Dubuque Metropolitan Area Transportation Study (DMATS)

2024 Performance Measures Report Long Range Transportation Plan

Table of Contents

Equity	4
Economic Development	6
Public Health	8
Mode Choice	11
System Maintenance	13
Environment	18
Safety	20
Efficiency	24
Technology	26



Introduction

Purpose

The Dubuque Metropolitan Area Transportation Study (DMATS) adopted its Long-Range Transportation Plan (LRTP) in October 2021. This plan outlines how DMATS will manage its transportation system over the next 30 years. The LRTP serves as a guide for decision-making, helping local leaders identify and prioritize projects that align with the goals set by both DMATS and the federal government. The plan establishes nine goals, each with objectives and performance measures to track progress over the next three decades.

Federal Performance Measures

The Infrastructure Investment and Jobs Act (IIJA), signed into law on November 15, 2021, provides funding for surface transportation infrastructure and establishes national transportation planning goals. The IIJA requires states and Metropolitan Planning Organizations (MPOs) to demonstrate progress toward these goals using performance measures. States and MPOs must set targets for each measure and track their progress accordingly.

For some goals, DMATS has adopted performance measures and targets established by the Iowa, Illinois, and Wisconsin Departments of Transportation (DOTs). In other areas, DMATS has developed its own performance measures and targets. This report tracks the Iowa DOT's statewide performance measures and targets, while performance measures and targets for all three state DOTs are included in the DMATS Transportation Improvement Program (TIP).

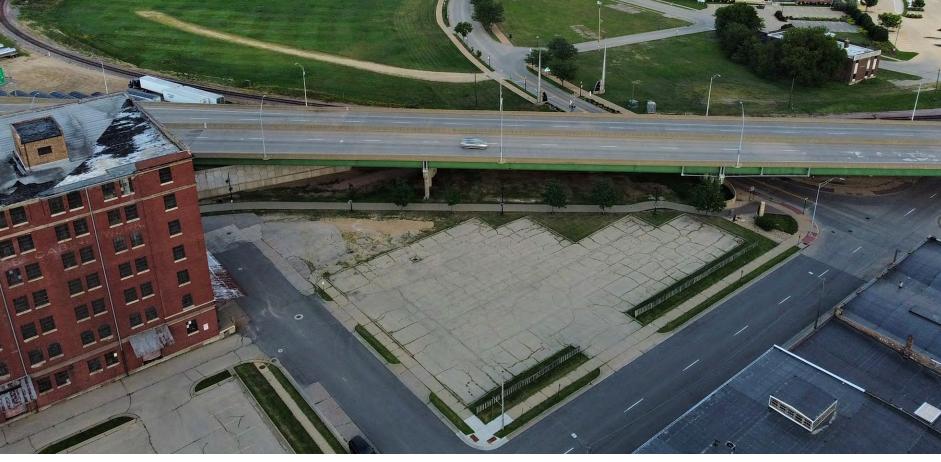
This report provides an update on the progress made toward these targets between the adoption of the LRTP in 2021 and 2024.



the progress made toward each target using the indicators listed above.

Equity

Goal: Ensure that all have access to reliable and affordable transportation.



Objective: Improve Transportation Affordability

Performance Measure	Target	Data and Trends	Current Status	Analysis
Reduce the Transportation and Housing Cost Burden on Area Low and Moderate Income Households as Measured by the H+T Affordability Index Baseline: 56% (2015)	≤45%	<section-header></section-header>	55% (2022)	Transportation is typically the second largest expense for households. The H+T Index determines that areas are affordable if their combined Housing and Transportation Costs are no greater than 45% of household income. Transportation costs are lower in efficient, compact neighborhoods, with access to jobs, transit, and amenities. According to the index, in the DMATS region, combined housing and transportation costs, on average, were 55% of a moderate income household's annual income in 2022.

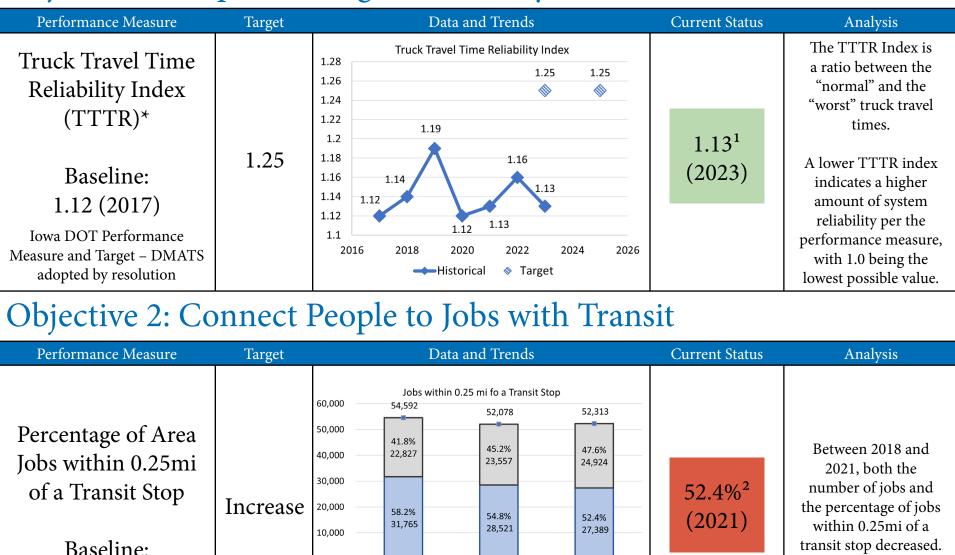
Source: H+T Affordability Index, https://htaindex.cnt.org/.Dubuque MPO Area. Updated 2022, Accessed 12/2024

Economic Development

Goal: Encourage regional economic development.



Objective 1: Improve Freight Reliability



2020

□ Jobs within 0.25mi of a Transit Stop □ All other Jobs ■ DMATS Area Jobs

2021

*Indicates a Federal Performance Measure

58.2% (2018)

¹Source: Iowa DOT System Performance and Freight Performance Measures: Status Update, September 30, 2024. ²Source: US Census Bureau, On the Map, 2021. https://onthemap.ces.census.gov/. Accessed December 2024.

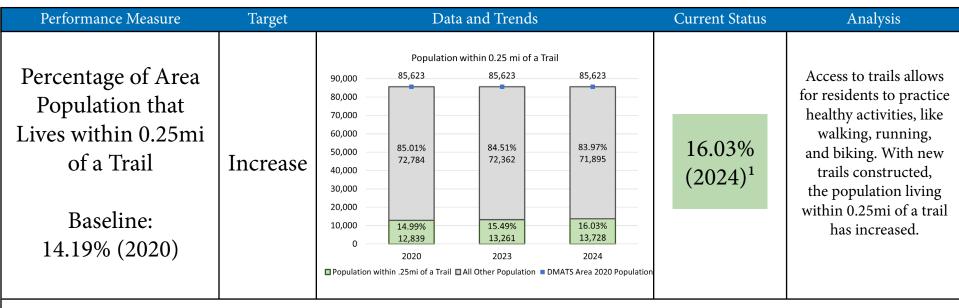
2018

Public Health

Goal: Improve public health.



Objective 1: Increase Trail Accessibility



Objective 2: Provide More On-Road Bicycle Facilities

Performance Measure	Target	D	ata and Trends	}	Current Status	Analysis
Centerline Miles of Roads with On-Road Bicycle Facilities Baseline: 51.94 mi (2019)	Increase	Miles of O 80 70 60 51.94 50 40 30 20 10 0 2019	n-Road Bicycle F	Facilities 74.35	74.35 mi (2024) ¹	On-Road Bicycle Facilities include: Signed On-Road Routes, Completed Safety Project (aka Complete Streets), Paved Shoulders, and Bike Lanes. The number of On- Road Bicycle Facilities has increased since 2019, allowing for safer travel.

¹Source: ESRI 2020 Census Block Population Point Data. ECIA trails database, updated 2024.

Objective 3: Provide More Multi-Use Trails in the Area



JULE OPERATIONS AND TRAINING CENTER

Mode Choice

Goal: Build a multi-modal transportation system.



Objective: Reduce the Share of Commute Trips Made by Personal Vehicles

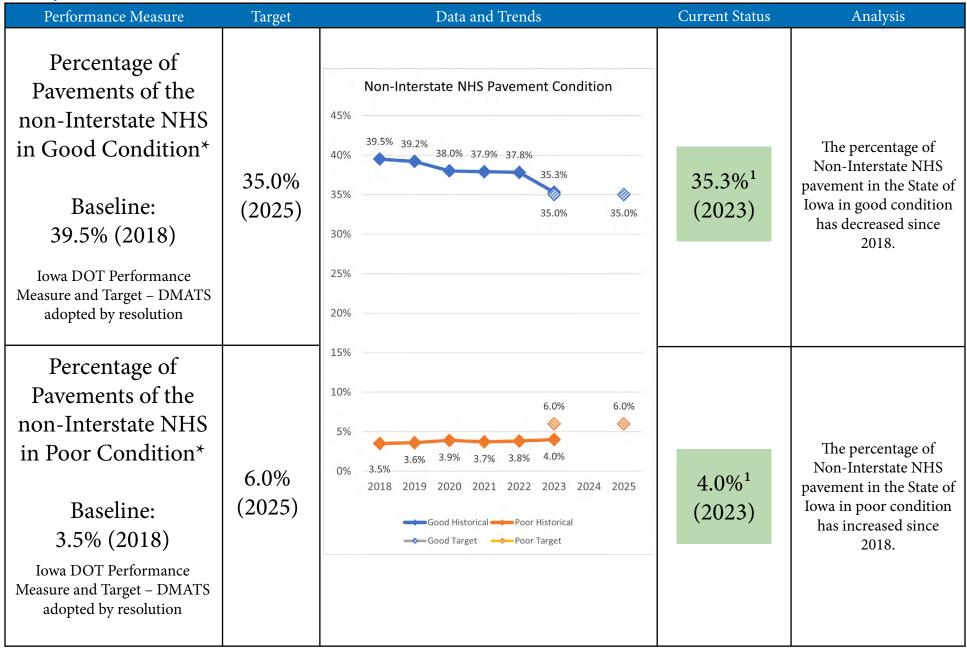
Performance Measure	Target	Data and Trends	Current Status	Analysis
Percentage of Workers Commuting via Transit Baseline: 1.43% (2019)	Increase	Mode of Transportation to Work 2023 75.34% 2022 77.19% 2021 78.89% 2020 78.23% 2019 80.70% 2018 80.65% 2017 80.29%	1.61% ¹ (2023)	Public transit provides reliable and affordable transportation. The percentage of workers commuting via transit has decreased since 2019.
Percentage of Workers Commuting via Walking and Biking Baseline: 4.32% (2019)	Increase	0% 20% 40% 60% 80% 100% Drove Alone Carpooled Walked or Biked Worked from Home Worked from Home Public Transportation (excluding taxicab) Other Other Mode of Transportation to Work 12% 10.87% 10% 8.55% 8.91% 8% 7.19% 6% 5.05% 4.32% 4% 3.65% 3.88%	3.88% ¹ (2023)	Walking and biking contribute to reducing roadway congestion and improving air quality and physical health. The percentage of workers commuting via walking and biking has decreased from 4.32% in 2019 to 3.88% in 2023.
Percentage of Workers Commuting via Carpool Baseline: 8.91% (2019)	Increase	4% 3.75% 3.68% 0% 1.51% 1.43% 1.19% 1.61% 2017 2018 2019 2020 2021 2022 2023 —Carpooled —Walked or Biked —Public Transportation (excluding taxicab) —Worked from Home Between 2019 and 2023 the percentage of workers commuting by all modes decreased as more people worked from home. Work from home increased from 3.68% in 2019 to 10.87% in 2023.	7.19% ¹ (2023)	Carpooling can reduce the number of vehicles on the road. The number of workers carpooling declined between 2019 and 2023.

¹Source: US Census Bureau, ACS 5-Year Estimates, 2019-2023

System Maintenance

Goal: Maintain transportation infrastructure.

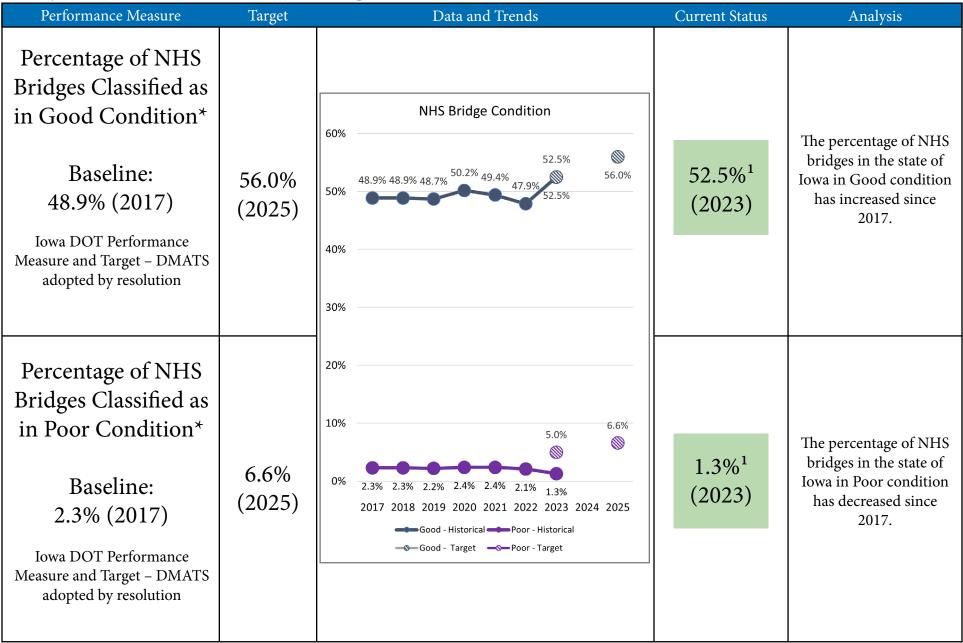
Objective: Maintain Non-Interstate Pavement



*Indicates a Federal Performance Measure

¹Source: Iowa DOT Pavement and Bridge Performance Measures: Status Update and 4-Year Target Adjustments - September 30, 2024

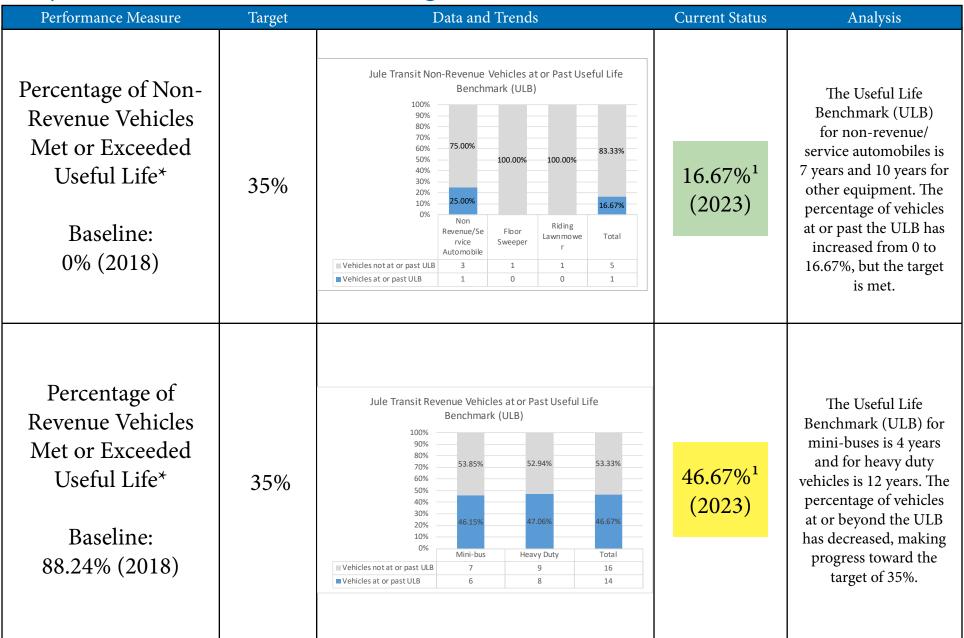
Objective: Maintain Bridges



*Indicates a Federal Performance Measure

¹Source: Iowa DOT Pavement and Bridge Performance Measures: Status Update and 4-Year Target Adjustments - September 30, 2024

Objective: Transit Asset Management

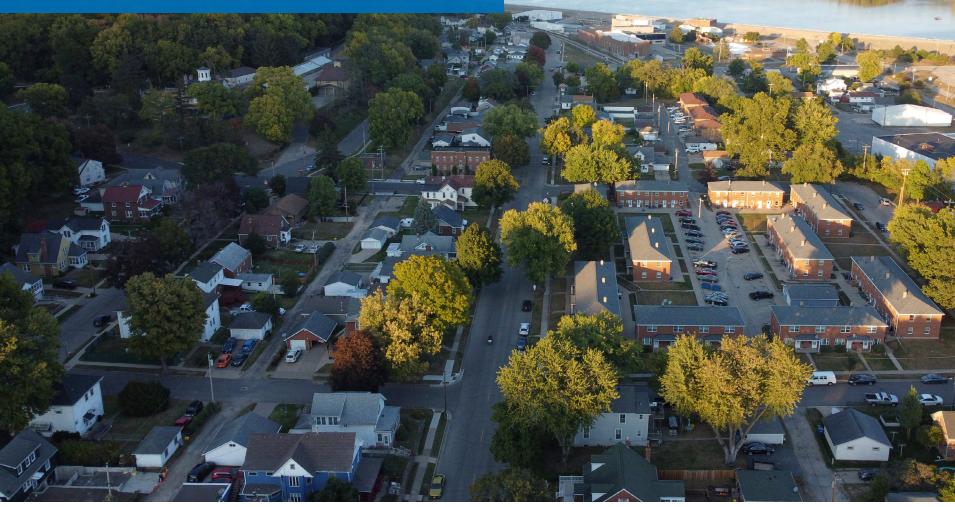


Objective: Transit Asset Management

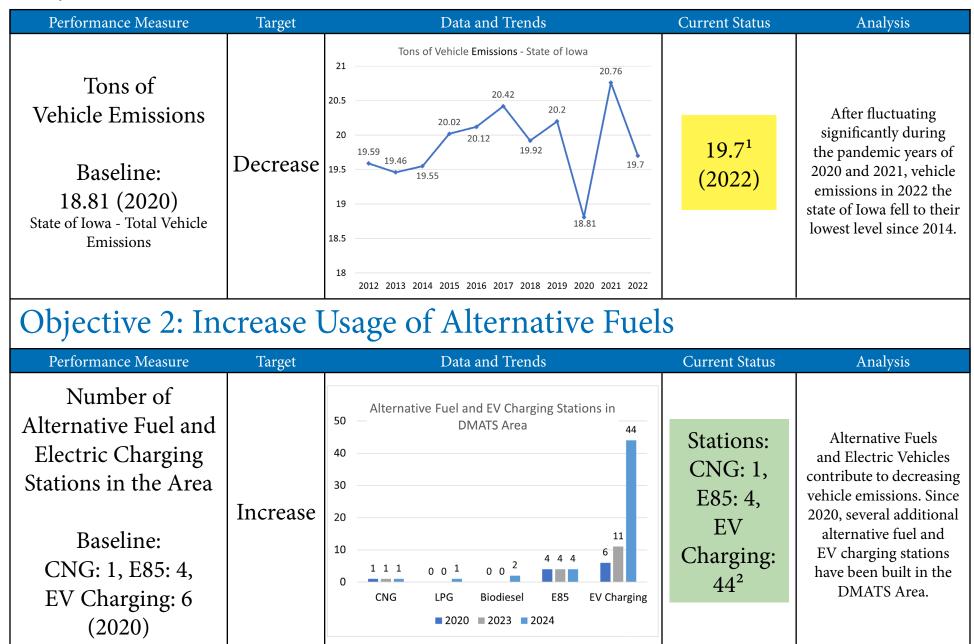
Performance Measure	Target		Data	a and T	Frends			Current Status	Analysis
Percentage of Assets with Condition Rating Below 3.0 on FTA TERM Scale* Baseline: 0% (2018)	0%	FacilitiesCountIntermodal Facility1Operations & Training Center1	Avg Age 8.0 5.0	Avg. TERM Cond. 5.0	Avg. Value \$15.7 M \$6.3 M	TERM Scale Cond. 5	TERM Scale Target 5 Excellent 5 Excellent	0% ¹ (2023)	Both of the Jule's facilities received a rating of 5 on the FTA's Transit Economic Requirements Model (TERM), indicating that both are in excellent condition. The target of maintaining 0% percent with a TERM rating of 3.0 or below is met.

Environment

Goal: Protect and enhance the natural environment.



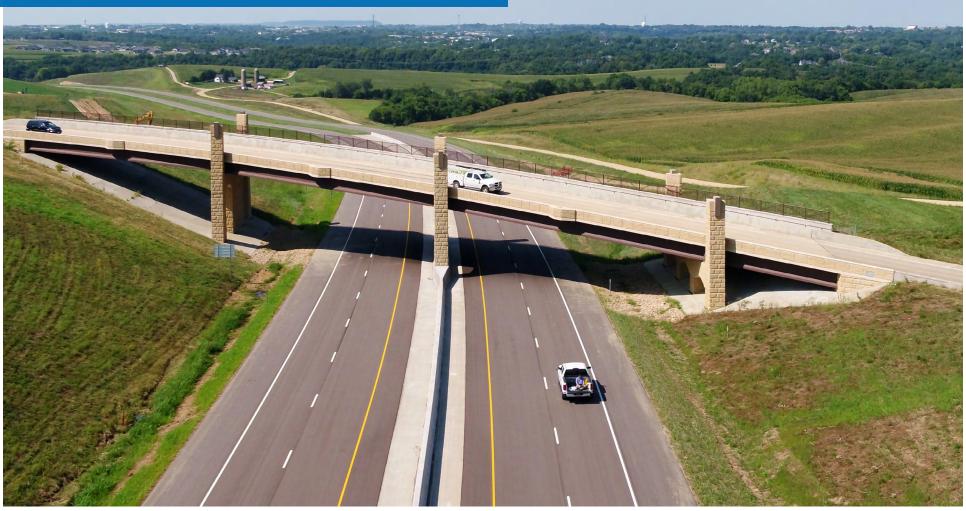
Objective 1: Reduce Vehicle Emissions



¹Source: Iowa DNR, 2022 Iowa Statewide Greenhouse Gas Emissions Inventory Report ²Source: US Department of Energy, Alternative Fueling Station Locator, Accessed 12-2024



Goal: Improve transportation safety.



Objective: Reduce Transportation Related Injuries and Deaths

Performance Measure	Target	Data and Trends	Current Status	Analysis
Number of Fatalities* Baseline: 342 (2020) Iowa DOT Performance Measure and Target – DMATS adopted by resolution	365.8 (21-25)	Number of Fatalities 390 377 380 377 370 365.8 360 356 360 356 360 356 360 356 360 356 360 356 360 356 360 356 370 356 360 356 310 319 300 319 2018 2019 2020 2021 2022 2023 2024 2025 Fatalities © Fatality Targets	377 ¹ (2023)	Decreasing the number of fatalities occurring from motor vehicle crashes is a primary goal in improving the safety of the transportation system. The number of fatalities increased significantly between 2022 and 2023.
Rate of Fatalities* Baseline: 1.159 (2020) Iowa DOT Performance Measure and Target – DMATS adopted by resolution	1.085 (21-25)	Fatality Rate 1.400 1.148 1.121 1.077 1.085 1.000 0.952 0.998 1.066 1.016 Image: Colspan="2">Image: Colspan="2" Image: Colspan="	1.121 ¹ (2023)	The Rate of Fatalities is based on the ratio of Fatalities to Vehicle Miles Traveled. The Rate of Fatalities has increased between 2022 and 2023.

*Indicates a Federal Performance Measure

¹Source: Iowa DOT FHWA 2025 Safety Targets, August 2024.

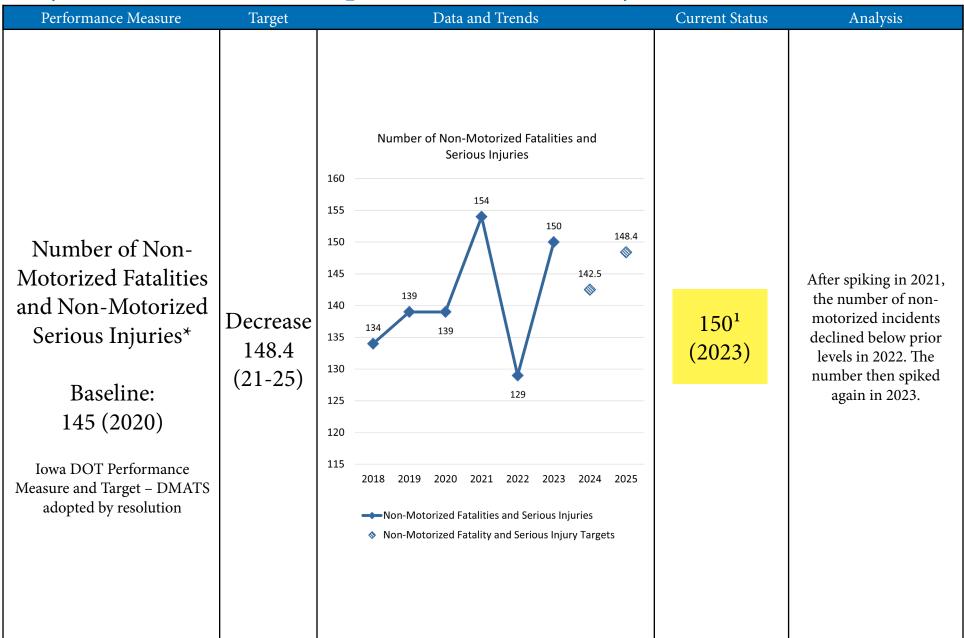
Objective: Reduce Transportation Related Injuries and Deaths

Performance Measure	Target	Data and Trends	Current Status	Analysis
Number of Serious Injuries* Baseline: 1310 (2020) Iowa DOT Performance Measure and Target – DMATS adopted by resolution	1,496.1 (21-25)	Number of Serious Injuires 1,550 1,496 1,500 1,435 1,450 1,435 1,400 1,349 1,350 1,312 1,312 1,308 1,300 1,312 1,250 2018 2018 2019 2020 2021 2022 2023 2024 2025 Serious Injuries Serious Injury Targets	1,388 ¹ (2023)	The number of serious injuries in the state of Iowa increased in 2021 and declined in 2022 and 2023.
Rate of Serious Injuries* Baseline: 4.23 (2020) Iowa DOT Performance Measure and Target – DMATS adopted by resolution	4.391 (21-25)	4.5 Serious Injury Rate 4.4 4.377 4.391 4.4 4.299 4.244 4.235 4.2 4.125 4.125 4.1 3.994 4.0 3.916 3.9 3.916 3.916 3.916 3.8 3.7 3.8 3.7 3.6 2018 2019 2020 2021 2022 2023 2024 2025 Serious Injury Rate Serious Injury Rate Targets	4.125 ¹ (2023)	The rate of serious injuries is a ratio of Serious Injuries to Vehicle Miles Traveled. The rate of serious has declined since 2020.

*Indicates a Federal Performance Measure

¹Source: Iowa DOT FHWA 2025 Safety Targets, August 2024.

Objective: Reduce Transportation Related Injuries and Deaths

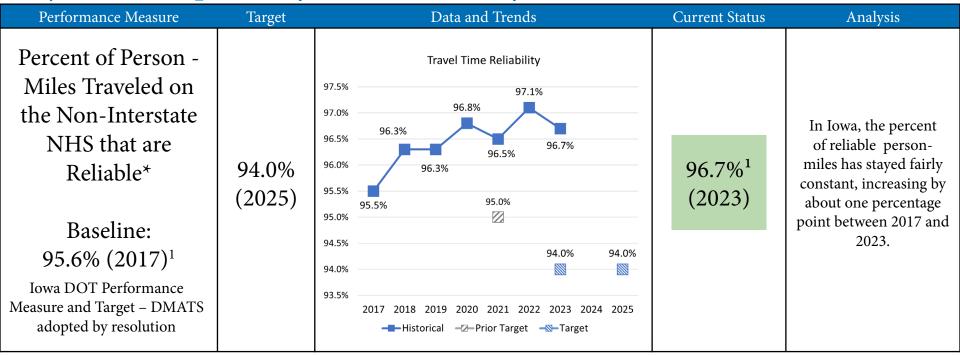


Efficiency

Goal: Improve system efficiency.



Objective: Improve System Reliability



Technology

Goal: Deploy technology to improve the system.



Objective: Intelligent Transportation Systems (ITS) to Maximize Efficiency

Performance Measure Target	Data and Trends	Current Status	Analysis
Percent of Signalized Intersections Connected to Adaptive Control Systems Baseline: 0% (2023) ¹	STREETS Project Corridors and Intersections 0	Progress Made Toward Target. The SRTEETS project is currently in the implementation process. The proj- ect will implement adaptive control systems at 68 signalized intersec- tions in the City of Dubuque. The project is divided into two phases. Phase 1 will include 38 intersec- tions. Phase 2 will add 38 more inter- sections, primar- ily in downtown Dubuque. Target implementation dates are spring 2025 for Phase 1 and spring 2027 for Phase 2.	DMATS and the City of Dubuque are im- plementing the next generation of integrated traffic signal system that includes rapid simulation of future traffic condi- tions based on real-time data collection. It also includes communicating the modeled changes to road-users before they leave and while in route to balance delay and re- duce congestion. The dy- namic rerouting of traffic to balance road user delay is also expected to have safety benefits with a reduction in crashes and pollutants.