



SAFETY PERFORMANCE MEASURES

Data Reporting Year 2023



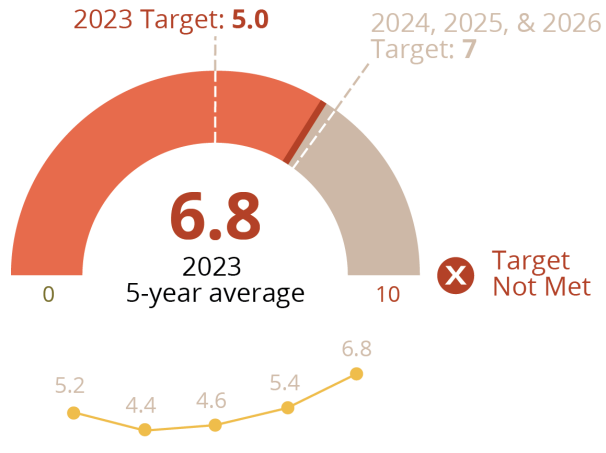
FHWA'S 5 SAFETY PERFORMANCE MEASURES

Regional 5-Year Rolling Averages of:

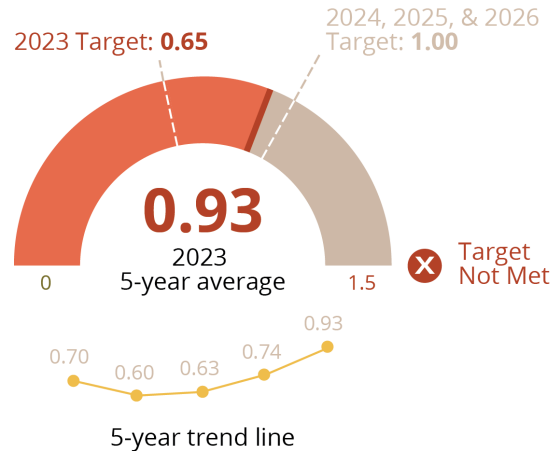
- 1 Number of Fatalities
- 2 Rate of Fatalities per 100 million VMT (Vehicle Miles Traveled)
- 3 Number of Serious Injuries
- 4 Rate of Serious Injuries per 100 million VMT
- 5 Number of Non-motorized Fatalities & Serious Injuries

SAFETY PERFORMANCE MEASURES: SUMMARY

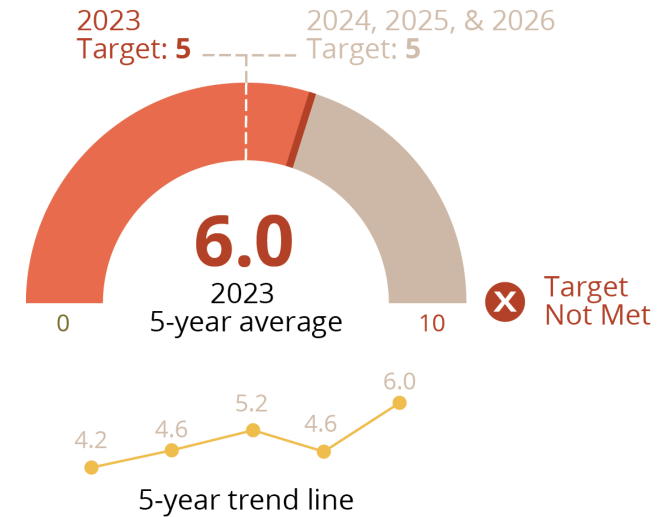
PM1: VEHICLE FATALITIES



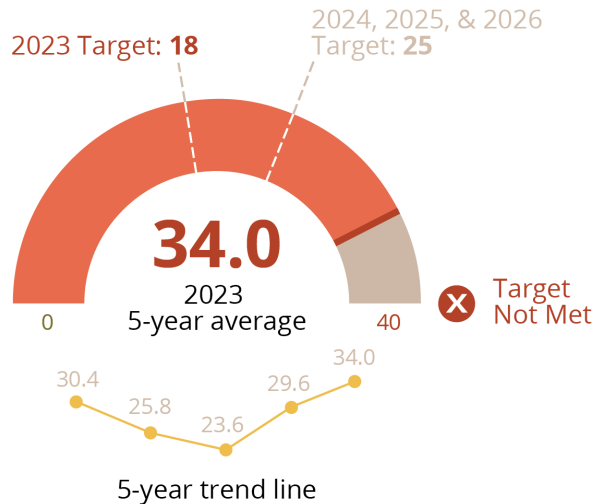
PM2: VEHICLE FATALITIES/100M VMT



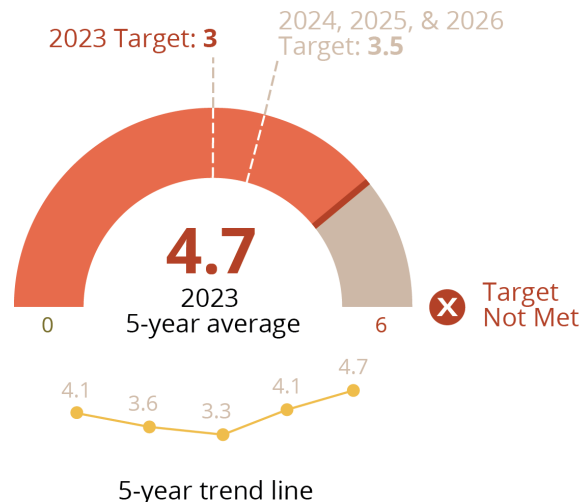
PM5: # NON-MOTORIZED FATAL + SI



PM3: # SERIOUS INJURIES



PM4: SERIOUS INJURIES/100M VMT

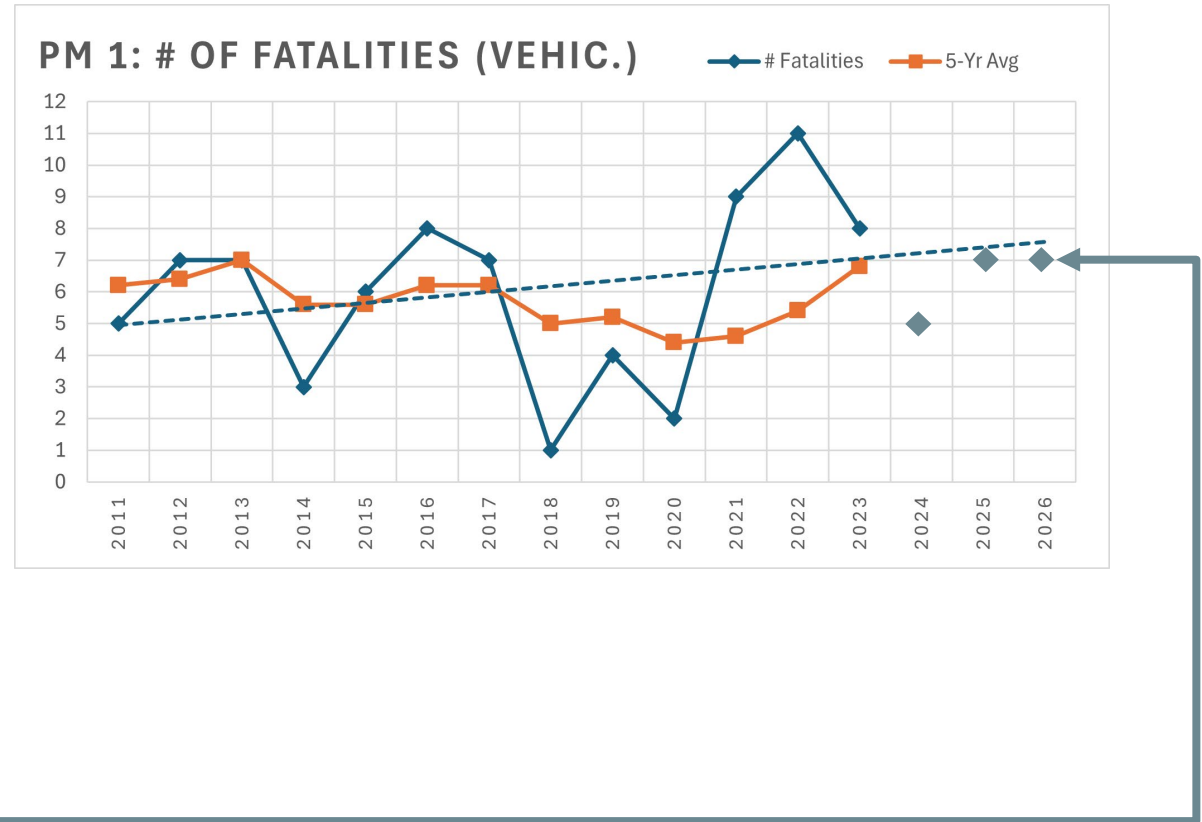


TARGET 1: # OF VEHICLE FATALITIES

Year	Annual Fatalities	5-Year Avg	Target
2011	5	6.2	
2012	7	6.4	
2013	7	7	
2014	3	5.6	
2015	6	5.6	
2016	8	6.2	
2017	7	6.2	
2018	1	5	5
2019	4	5.2	5
2020	2	4.4	5
2021	9	4.6	5
2022	11	5.4	5
2023	8	6.8	5
2024			5
2025			7
2026			7



Off Target

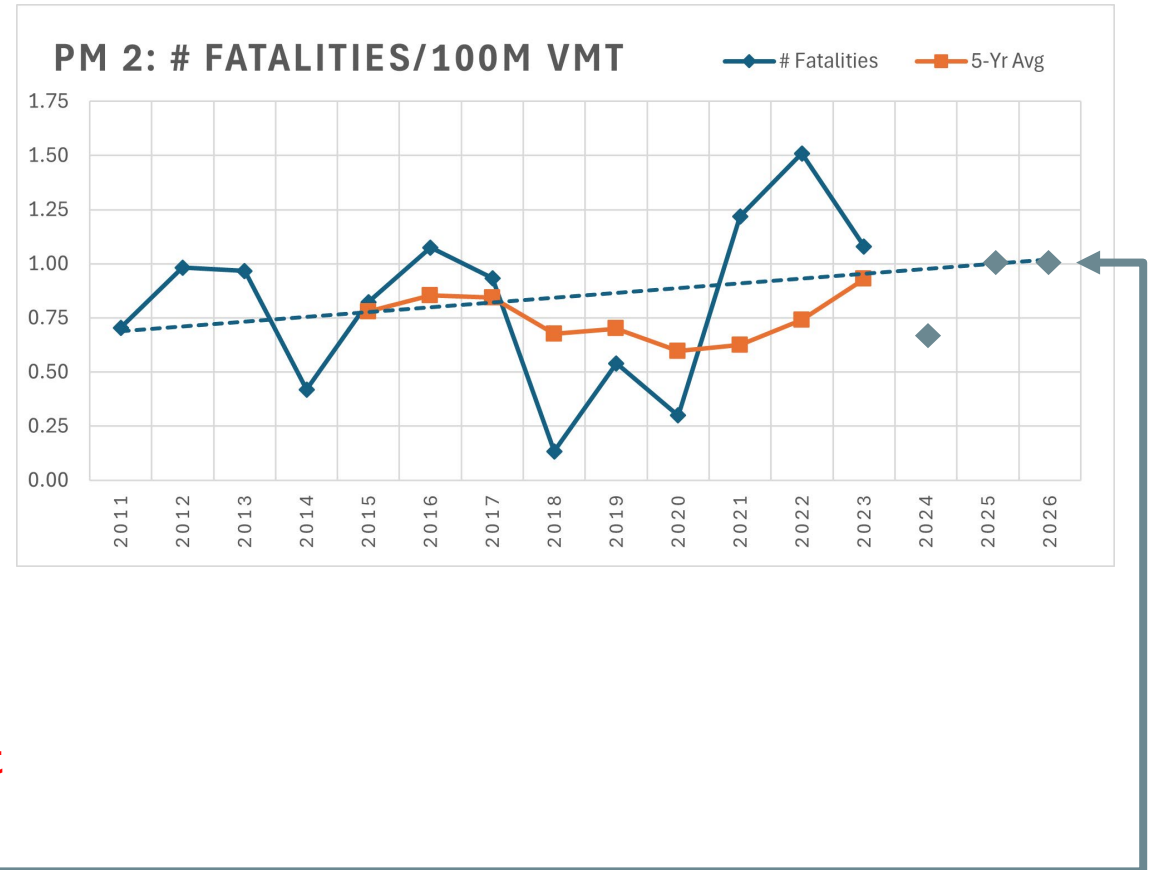


TARGET 2: RATE OF VEHICLE FATALITIES P. 100M VMT

Year	Annual Fatalities	100M VMT	Fatality Rate p/100M VMT	5-Year Avg	Target
2011	5	7.10	0.70		
2012	7	7.13	0.98		
2013	7	7.24	0.97		
2014	3	7.17	0.42		
2015	6	7.29	0.82	0.78	
2016	8	7.45	1.07	0.85	
2017	7	7.50	0.93	0.84	
2018	1	7.49	0.13	0.68	0.7
2019	4	7.41	0.54	0.70	0.65
2020	2	6.68	0.30	0.60	0.6
2021	9	7.38	1.22	0.63	0.65
2022	11	7.29	1.51	0.74	0.65
2023	8	7.41	1.08	0.93	0.65
2024					0.65
2025					
2026					



Off Target

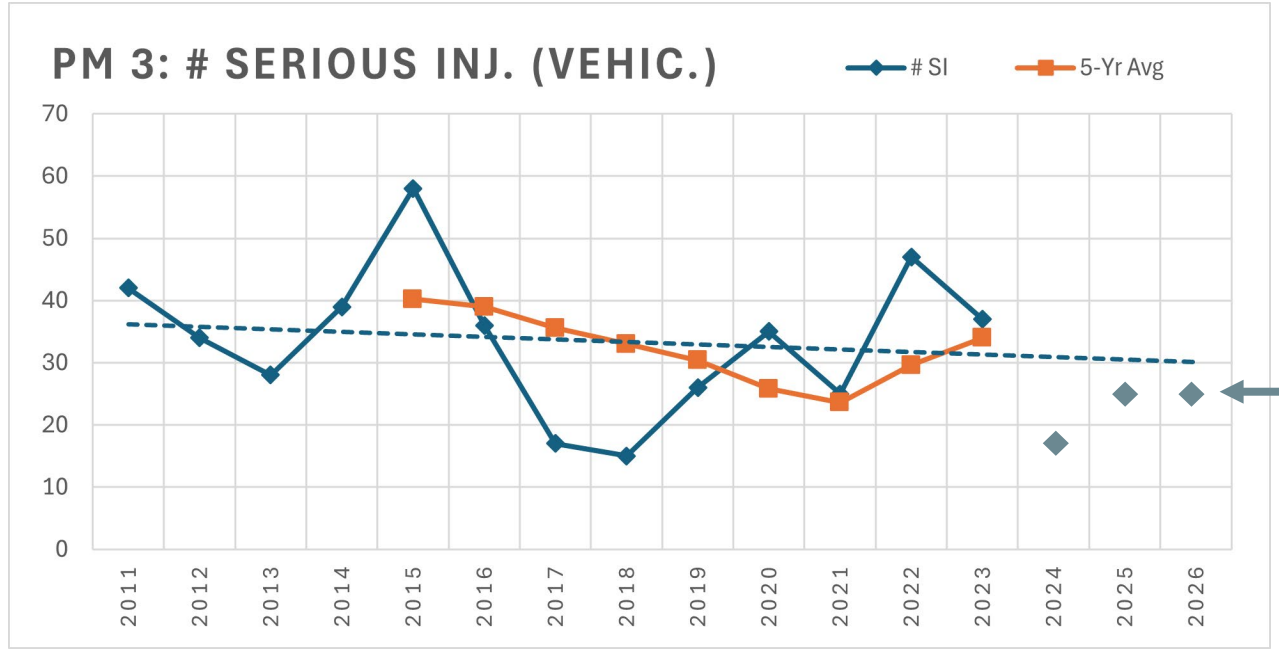


* VMT details found in Appendix A

TARGET 3: # OF SERIOUS INJURIES

Year	Annual Serious Injuries	5-Year Avg	Target
2011	42		
2012	34		
2013	28		
2014	39		
2015	58	40.2	
2016	36	39	
2017	17	35.6	
2018	15	33	32
2019	26	30.4	32
2020	35	25.8	32
2021	25	23.6	18
2022	47	29.6	18
2023	37	34	18
2024			18
2025			25
2026			25

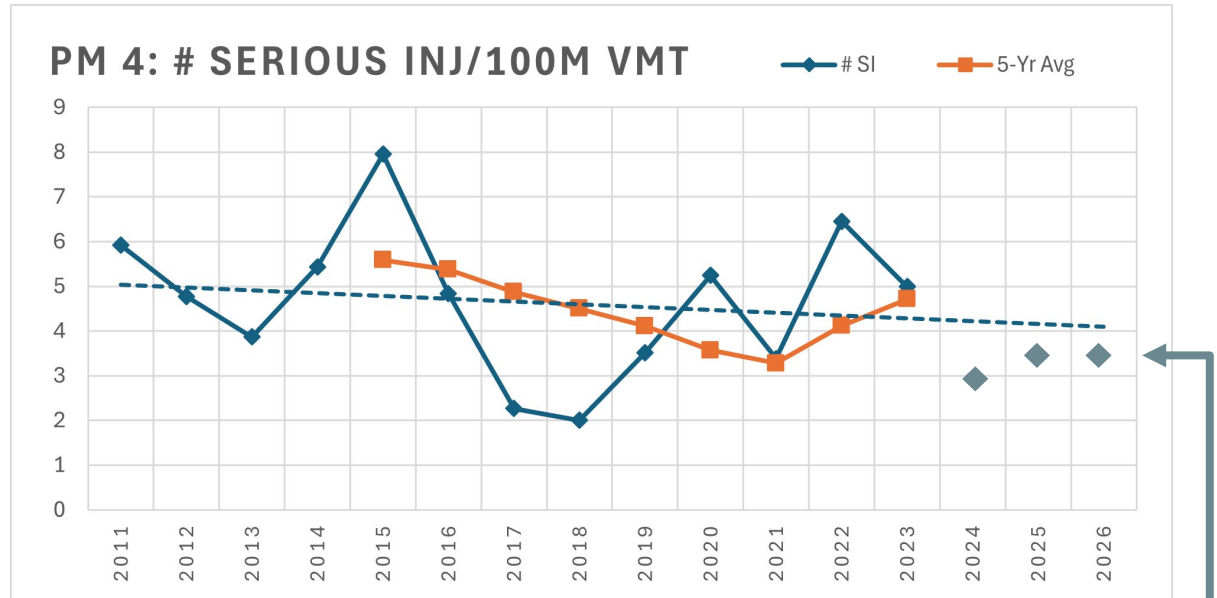
X
Off Target



TARGET 4: RATE OF SERIOUS INJURIES P. 100M VMT

Year	Annual Serious Injuries	100M VMT	SI Rate p/100M VMT	5-Year Avg	Target
2011	42	7.10	5.92		
2012	34	7.13	4.77		
2013	28	7.24	3.87		
2014	39	7.17	5.44		
2015	58	7.29	7.96	5.59	
2016	36	7.45	4.83	5.37	
2017	17	7.50	2.27	4.87	
2018	15	7.49	2.00	4.50	4.4
2019	26	7.41	3.51	4.11	4.3
2020	35	6.68	5.24	3.57	4.2
2021	25	7.38	3.39	3.28	3
2022	47	7.29	6.45	4.12	3
2023	37	7.41	4.99	4.72	3
2024					3
2025					3.5
2026					3.5

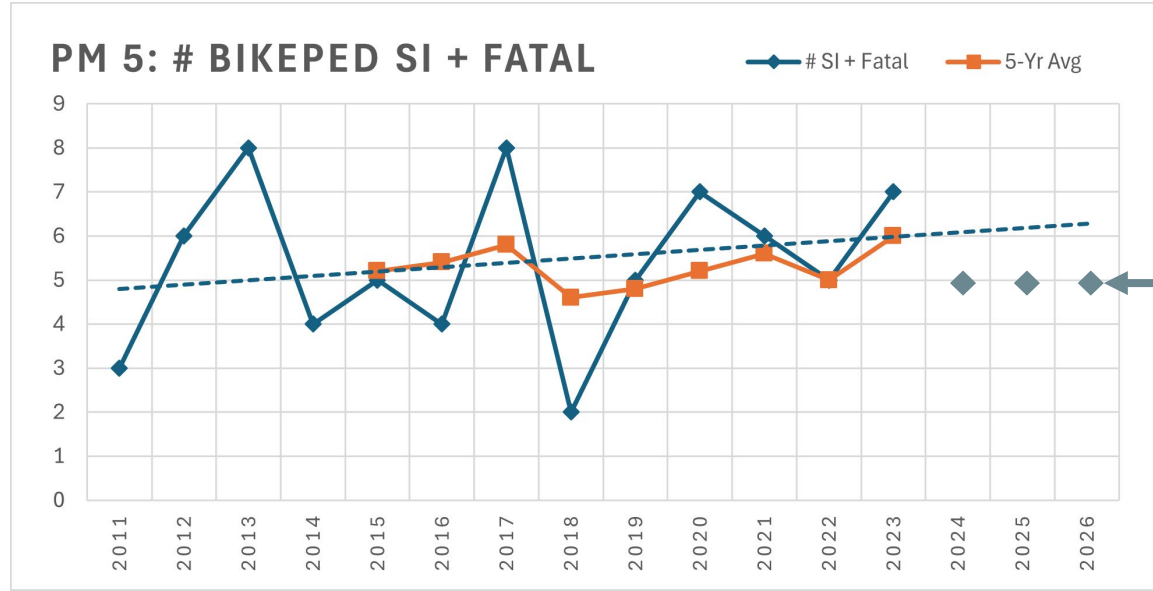
X
Off Target



* VMT details found in Appendix A






TARGET 5: # OF NON-VEHICULAR FATALITIES & SERIOUS INJURIES

Year	Annual Fatal + SI	5-Year Avg	Target
2011	3		
2012	6		
2013	8		
2014	4		
2015	5	5.2	
2016	4	5.4	
2017	8	5.8	
2018	2	4.6	1
2019	5	4.8	0
2020	7	5.2	5
2021	6	5.6	5
2022	5	5	5
2023	7	6	5
2024			5
2025			5
2026			5



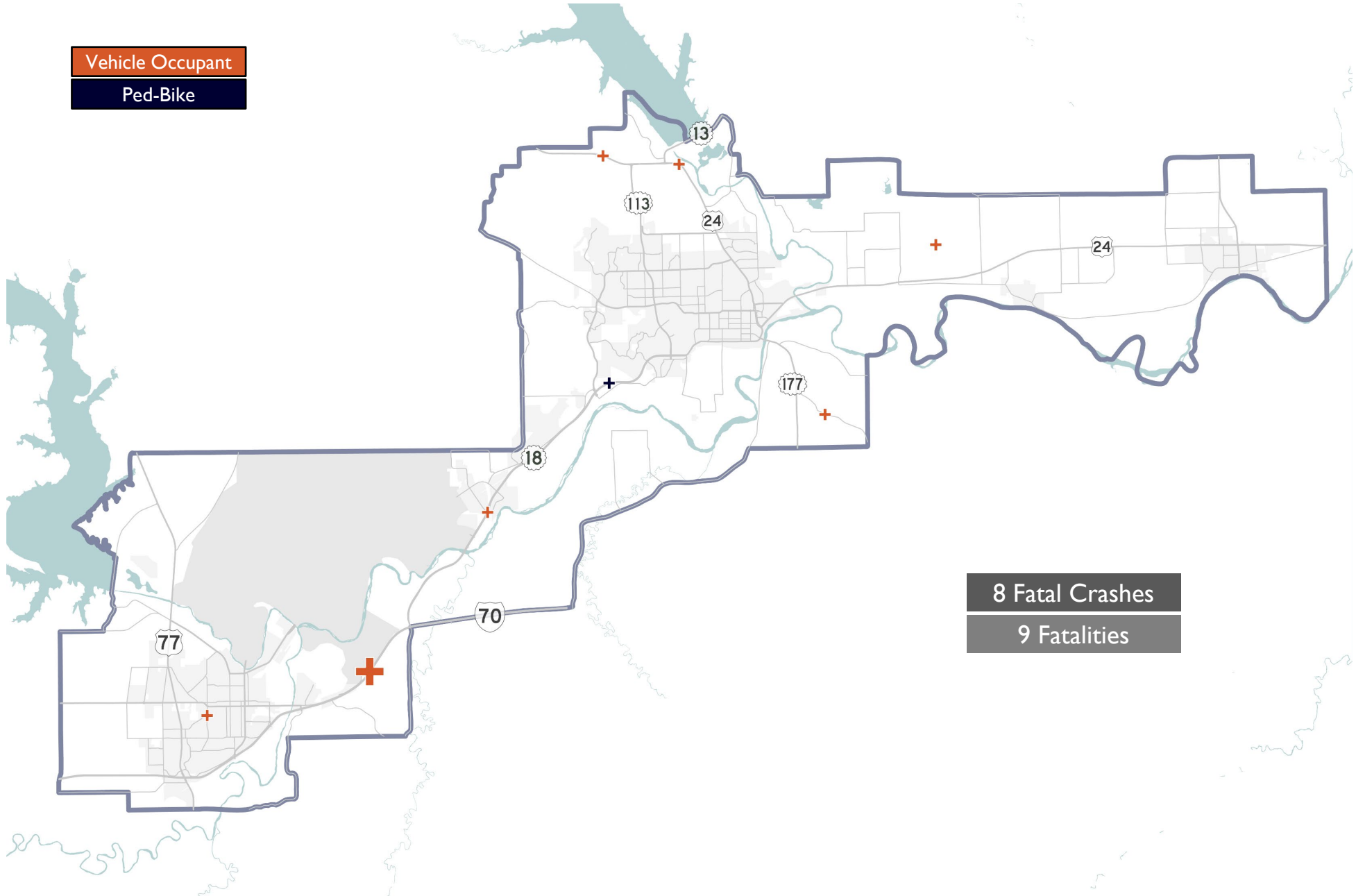
X
Off Target

TARGET SUMMARY

Performance Measure		2023 5-Year Avg	2023 Targets (set in 2018)	Future Targets
1	# of Fatalities	6.8	5  Off Target	2024: 7 2025: 7 2026: 7
2	Rate of Fatalities per 100 million VMT	0.93	0.65  Off Target	2024: 1.00 2025: 1.00 2026: 1.00
3	# of Serious Injuries	34	18  Off Target	2024: 25 2025: 25 2026: 25
4	Rate of Serious Injuries per 100 million VMT	4.7	3.0  Off Target	2024: 3.5 2025: 3.5 2026: 3.5
5	# of Non-Vehicular Fatalities & Serious Injuries	6	5  Off Target	2024: 5 2025: 5 2026: 5

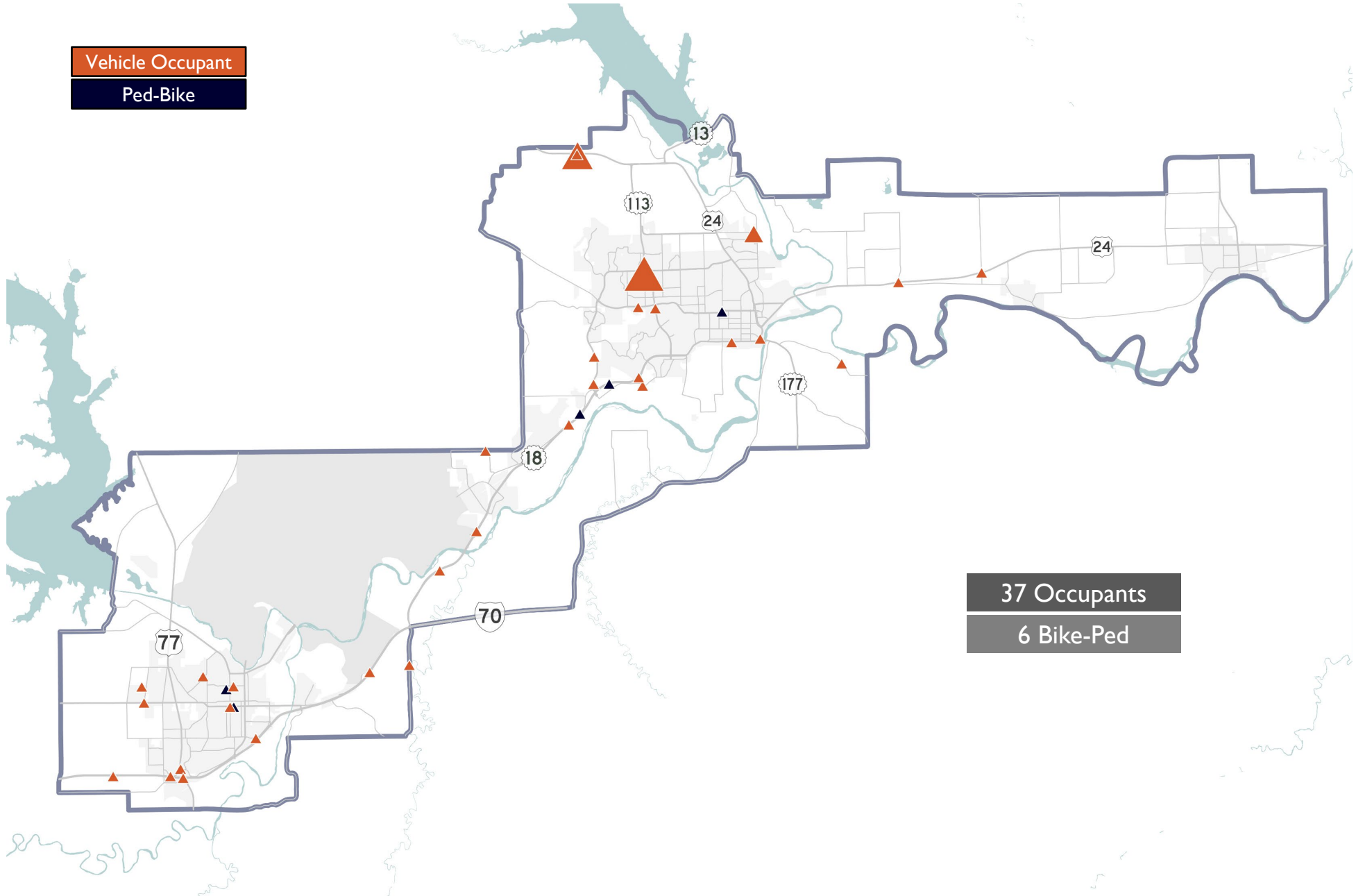
CRASH MAPS: FATALITIES

Vehicle Occupant
Ped-Bike



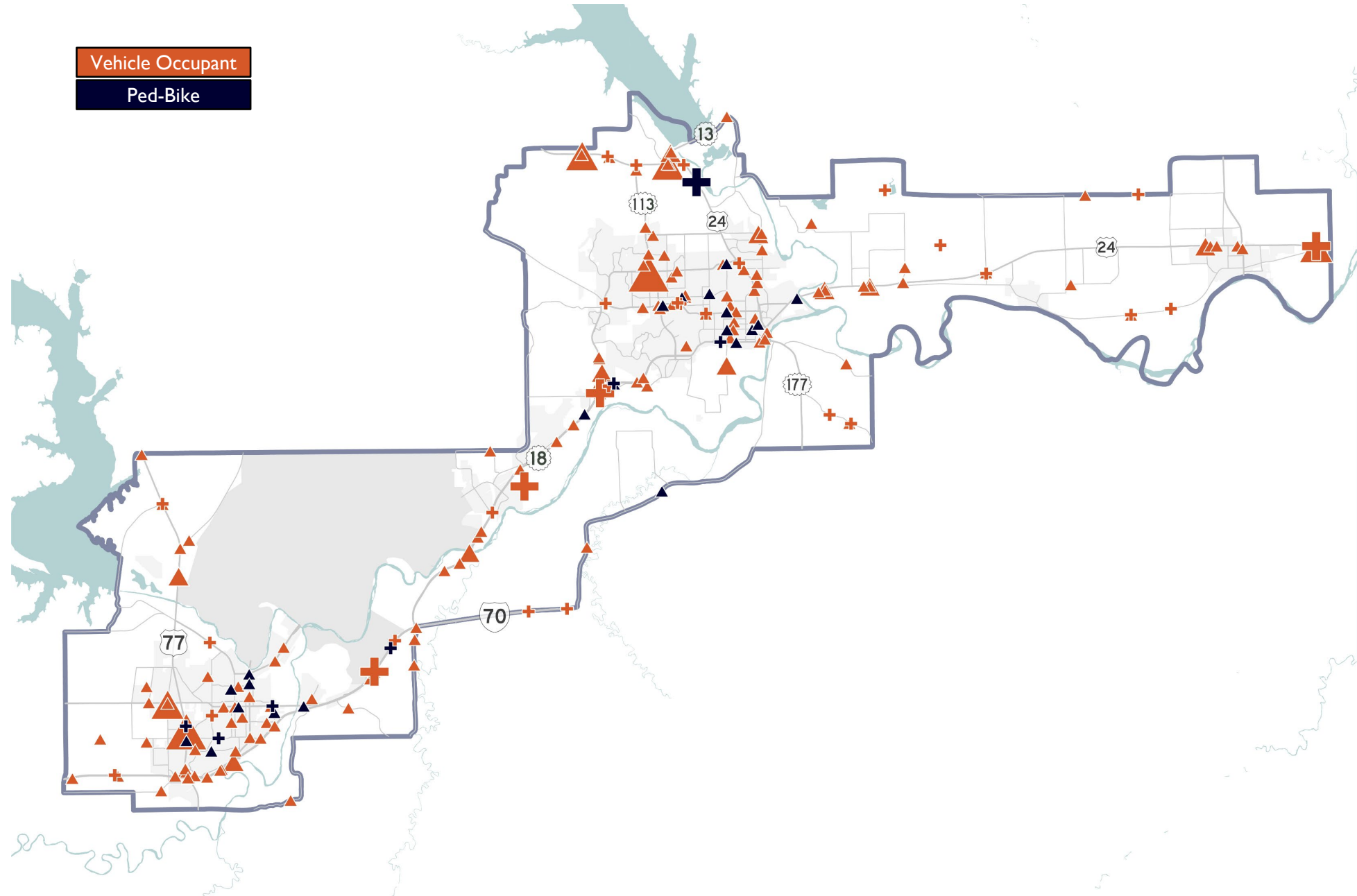
CRASH MAPS: SERIOUS INJURY

Vehicle Occupant
Ped-Bike

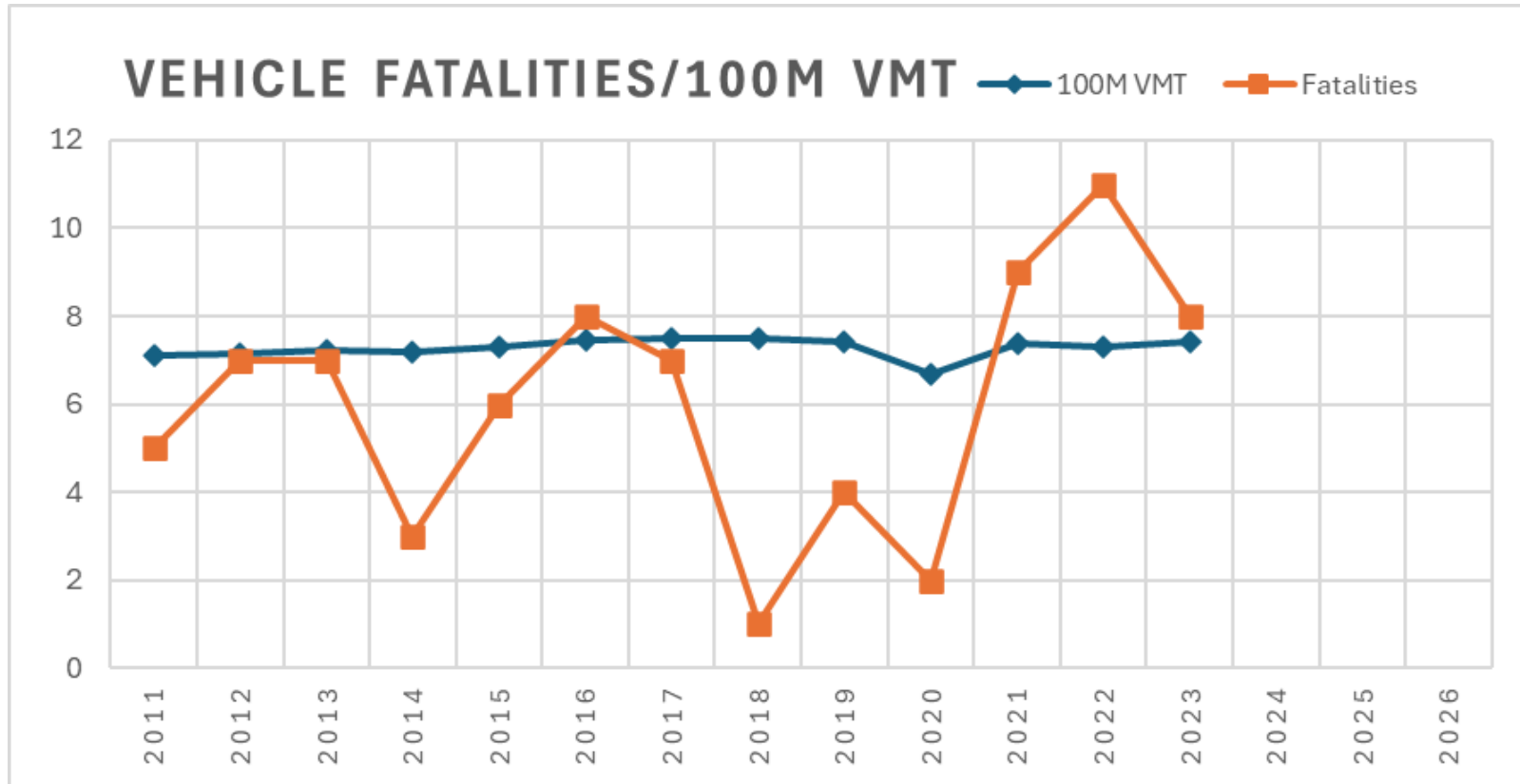


37 Occupants
6 Bike-Ped

FATAL/SERIOUS INJ. CRASHES: 2019-2023

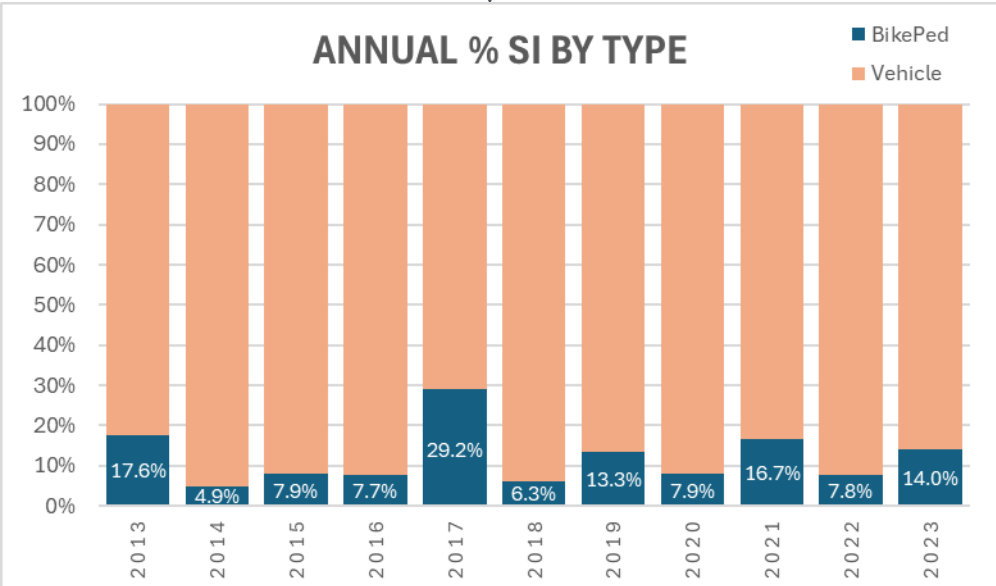
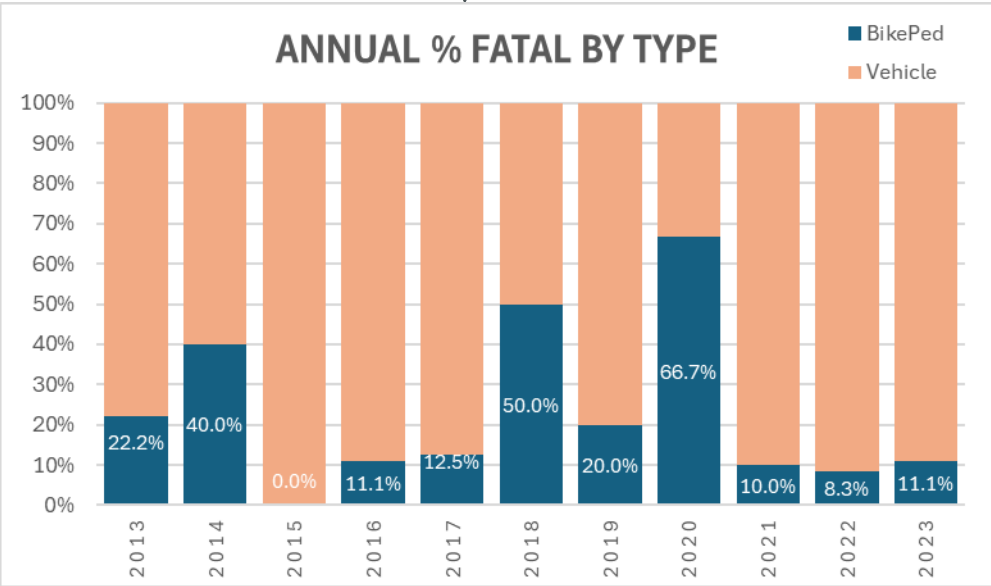
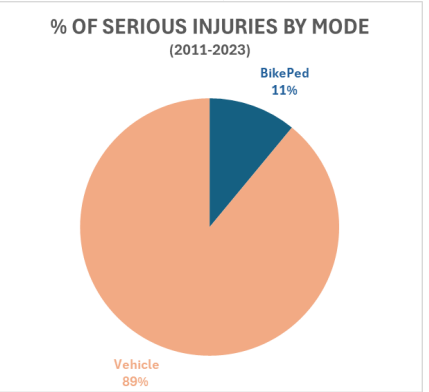
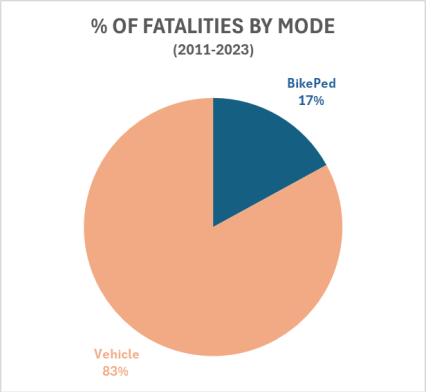
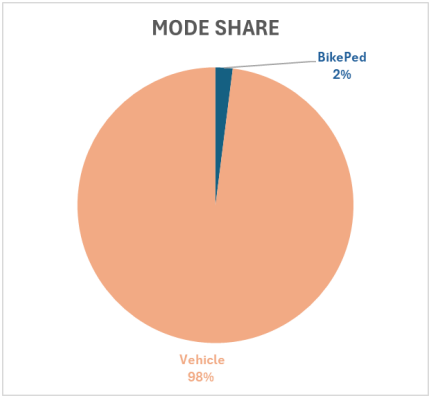
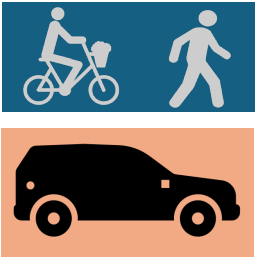


TRENDS & CONCERNS



- ✚ Minimal VMT growth
- 2021 jump in fatalities – more fatalities in about the same number of miles driven

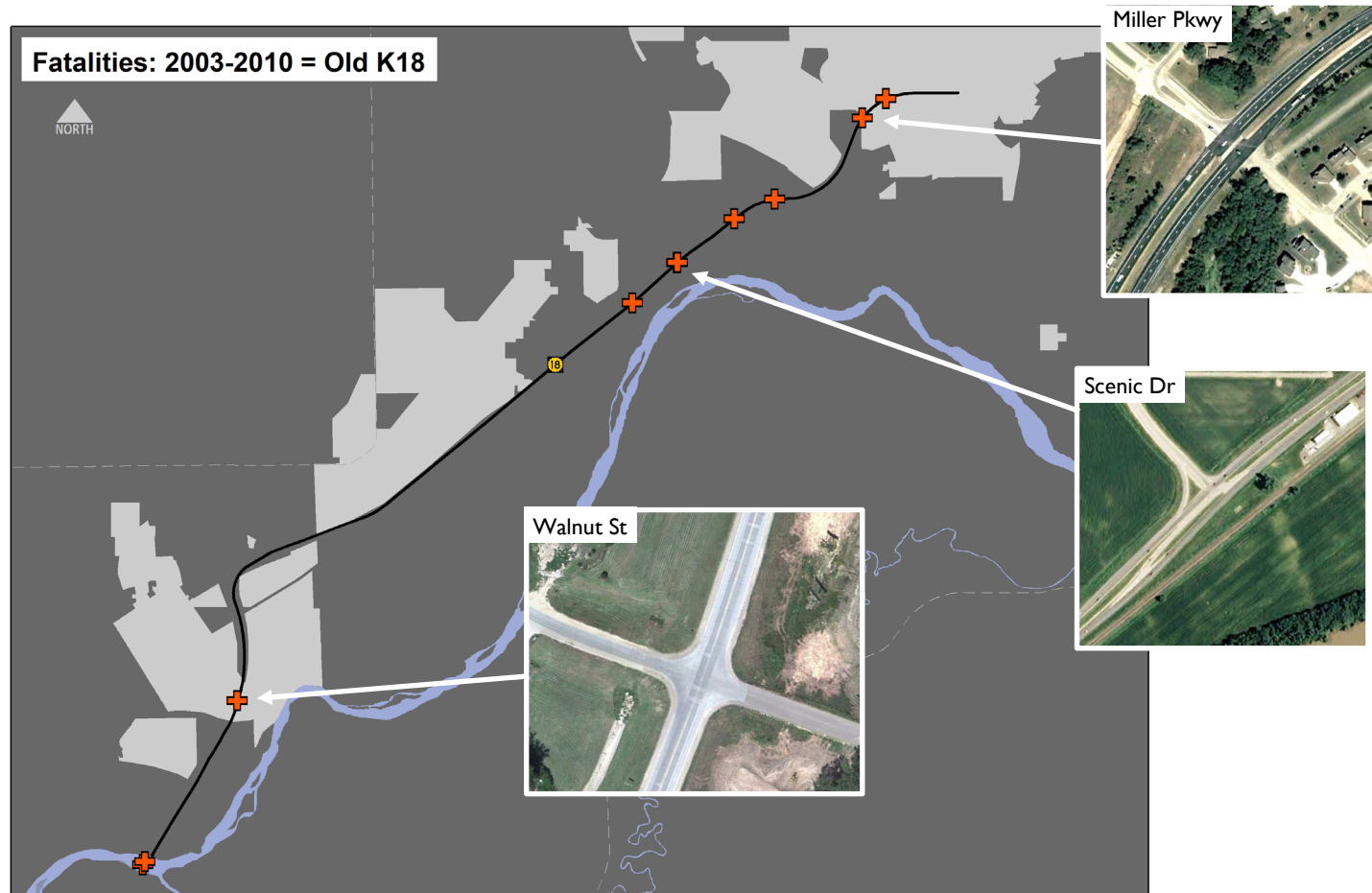
TRENDS & CONCERNS



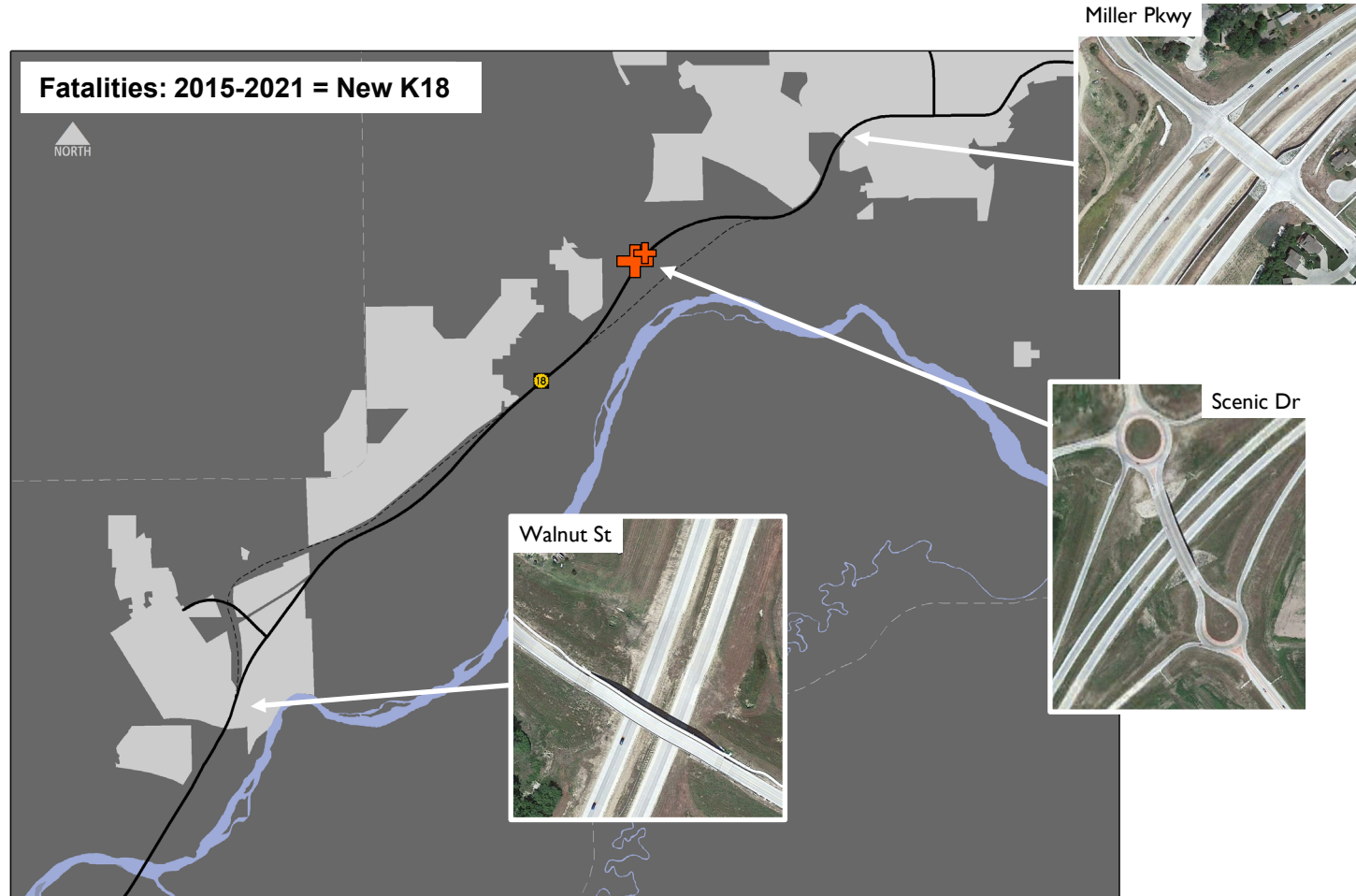
Fatalities
16 **78**

Serious Injuries
54 **439**

K18: BEFORE & AFTER



K18: BEFORE & AFTER



K18: BEFORE & AFTER

Years	Road Type	# of Crashes	Crashes p.Year	# of Fatalities	Fatalities p. Year	# of Serious Injuries	Serious Injuries p.Year
2004-10	4-Lane	676	96.5	9	1.29	40	5.71
2015-21	4-Lane Limited Access	428	61.1	4	0.57	11	1.57

37%
Reduction

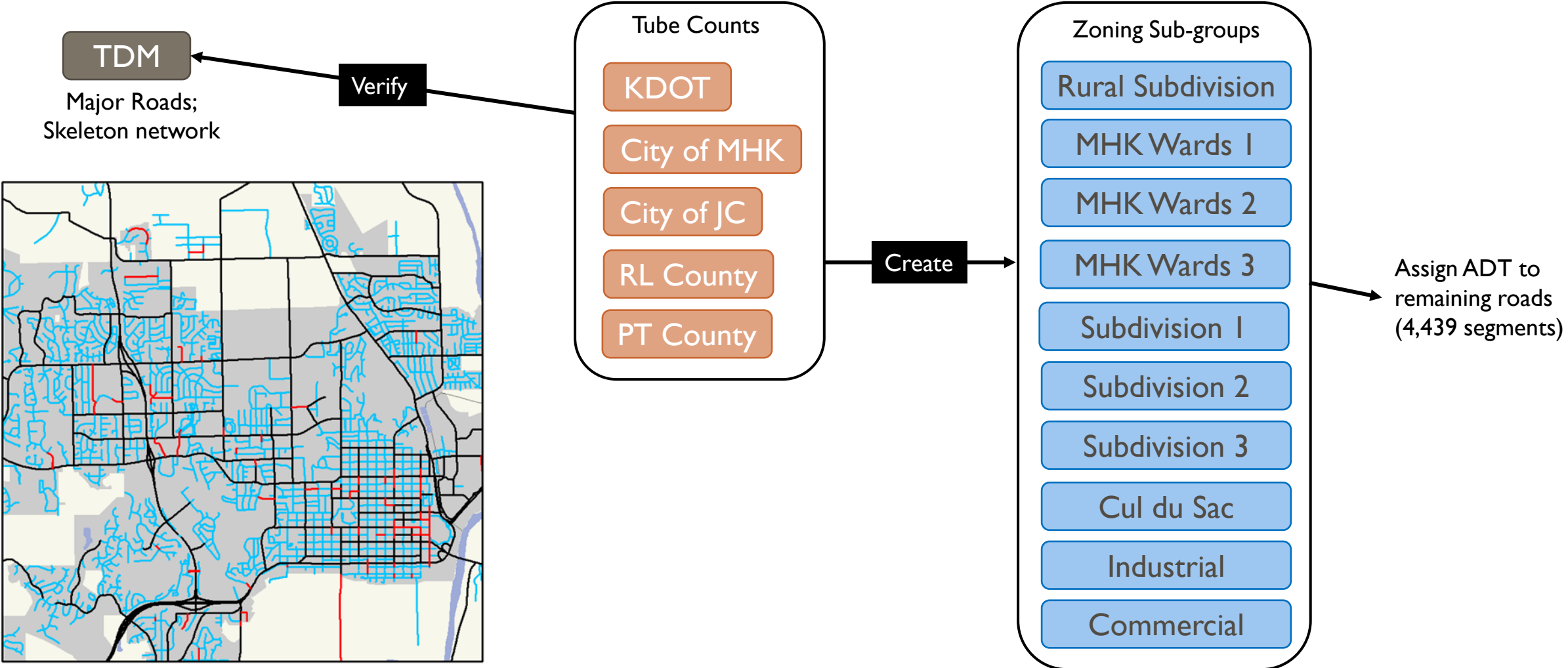
56%
Reduction

73%
Reduction

APPENDIX A

CALCULATING VMT

1. Calculate ADT for all Road Segments



APPENDIX A

CALCULATING VMT

2. Calculate VMT from ADT for all Road Segments

$$\left(\text{Road Length (ft)} \div 5280 \right) \times \text{ADT} = \text{Daily VMT}$$

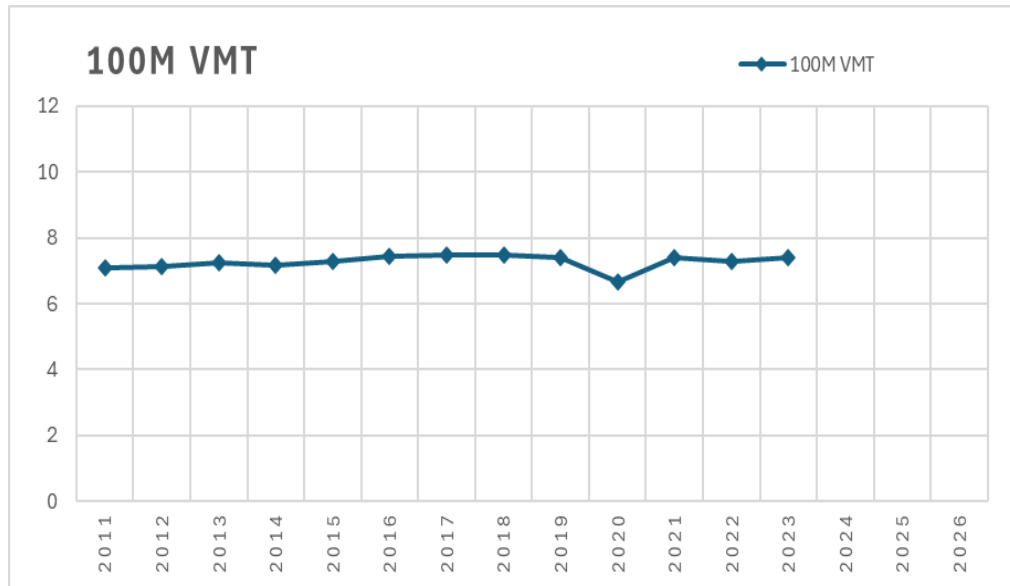
$$\times 365 =$$

Annual VMT

2016 VMT: 744,949,486



2023 VMT: 741,327,245



Annual % change based on KDOT data