

# 2045

**Black Hawk County MPO**

**LONG-RANGE**

**TRANSPORTATION PLAN**

**Executive Summary**

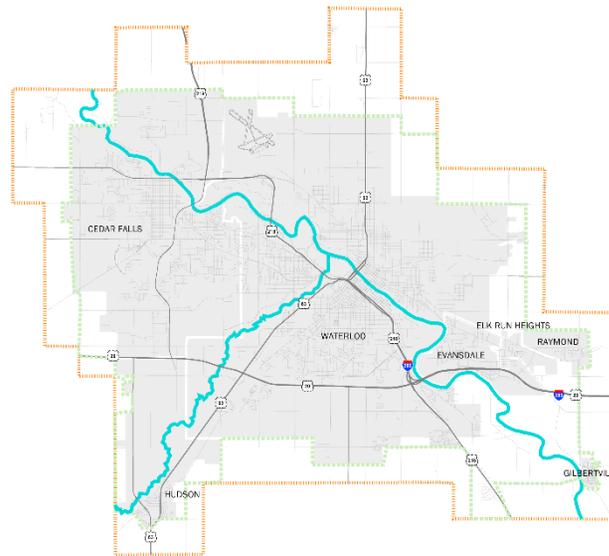
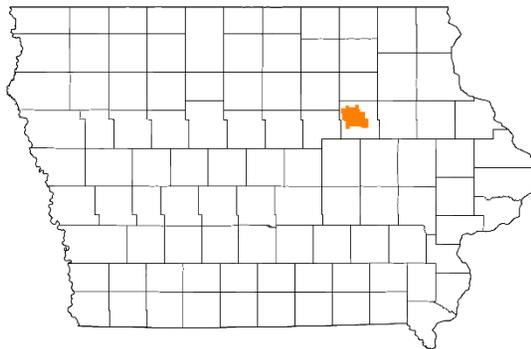
# EXECUTIVE SUMMARY

The *2045 Long-Range Transportation Plan* is the metropolitan transportation plan for the Black Hawk County Metropolitan Area. The document provides a policy framework for the investment of anticipated federal, state, and local funds, based on anticipated needs and regional goals and objectives, through the year 2045. The Plan establishes the purpose and need for major transportation investments, identifies activities to address transportation and growth issues, and prioritizes investments to improve system condition and performance.

## WHAT'S NEW

This update:

- Includes performance measures
- Projects moderate growth in regional population and employment over the life of the plan
- Strengthens the role of complete streets
- Further refines planned on-road bicycle facility facilities in the Bikeway Plan
- Features parcel data in the travel demand model process



## 2045 MPO GOALS

### SAFETY

Increase the safety of the transportation system

### PRESERVATION

Strategically preserve the existing infrastructure

### EFFICIENCY

Support an efficient transportation system

### MULTIMODAL

Provide a high degree of multimodal accessibility and mobility

2045 GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

Goal	Objective	Performance Measurement	MPO Baseline Condition Data
Increase the safety of the transportation system	1.1) Reduce the number of traffic fatalities	Total number of traffic fatalities*	6.8 / year
	1.2) Reduce the rate of traffic fatalities	Rate of fatalities per 100 million Vehicle Miles Traveled*	2.092
	1.3) Reduce the number of traffic serious injuries	Total number of serious injuries*	38.6 / year
	1.4) Reduce the rate of traffic serious injuries	Rate of serious injuries per 100 million Vehicle Miles Traveled*	11.876
	1.5) Reduce the number of non-motorized fatalities and serious injuries	Total number of non-motorized fatalities and serious injuries*	6.8 / year
	1.6) Reduce the number of traffic accidents involving pedestrians and bicyclists	Total number of crashes involving pedestrians and bicyclists	40.8 / year
Strategically preserve the existing infrastructure	2.1) Preserve and maintain Interstate system pavement	Percentage of Interstate pavement in good condition* Percentage of Interstate pavement in poor condition*	Good: 75.5% Poor: 0.00%
	2.2) Preserve and maintain non-Interstate National Highway System (NHS) pavement	Percentage of non-Interstate NHS pavement in good condition* Percentage of non-Interstate NHS pavement in poor condition*	Good: 24.2% Poor: 30.6%
	2.3) Preserve and maintain NHS bridges	Percentage of NHS bridge deck area in good condition* Percentage of NHS bridge deck area in poor condition*	Good: 57.8% Poor: 0.0%
	2.4) Preserve and maintain non-NHS road pavement conditions	Percentage of non-NHS roads in good or very good condition Percentage of non-NHS roads in poor or very poor condition	Good: 34.0% Poor: 21.0%
	2.5) Decrease the number of bridges that are posted or closed	Total number of posted or closed bridges	13
	2.6) Decrease the number of bridges that are structurally deficient	Total number of structurally deficient bridges	12
	2.7) Increase the average bridge sufficiency rating	Average bridge sufficiency rating of bridges in the metropolitan area	88.3
Support an efficient transportation system	3.1) Maintain the percent of person-miles traveled on the Interstate that are reliable	Level of Travel Time Reliability (LOTTR)*	100.0%
	3.2) Maintain the percent of the person-miles traveled on the non-Interstate NHS that are reliable	LOTTR*	99.6%
	3.3) Improve freight travel time reliability	Truck Travel Time Reliability (TTTR) Index*	1.19
	3.4) Reduce the total vehicle hours traveled	Travel Demand Model (TDM) base year total vehicle hours traveled (VHT)	83,582 (VHT)
Provide a high degree of multimodal accessibility and mobility	4.1) Provide more on-road bicycle facilities	Number of miles of on-road bicycle accommodations	TBD
	4.2) Provide additional infrastructure to provide pedestrians easy access to commercial districts	Total length of public sidewalks and crosswalks in MPO Pedestrian Master Plan focus areas	282.6 miles
	4.3) A greater percentage of trips are made by foot	Percent of workers who walk to work	5.0%
	4.4) A greater number of trips are made using public transit	Total number of fixed route rides using MET	398,270
	4.5) Decrease the percent of MET's vehicles that are beyond Useful Life Benchmark (ULB)	Percent of revenue vehicles within an asset class that have met or exceeded ULB* Percent of non-revenue vehicles that have met or exceeded ULB*	Buses: 26% Mini-buses: 54% Non-Rev: 66% Facilities: 0%
	4.6) Transit facilities remain in good condition	Percent of MET's facilities with a condition rating below 3.0*	0.0%
	4.7) Increase the number of bus shelters in the metropolitan area	Number of bus shelters	6

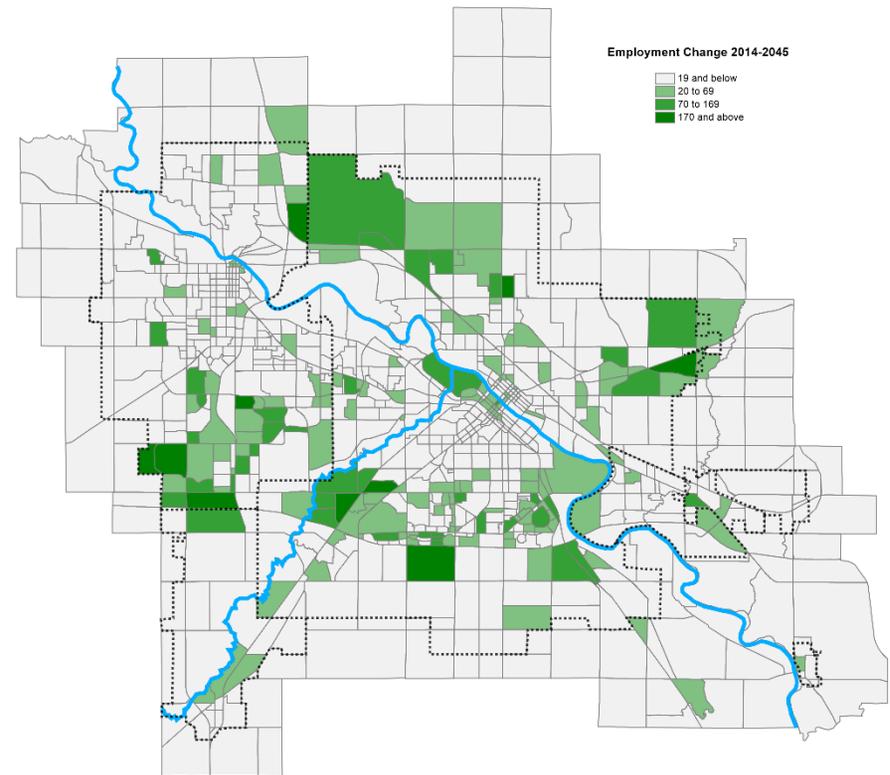
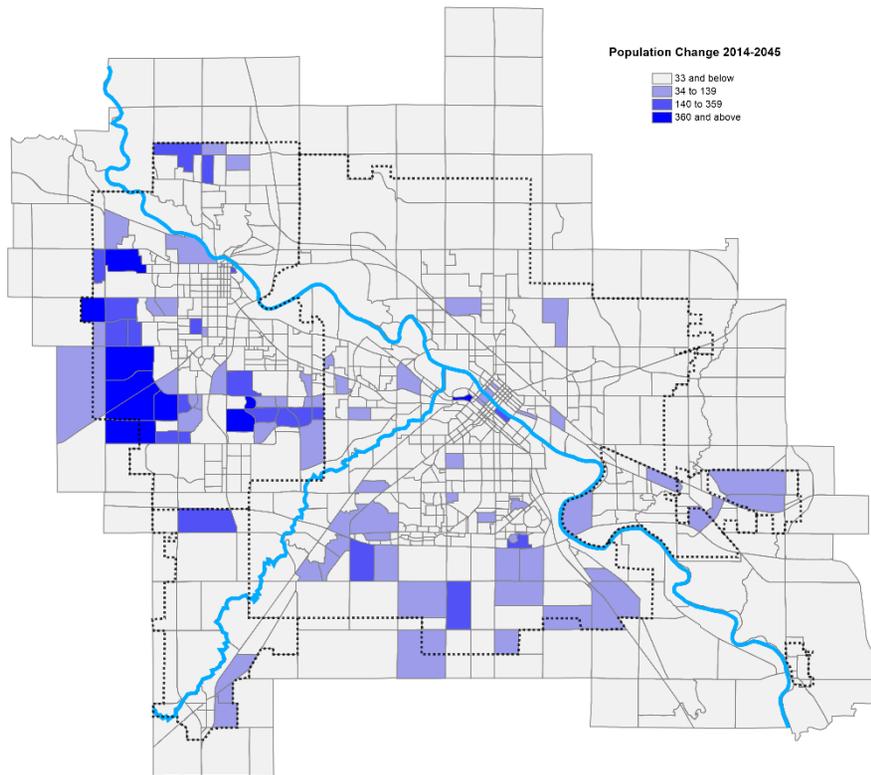
\*Federally required performance measurement

## A CHANGING METROPOLITAN AREA

The Black Hawk County metropolitan area continues to change. The population is aging and becoming more racially diverse, while Millennials make up the largest percentage of the population. Residents are seeking more choices for transportation and housing. The MPO has made it a goal to provide a high degree of multimodal accessibility and mobility to help support this demand for a greater array of transportation choices.

Currently, the area is home to approximately 123,500 people, and that number is expected to grow by 11 percent over the next three decades. Additionally, employment is projected to increase by 12,500 jobs – an increase of 17 percent.

Population and Employment Forecasts for the MPO				
	2014	2025	2035	2045
<b>Population</b>	123,521	128,131	132,752	137,373
<b>Employment</b>	74,908	78,905	83,194	87,432

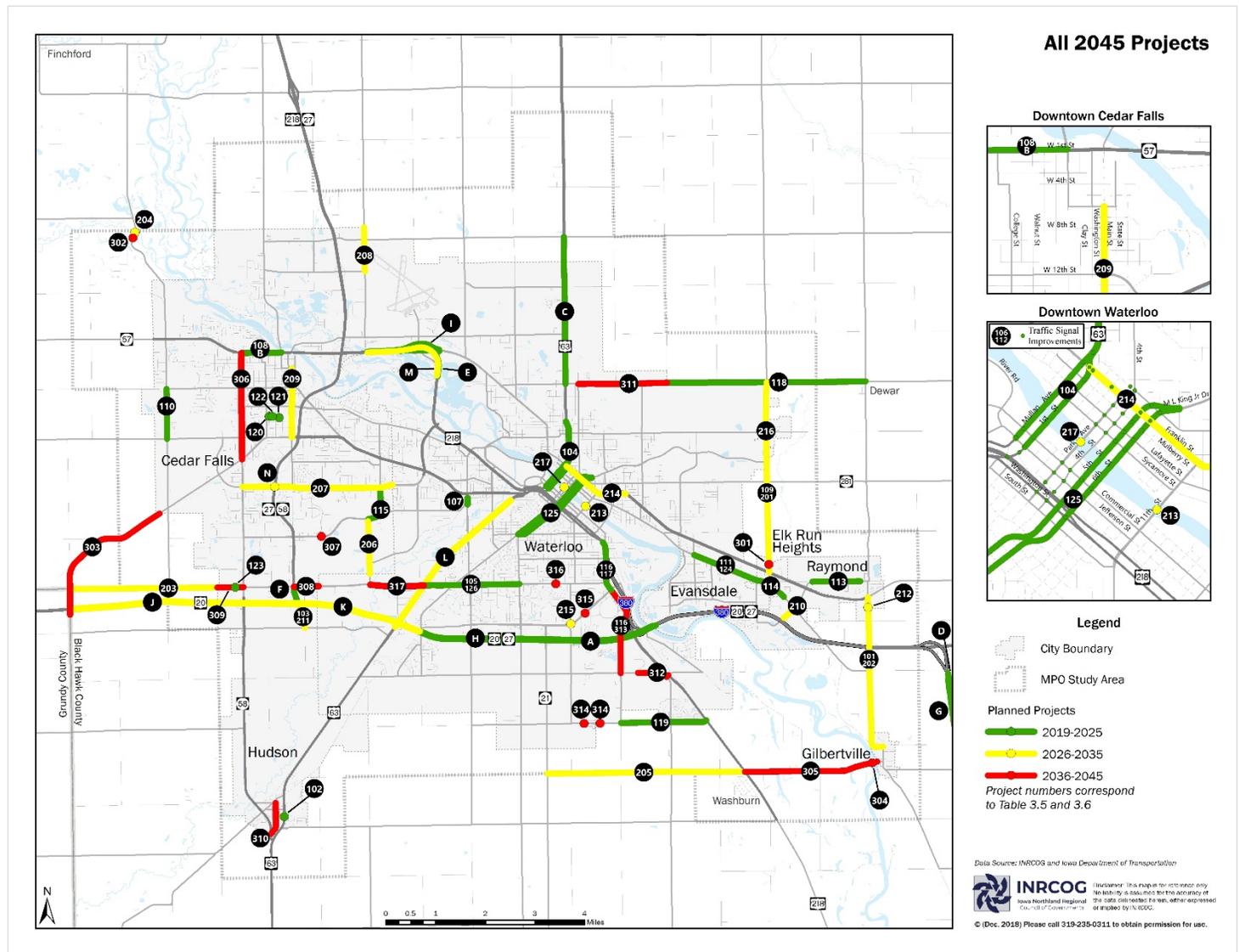


## 2045 PLANNED PROJECTS

Road and bridge projects were identified based on how projects met the goals, objectives, and performance measures of the Plan. Projects were also reviewed based on the timeframe, current traffic volumes, level of service, and road conditions.

Projects have been divided into three time periods: 2019-2025, 2026-2035, and 2036-2045. Projects are not prioritized within time periods. Projects included are fiscally constrained, and costs were inflated to year of expenditure dollars.

The 2045 Plan places an emphasis on maintaining the existing transportation infrastructure. The MPO also promotes and encourages context-sensitive solutions in the transportation planning and project development process to foster complete streets.



## TRAVEL DEMAND MODEL (TDM)

Travel demand modeling replicates existing traffic levels and forecasts future traffic levels based on anticipated population and employment growth. The 2045 TDM was completely rebuilt using the Iowa DOT's Iowa Standardized Model Structure (ISMS). The ISMS architecture uses parcel data as a primary input to trip generation.

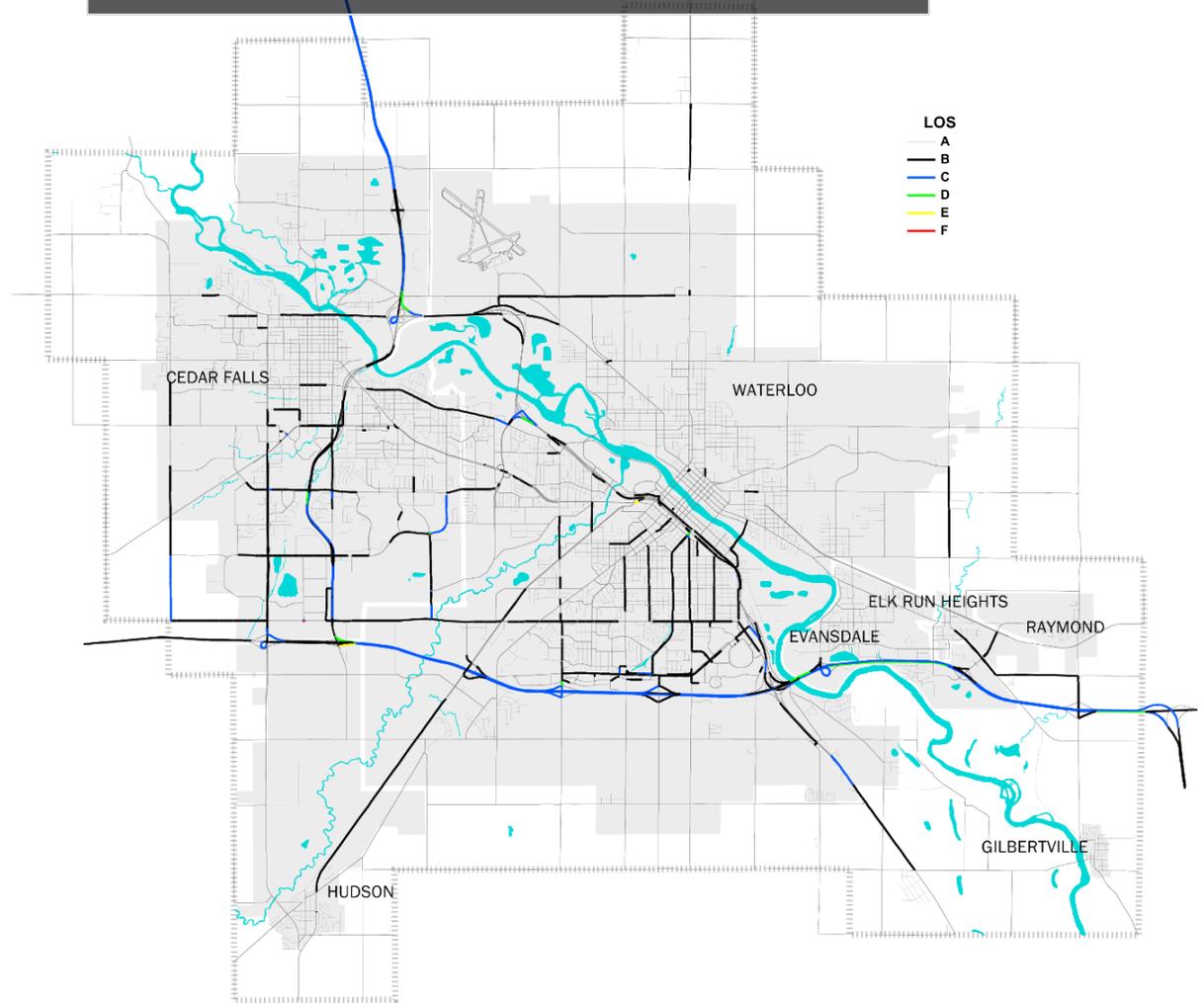
The MPO has a wealth of roadway capacity in the existing transportation network, and there are relatively few deficiencies forecast to occur.

Level of service (LOS) is commonly used to describe congestion, or the flow of traffic on a roadway. There are grades of A-F; generally, LOS of C or above during peak hour traffic is acceptable.

TDM Statistics, Planned Network, Weekday PM

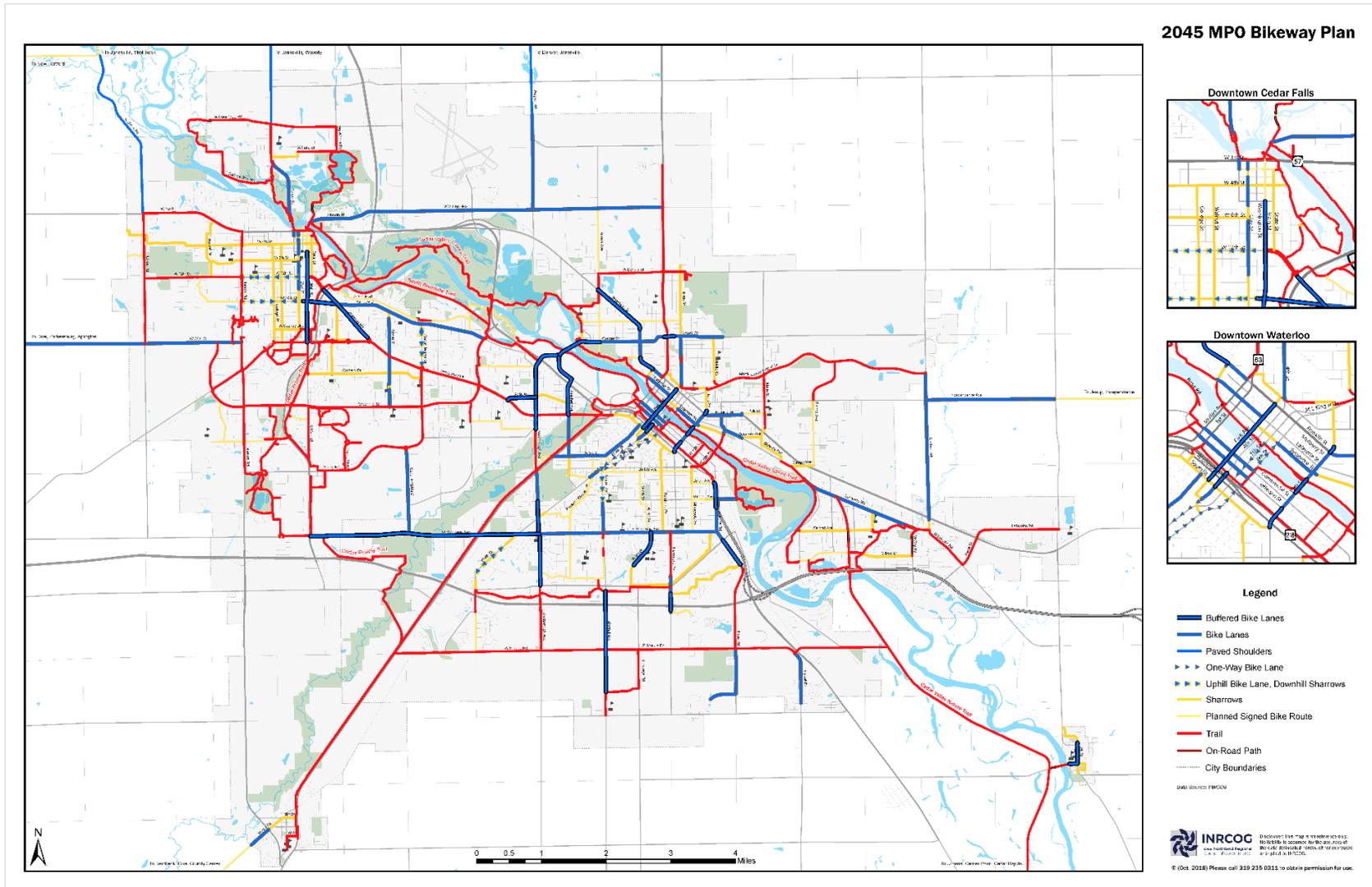
	2014	2025	2035	2045
Person Trips	915,897	939,600	958,749	1,043,714
VMT	2,857,163	2,936,305	3,016,458	3,579,177
Freeflow VHT	65,914	67,917	69,629	81,223
Congested VHT	79,298	82,165	84,554	102,810
LOS (mean)	0.104 (A)	0.107 (A)	0.109 (A)	0.121 (A)

Level of Service, 2045 Existing, Committed, and Planned Network



## MPO BIKEWAY PLAN

The 2045 MPO Bikeway Plan is a significant update from the previous Plan. Roadways were reviewed in greater detail to determine more feasible planned facility types. Several factors were considered including each road's right-of-way, trees, driveways, drainage areas, traffic volumes, and lane configurations. The Plan also identifies low-volume residential streets that can be used by bicyclists without any additional treatments.



# HOW TO GET INVOLVED

The public is encouraged to discuss transportation concerns at any time with local officials and the Iowa Northland Regional Council of Governments transportation planning staff.

Meeting times and dates can be found on the website calendar. A downloadable version of drafts and final documents can be found on the website as well. Information can also be obtained by contacting or visiting INRCOG staff during normal business hours from 8:00 a.m. to 4:00 p.m. Monday through Friday.

Kyle Durant  
Transportation Planner II  
[kdurant@inrcog.org](mailto:kdurant@inrcog.org)

Codie Leseman  
Transportation Planner II  
[cleseman@inrcog.org](mailto:cleseman@inrcog.org)

Iowa Northland Regional Council of Governments  
229 E Park Ave  
Waterloo, IA 50703  
(319) 235-0311



**INRCOG**  
Iowa Northland Regional  
Council of Governments

[www.inrcog.org](http://www.inrcog.org)