



# SYSTEM RELIABILITY & FREIGHT MOVEMENT PERFORMANCE MEASURES

2023



## FHWA'S 3 SYSTEM RELIABILITY & FREIGHT MOVEMENT PERFORMANCE MEASURES



Data Source: RITIS

- 1 Interstate Travel Time Reliability Measure (TTRM):  
% of person-miles traveled on the Interstate that are reliable
- 2 Non-Interstate Travel Time Reliability Measure (NTTRM):  
% of person-miles traveled on the Non-Interstate NHS that are reliable



Data Source:  
RITIS

- 1 Interstate Freight Reliability Measure:  
Truck Travel Time Reliability (TTTR) Index



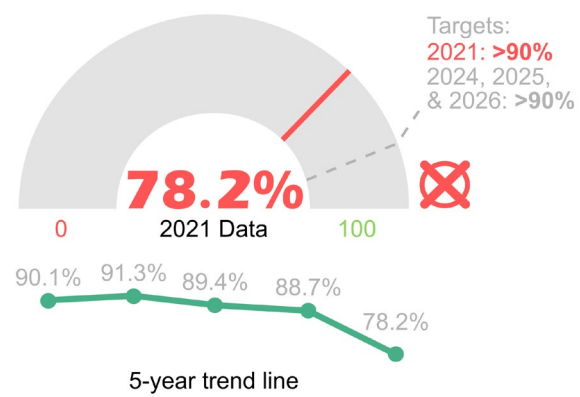


# SYSTEM RELIABILITY & FREIGHT MOVEMENT: SUMMARY

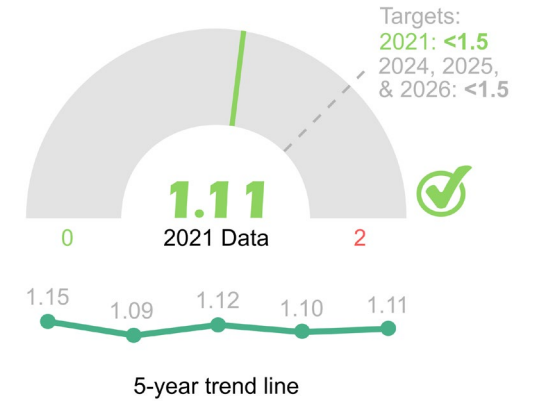
## PM 1: % of Person-Miles Traveled on Interstate with Reliable Travel Time



## PM 2: % of Person-Miles Traveled on the NHS with a Reliable Travel Time



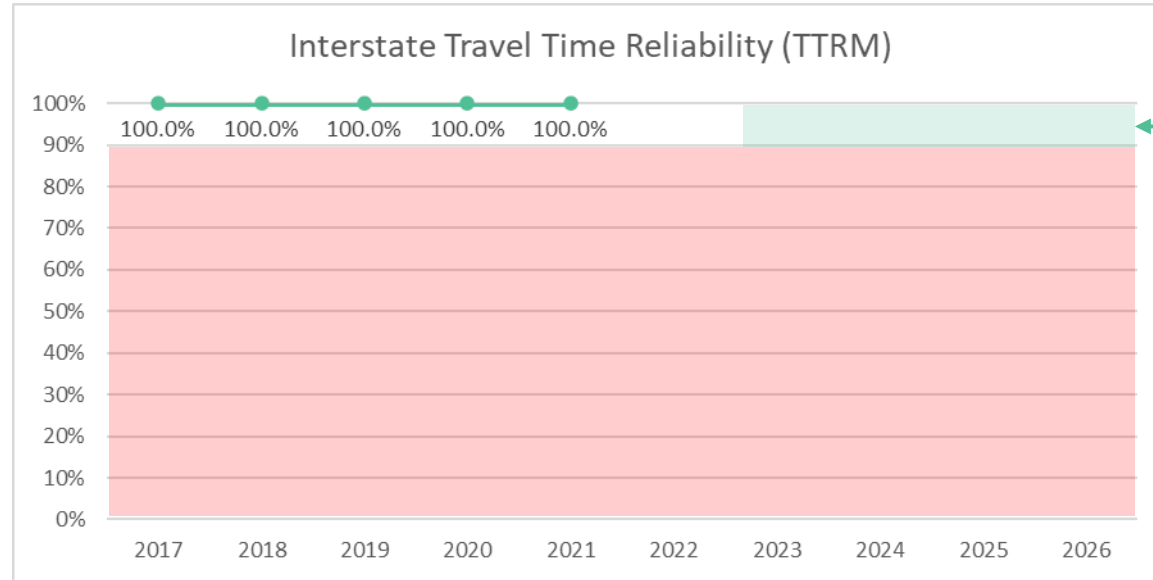
## PM 3: Truck Travel Time Reliability (TTR) Index on our Interstate System





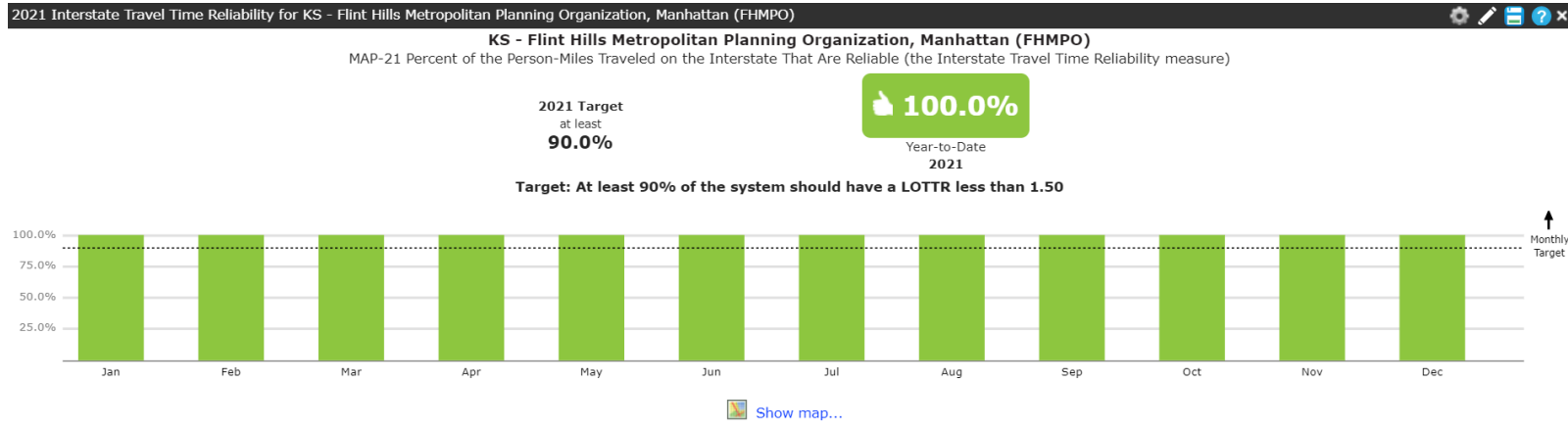
# TARGET ①: INTERSTATE TRAVEL TIME RELIABILITY MEASURE (TTRM)

Year	TTRM	Target
2017	100.0%	
2018	100.0%	
2019	100.0%	
2020	100.0%	
2021	100.0%	>90%
2022		-
2023		>90%
2024		>90%
2025		>90%
2026		>90%





# TARGET ①: INTERSTATE TRAVEL TIME RELIABILITY MEASURE (TTRM)



Calculated using 100.00% of miles in Flint Hills Metropolitan Planning Organization  
Data source: NPMRDS INRIX



Calculated using 100.00% of miles in Flint Hills Metropolitan Planning Organization  
Totals: 208262507.1975/208262507.1975  
Data source: NPMRDS INRIX



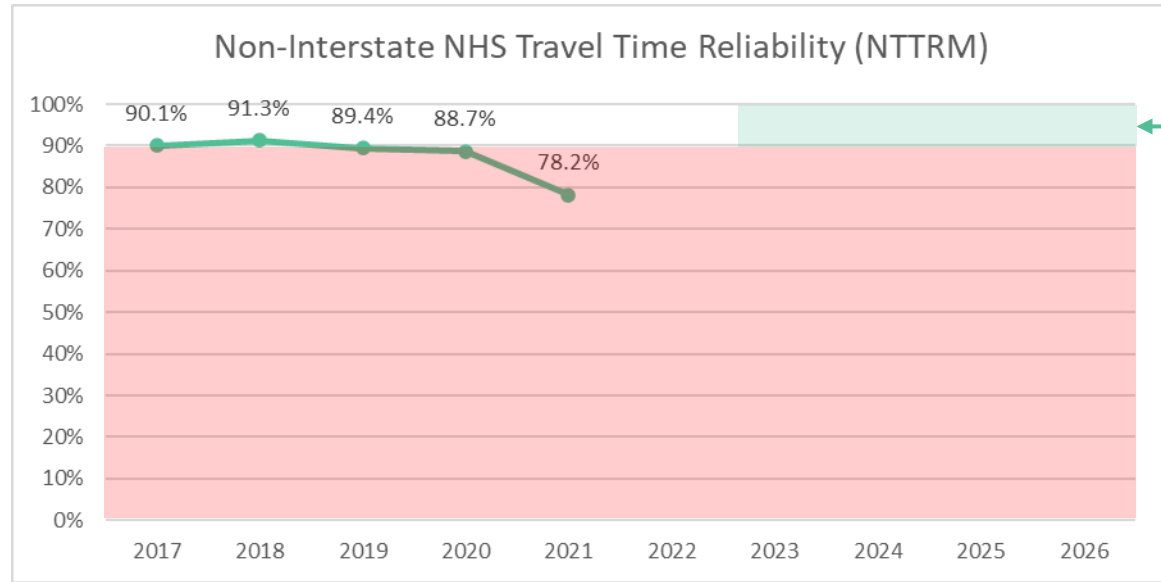


# TARGET ②: NON-INTERSTATE TRAVEL TIME RELIABILITY MEASURE (NTTRM)

Year	NTTRM	Target
2017	90.1%	
2018	91.3%	
2019	89.4%	
2020	88.7%	
2021	78.2%	>90%
2022		-
2023		>90%
2024		>90%
2025		>90%
2026		>90%



Off Target





# TARGET ②: NON-INTERSTATE TRAVEL TIME RELIABILITY MEASURE (NTTRM)

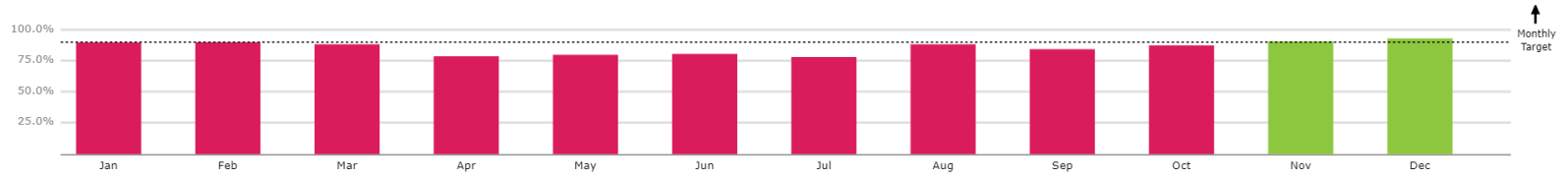
2021 Non-interstate NHS Travel Time Reliability for KS - Flint Hills Metropolitan Planning Organization, Manhattan (FHMPPO)

KS - Flint Hills Metropolitan Planning Organization, Manhattan (FHMPPO)  
MAP-21 Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable (the Non-Interstate NHS Travel Time Reliability measure)

2021 Target  
at least  
**90.0%**

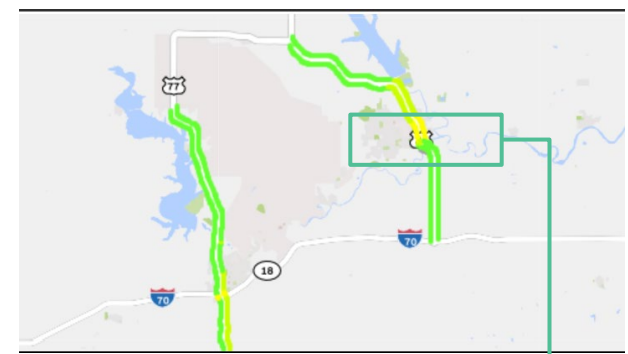
**78.2%**  
Year-to-Date  
2021

Target: At least 90% of the system should have a LOTTR less than 1.50

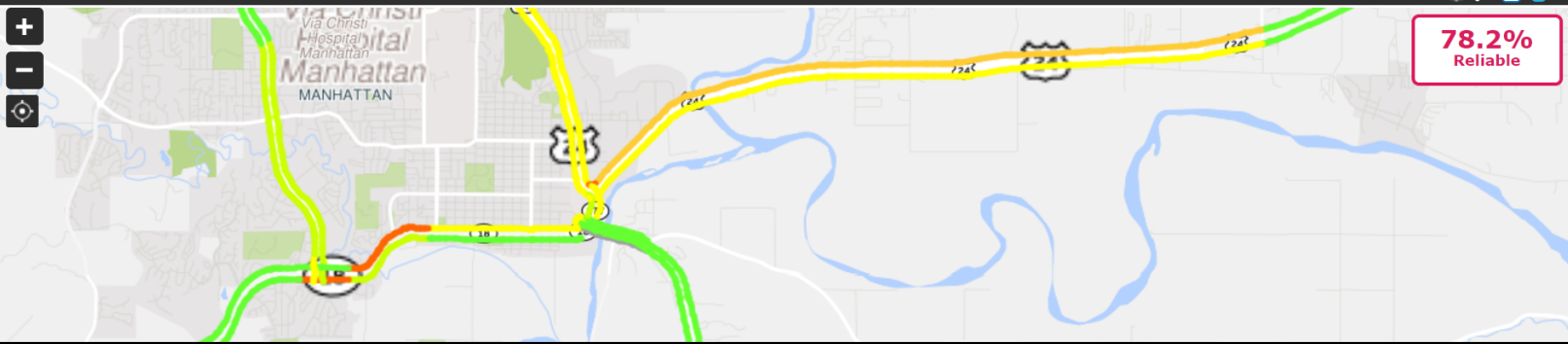


Show map...

Calculated using 99.64% of miles in Flint Hills Metropolitan Planning Organization  
Data source: NPMRDS INRIX



2021 Non-interstate NHS Travel Time Reliability for KS - Flint Hills Metropolitan Planning Organization, Manhattan (FHMPPO)



Target: At least 90% of the system should have a LOTTR less than 1.50

Calculated using 99.64% of miles in Flint Hills Metropolitan Planning Organization  
Totals: 419838581.8135/536696821.25  
Data source: NPMRDS INRIX

Wildcat Creek Bridge Construction

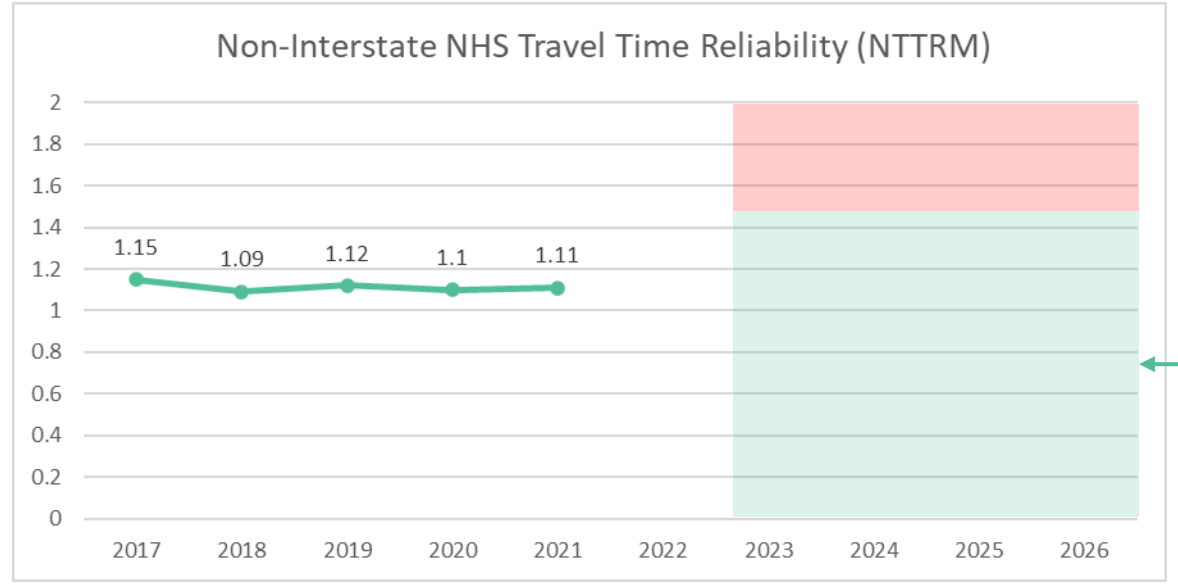
US24 @ Green Valley Rd Construction





# TARGET ①: INTERSTATE FREIGHT RELIABILITY MEASURE (TTTR)

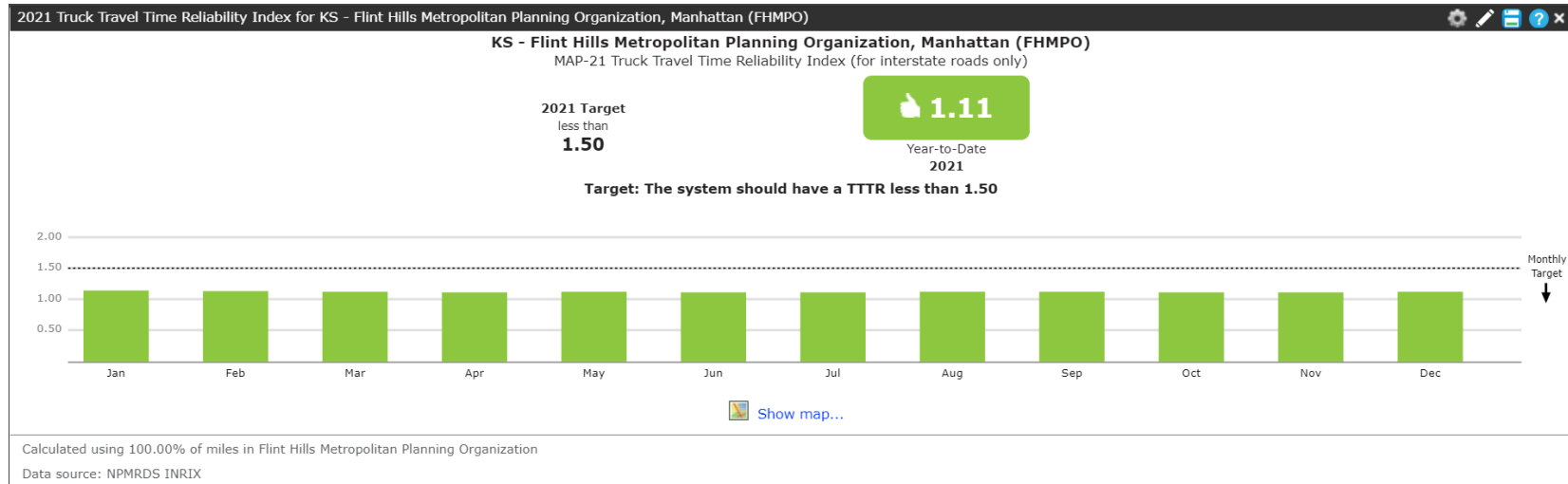
Year	TTTR	Target
2017	1.15	
2018	1.09	
2019	1.12	
2020	1.10	
2021	1.11	<1.50
2022		-
2023		<1.50
2024		<1.50
2025		<1.50
2026		<1.50







# TARGET 1: INTERSTATE FREIGHT RELIABILITY MEASURE (TTTR)





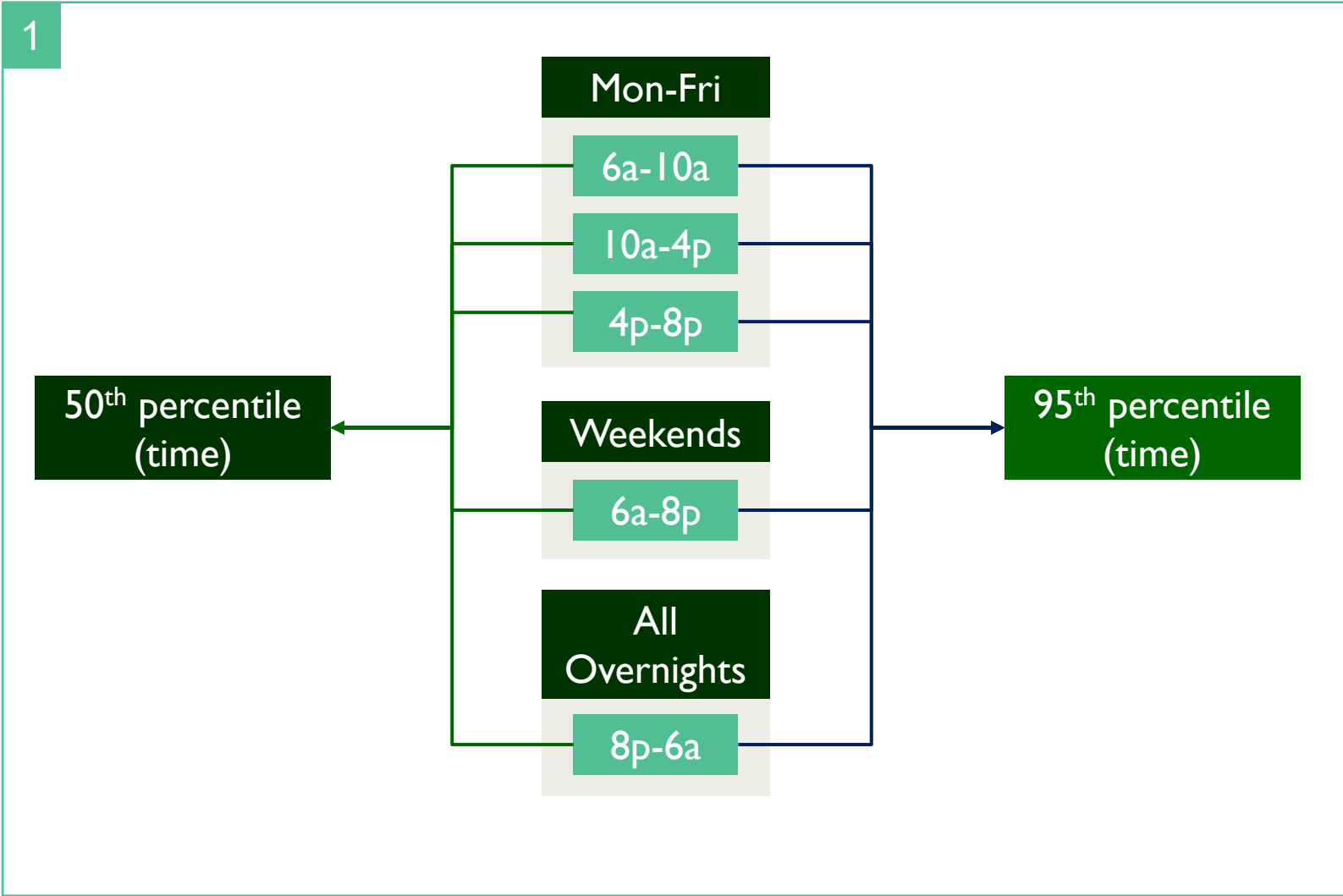
## BACKGROUND ON SYSTEM RELIABILITY & FREIGHT MANAGEMENT

- System Reliability & Freight Management data are monitored and aggregated via the Regional Integrated Transportation Information System (RITIS). RITIS is a web-based database with multiple interfaces including graphs and maps.
- FHMPO staff has access to this data and has an account based upon the 2017 FHMPO boundary. RITIS data is monitored on the Interstate and Non-Interstate NHS systems.





# TRUCK TRAVEL TIME RELIABILITY INDEX (TTTR)



2

$$\frac{95^{\text{th}} \text{ percentile}}{50^{\text{th}} \text{ percentile}} = \text{TTTR}$$

