



LAKE COUNTY DIVISION OF TRANSPORTATION
2019-2024 Highway Improvement Program

Funding Overview and Program Priorities

Kevin Carrier, Director of Planning and Programming
CMAP Transportation Committee | September 20, 2019

Lake County



700,000+
POPULATION



52
MUNICIPALITIES



30,000+
BUSINESSES



Lake County's Transportation Network

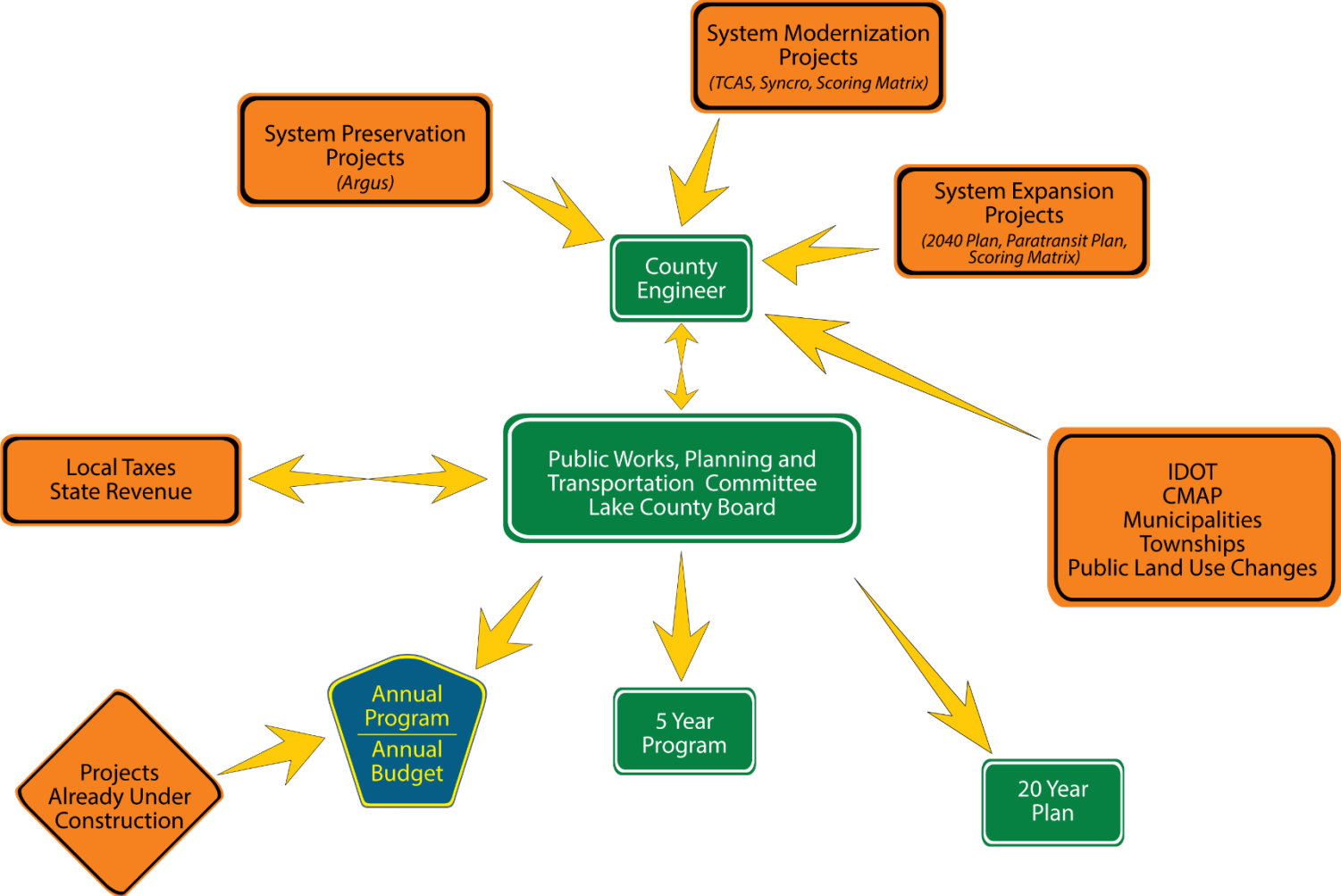
- Interstate I -94
- Over 2,880 miles of roadway – state, county, local
- Over 500 miles of bike facilities
- 4 Metra lines, 32 train stations
- 14 Pace bus fixed routes
- Various paratransit services
- Corporate shuttle services
- Private car and ride -sharing/ride -hailing companies



LCDOT INVENTORIES: Pavement and Other Assets

- 300+ centerline miles (900+ lane miles)
- 62 miles of bike facilities
- 37 bridges
- 200+ miles culvert and storm sewer pipe
- 206 signal controllers
- 285 miles of fiber optic cable
- 27,000+ signs
- *more*

Capital Programming



**Capital Program
Revenues:**

(Annual Projections)

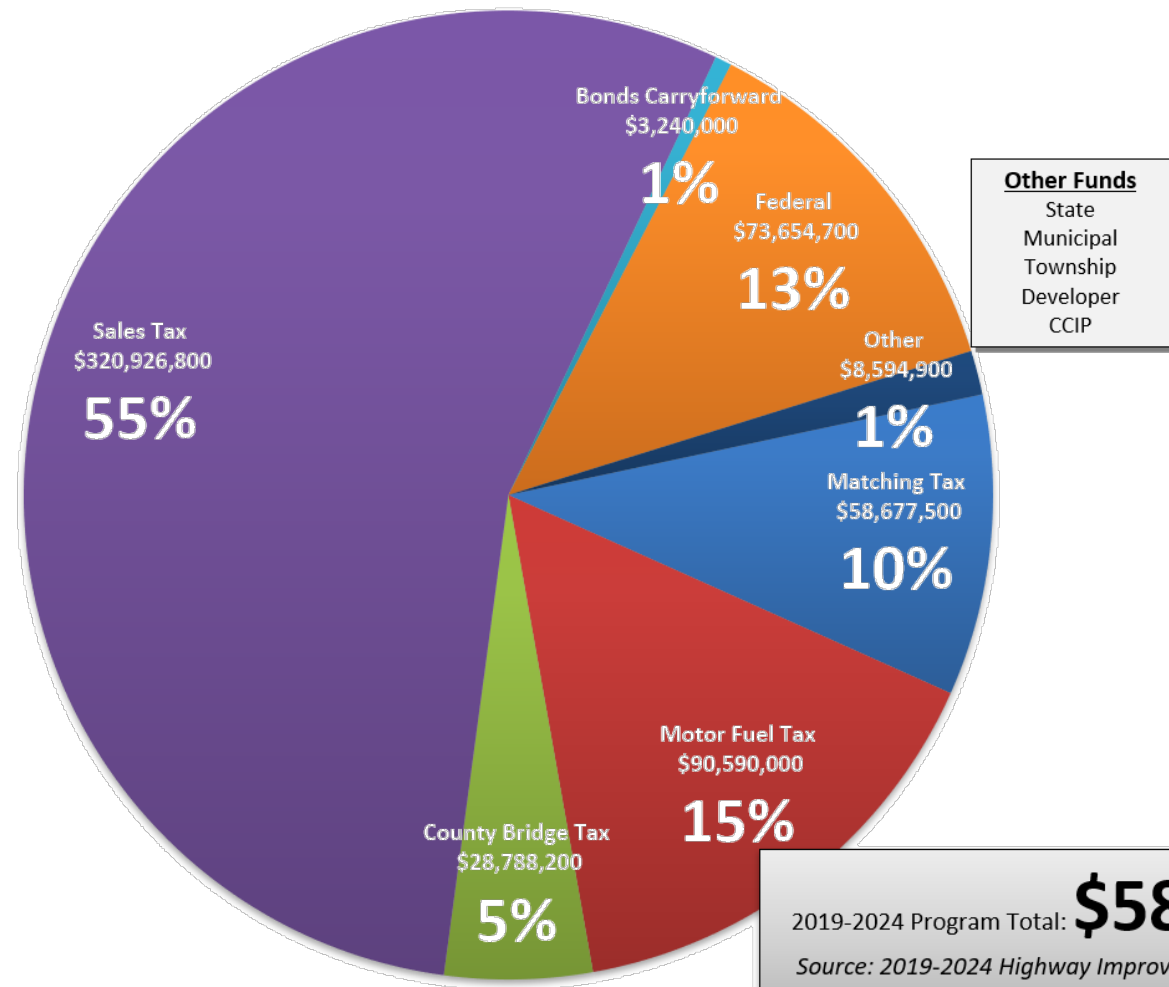
**County
Bridge Fund
(\$4M)**

**Matching
Tax (\$8M)**

**Motor Fuel
Tax (\$11M)**

**Sales Tax
(\$34M)**

Fund Sources 2019-2024 program



**Management
Philosophy Sets
System Priorities:**

1 Preservation

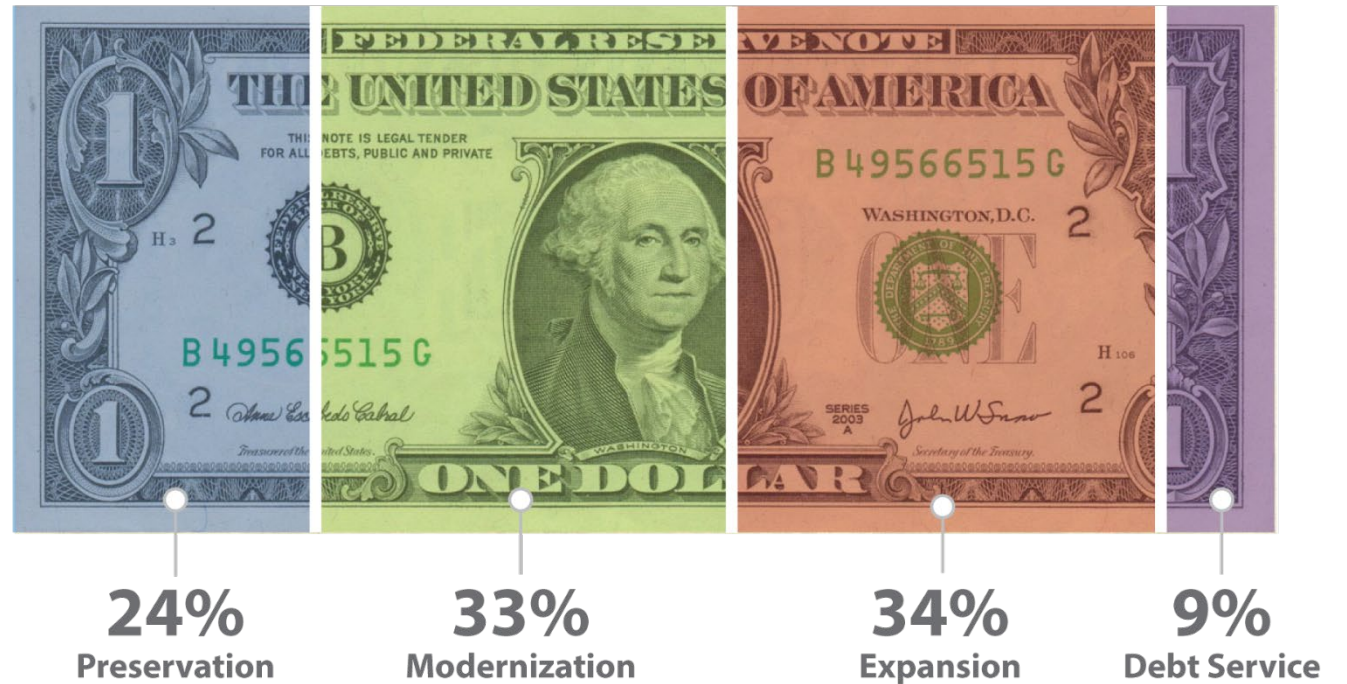
2 Modernization

3 Expansion

Balancing Program Needs

- \$584M 6-year Program
- 317 Projects

Funds Distribution | 2019-2024 by program category



Source: LCDOT Information Services | CPMS v.6a

Priority One: Preservation

Typically resurfacings, crack sealing and patching, bridge and culvert repairs/replacements and other maintenance activities



\$143 million

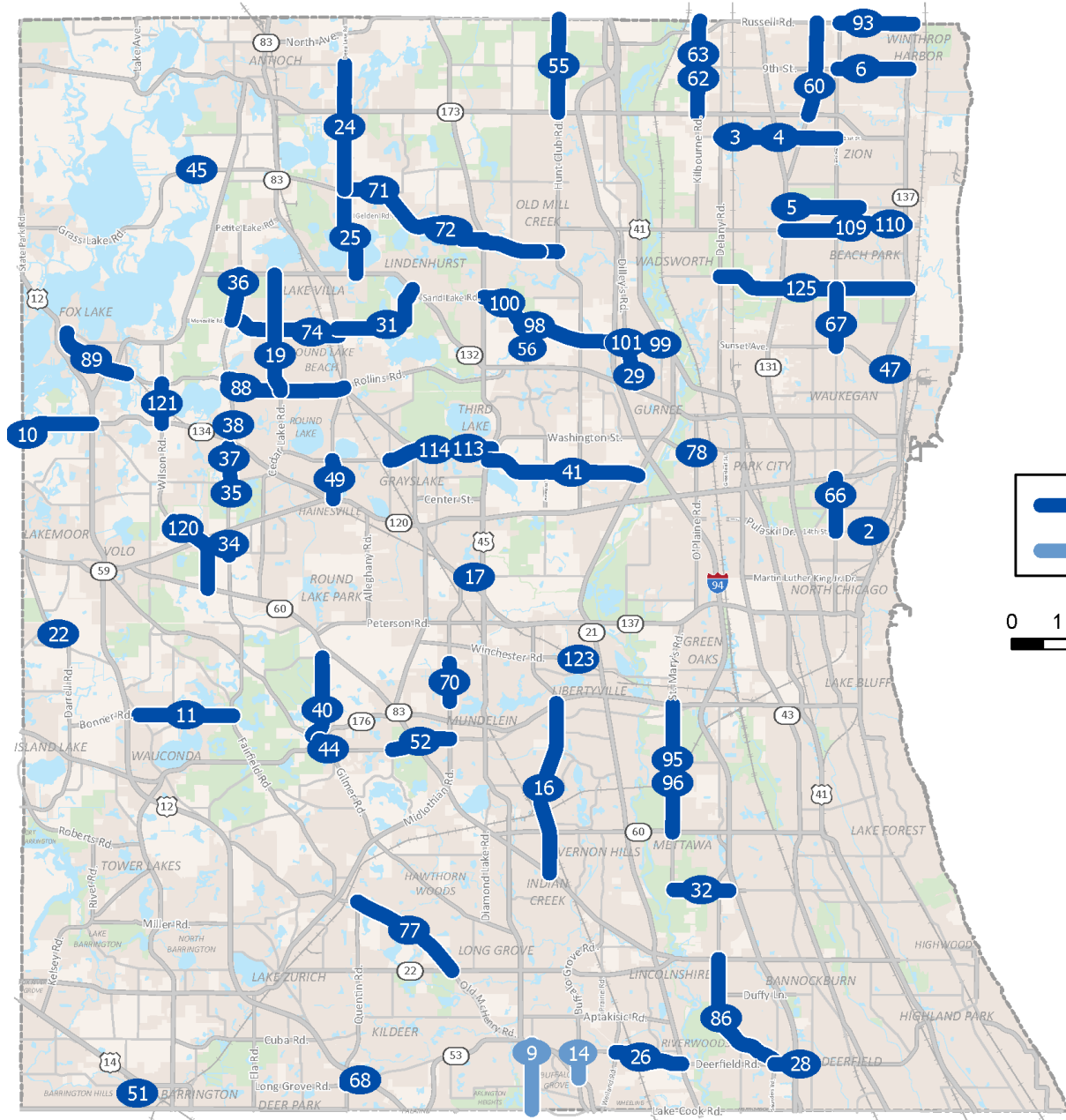


163 projects



Project Selection Tools:

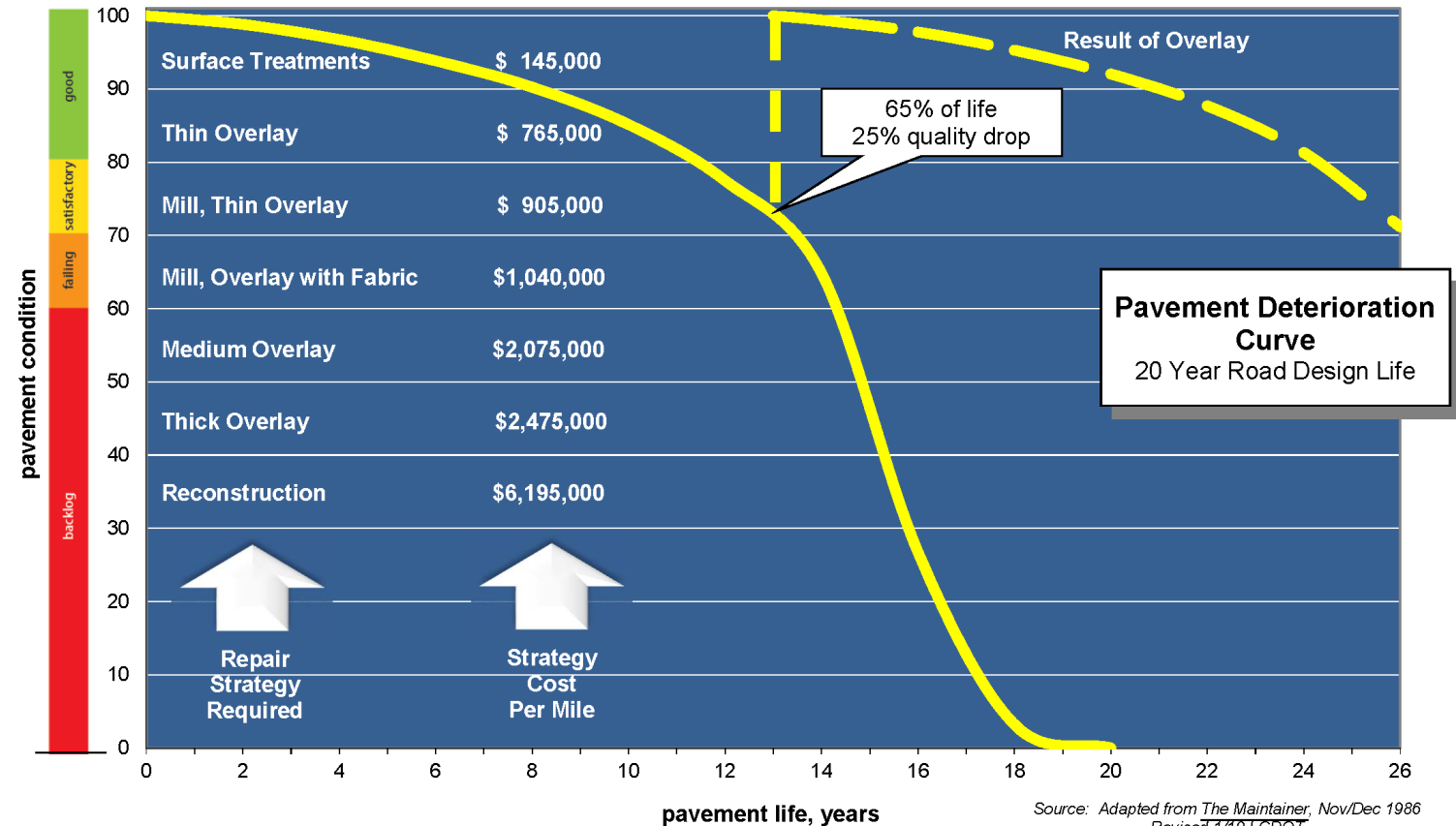
- Pavement Management System
- Asset Inventories
- Innovative Techniques



Staying Ahead of the Curve

- Moved away from “worst first” philosophy
- Focus more on treatments early in the life-cycle
- Took time to convince elected officials and public

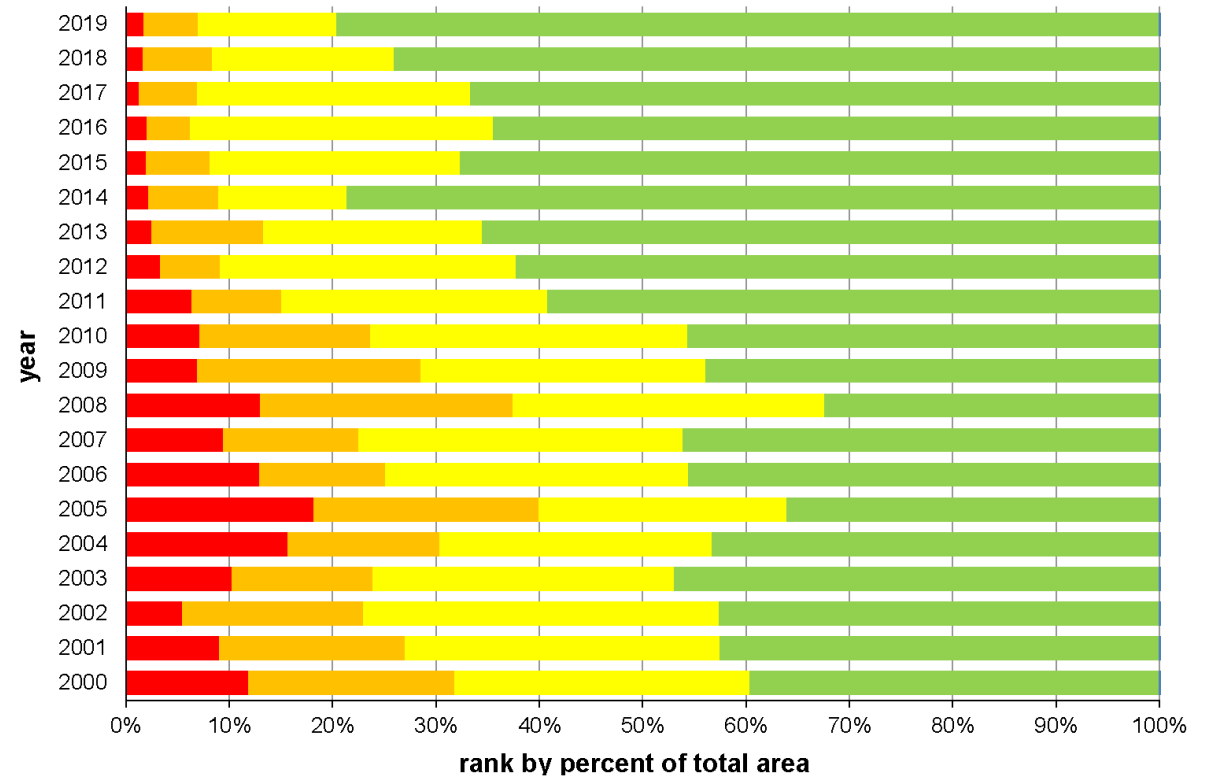
Early repairs are most cost effective



Pavement Management Results

- Implemented in 1986
- Overall Pavement Condition has improved from 68 to 84
- Backlog/failing pavement reduced from 55% to 2%

ARGUS System optimizes improvements



Note: Current year rankings are based on the previous year's testing.

Backlog Failing Satisfactory Good

Prepared by LCDOT 3/19
Source: 2018 pavement testing

Priority Two: Modernization

Intersection/safety improvements, bike and pedestrian accommodations



\$191 million

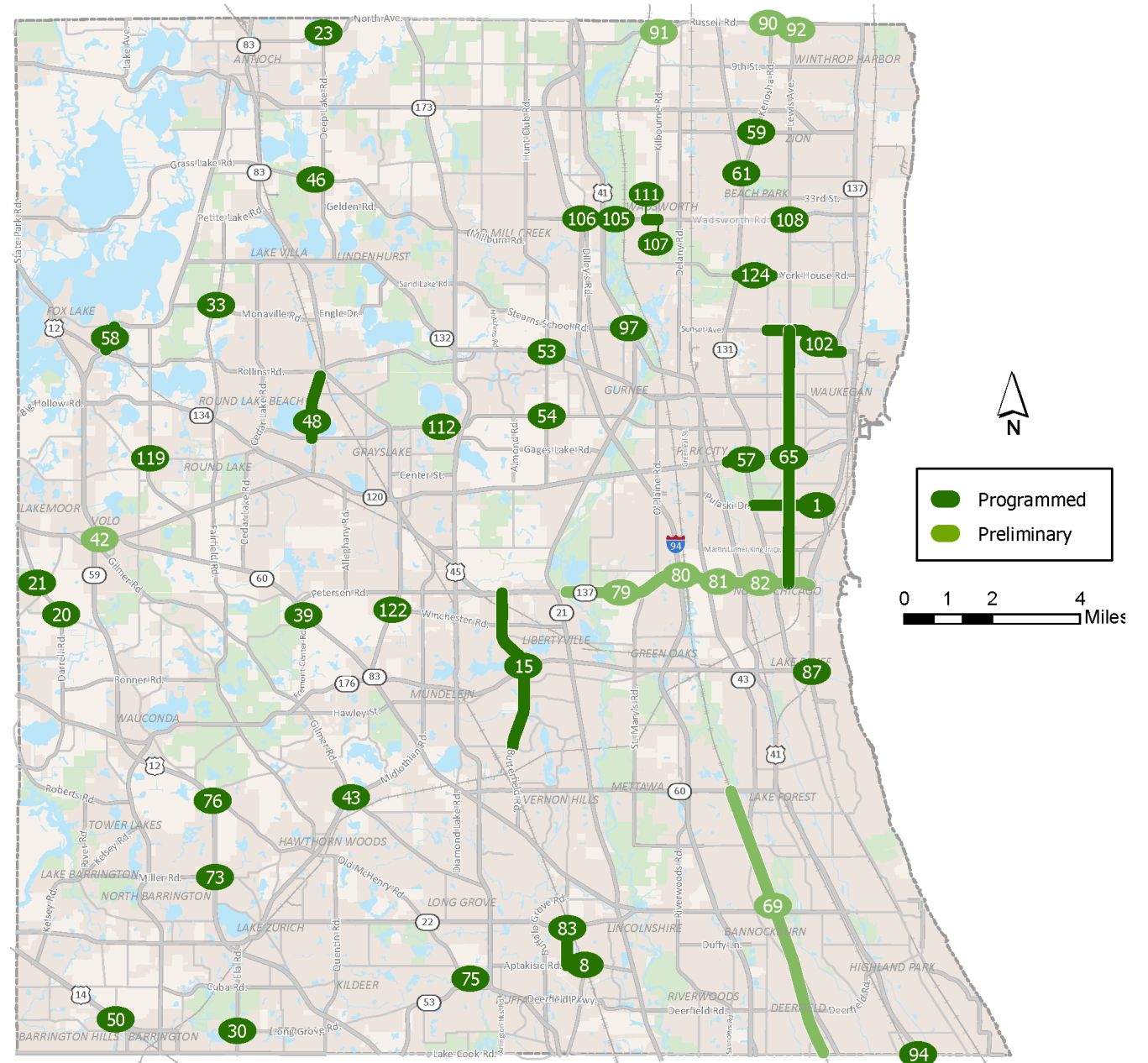


118 projects



Project Selection Tools:

- Traffic Analysis/Level of Service Data
- Crash Data/Heat Maps
- Non-motorized policy
- 2040 Bike and Pedestrian Priorities
- Project Scoring Matrix



**Modernization
saves time, fuel,
money and the
environment**

Analyzing and adjusting signals along Lewis Avenue from Sunset to IL173 (5 miles):

Delays Reduced: **403** hours per day

Fuel Saved: **4380** gallons per year

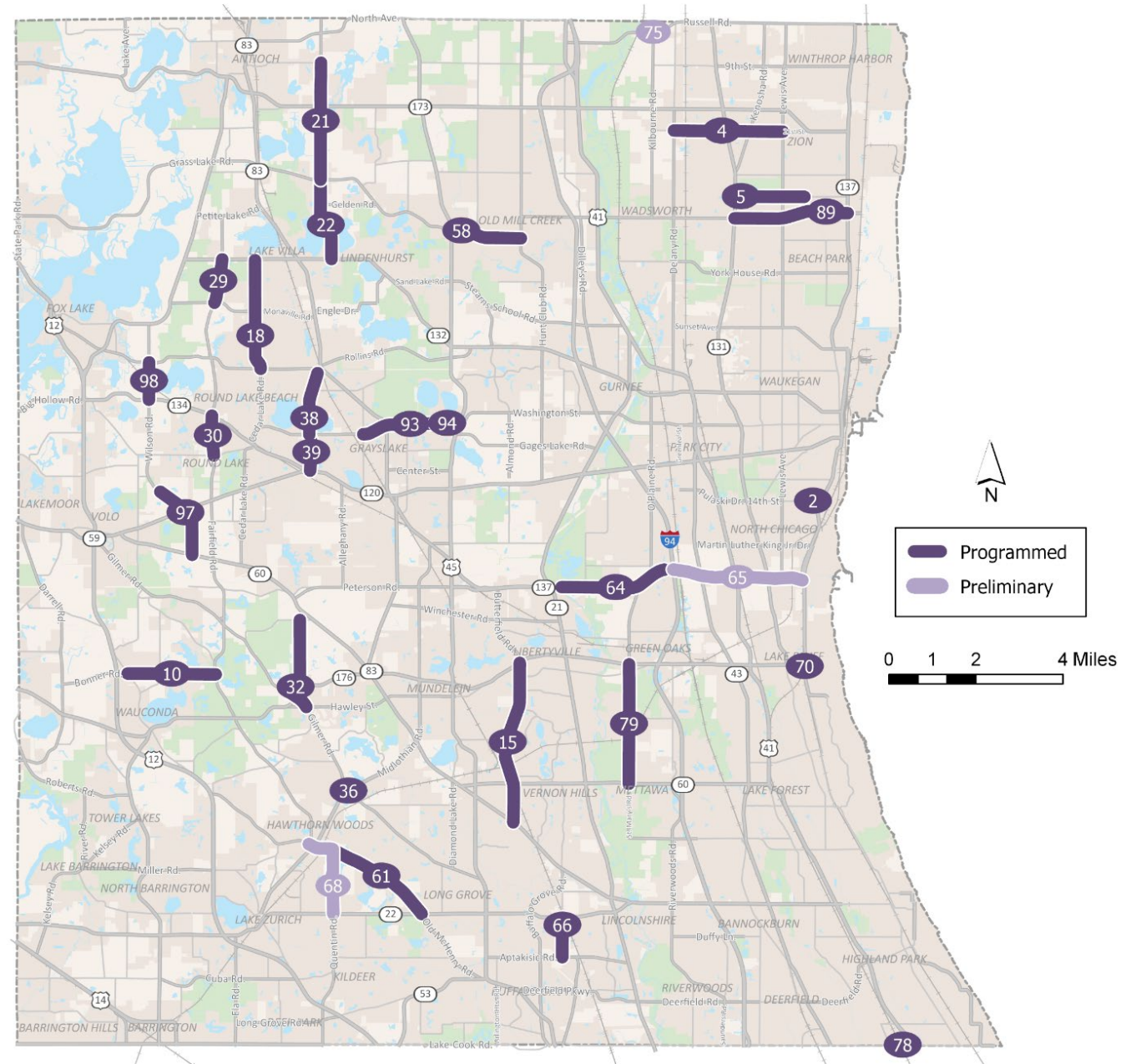
Annual Benefit: **\$2,486,700**

CO₂ Emissions Avoided: **25.2** metric tons per year

\$32M

in non-motorized improvements

- 6% of 6-year project expenditures
- Bike paths
- Bike-friendly shoulders
- Sidewalks and sidewalk gap improvements
- Pedestrian accommodations



Priority Three: Expansion

Add lanes, grade separations,
new or extended roads



\$197 million

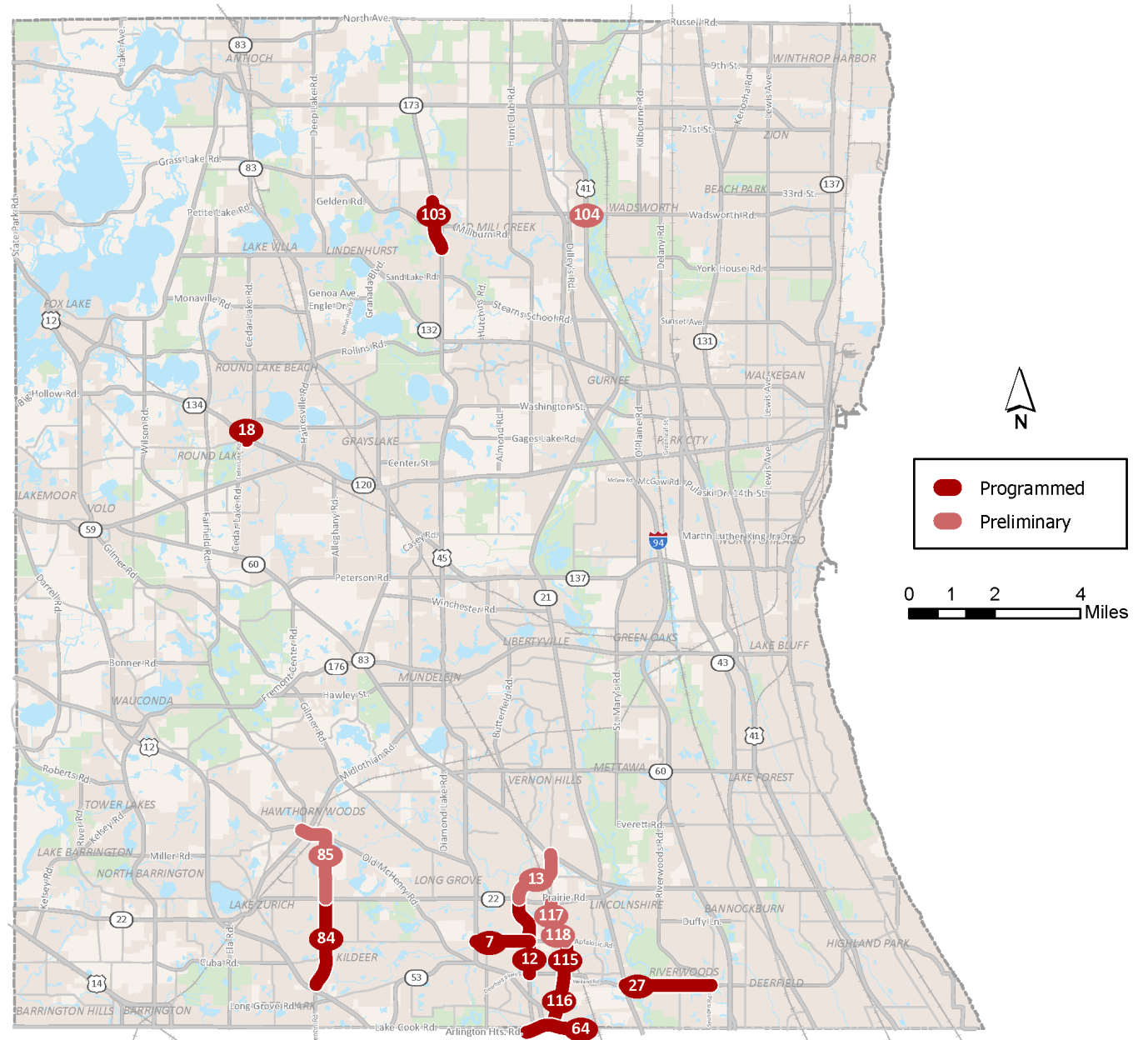


36 projects



Project selection tools:

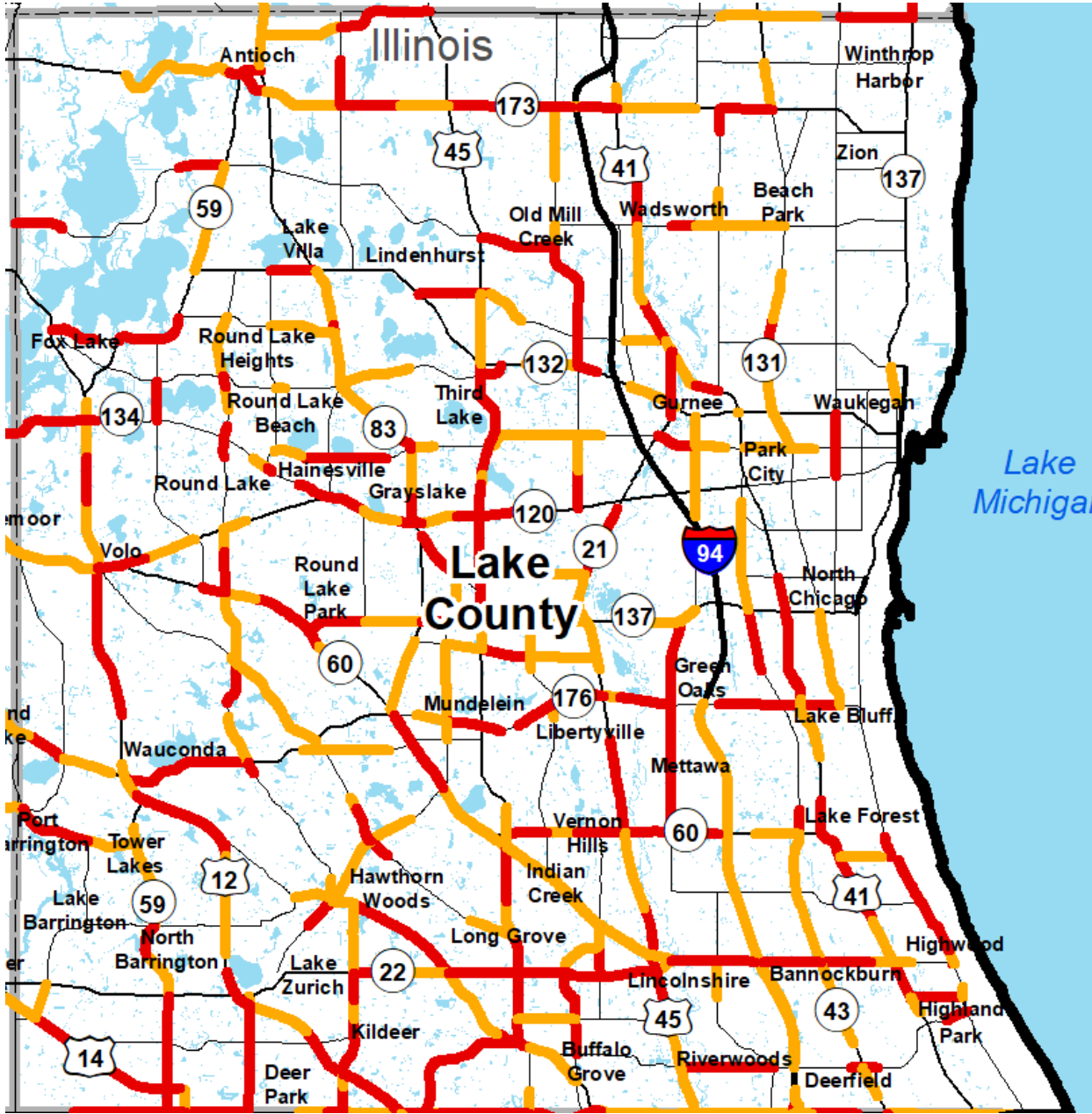
- LCDOT 2040 Plan
- Traffic/Crash Data
- Demographic Trends
- Project Scoring Matrix





Congestion: #1 Transportation Problem in Lake County

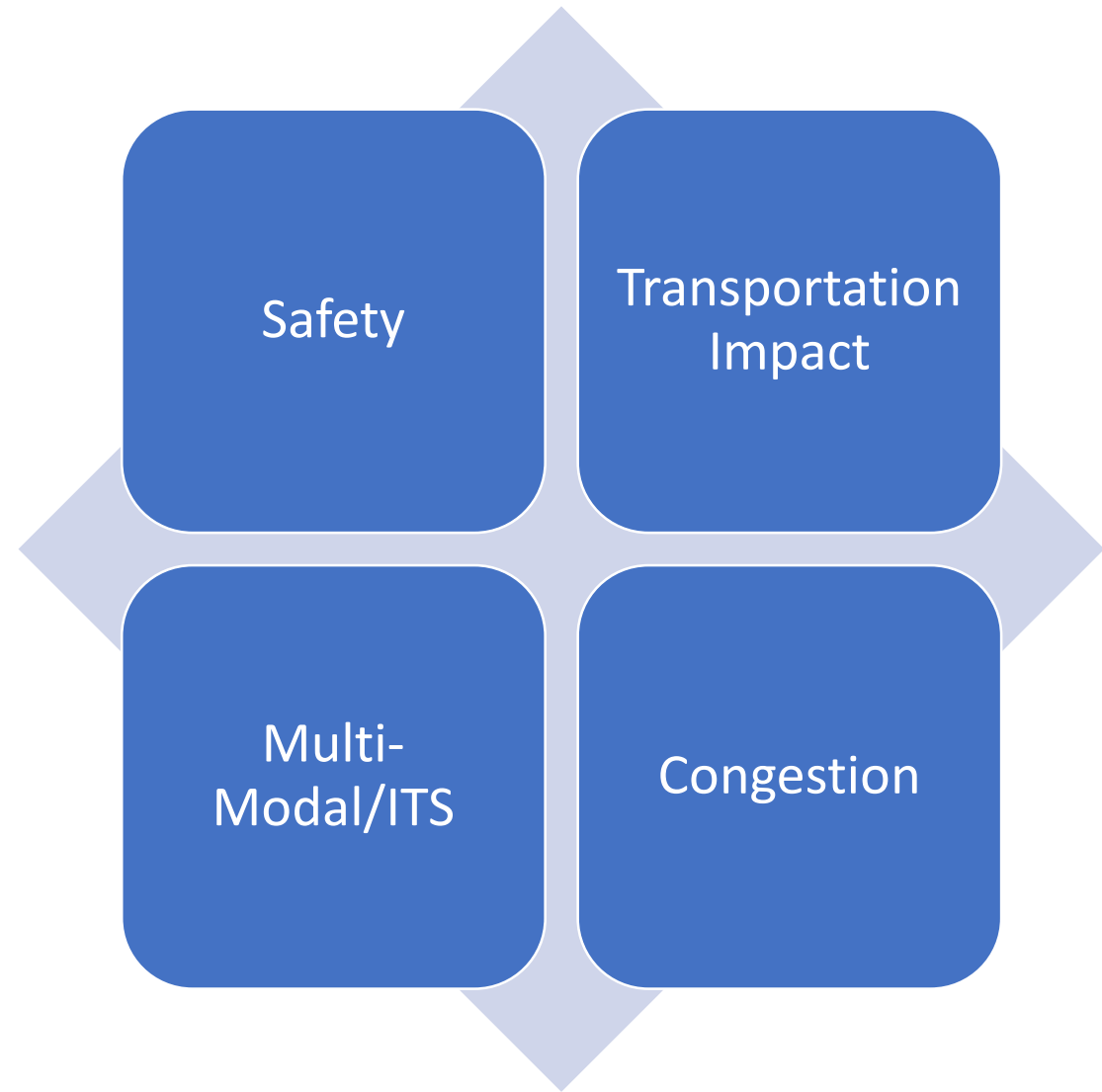
Congestion Levels



Congestion Level: — Moderate/Heavy — Severe/Extreme

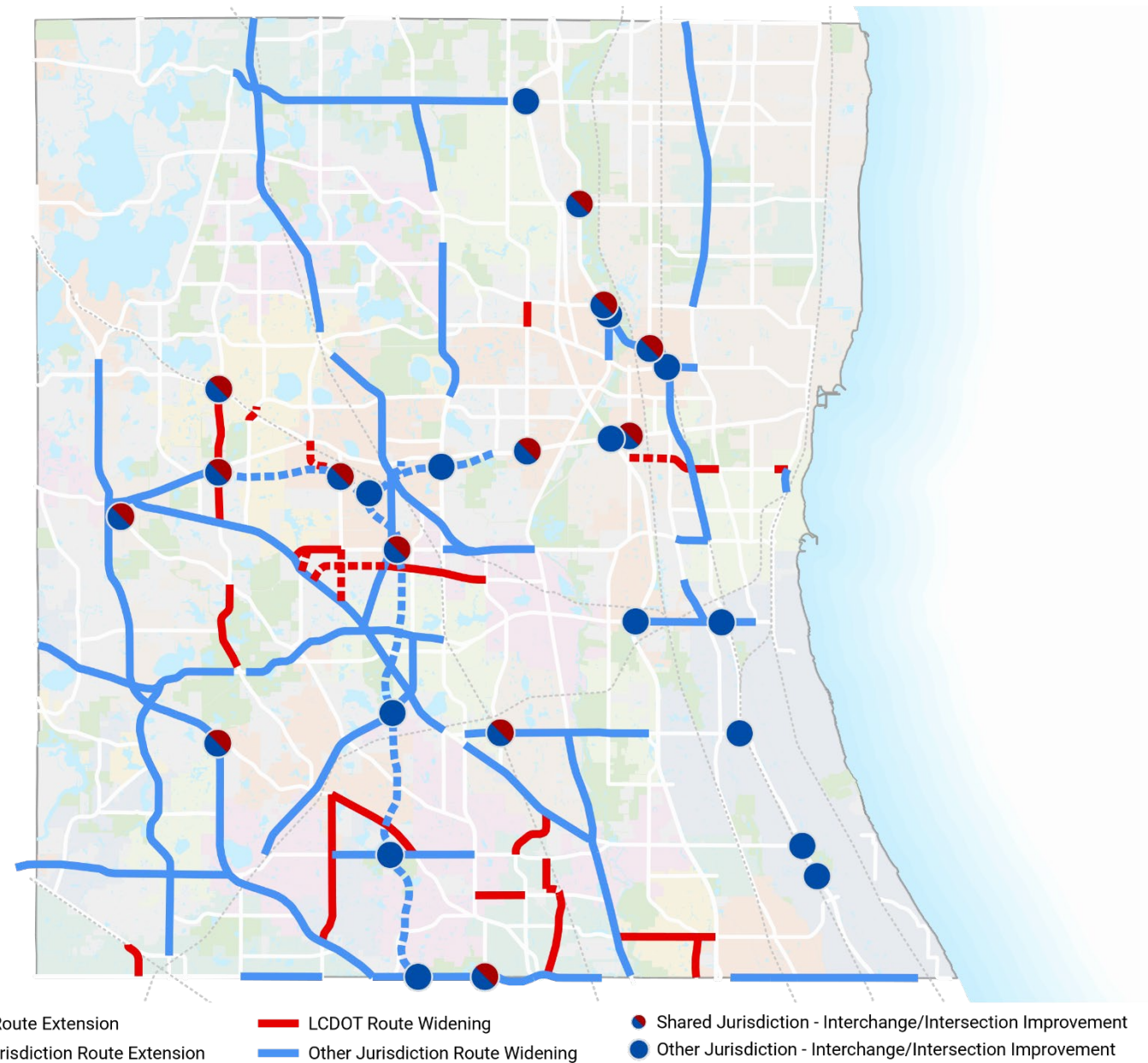
Project Priority Scoring Matrix

- One component in selecting modernization and expansion projects
- Data driven; cost not a factor
- Weighted on four factors
- Based on LCDOT Strategic Plan
- System refined annually



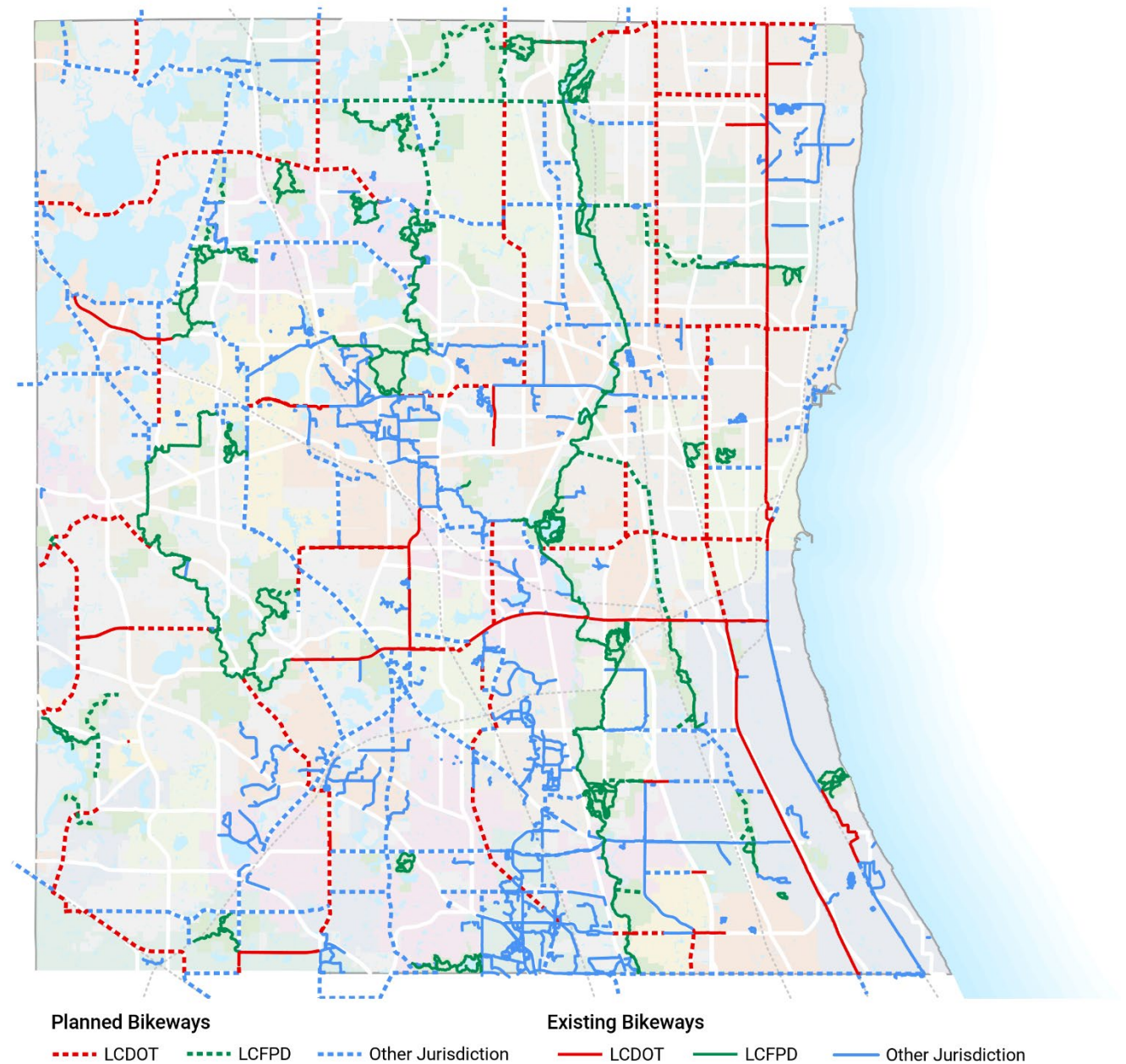
2040 Roadway Priorities

- Peak period trips estimated to increase by **36%** between 2010 and 2040
- **212 miles** of roadway Improvements recommended
 - **7** interchange
 - **9** intersection
 - **65** corridor



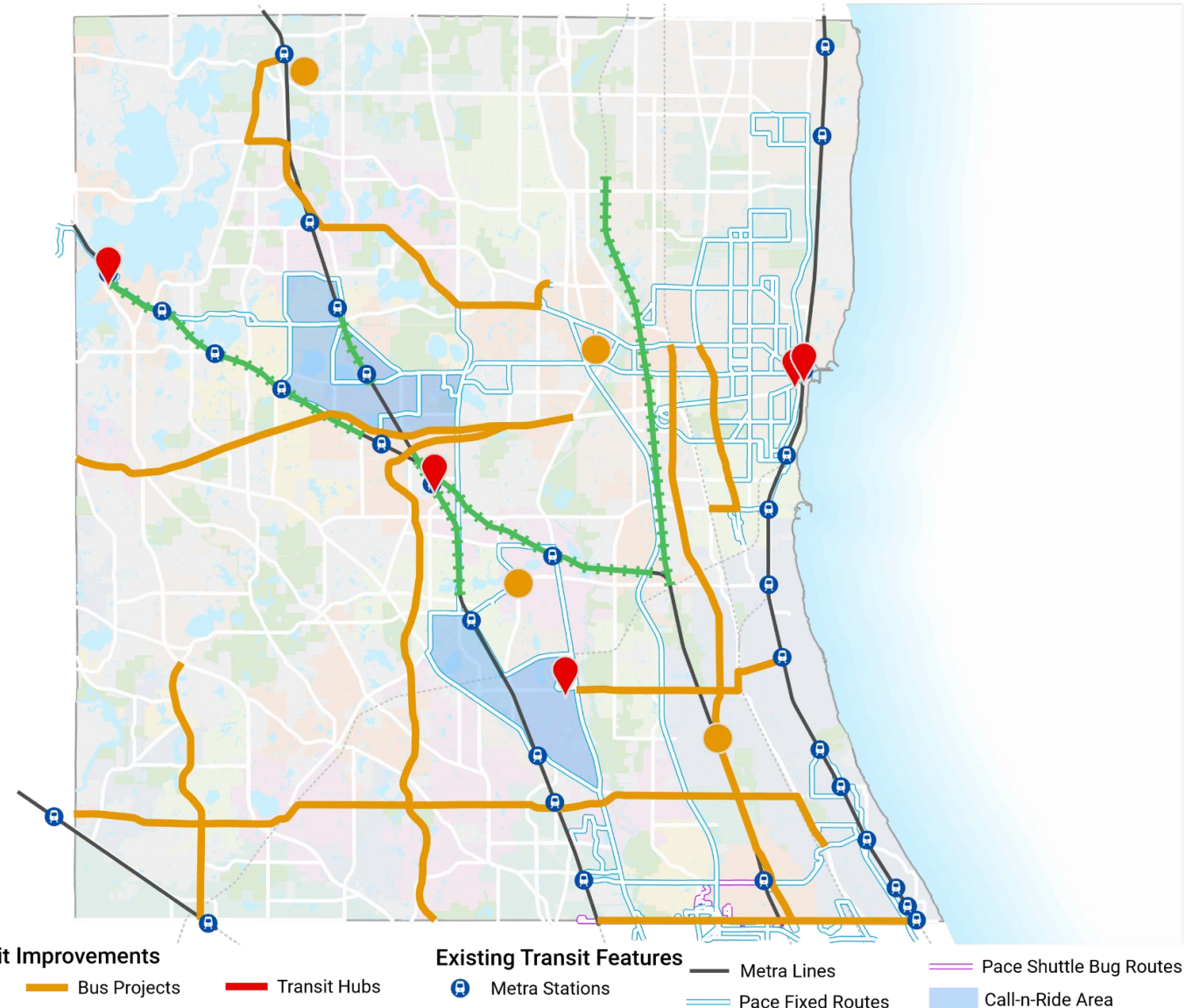
2040 Non-Motorized

- Over 300 miles of facilities recommended
- Primarily off-street, multi-use facilities
- Connections to important destinations such as communities, forest preserves, Metra stations, Pace routes and employment centers



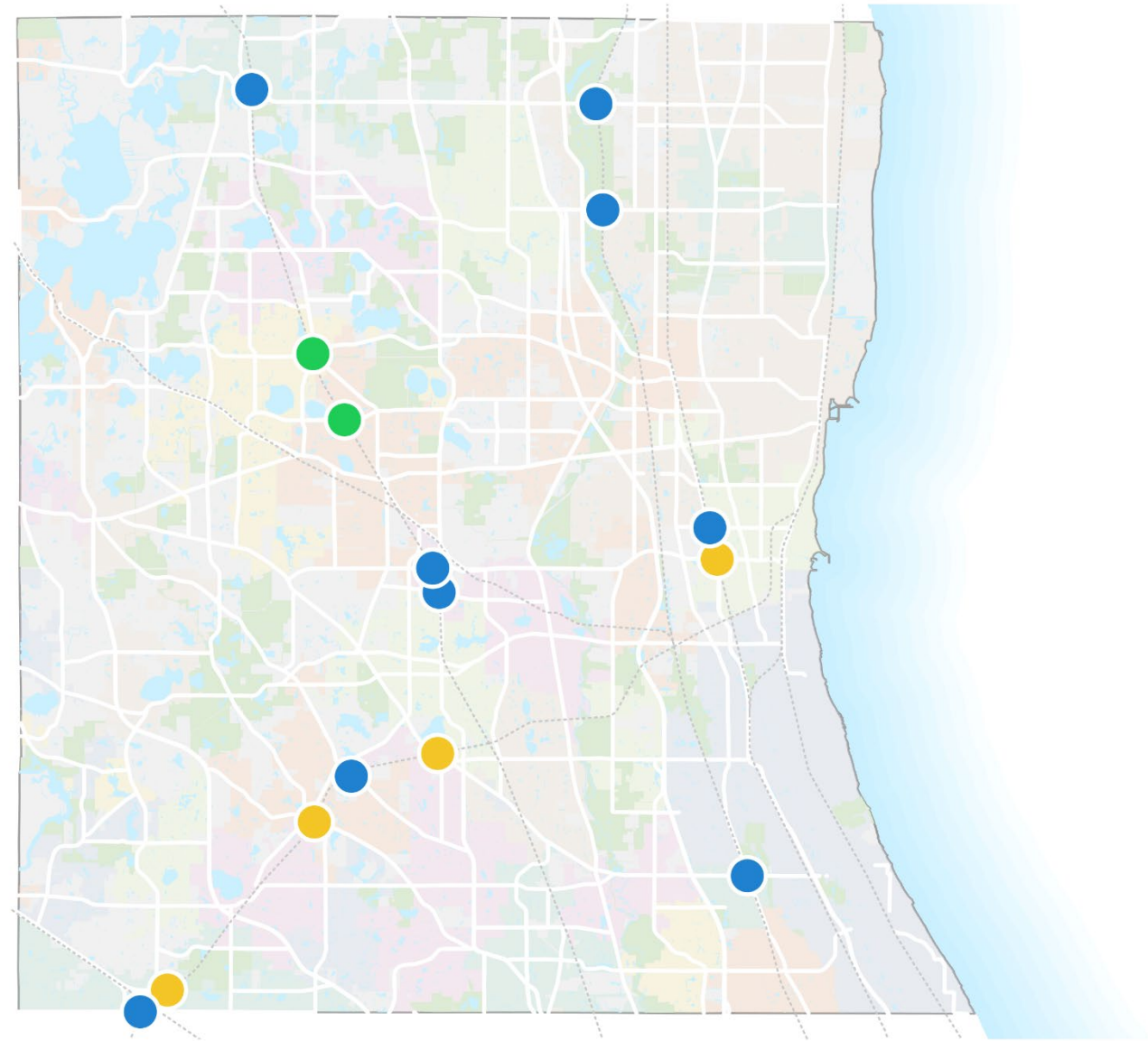
2040 Transit

- Diverse land uses, population densities – no single transit solution
- 20 recommended improvements from new demand response to commuter rail extensions



2040 Railroad Grade Separations

- Evaluated 66 at-grade road/rail crossings
- Criteria included vehicular ADT, freight trains per day, other roadway deficiencies
- 15 recommended for grade separation



● Grade Separation - Completed ● Grade Separation - Identified ● Grade Separation - Study Underway

Lake County's Five-Year Plan on the Web

lakecountyiil.gov/transportation



Lake County, Illinois

**2019 - 2024
Proposed
Highway
Improvement
Program**



Thank You!

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