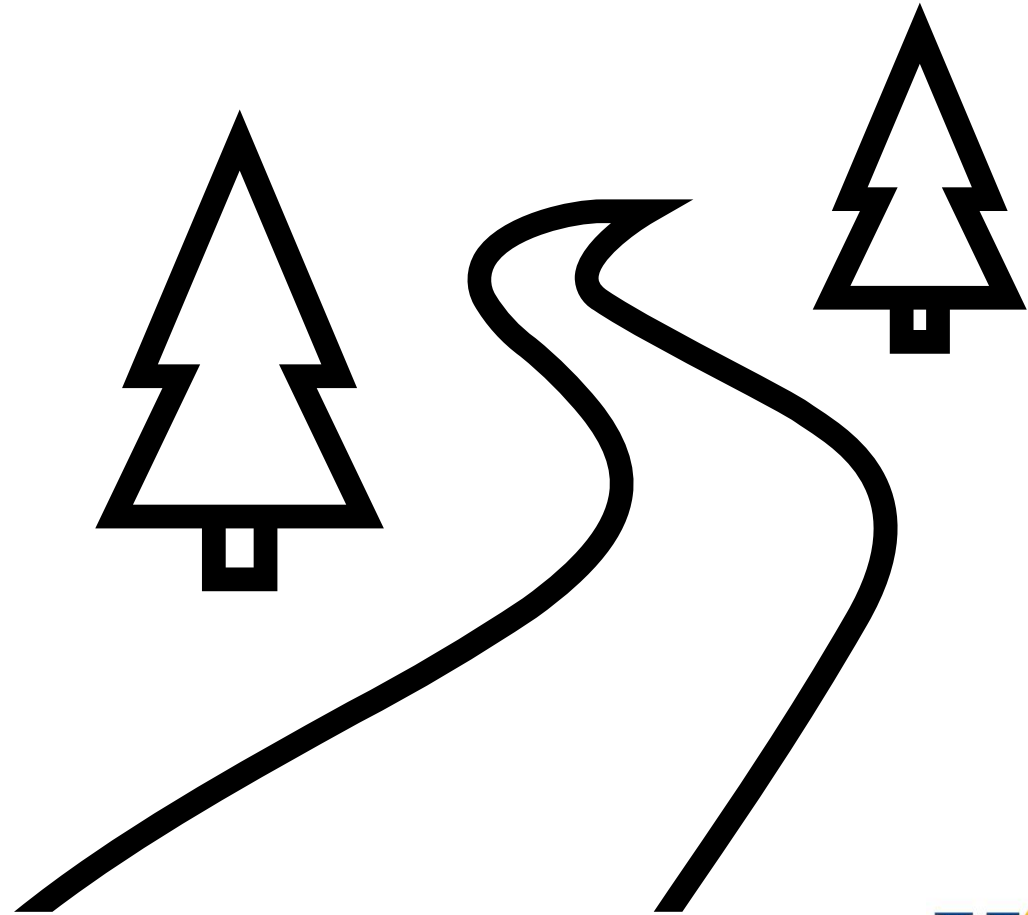
KDOT Personnel

- Team Lead
- Central Permitting: 3
- Superload Routing Team: 3
- Load Raters: 2-3
- District Personnel: 1-2 in each of KDOT's 6 districts



OSOW Routing Vs. Average Road Trip

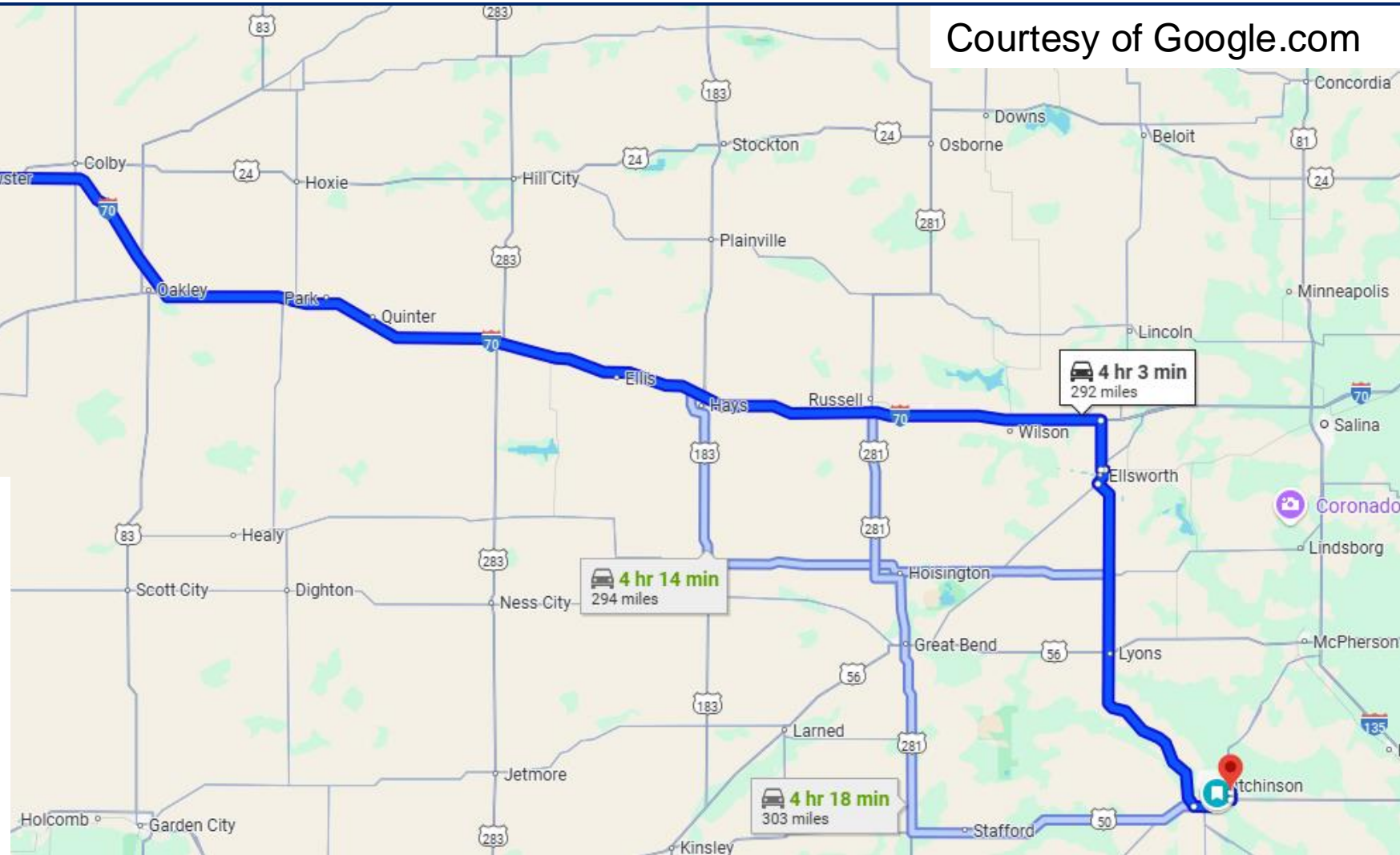
- Origin:
I-70, at the Colorado
border, near Kanorado
- Destination
Hutchison



OSOW Routing Vs Average Road Trip

Courtesy of Google.com


- If a legal sized, passenger vehicle entered the route into a mapping service...



Bid Route

- Any user can use “Bid Route” function
- User will input length, width, height, and total weight to use in routing
- “PRELIMINARY ROUTE” based on dimensions entered

Bid Route: Enter Load Dimensions

 To begin your Bid Route, please enter the dimensions of your truck and load.

Bid Route: Truck Dimensions

Enter the dimensions you wish to use:

Dimensions	
Length:	<input type="text" value="155"/> ft. <input type="text"/>
Width:	<input type="text" value="11"/> ft. <input type="text"/>
Height:	<input type="text" value="16"/> ft. <input type="text" value="1"/> in.
GVW	<input type="text" value="145000"/> lbs


Next

Bid Route

- User selects an origin and destination on State of Kansas maintained/owned routes
- Can select from:
 - Border crossing
 - Address
 - Intersection
 - Latitude/Longitude on Map
 - Road and Mile Marker
 - Landmark
 - Crossing State Road

Enter a Route

[Back](#)

		
Enter Trip		
Origin	Border Crossing ▼	
Select:	KS51, Walsh CO ▼	
Via Points	None ▼	
Destination	Lat/Lon / Map ▼	
Lat	Lon	
<input type="text" value="38.0295121685505"/>	<input type="text" value="-97.8668641043747"/>	Find
SOUTH AIRPORT ROAD near HUTCHINSON		

[Validate and Run](#)

Bid Route

Any restriction that causes
“Fail to Route” can be
explored by the user

Failed to route on leg 1 because of: 39 restrictions

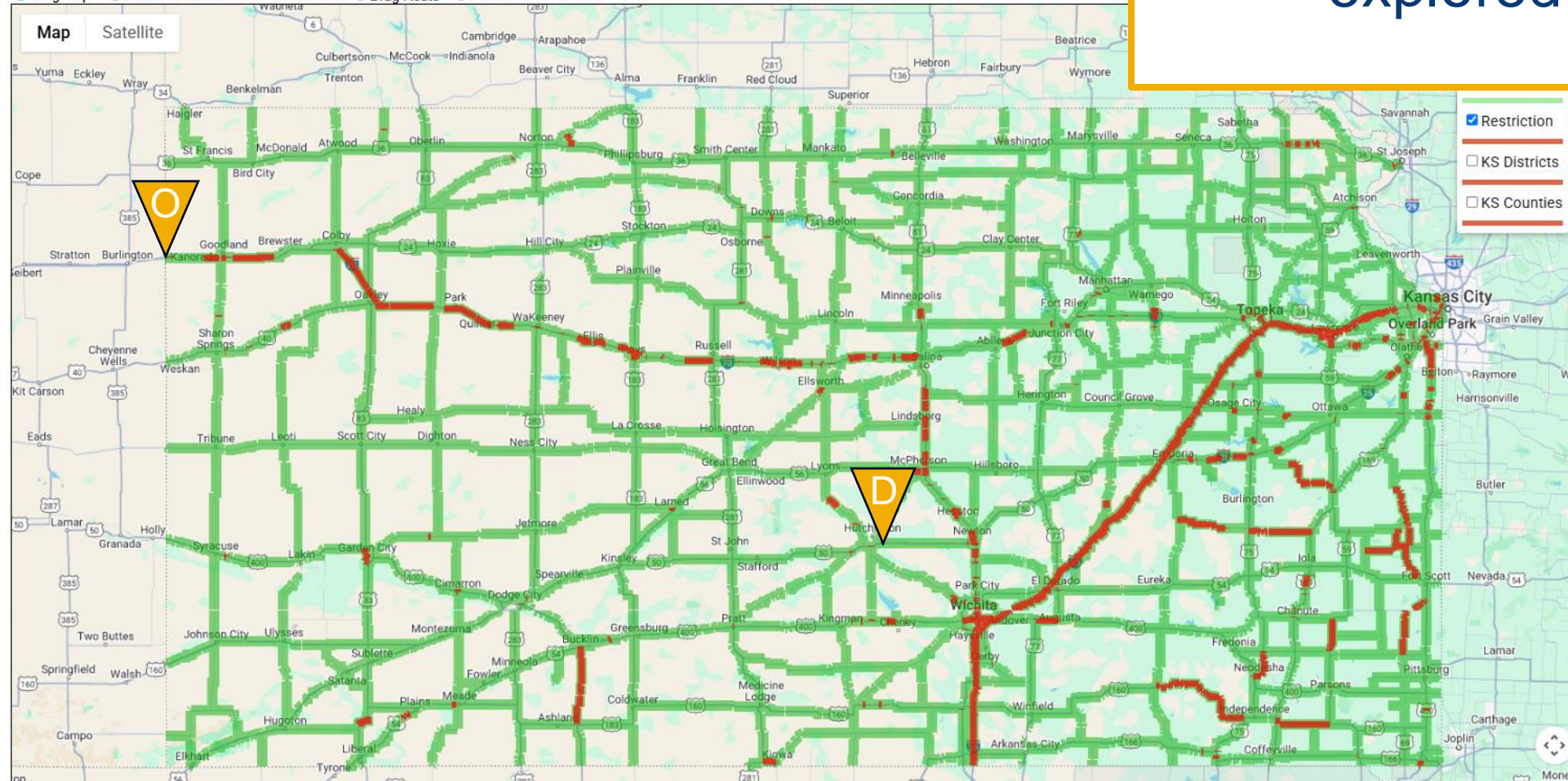
[Return to Dashboard](#)

IH0070;CO;Kanorado to Ramp, HUTCHINSON

Suggested Route Only – Not Valid for Travel

Trip Distance: 0 Trip Time: 0 [Save this trip...](#)

☒ Drag Map ☐ Get Restriction Information For Road ☐ Drag Route ☐ Restrictions in Box



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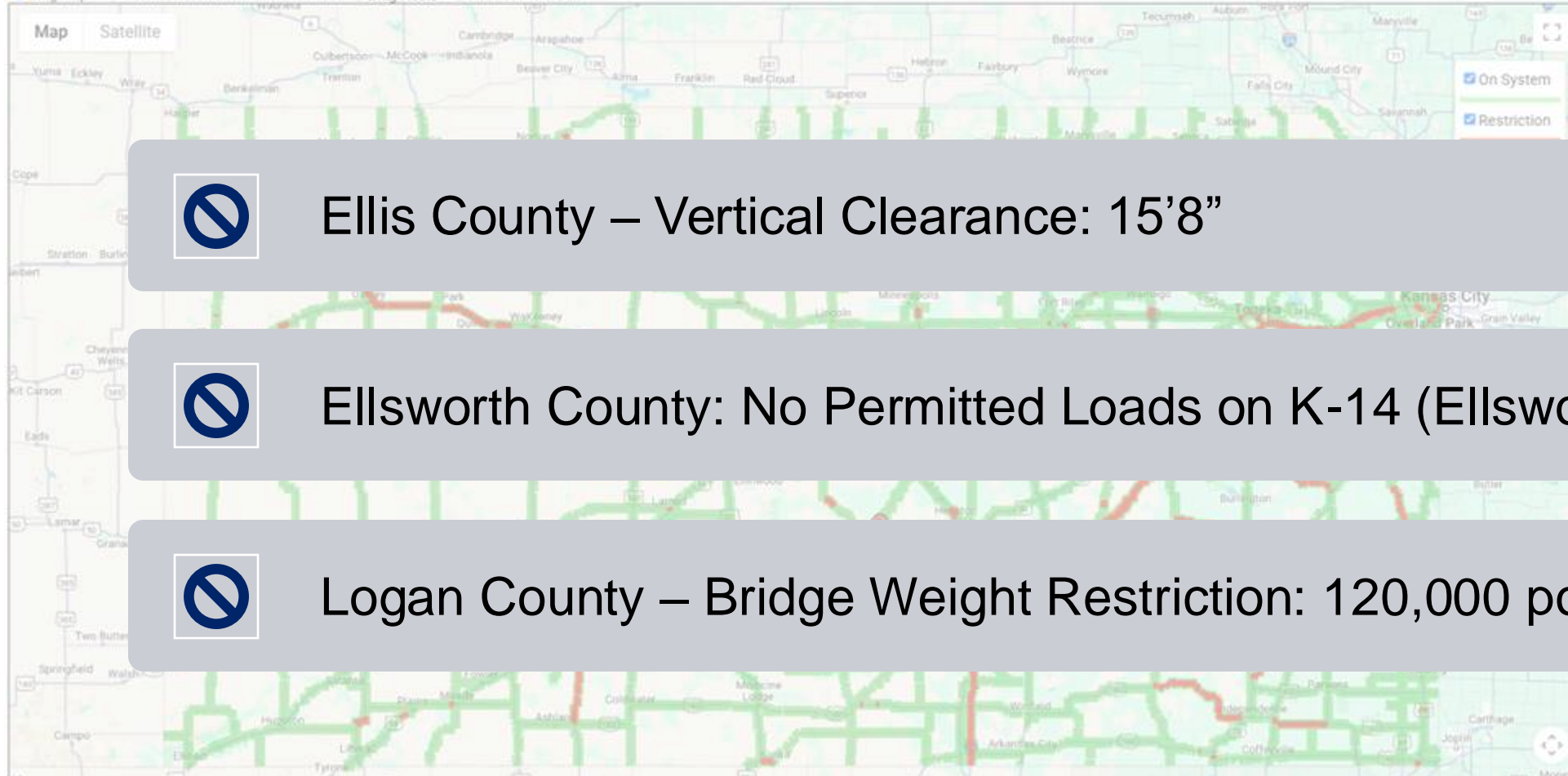
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[Drag Map](#) [Get Restriction Information For Road](#) [Drag Route](#) [Restrictions in Box](#)



Ellis County – Vertical Clearance: 15'8"



Ellsworth County: No Permitted Loads on K-14 (Ellsworth)



Logan County – Bridge Weight Restriction: 120,000 pounds

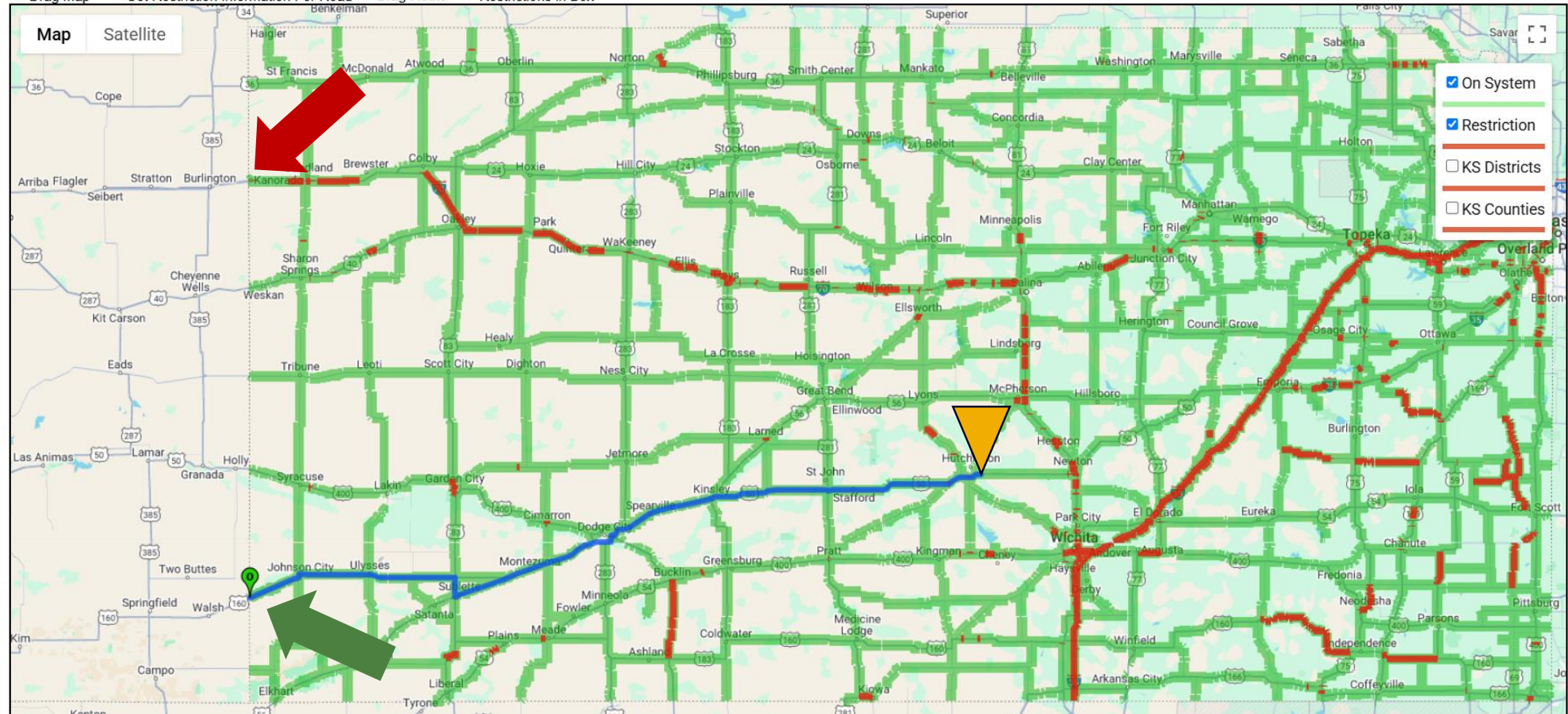
Bid Route

US0160;CO;Manter to Ramp, HUTCHINSON

Suggested Route Only – Not Valid for Travel

Trip Distance: 246.56 Trip Time: 04:08 [Save this trip...](#)

☒ Drag Map ☐ Get Restriction Information For Road ☐ Drag Route ☐ Restrictions in Box



Bid Route

- Integrated with Open Street Modeler, Google Maps, for map interaction
- Supplies Driving Directions

Driving Directions

Miles	Route	To	Distance	Time
Origin: US0160;CO;Manter				
66.28	US-160	Take Ramp	66.28	00:60
0.44	Ramp	Continue straight on US-83 [US-160]	66.72	00:00
5.63	US-83	Turn left onto US-56	72.35	00:07
56.81	US-56	Continue straight on US-56 Ramp [US-283 Ramp]	129.16	00:54
0.35	US-56 Ramp	Continue straight on US-50 [US-56], [US-283]	129.51	00:00
67.69	US-50	Bypass Via Ramp Take Ramp; Take Next Entrance after US-281	196.95	01:15
49.32	US-50	Head toward AIRPORT RD/YODER RD	246.52	00:53
0.04	Ramp	Arrive at destination.	246.56	00:00
Final Destination: Ramp, HUTCHINSON				
			246.56	04:08

Gives Suggested Route Only

What if you have an Annual Permit?

Bid Route

- Any user can use bid route function (with or without a permit)
- User will input length, width, height, and total weight to use in routing
- Presents a “preliminary route” based on dimensions entered

Annual Permit Route

- Permit Number Specific
- Provides a route to be printed and followed
- Same inputs plus
 - Lowboy?
 - Axle spacing specific
- HELPS AVOID RESTRICTIONS

Permit Information

- Routed Permits
 - Similar process for Bid Route
 - Routed permits **must** follow the route on the permit
- User must enter:
 - Width
 - Height
 - Length
 - Weight
 - Front and Rear Overhang
 - Axle Spacing
 - Individual Axle Weights

Load Description

CONTROL BUILDING

Vehicles Used For This Permit

Unit Number	Type	Make	Year	State	License	VIN	Registered GVW
223	Tractor	INT	2024	WI	166	3HSPCA	85500

Load and Dimensions

Below is a table containing the dimensions used when creating and routing this permit.

Dimensions

Width: 13 ft. Height: 16 ft. 4 in. Length: 139 ft.
Weight: 139600 Front O'Hang: Legal Rear O'Hang: Legal

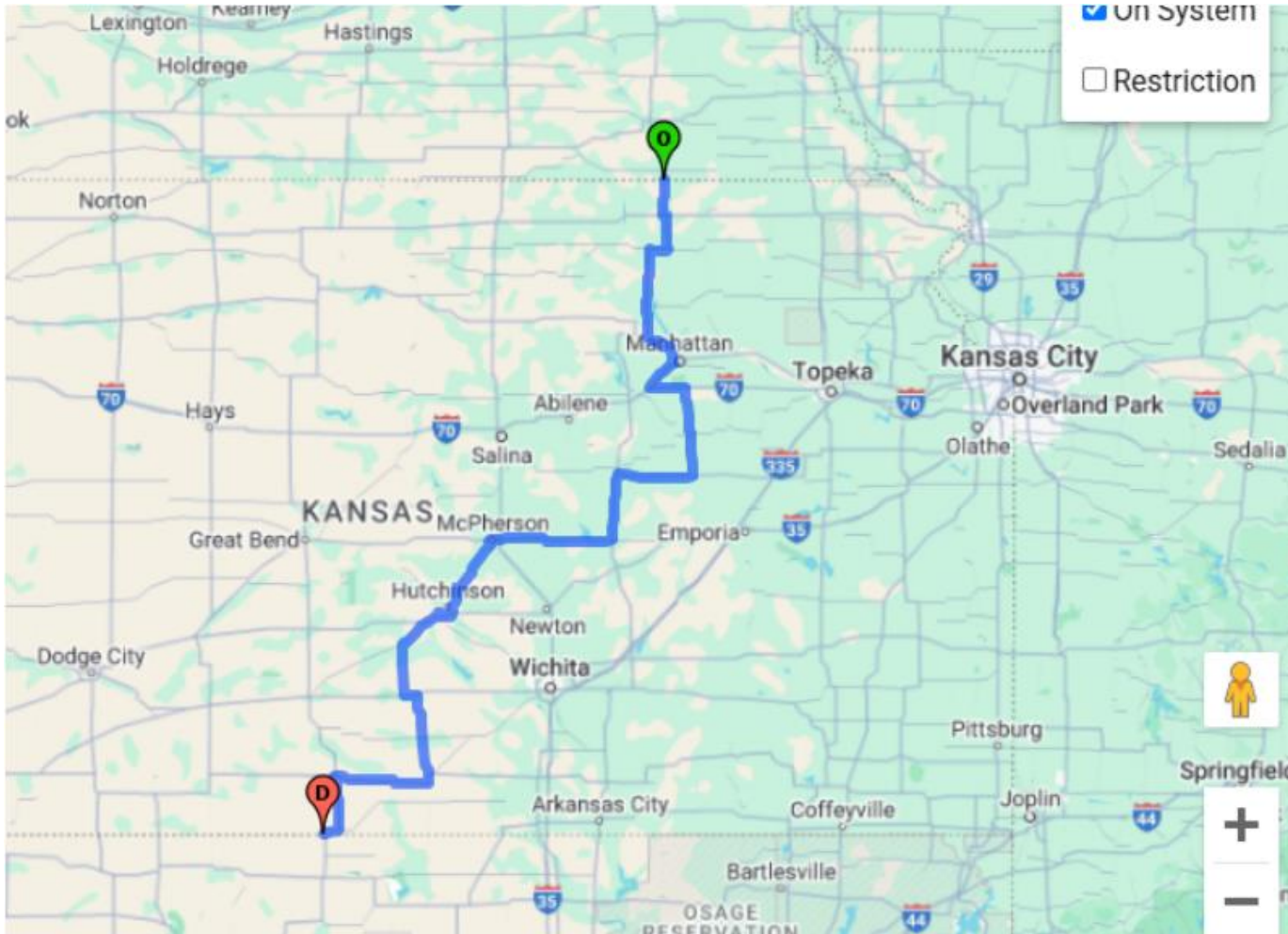
Axles



Axle:	1	2	3	4	5	6	7
Distances:		16 ft. 1 in.	4 ft. 6 in.	4 ft. 6 in.	94 ft. 1 in.	5 ft.	5 ft.
Weights:	19600	20000	20000	20000	20000	20000	20000
Width:	8 ft.	8 ft.	8 ft.	8 ft.	8 ft.	8 ft.	8 ft.

Routed Permit Information

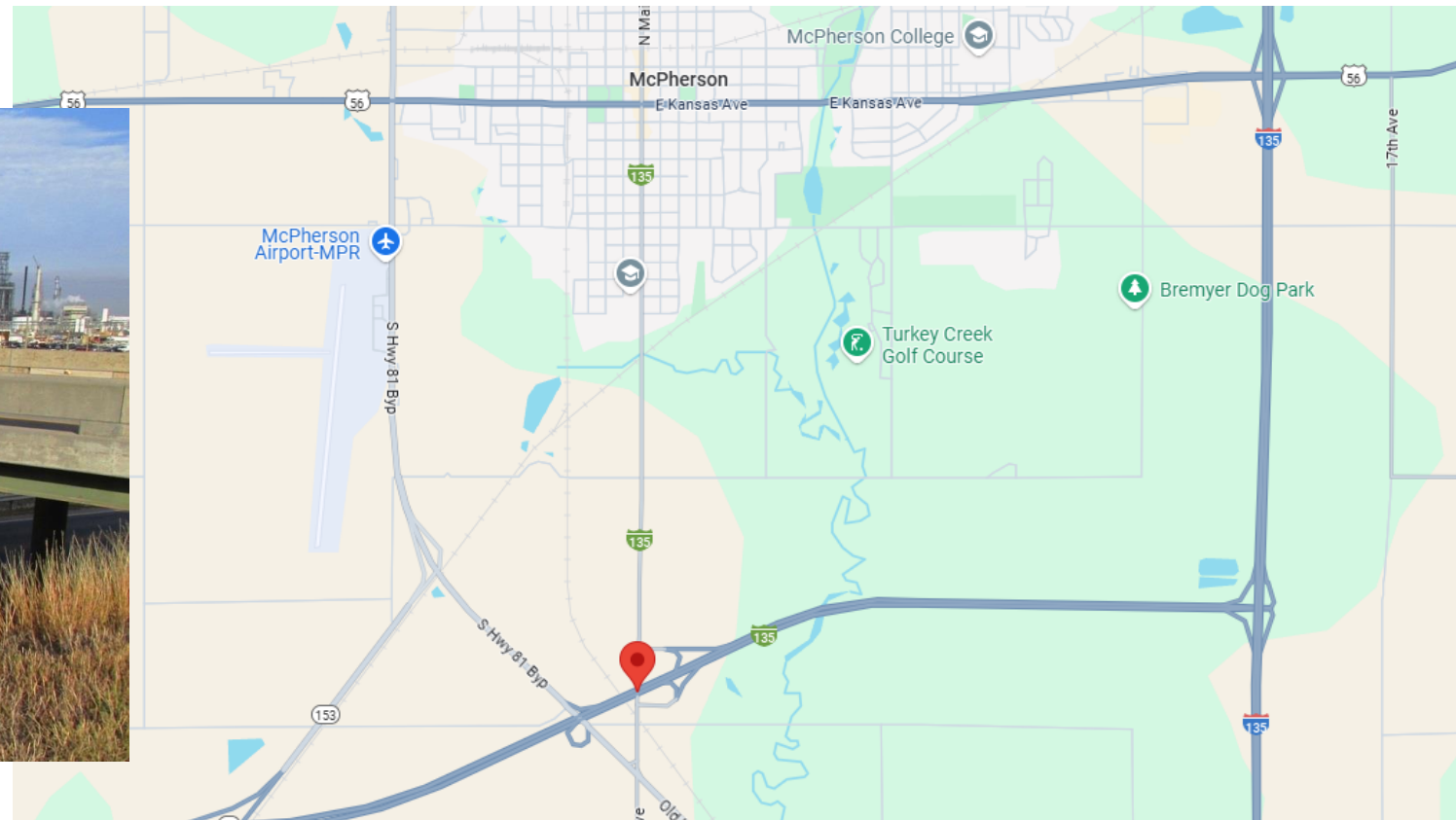
- A mapped route and driving directions are obtained



Driving Directions			Distance	Time
Miles	Route	To		
[Trip Origin]				
57.02	US-77	Continue straight on US-24	57.02	01:03
8.5	US-24	Take Ramp	65.52	00:10
0.12	Ramp	Continue straight on KS-113 [NORTH SETH CHILD ROAD]	65.63	00:00
5.51	KS-113	Take Ramp	71.14	00:05
0.21	Ramp	Merge onto KS-18 [FORT RILEY BOULEVARD]	71.35	00:00
11.19	KS-18	Take Ramp	82.54	00:11
0.26	Ramp	Continue straight on I-70 [US-40]	82.81	00:00
10.42	I-70	Take Exit 313 toward KS-177/MANHATTAN	93.22	00:10
0.25	Ramp	Turn right onto KS-177	93.47	00:00
28.57	KS-177	Turn right onto US-56 [KS-177], [EAST MAIN STREET]	122.04	00:32
45.79	US-56	Bear right onto US-56 [US-77]	167.83	00:42
0.01	US-56	At the roundabout, take the 1st exit onto US-56	167.84	00:00
39.35	US-56	Turn left onto KS-153 [13TH AVENUE]	207.19	00:37
1.62	KS-153	Continue straight on KS-153 Ramp	208.81	00:02
0.45	KS-153 Ramp	Continue straight on KS-153	209.26	00:00
0.71	KS-153	Continue straight on KS-153 Ramp	209.96	00:00
0.66	KS-153 Ramp	Merge onto KS-61	210.62	00:00
8.39	KS-61	Bypass Via Ramp Take Ramp; Take Next Entrance after CHEROKEE ROAD	218.59	00:09
16.48	KS-61	Turn right onto KS-61 Ramp	235.5	00:17
0.42	KS-61 Ramp	Continue straight on US-50 [KS-61]	235.92	00:00
3.18	US-50	Head toward KS-14/KS-96/LYONS	239.1	00:03
0.69	KS-14 Ramp	Continue straight on KS-14 [KS-96]	239.79	00:00
1.15	KS-14	Head toward 6TH AVENUE	240.94	00:02
0.3	Ramp	Turn left onto WEST 6TH AVENUE	241.24	00:00
0.17	WEST 6TH AVENUE	Take Ramp	241.42	00:00
0.34	Ramp	Continue straight on KS-14 [KS-96]	241.76	00:00
1	KS-14	Head toward US-50 W/KS-61 S/KINSLEY PRATT	242.76	00:02
0.7	Ramp	Merge onto US-50 [KS-61], [WEST ILLINOIS AVENUE]	243.46	00:00
3.96	US-50	Head toward KS-61	247.42	00:05
11.39	KS-61	Turn left onto KS-11 [SOUTH HODGE ROAD]	258.81	00:13
16.82	KS-11	Turn left onto US-54 [US-400], [CANNONBALL STAGELINE]	275.63	00:19
4.19	US-54	Turn right onto KS-14 [NORTH MAIN STREET]	279.82	00:05
26.37	KS-14	Continue straight on US-160 [KS-2]	306.18	00:29
34.69	US-160	Turn left onto US-281	340.87	00:32
24.02	US-281	Arrive at destination.	364.89	00:22
[Trip Destination]			365	06:05

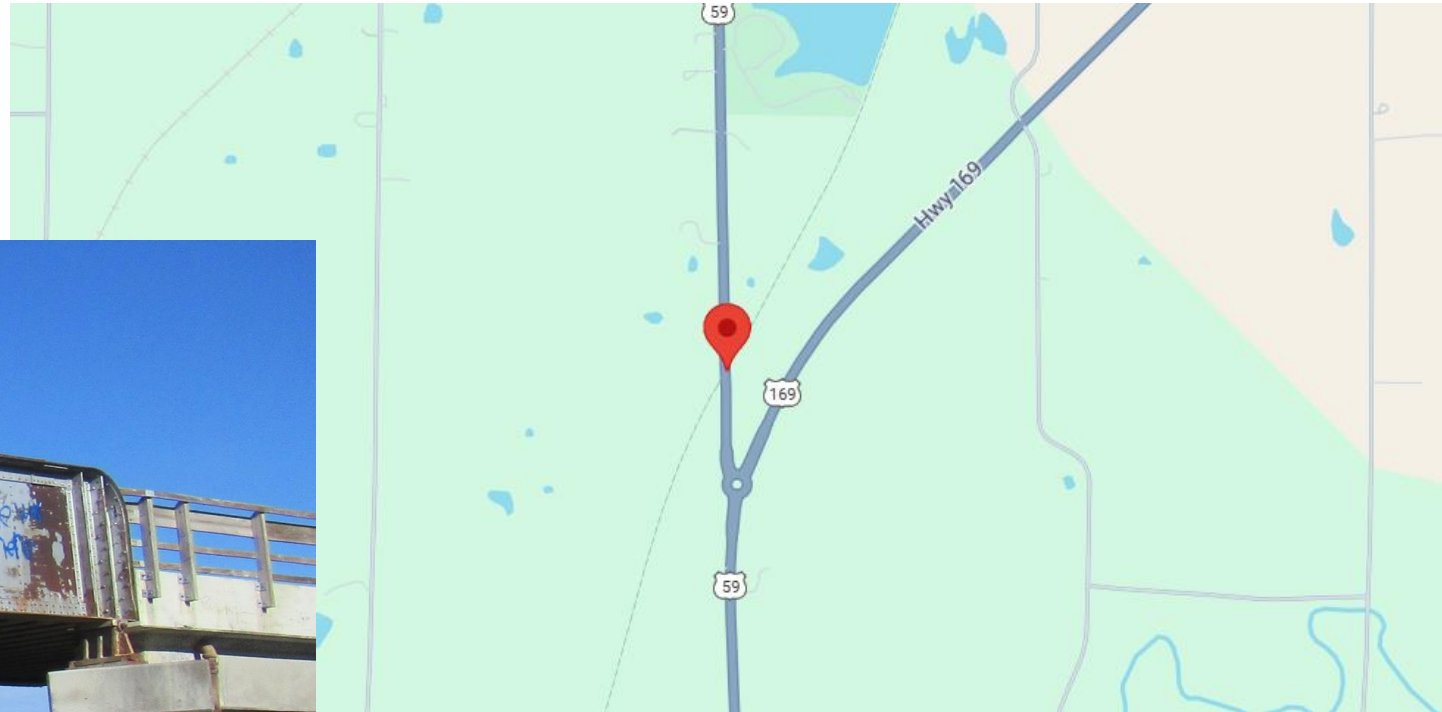
Route Restrictions – Weight Restrictions

- McPherson County
- Bridge 059-0102
- Posted in 2023 - Weight Restriction
- Programmed for deck replacement in FY2026



Route Restrictions – Vertical Clearances

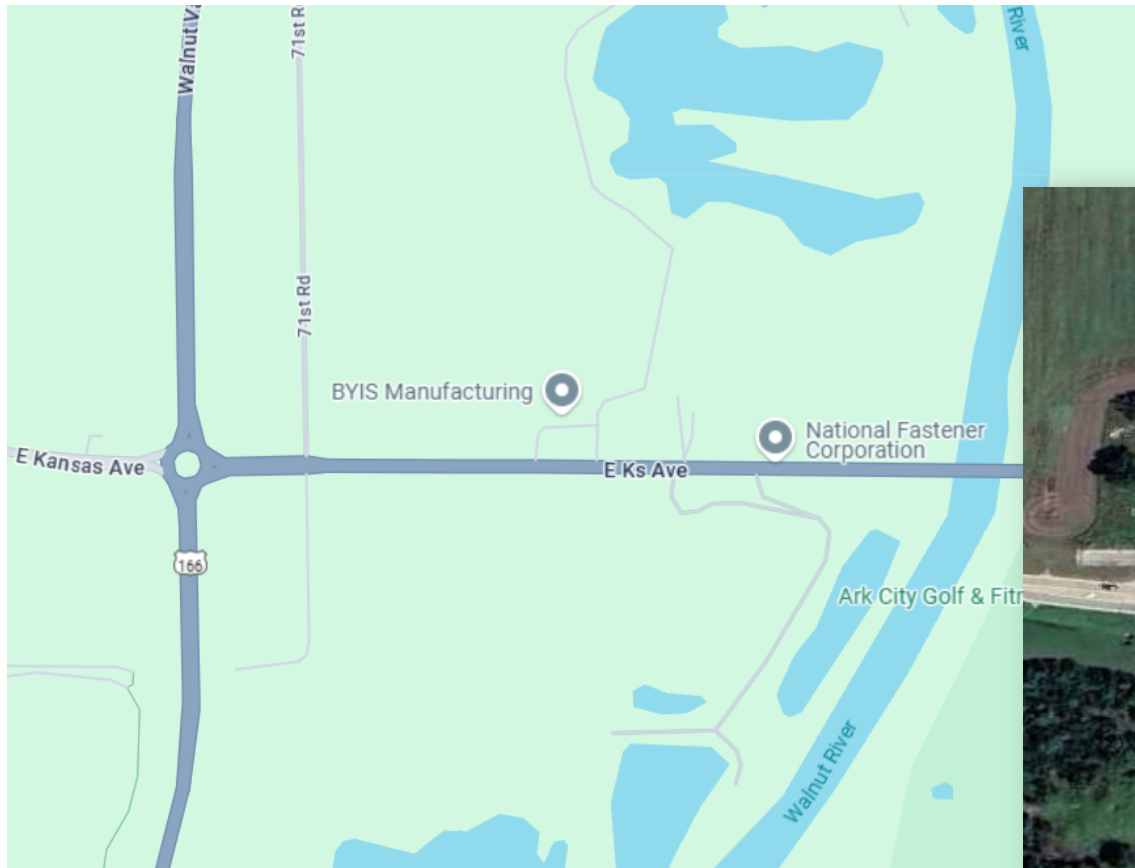
- Anderson County
- Bridge 002-0004



- Pedestrian/Bicycle Path
- Over US-59 Highway

Route Restrictions – Turning Movements

- Cowley County: East of Arkansas City
- Intersection of US-77 and US-166



- 100-foot length restriction

Route Restrictions – Construction

- KanDrive gives construction restriction information
- Feeds directly into K-Trips



W 1st Ave in both directions: Closed to thru traffic.
at SW Tyler St in Topeka

 26,000 lbs



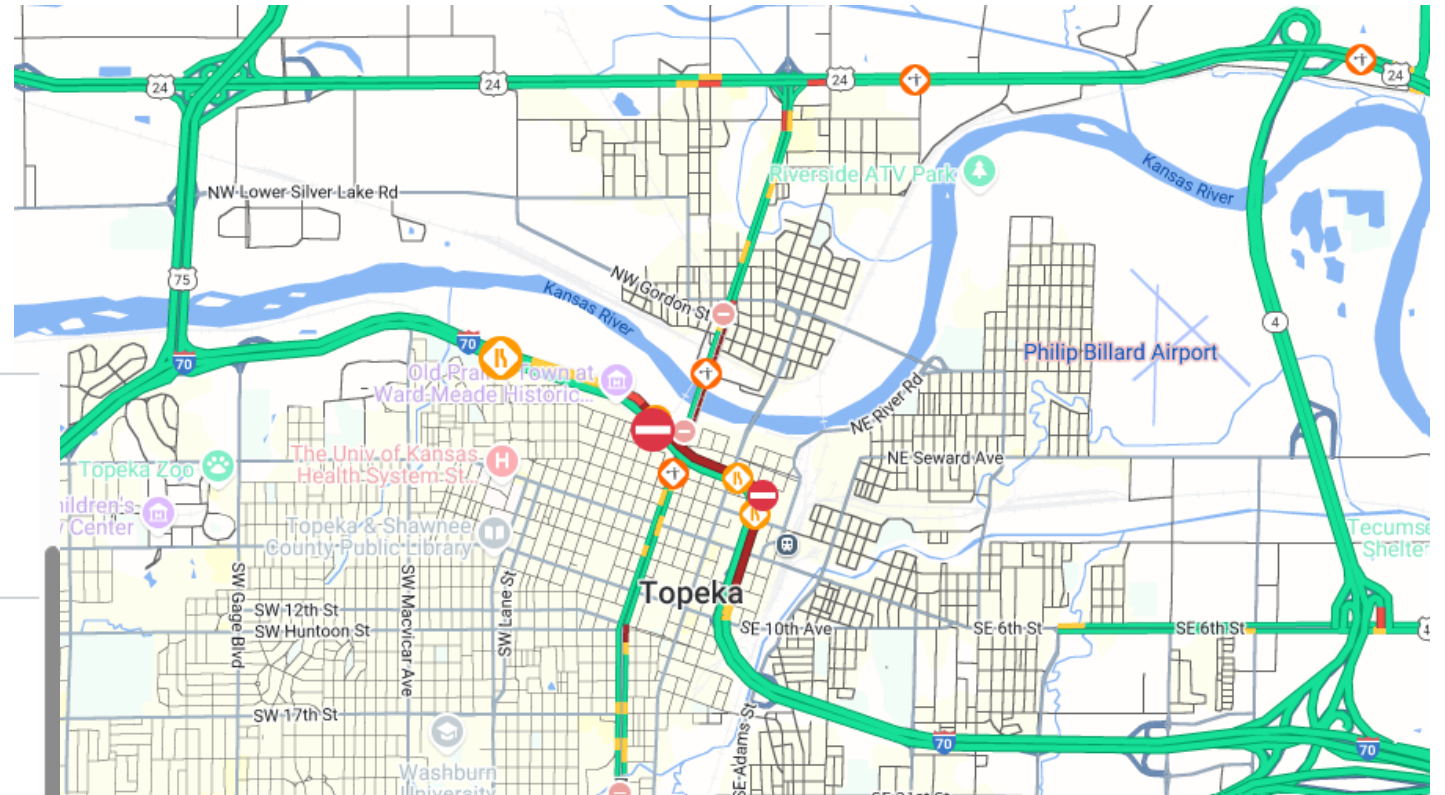
US 24 in both directions: Construction work.
between Topeka and Grantville

 50 mph



US 24 in both directions: Construction work.
in Topeka

 35 mph



Completing the Permit

- KDOT reviews the route, if needed
- User notified of approval if needed
- User can review the permit. Not required to pay immediately
- Payment
 - All payments are secure
 - Can use a credit card
 - Companies can set up an Escrow account
- Fees for the permits are credited to the State Highway Fund
- Permit can be printed or viewed on a tablet or pdf reading device.

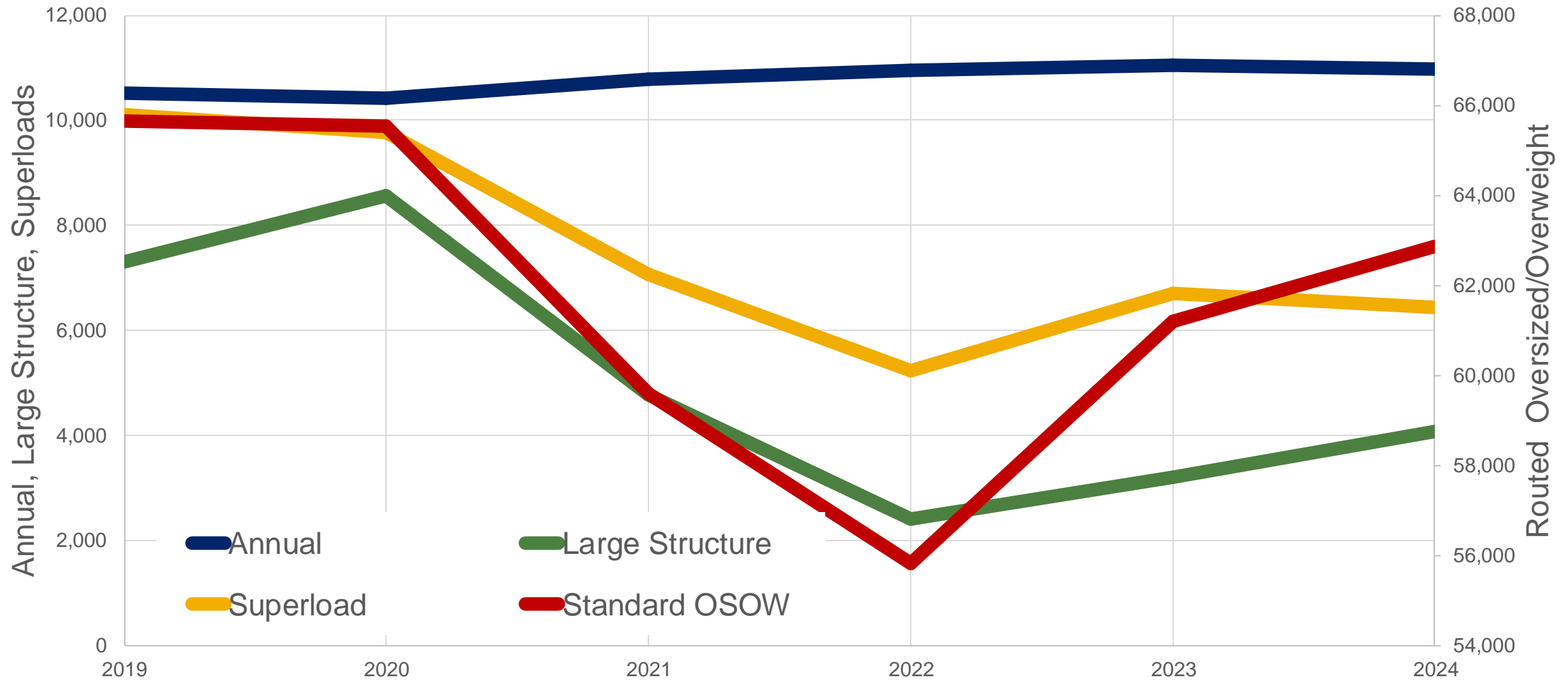
Routed Permit Information – Heat Map



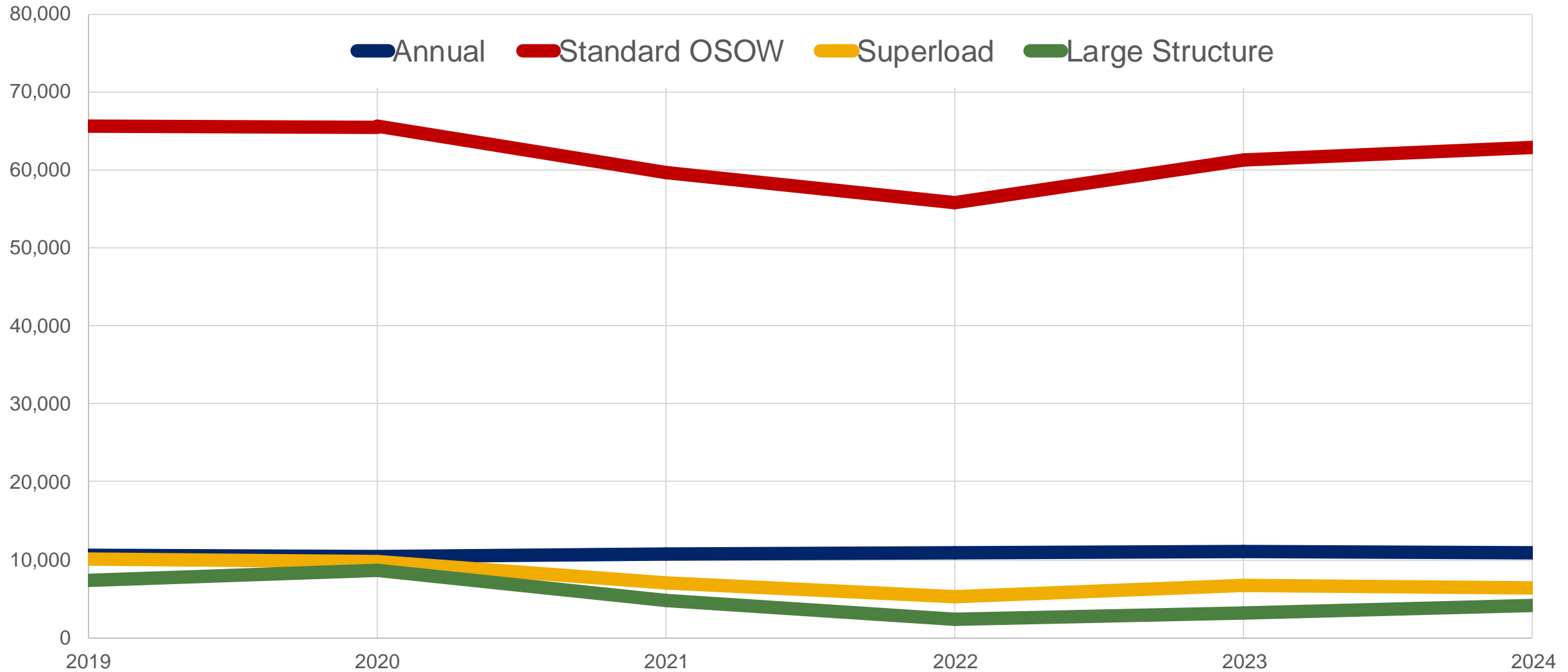
Permit Count Trends

Permit Type	2019	2020	2021	2022	2023	2024
Annual	10,519	10,413	10,784	10,957	11,042	10,977
Standard OSOW	65,652	56,978	54,822	53,427	58,002	58,776
Large Structure	7,312	8,558	4,769	2,396	3,196	4,083
Superload	10,101	9,758	7,060	5,237	6,692	6,443

Permit Count Trends



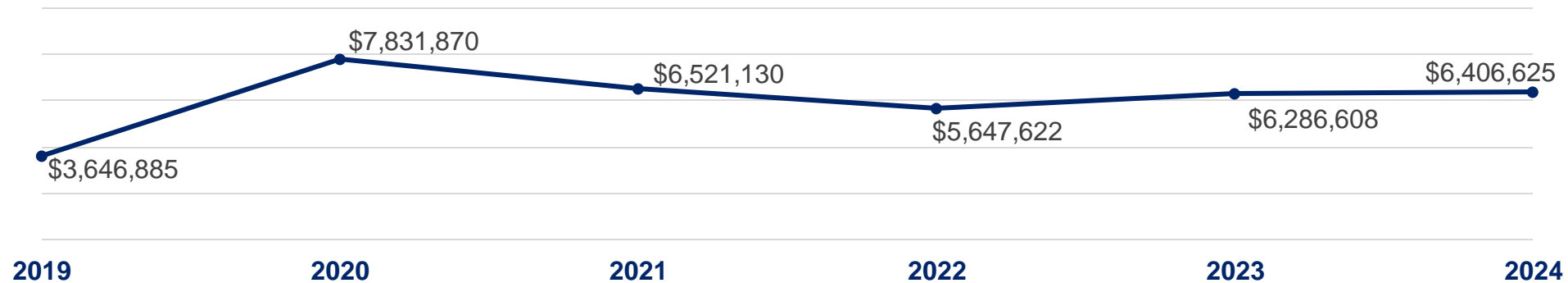
Permit Count Trends



Fees and Revenue

Fees	Before January 1, 2020	After January 1, 2020
Annual Permits	\$150	\$200
Standard OSOW	\$20	\$40
Large Structure Permits	\$30	\$200
Superload Permits	\$50	\$200

Annual Revenue



Challenges and Opportunities

- ✓ Permit Harmonization
- ✓ Invasive species
- RR Crossing Safety
- Turn-by turn audible directions
- State border communication
- Multi-state routing
- Infrastructure vs. demand



Mammoet Heavy Haul

Thank you!

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March 5, 2025

