



2023-2028 Proposed Transportation Improvement Program

Lake County Division of Transportation

Shane E. Schneider, P.E.

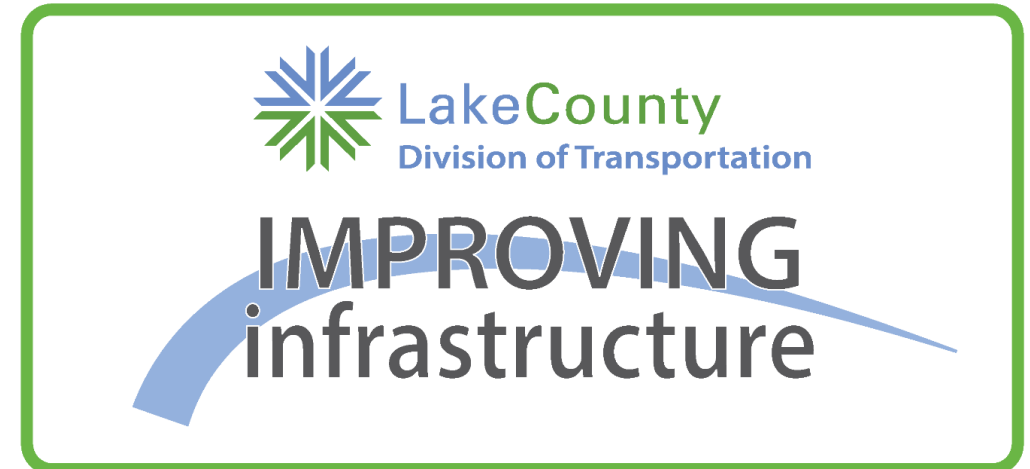
Director | County Engineer

Public Works and Transportation Committee

June 7, 2023

Agenda

- **Schedule**
- **Statutory Requirements**
- **Fund Sources**
- **Fund Distribution**
- **Program Categories and Priorities**
- **Preservation Projects**
- **Modernization Projects**
- **Non-motorized Projects**
- **Expansion Projects**



Schedule

- **June 7, 2023** **Proposed Program Presentation**
- **June 28, 2023** **Committee Adoption for Consideration**
- **July 11, 2023** **County Board Adoption for Consideration**

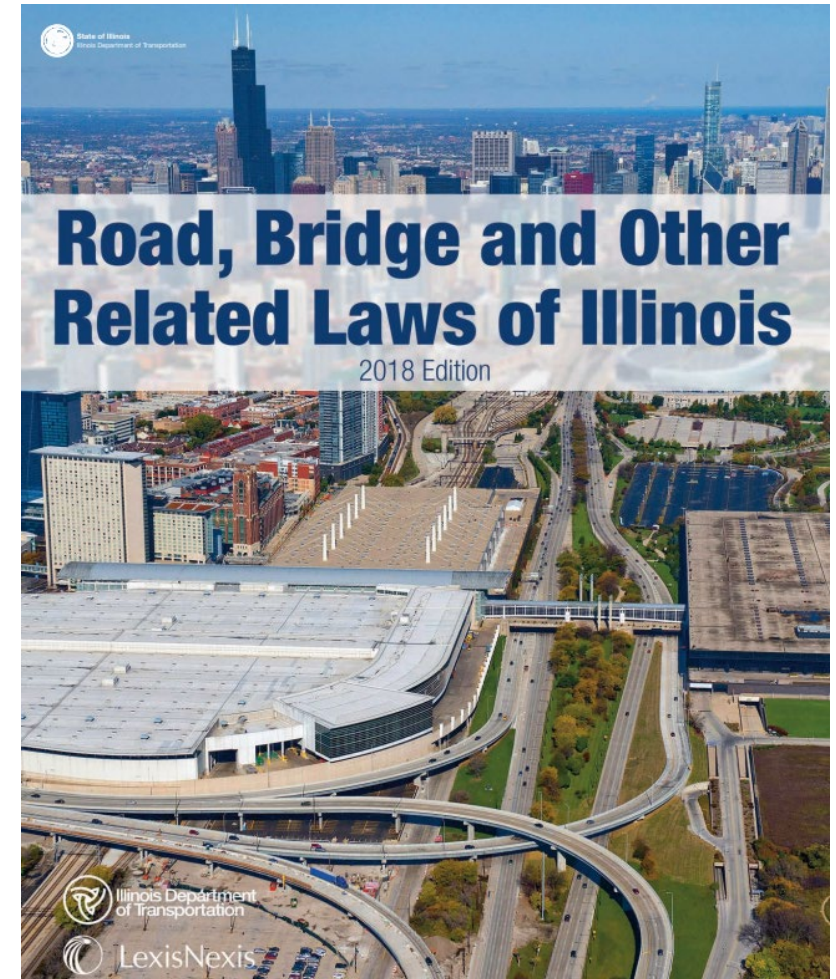
Purpose

Statutory Requirements

Illinois Road and Bridge Laws (605 ILCS 5/5-301)

Directs County Engineer to update the 5-Year Transportation Improvement Program (TIP) on an annual basis, notify local public agencies, and file with the Illinois Department of Transportation.

- The 5-Year TIP is the scheduling component of the 20-Year Long-Range Plan (Lake County's 2040 Transportation Plan)
- Maintaining a 20-Year Long-Range Transportation Plan is also a statutory requirement



Lake County's Five-Year Transportation Improvement Program is fiscally constrained based on the expected revenue over the planning horizon.

5 Local Revenue Streams Support Transportation Project Funding:



Property Tax Based*

- County Bridge Tax
- Matching Tax



Sales Tax Based

- RTA ¼% Sales Tax



User Fee Based

- Motor Fuel Tax
- County Option
Motor Fuel Tax

*County Highway Tax is an additional property tax-based fund used for LCDOT Operations.

Fund Sources

County: 5-Year Revenue Projections



Local Fund Source	2024	2025	2026	2027	2028
County Bridge Tax	\$3.9	\$3.9	\$3.9	\$3.9	\$3.9
Matching Tax	\$8.3	\$8.3	\$8.3	\$8.3	\$8.3
RTA Sales Tax	\$42.1	\$43.6	\$45.1	\$46.7	\$48.4
Motor Fuel Tax	\$16.8	\$16.9	\$17.0	\$17.1	\$17.2
County Option Motor Fuel Tax	\$12.2	\$12.4	\$12.4	\$12.5	\$12.6
TOTAL	\$83.3	\$85.1	\$86.7	\$88.5	\$90.4

millions USD

Assumptions:

- County Bridge Tax - flat growth
- Matching Tax - flat growth
- RTA Sales Tax - 3.5% annual growth (per RTA)
- Motor Fuel Tax - 0.5-1% annual growth (per IDOT) (EVs and greater fuel efficiency are slowing growth)
- County Option Motor Fuel Tax – 0.5-1% annual growth (per IDOT) (EVs and greater fuel efficiency are slowing growth)
- Note: outside revenue and interest earnings not included in above table

Fund Sources

Federal, State, Local Partners



Partial List of Commonly Pursued Outside Fund Sources

- **CMAQ** Congestion Mitigation and Air Quality
- **DCEO** Illinois Department of Commerce & Economic Opportunity
- **HSIP** Highway Safety Improvement Program
- **ICC** Illinois Commerce Commission Railroad Grade Crossing Protection
- **IIJA/BIL** Infrastructure Investment & Jobs Act/Bipartisan Infrastructure Law
- **ITEP** Illinois Transportation Enhancement Program
- **LA** Local Agency Partnerships and Reimbursements
- **MYP** IDOT's Multi-Year Plan (State Funding)
- **RAISE** Rebuilding American Infrastructure with Sustainability and Equity
- **RBI** Rebuild Illinois Bonds
- **STP** Surface Transportation Block Grant
- **SS4A** Safe Streets and Roads for All
- **TAP** Transportation Alternatives Program
- **5310** Mobility of Seniors and Individuals with Disabilities (Paratransit)
- **More...**

Fund Sources

New Awards: State and Federal

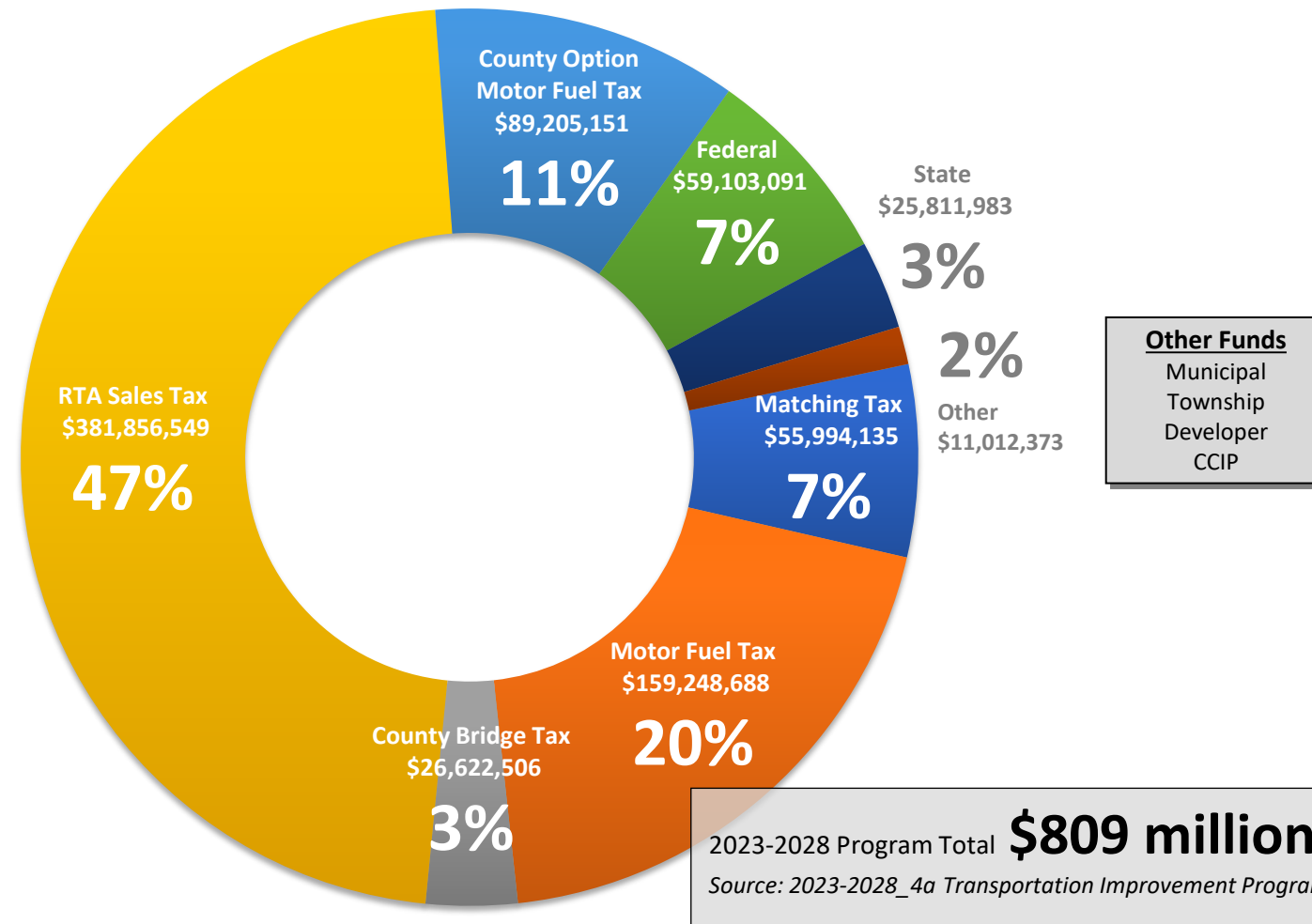


\$28M Total

- \$11.5M • Cedar Lake Rd Realignment (Hart to Nippersink) - STP/CPF**
- \$.5M • Hainesville Rd Bike Path – DCEO**
- \$2.4M • Patriot Path, Segment 1 – ITEP**
- \$13M • Buffalo Grove Rd at US45 – State MYP**
- \$.5M • Safety Action Plan – SS4A IJA**

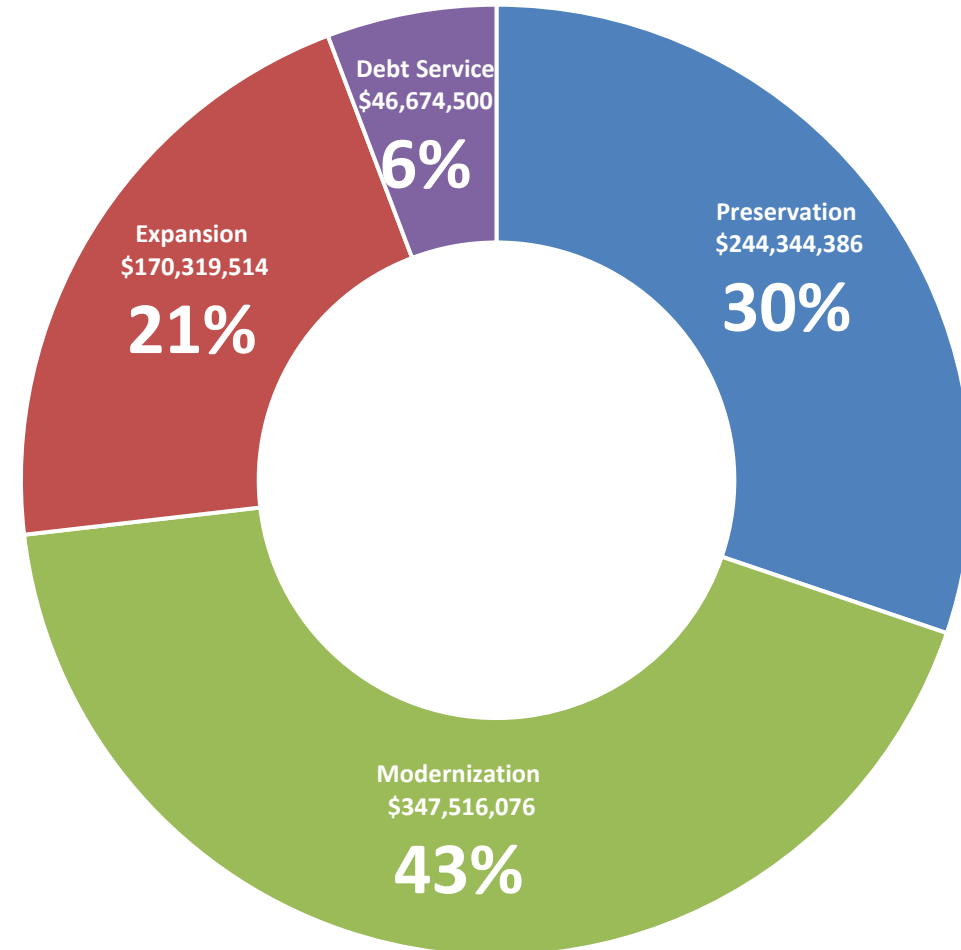
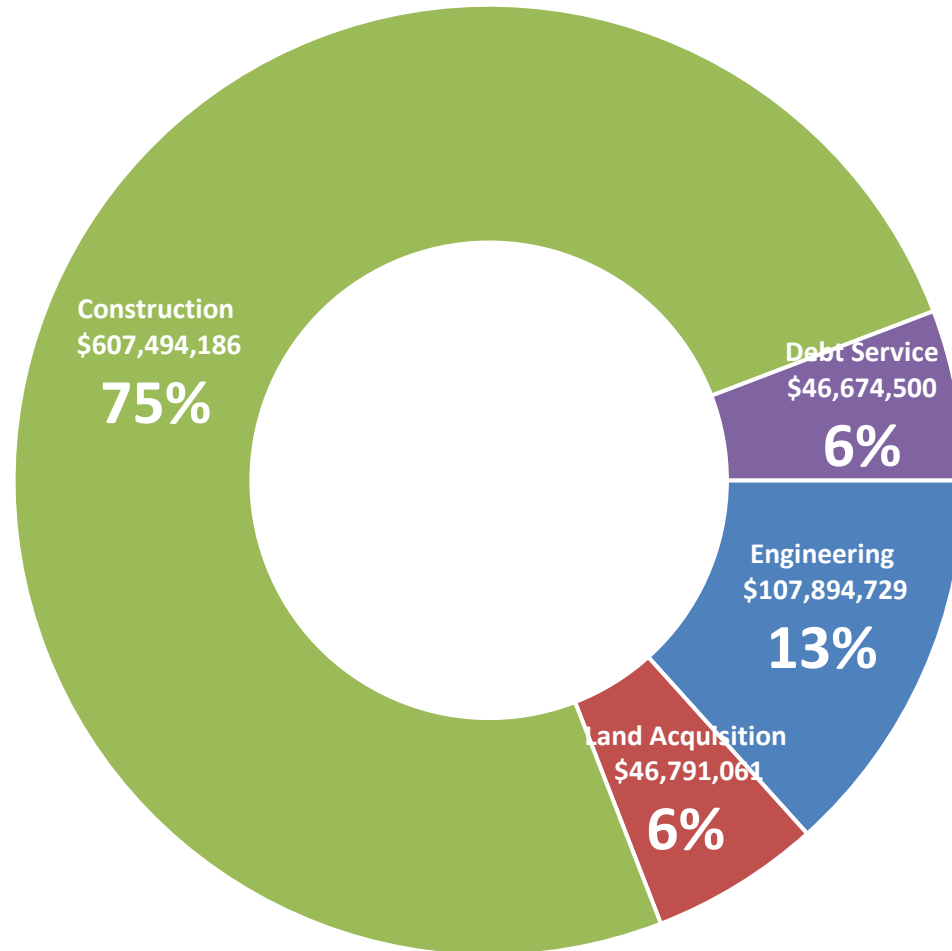
Fund Sources

2023-2028 Program Totals



Fund Distribution

2023-2028 Program Totals



Program Priorities

1. Preservation

- Keep roads, bridges, drainage systems, and other assets in good condition

2. Modernization

- Reduce delays and increase safety
- Non-motorized accommodation
- Use technology

3. Expansion

- Accommodate regional traffic and economic development
- Countywide Paratransit

Priority One: Preservation

Project selection tools:

- Asset inventories
- Condition assessments
- Life cycle/benefit cost analysis
- Unit cost information
- Industry standards
- Innovative techniques

Typical projects include:

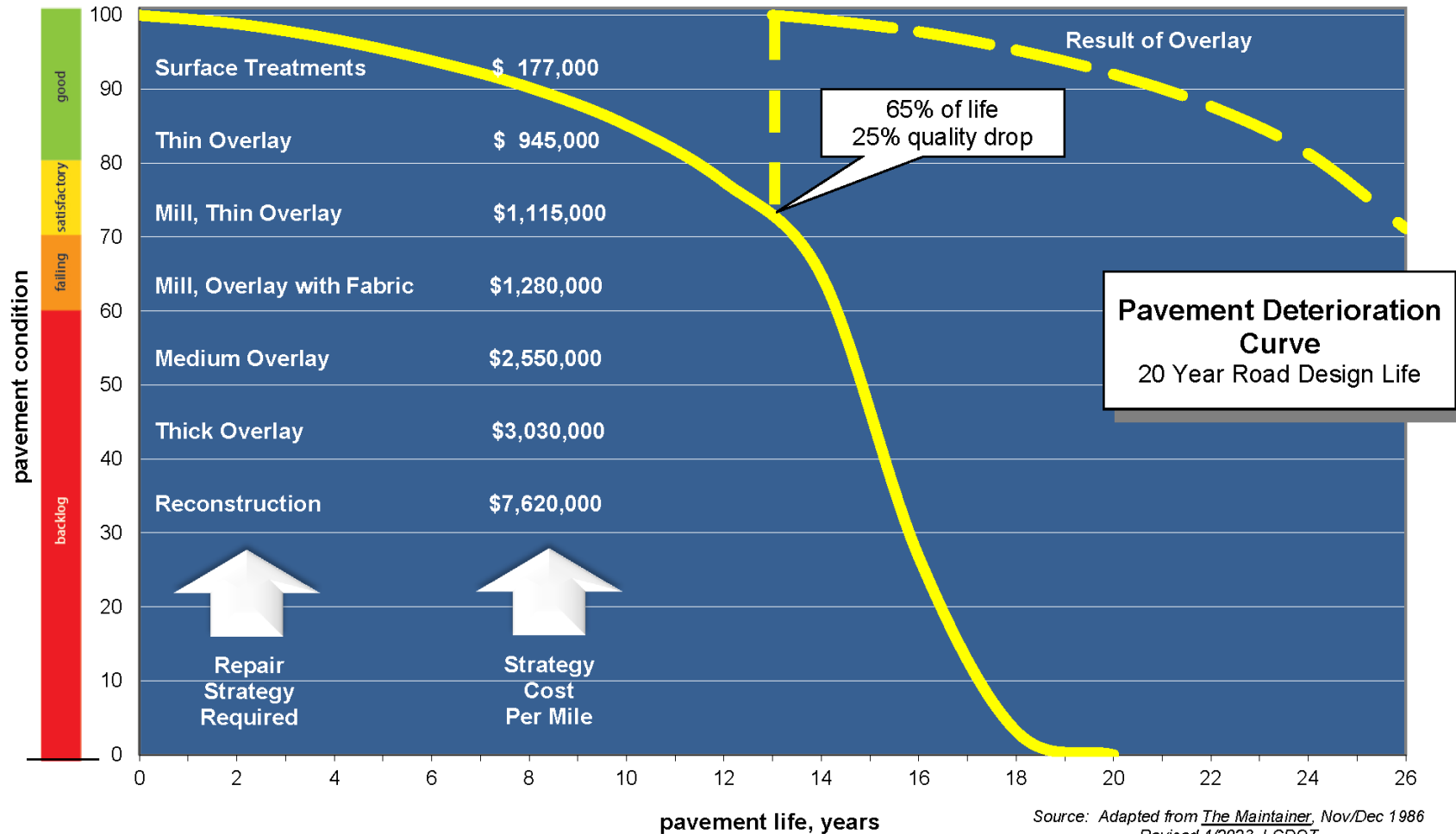
- Resurfacing and other pavement treatments
- Annual maintenance work



Life Cycle Analysis

Investments at the right time

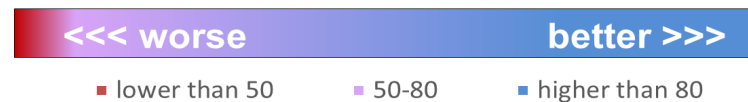
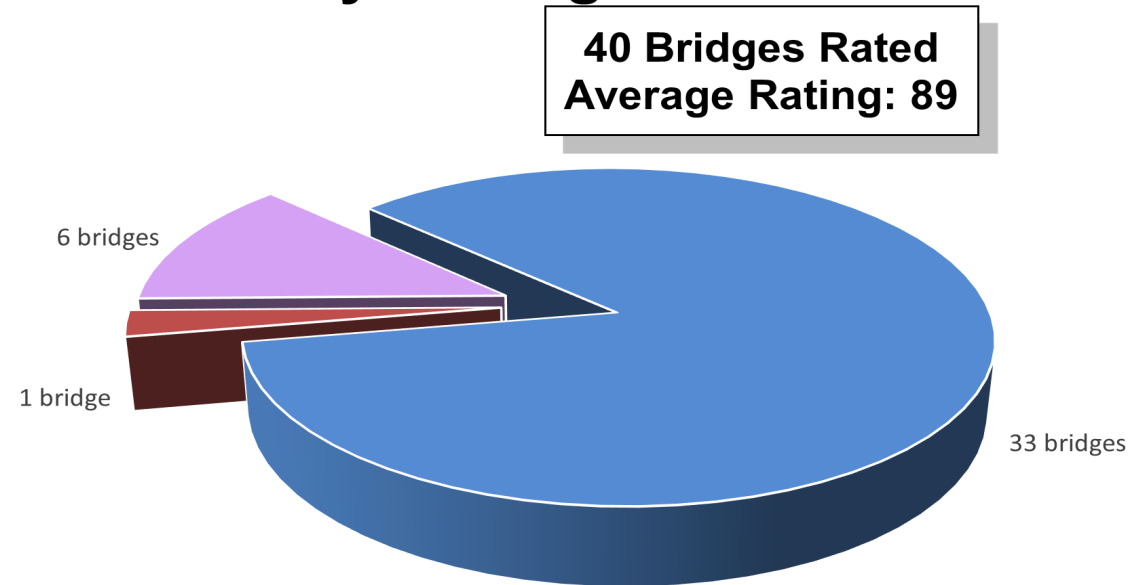
Early repairs are most cost effective



Lake County's Bridges

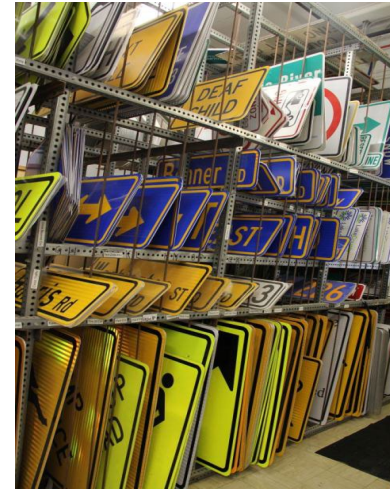
- Stearns School Rd Bridge over Mill Creek (poor rating) is being replaced in 2023

Sufficiency Ratings: Lake County's Bridges

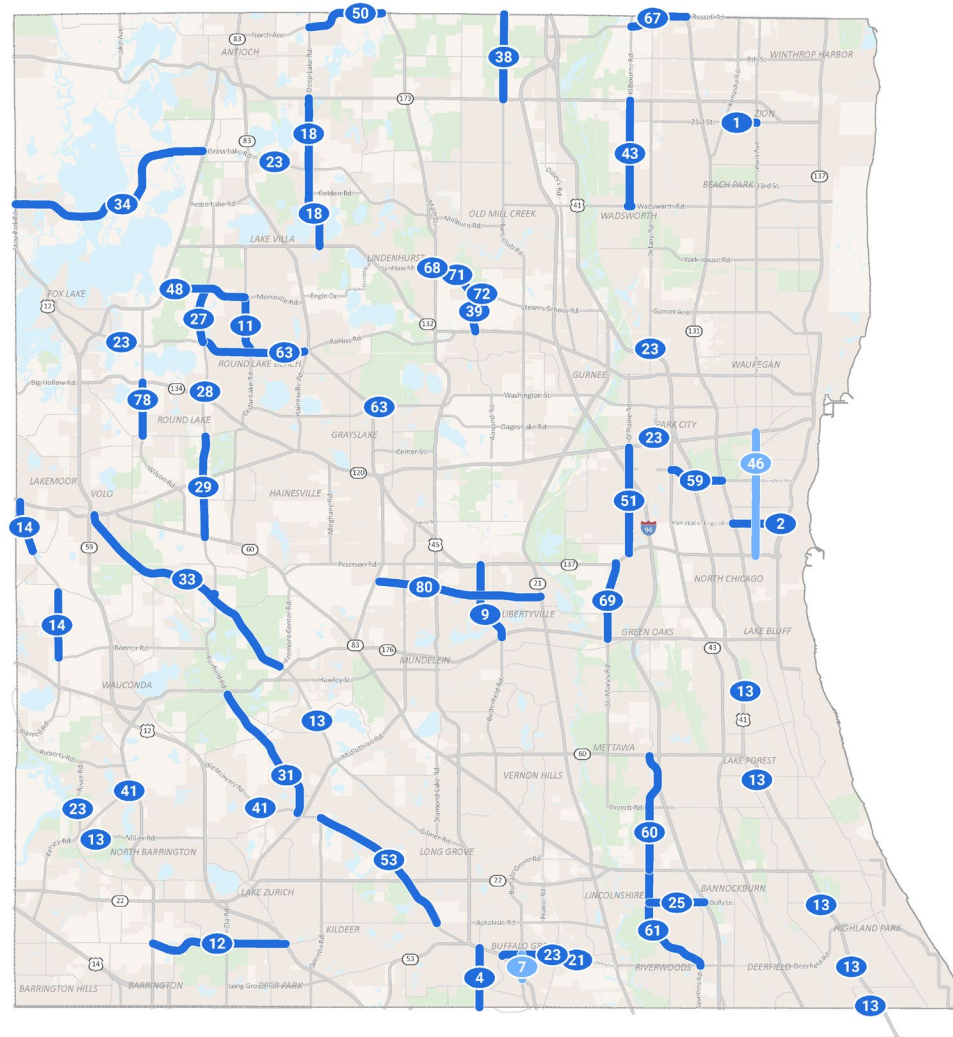




Asset Inventories

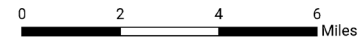
- Pavement and bike facilities
- Guardrail, bridges, rail crossings
- Signals and signs
- Drainage and stormwater facilities
- Fencing
- More...



Preservation | 2023 - 2028



-  Fully Programmed
-  Partially Programmed



Preservation Projects



Preservation Projects					
Map ID	Route	Type	Program Year	Total Cost	ProjectTracker ID
1	21st Street	Highway/Road - Resurface (With No Lane Widening)	2026	\$703,000	23-26
2	22nd St./ MLK Jr. Dr.	Highway/Road - Resurface (With No Lane Widening)	2027	\$1,837,000	23-29
4	Arlington Heights Road	Highway/Road - Reconstruct in Kind	2023	\$17,957,017	B-01182
7	Buffalo Grove Road	Highway/Road - Reconstruct in Kind	Post-2028	\$825,000	B-01359
9	Butterfield Road	Highway/Road - Resurface (With No Lane Widening)	2024	\$2,734,000	B-01636a
11	Cedar Lake Road	Highway/Road - Resurface (With No Lane Widening)	2026	\$1,726,000	B-01395
12	Cuba Road	Highway/Road - Resurface (With No Lane Widening)	2027	\$2,723,200	B-01678
13	Culvert Replacements 2024	Culvert - Replacement	2024	\$860,000	B-01517
14	Darrell Road	Highway/Road - Resurface (With No Lane Widening)	2026	\$3,993,000	23-27
18	Deep Lake Road	Highway/Road - Resurfacing, restoration, and rehabilitation (3R)	2023	\$8,392,944	B-00913a
21	Deerfield Parkway	Maintenance - Pavement Patching	2024	\$580,000	B-01708
23	Culvert Replacements 2026	Culvert - Replacement	2026	\$7,025,000	B-01645
25	Duffy Lane	Highway/Road - Resurfacing, restoration, and rehabilitation (3R)	2028	\$6,224,023	23-36
27	Fairfield Road	Highway/Road - Resurfacing, restoration, and rehabilitation (3R)	2025	\$5,100,000	23-25
28	Fairfield Road	Culvert - Replacement	2023	\$1,050,000	B-01434
29	Fairfield Road	Highway/Road - Resurface (With No Lane Widening)	2024	\$2,150,000	B-01634
31	Fairfield Road	Highway/Road - Resurface (With No Lane Widening)	2023	\$3,000,000	B-01706
33	Gilmer Road	Highway/Road - Resurface (With No Lane Widening)	2024	\$7,871,517	B-01631a
34	Grass Lake Road	Safety - Pavement Marking	2024	\$4,250,000	23-43
38	Hunt Club Road	Highway/Road - Resurface (With No Lane Widening)	2023	\$3,197,839	B-01539
39	Hutchins Road	Highway/Road - Resurface (With No Lane Widening)	2026	\$825,000	B-01676
41	Kelsey Road	Culvert - Replacement	2022	\$390,714	B-01619
43	Kilbourne Road	Highway/Road - Intersection Improvement and Resurfacing	2023	\$4,556,954	B-01576
46	Lewis Avenue	Highway/Road - Reconstruct with Change in Use or Width of Lane	Post-2028	\$18,379,381	B-01452b
48	Monaville Road	Highway/Road - Resurface (With No Lane Widening)	2026	\$2,046,000	23-28
50	North Avenue	Highway/Road - Resurface (With No Lane Widening)	2028	\$2,121,000	B-01582
51	O'Plaine Road	Highway/Road - Resurface (With No Lane Widening)	2028	\$3,572,809	23-31
53	Old McHenry Road	Highway/Road - Resurface (With No Lane Widening)	2024	\$4,200,000	B-01673
59	Pulaski Drive	Highway/Road - Resurface (With No Lane Widening)	2025	\$1,338,000	B-01577
60	Riverwoods Road	Highway/Road - Resurface (With No Lane Widening)	2027	\$5,300,000	23-30
61	Riverwoods Road	Highway/Road - Resurfacing, restoration, and rehabilitation (3R)	2026	\$12,594,800	B-01494
63	Rollins Road	Highway/Road - Resurface (With No Lane Widening)	2025	\$6,649,620	B-01495
67	Russell Road	Highway/Road - Resurface (With No Lane Widening)	2024	\$1,100,000	B-01704
68	Sand Lake Road	Maintenance - Miscellaneous	2024	\$100,000	22-05
69	St. Mary's Road	Highway/Road - Resurface (With No Lane Widening)	2028	\$3,442,000	23-32
71	Stearns School Road	Highway/Road - Resurface (With No Lane Widening)	2026	\$1,260,000	B-01496
72	Stearns School Road	Bridge/Structure - New	2023	\$1,701,666	B-01499b
78	Wilson Road	Highway/Road - Resurface (With No Lane Widening)	2024	\$1,640,000	B-01641
80	Winchester Road	Highway/Road - Resurface (With No Lane Widening)	2023	\$6,458,313	B-01573a

Note: Project Cost shown reflects cost in 2023 - 2028 years only. Detailed funding information for all projects is available in ProjectTracker.

What's New in Preservation?



- **Roadway Resurfacing Projects:**
 - **Duffy Lane 3R: Riverwoods Rd – I94**
 - **Grass Lake Rd Safety Improvements: IL59 – State Park Rd**
 - **Fairfield Rd 3R: Rollins Rd – Monaville Rd**
 - **Riverwoods Rd 3R: IL22 – Deerfield Rd**
- **Deerfield Pkwy concrete repairs: IL21 – IL83**
- **Libertyville Campus Fuel Facility**
- **Pedestrian Bridges - Deck Rehabilitation**
- **Culvert Replacements (high-risk metal culverts)**
- **Rollins Rd Improvement: Washington Ave to Grand Ave (additional funding)**

What's New in Preservation?

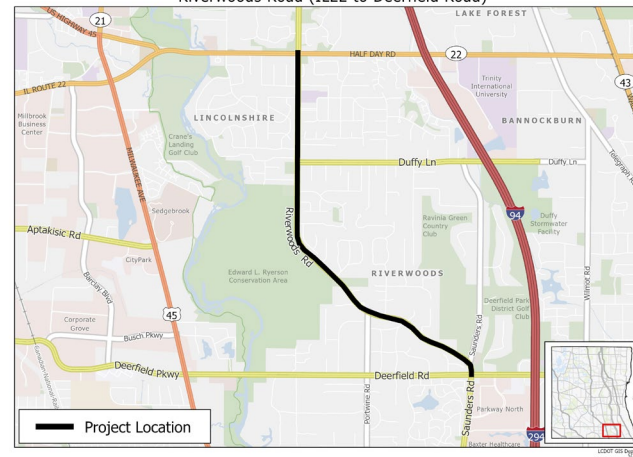
- Annual Work at Various Locations:
 - Bridge repairs
 - Crack sealing
 - Microsurfacing
 - Pavement patching
 - Pavement rejuvenator
 - Pavement markers
 - Pavement markings
 - Drainage system cleaning
 - Culvert repair or replacement
 - Retaining wall repair or replacement
 - Roadway signs
 - Curb and gutter repair or replacement
 - Rumble strips
 - Sidewalk and ADA curb ramps
 - Guardrail repair or replacement
 - Township road district projects



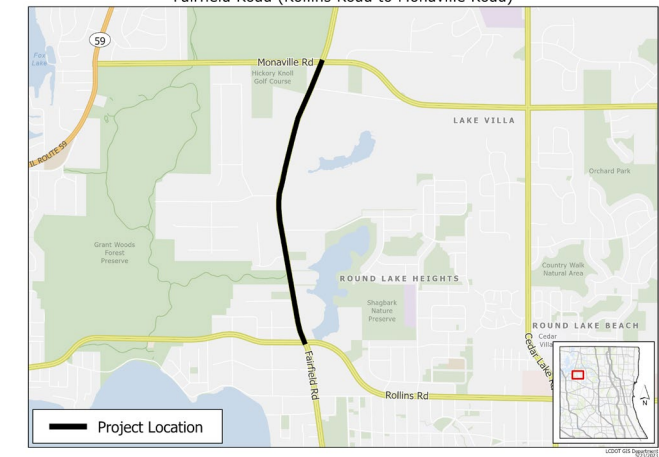
Project Highlight: Riverwoods Rd, Duffy Ln, Fairfield Rd

- 3R Resurfacing Projects
- Expanded Scope
 - Enhance Safety
 - Improve Drainage
 - Fill Non-Motorized Gaps
- Typically avoid right-of-way acquisition
- 2-3 years for design, coordination and permitting

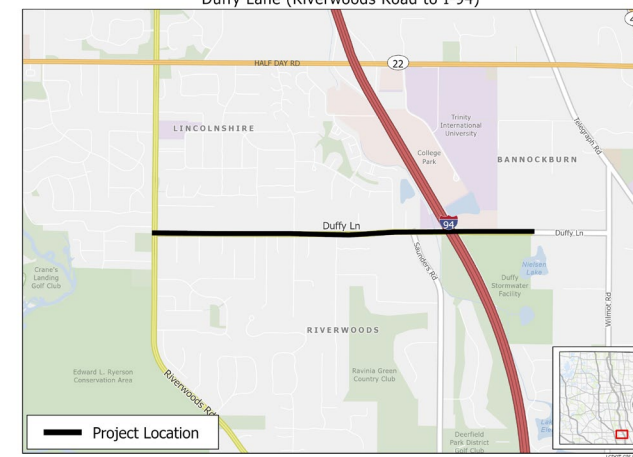
Location Map
Riverwoods Road (IL22 to Deerfield Road)



Location Map
Fairfield Road (Rollins Road to Monville Road)



Location Map
Duffy Lane (Riverwoods Road to I-94)

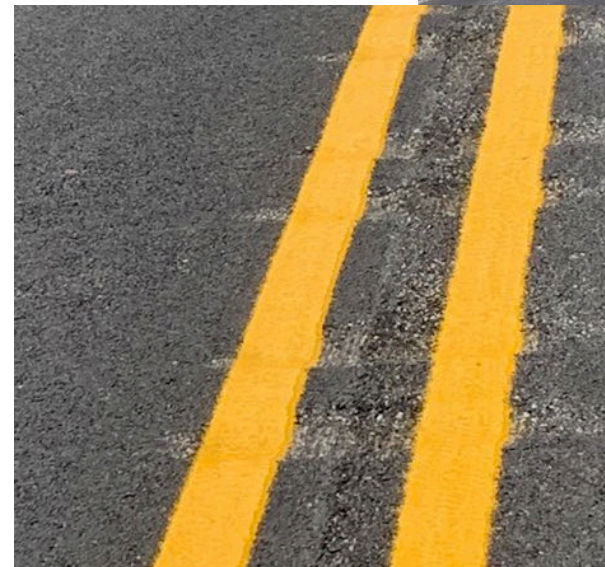


Project Highlight: Center and Edge Line Rumble Strips

- **New systemwide safety countermeasure intended to reduce roadway departures:**
 - Run-off-road crashes
 - Head-on crashes
- **Installed along two-lane county highways with posted speed limits of 45 mph and over**

“The sound of safety”

FHWA Report No. FHWA-SA-16-115



ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE

Priority Two: Modernization

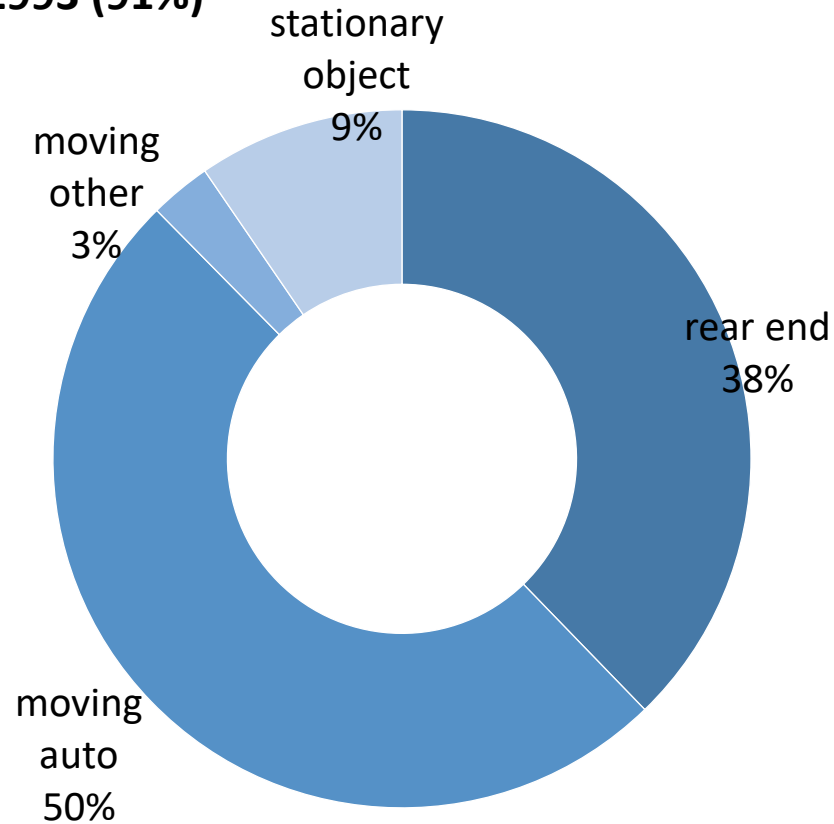
- **Project selection tools:**
 - Traffic and safety analysis
 - Level of Service (LOS) data
 - PASSAGE data
 - 2040 bike and pedestrian priorities
 - Non-motorized policy
 - Bike/Pedestrian gap analysis
- **Typical projects include:**
 - Intersection and safety improvements
 - Bike and pedestrian accommodations
 - Signal timing and interconnects



Crash Summary 2021 Data

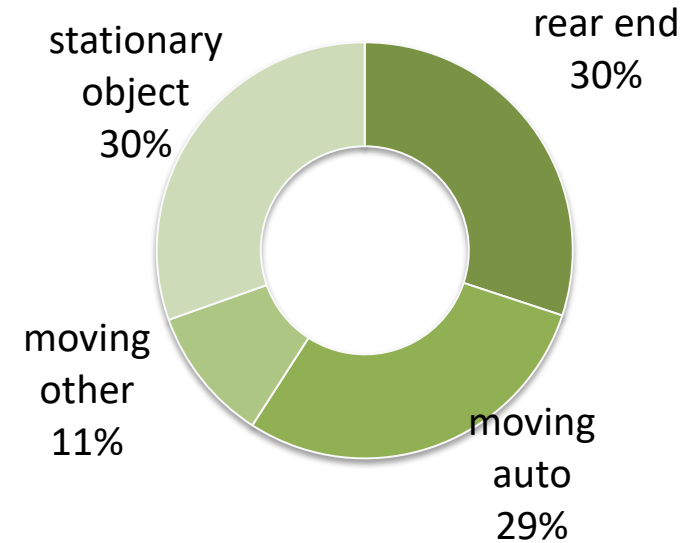
Crashes at intersections

total: 2993 (91%)



Crashes on roadway sections

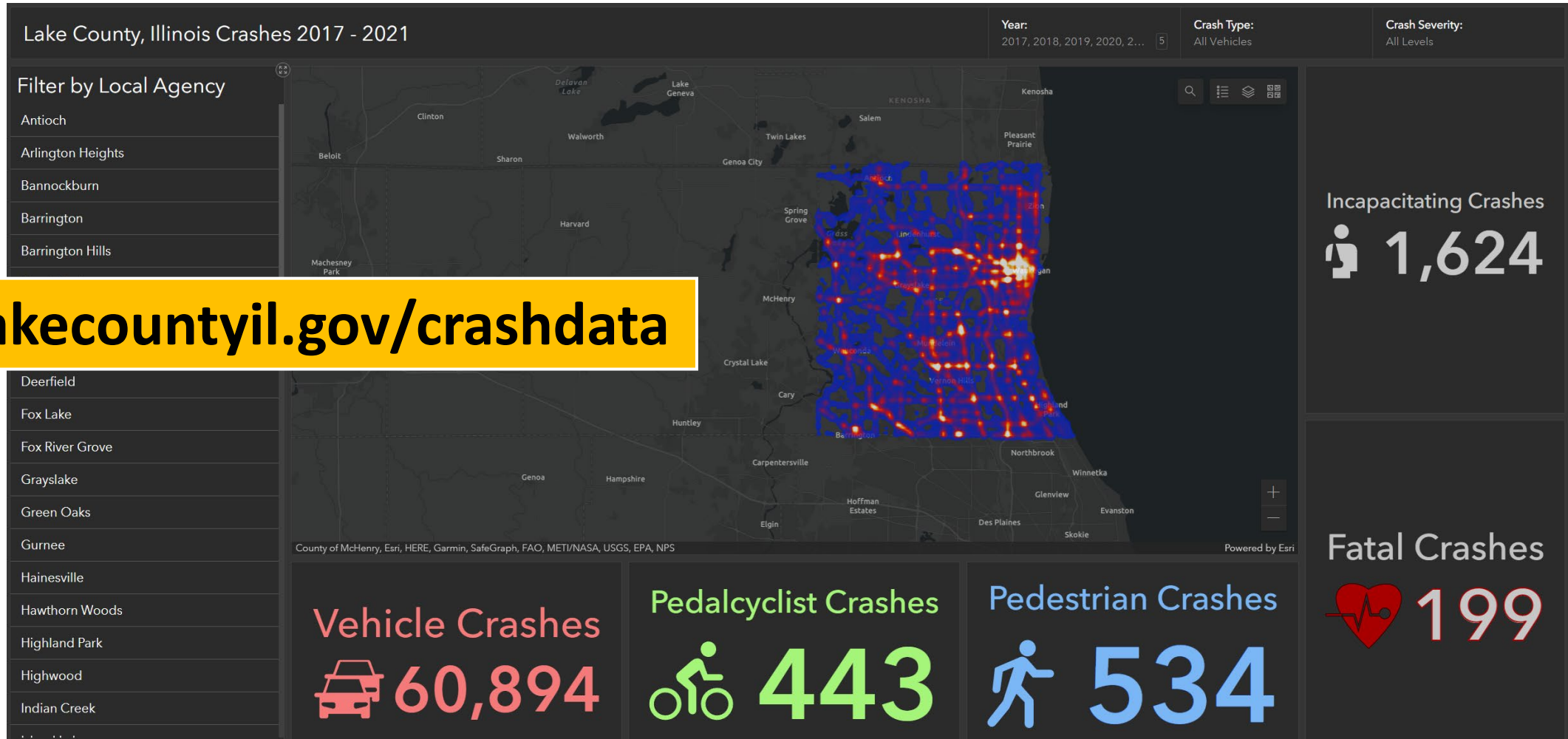
Total: 286 (9%)



Data Source: LCDOT Traffic Department, 4/2023
IDOT 2021 crash data (most recent available)

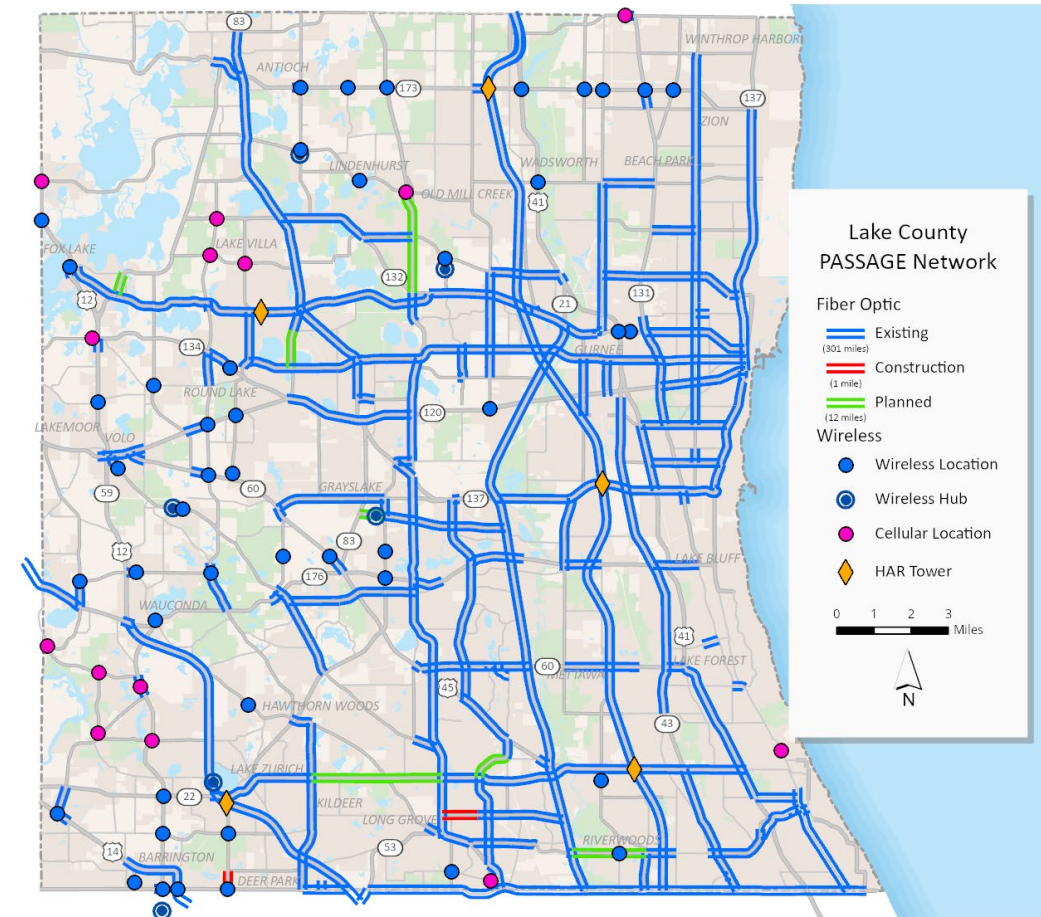
Crash Dashboard

2017-2021 Crash Data



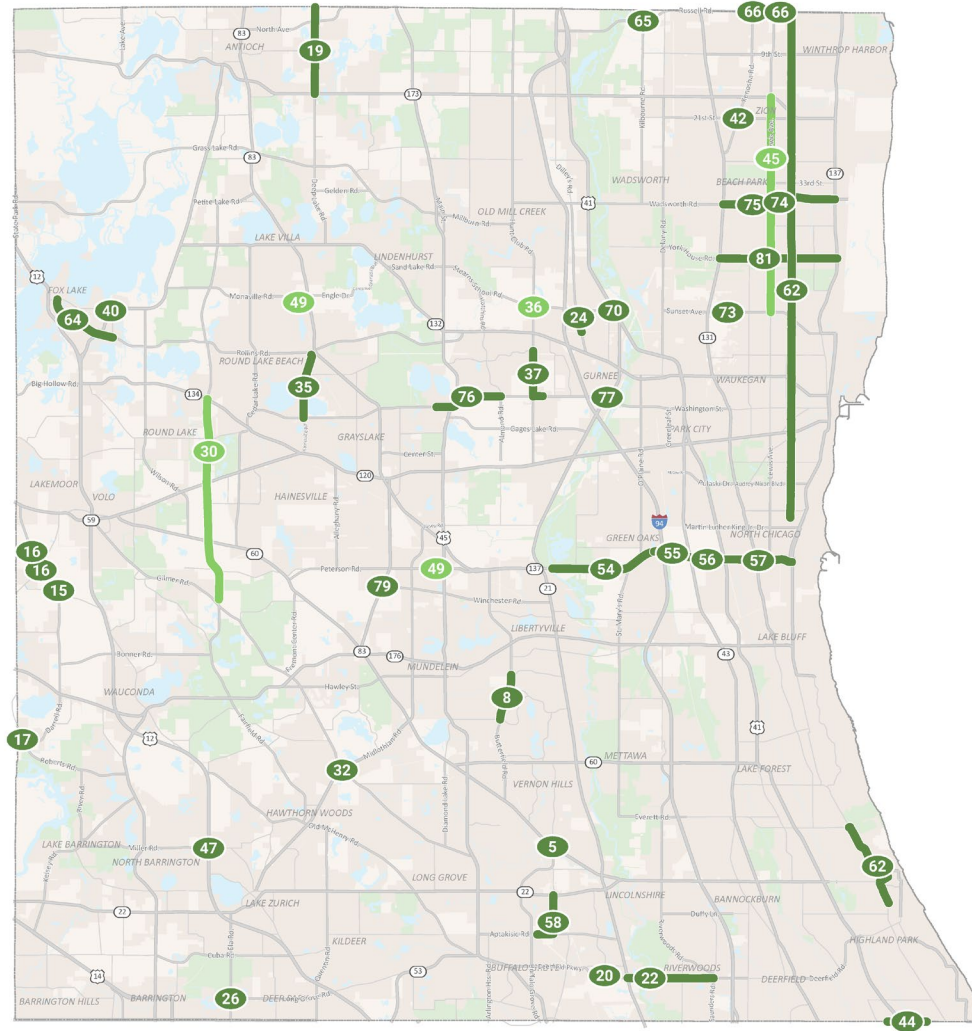
Lake County's Traffic Signal and Communication Network



- 301 miles of fiber optic in place
- 11 miles planned
- 670 traffic signals connected
- 445 PTZ Cameras
- 1 portable PTZ (cell)
- 9 portable changeable message board signs
- 5 Highway Advisory Radio (HAR) towers – Radio 1620AM



Source: LCDOT Traffic Department 5/9/2023

Modernization | 2023 - 2028



-  Fully Programmed
-  Partially Programmed



Modernization Projects

Modernization Projects						
Map ID	Route	Type	Program Year	Total Cost	ProjectTracker ID	
5	Buffalo Grove Road	Highway/Road - Intersection Improvement	2028	\$19,000,000	23-46	
8	Butterfield Road	New Shared Use Path	2023	\$2,904,971	B-01617b	
15	Darrell Road	Highway/Road - New Roundabout	2023	\$7,994,239	B-00141a	
16	Darrell Road	Highway/Road - New Roundabout	2023	\$10,140,000	B-00141b	
17	Darrell Road	Highway/Road - Intersection Improvement	2026	\$3,400,000	B-01703	
19	Deep Lake Road	Highway/Road - New Roundabout	2024	\$10,732,570	B-01547	
20	Deerfield Parkway	Signals - Add Signals at Single Intersection	2025	\$860,000	22-03	
22	Deerfield Road	Highway/Road - Continuous Bi-Directional Turn Lanes	2024	\$42,178,792	B-01266a	
24	Dilley's Road	New Shared Use Path	2023	\$693,965	23-34	
26	Ela Road	Highway/Road - Intersection Improvement	2022	\$3,397,186	B-01120	
30	Fairfield Road	Highway/Road - Corridor Improvement	Post-2028	\$6,401,400	B-01667	
32	Gilmer Road	Highway/Road - Intersection Improvement	2021	\$3,458,654	B-00728a	
35	Hainesville Road	Highway/Road - Continuous Bi-Directional Turn Lanes	2024	\$26,380,248	B-01482	
36	Hunt Club	Highway/Road - Intersection Improvement	Post-2028	\$3,400,000	B-01707	
37	Hunt Club Road	Highway/Road - Intersection Improvement	2023	\$18,337,532	B-01437	
40	IL Route 59	Highway/Road - Intersection Improvement	2023	\$12,512,858	B-00738	
42	Kenosha Road	Highway/Road - New Roundabout	2025	\$3,540,526	B-01548	
44	Lake-Cook Road	New Shared Use Path	2026	\$6,517,223	B-01616	
45	Lewis Avenue	Highway/Road - Reconstruct with Change in Use or Width of Lane	Post-2028	\$2,750,000	23-44	
47	Miller Road	Highway/Road - Intersection Improvement	2023	\$3,275,610	B-01263	
49	Monaville Road and Peterson Road	Highway/Road - Railroad Grade Separation Feasibility Study	Post-2028	\$1,123,215	B-01666a	
54	Patriot Path	New Shared Use Path	2026	\$11,808,764	B-01181a	
55	Patriot Path	New Shared Use Path	2028	\$8,306,400	B-01181b	
56	Patriot Path	New Shared Use Path	2028	\$1,289,100	B-01181c	
57	Patriot Path	New Shared Use Path	2025	\$6,800,800	B-01181d	
58	Prairie Road	Highway/Road - Intersection Improvement	2025	\$6,267,000	B-01500	
62	Robert McClory Bike Path	Improve Shared Path Facility	2025	\$5,650,000	B-01702	
64	Rollins Road	Highway/Road - Continuous Bi-Directional Turn Lanes	2026	\$21,109,047	B-01705	
65	Russell Road	Highway/Road - Intersection Improvement	2025	\$2,785,141	B-01445a	
66	Russell Road	Highway/Road - New Roundabout	2024	\$9,070,000	B-01445b	
70	Stearns School Road	Highway/Road - Intersection Improvement	2023	\$4,148,534	B-01361	
73	Sunset Avenue	Signals - Add Signals at Single Intersection	2025	\$510,000	B-01701	
74	Wadsworth Road	Highway/Road - Intersection Improvement	2024	\$4,046,270	B-01119	
75	Wadsworth Road	Highway/Road - Continuous Bi-Directional Turn Lanes	2026	\$28,336,768	B-01402a	
76	Washington Street	New Shared Use Path	2024	\$3,184,306	B-01419a	
77	Washington Street	Highway/Road - Intersection Improvement	2028	\$6,400,000	B-01700	
79	Winchester Road	Highway/Road - Intersection Reconstruction	2023	\$3,823,135	B-01365	
81	York House Road	Highway/Road - Continuous Bi-Directional Turn Lanes	2027	\$18,317,281	B-01509	

Note: Project Cost shown reflects cost in 2023 - 2028 years only. Detailed funding information for all projects is available in ProjectTracker.

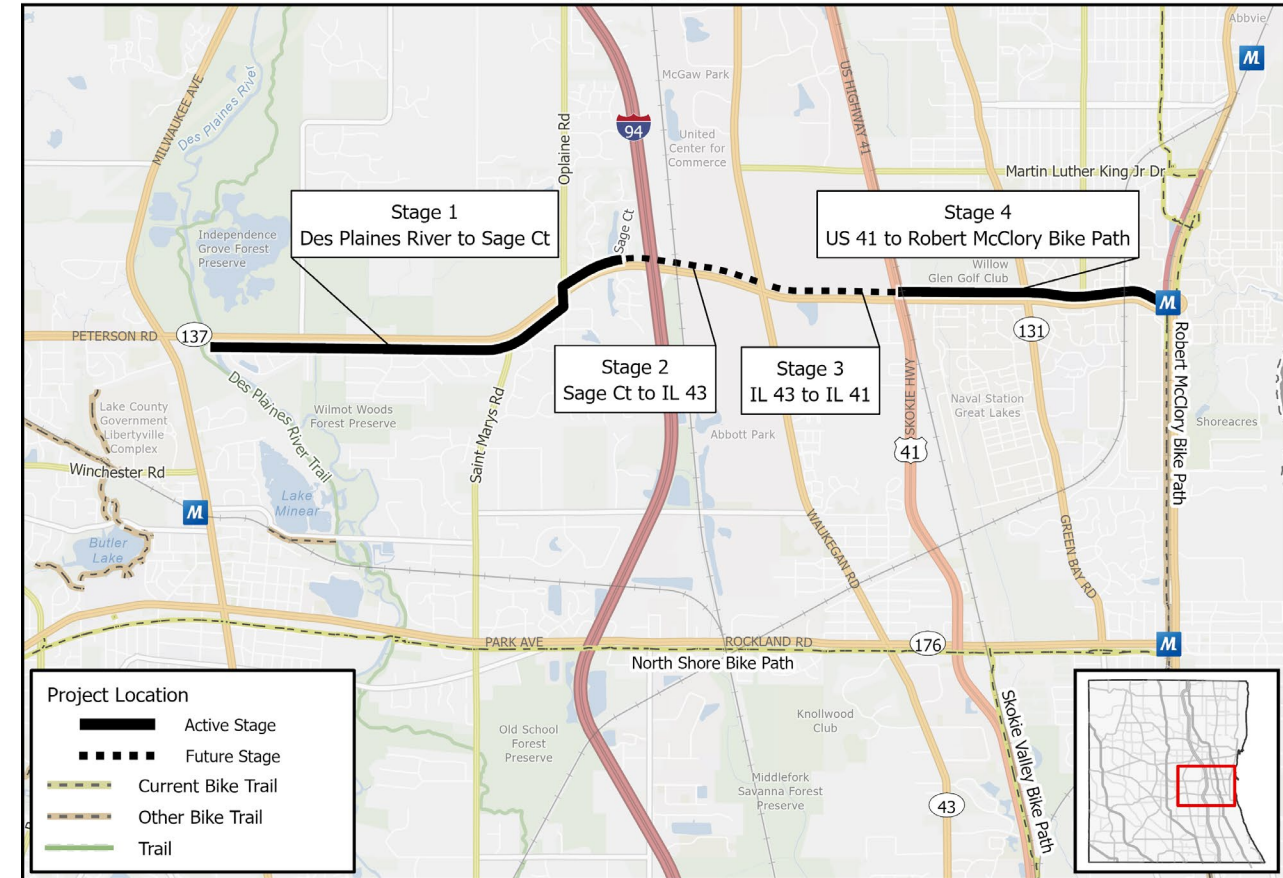
What's New in Modernization?

- **Pedestrian Safety: Accessible (Audible) Pedestrian Push Buttons**
- **Buffalo Grove Rd at US45 (joint project with IDOT)**
- **Dilley's Rd Bike Path (joint project with Village)**
- **Countywide Safety Action Plan (SS4A Grant with CMAP)**
- **Lewis Ave Study: Sunset Ave to IL 173**
- **Patriot Path Segments 2 and 3: O'Plaine Rd to US 41**
- **Washington St at IL 21 (construction funding)**
- **Wadsworth Road: IL 131 to Sheridan Road (construction funding)**
- **Hainesville Road: Washington St to Rollins Rd (construction funding)**

Project Highlight: Patriot Path Segments 2 and 3

- Fully funded Engineering & Construction
- 5.5 mile bike path that connects the Des Plaines River Trail and the Robert McClory Bike Path
- Provides new recreational and commuting options
- Connects to parks, forest preserves, employment centers and transit stops

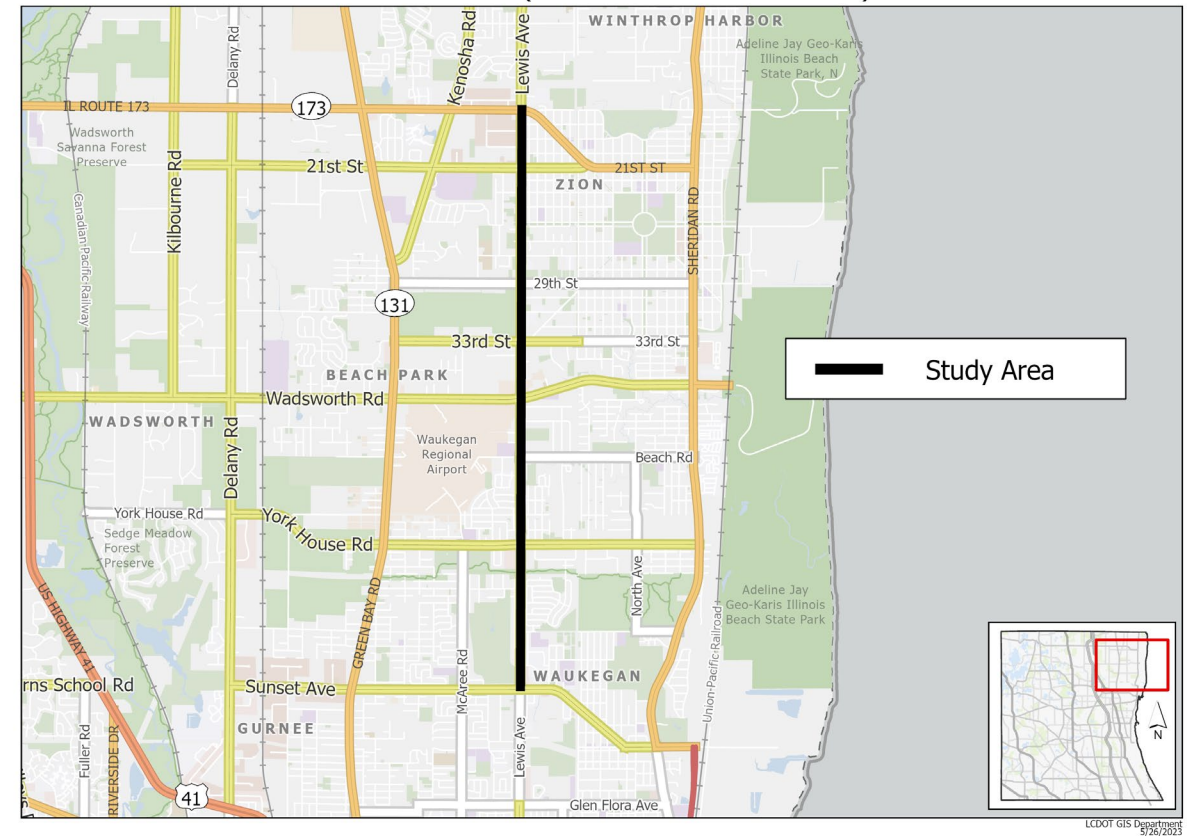
Location Map
Patriot Path



Project Highlight: Lewis Ave: Sunset Ave to IL 173

- Initial engineering study to investigate crashes and potential range of alternatives
- 5 mile corridor with over 20,000 vehicles per day
- 877 crashes (322 injury crashes) over 5-year study period
- Plan to submit future Safe Streets for All implementation grant (federal funds)

Location Map
Lewis Avenue (Sunset Avenue to IL-173)



Project Highlight: Multi-Use Maintenance Facility

- Feasibility study and design services
- Goals:
 - Modern design that meets current and future (50+ years) needs
 - Energy and operationally efficient
 - Consolidate existing 1950s-70s spaces: truck storage, light duty, parts, snow command, and sign shop
 - Potential storage options for outside departments/agencies
 - Potential flexible meeting spaces for 40-60 staff
 - Potential loading dock for Libertyville campus

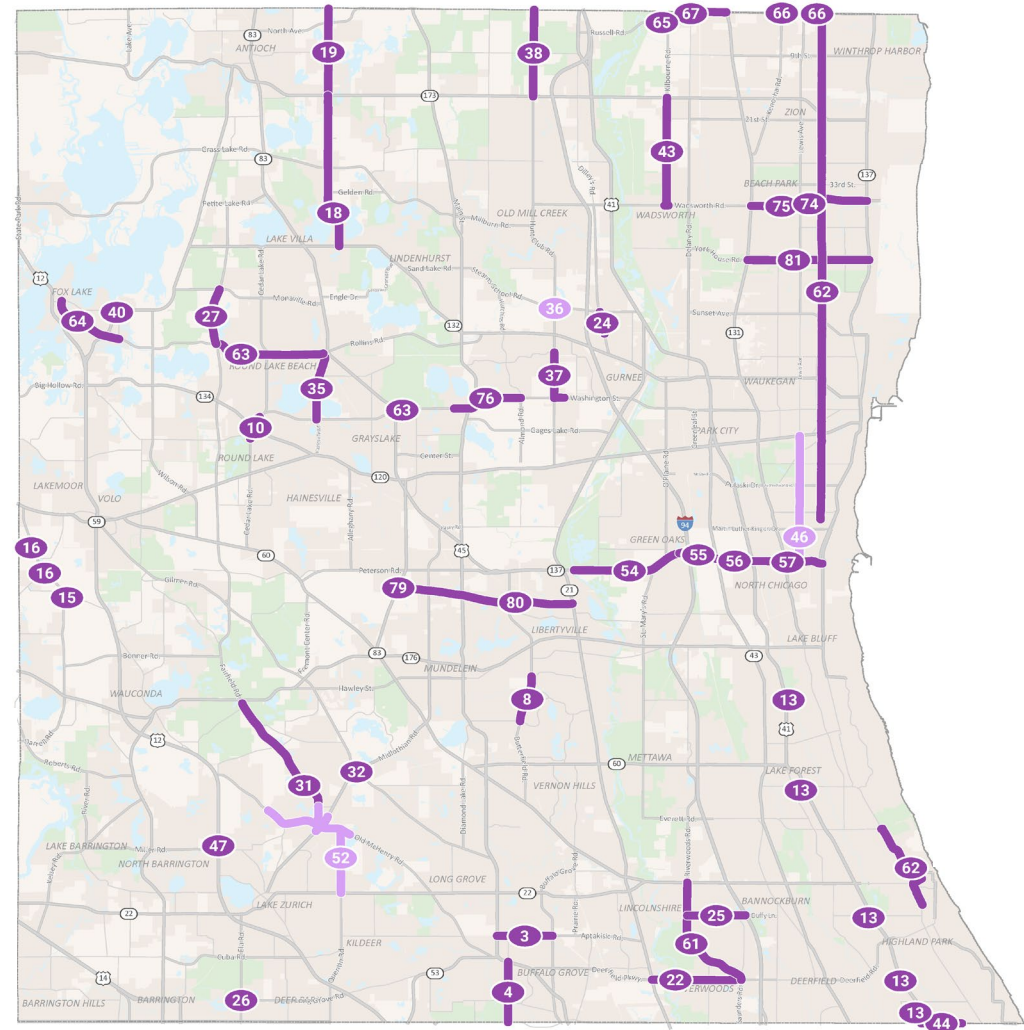


Non-motorized Projects | 2023-2028

\$98 Million Investment 12% of total program

- 31.5 miles of paved shoulder
- 55.7 miles of bike path
- 14.3 miles of sidewalk

- Fully Programmed
- Partially Programmed



Non-motorized projects

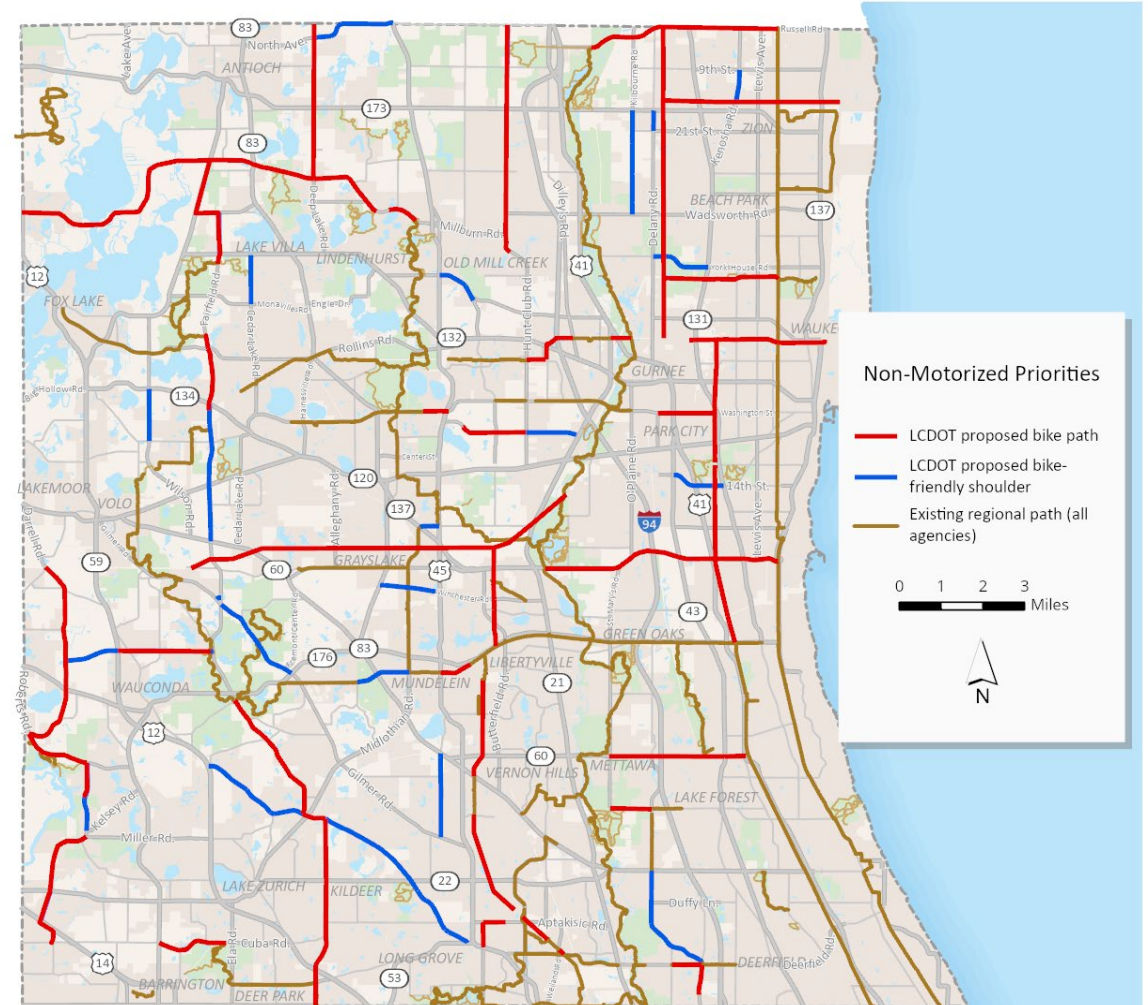


Non-Motorized Accommodations Projects						
Map ID	Route	Type	Program Year	ProjectTracker ID	Total Cost	Non-Motorized Improvement
3	Aptakistic Road	Highway/Road - Add Lanes	2023	B-00739a	\$14,904,780	Bike Path
4	Arlington Heights Road	Highway/Road - Reconstruct in Kind	2023	B-01182	\$17,957,017	Sidewalk
8	Butterfield Road	New Shared Use Path	2023	B-01617b	\$2,904,971	Bike Path
10	Cedar Lake Road	Highway/Road - New Road	2025	B-00752	\$34,842,061	Bike Path
13	Skokie Valley Bike Path	Culvert - Replacement	2024	B-01517	\$860,000	Bike Path
15	Darrell Road	Highway/Road - New Roundabout	2023	B-00141a	\$7,994,239	Bike Path
16	Darrell Road	Highway/Road - New Roundabout	2023	B-00141b	\$10,140,000	Bike Path
18	Deep Lake Road	Highway/Road - Resurfacing, restoration, and rehabilitation (3R)	2023	B-00913a	\$8,392,944	Paved Shoulder
19	Deep Lake Road	Highway/Road - New Roundabout	2024	B-01547	\$10,732,570	Bike Path
22	Deerfield Road	Highway/Road - Continuous Bi-Directional Turn Lanes	2024	B-01266a	\$42,178,792	Bike Path
24	Dilley's Road	New Shared Use Path	2023	23-34	\$693,965	Bike Path
25	Duffy Lane	Highway/Road - Resurfacing, restoration, and rehabilitation (3R)	2028	23-36	\$6,224,023	Bike Path
26	Ela Rd	Highway/Road - Intersection Improvement	2022	B-01120	\$3,397,186	Bike Path
27	Fairfield Road	Highway/Road - Resurfacing, restoration, and rehabilitation (3R)	2025	23-25	\$5,100,000	Bike Path
31	Fairfield Road	Highway/Road - Resurface (With No Lane Widening)	2023	B-01706	\$3,000,000	Paved Shoulder
32	Gilmer Road	Highway/Road - Intersection Improvement	2021	B-00728a	\$3,458,654	Bike Path
35	Hainesville Road	Highway/Road - Continuous Bi-Directional Turn Lanes	2024	B-01482	\$26,380,248	Bike Path
36	Hunt Club	Highway/Road - Intersection Improvement	Post-2028	B-01707	\$3,400,000	Bike Path
37	Hunt Club Road	Highway/Road - Intersection Improvement	2023	B-01437	\$18,337,532	Bike Path
38	Hunt Club Road	Highway/Road - Resurface (With No Lane Widening)	2023	B-01539	\$3,197,839	Paved Shoulder
40	IL59	Highway/Road - Intersection Improvement	2023	B-00738	\$12,512,858	Bike Path
43	Kilbourne Road	Highway/Road - Intersection Improvement and Resurfacing	2023	B-01576	\$4,556,954	Sidewalk
44	Lake-Cook Road	New Shared Use Path	2026	B-01616	\$6,517,223	Bike Path
46	Lewis Avenue	Highway/Road - Reconstruct with Change in Use or Width of Lane	Post-2028	B-01452b	\$18,379,381	Bike Path
47	Miller Road	Highway/Road - Intersection Improvement	2023	B-01263	\$3,275,610	Sidewalk
52	Old McHenry Road	Highway/Road - Railroad Grade Separation	Post-2028	B-01546	\$52,270,022	Bike Path
54	Patriot Path	New Shared Use Path	2026	B-01181a	\$11,808,764	Bike Path
55	Patriot Path	New Shared Use Path	2028	B-01181b	\$8,306,400	Bike Path
56	Patriot Path	New Shared Use Path	2028	B-01181c	\$1,289,100	Bike Path
57	Patriot Path	New Shared Use Path	2025	B-01181d	\$6,800,800	Bike Path
61	Riverwoods Road	Highway/Road - Resurfacing, restoration, and rehabilitation (3R)	2026	B-01494	\$12,594,800	Bike Path
62	Robert McClory Bike Path	Improve Shared Path Facility	2025	B-01702	\$5,650,000	Bike Path
63	Rollins Road	Highway/Road - Resurface (With No Lane Widening)	2025	B-01495	\$6,649,620	Sidewalk
64	Rollins Road	Highway/Road - Continuous Bi-Directional Turn Lanes	2026	B-01705	\$21,109,047	Bike Path
65	Russell Road	Highway/Road - Intersection Improvement	2025	B-01445a	\$2,785,141	Bike Path
66	Russell Road	Highway/Road - New Roundabout	2024	B-01445b	\$9,070,000	Bike Path
67	Russell Road	Highway/Road - Resurface (With No Lane Widening)	2024	B-01704	\$1,100,000	Paved Shoulder
74	Wadsworth Road	Highway/Road - Intersection Improvement	2024	B-01119	\$4,046,270	Bike Path
75	Wadsworth Rd	Highway/Road - Continuous Bi-Directional Turn Lanes	2026	B-01402a	\$28,336,768	Bike Path
76	Washington Street	New Shared Use Path	2024	B-01419a	\$3,184,306	Bike Path
79	Winchester Road	Highway/Road - Intersection Reconstruction	2023	B-01365	\$3,823,135	Paved Shoulder
80	Winchester Road	Highway/Road - Resurface (With No Lane Widening)	2023	B-01573a	\$6,458,313	Bike Path
81	York House Road	Highway/Road - Continuous Bi-Directional Turn Lanes	2027	B-01509	\$18,317,281	Bike Path

Note: Project Cost shown reflects cost in 2023 - 2028 years only. Detailed funding information for all projects is available in ProjectTracker.

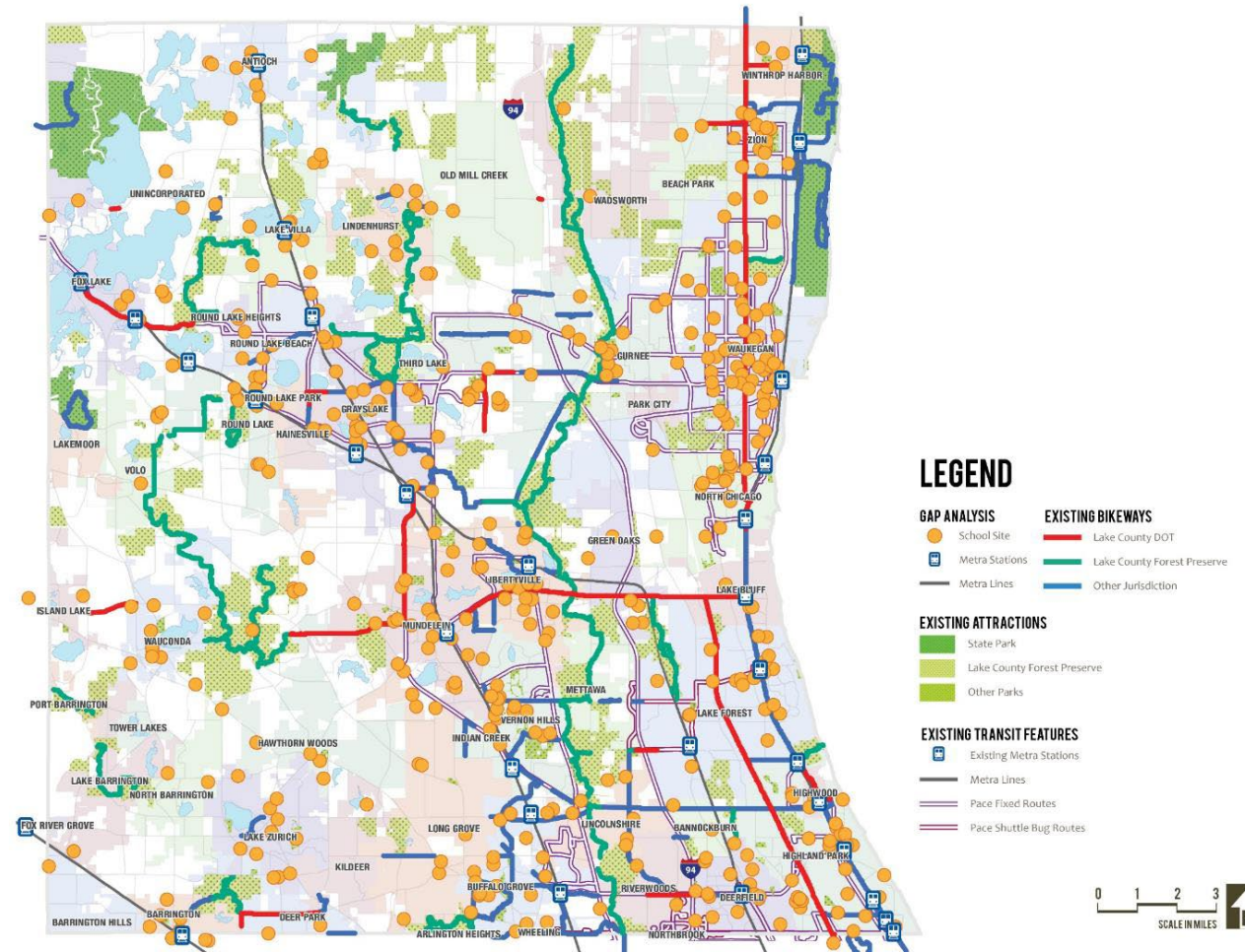
Bike and Pedestrian Priorities

- **Lake County's 2040 Non-motorized plan identifies 310 miles of proposed bike paths**
 - 107 miles under LCDOT jurisdiction
 - 43 miles under LCFPD jurisdiction
 - 160 miles under other jurisdiction, such as State, municipality, or township
- **Advance as stand-alone projects or combined with adjacent roadway project work**



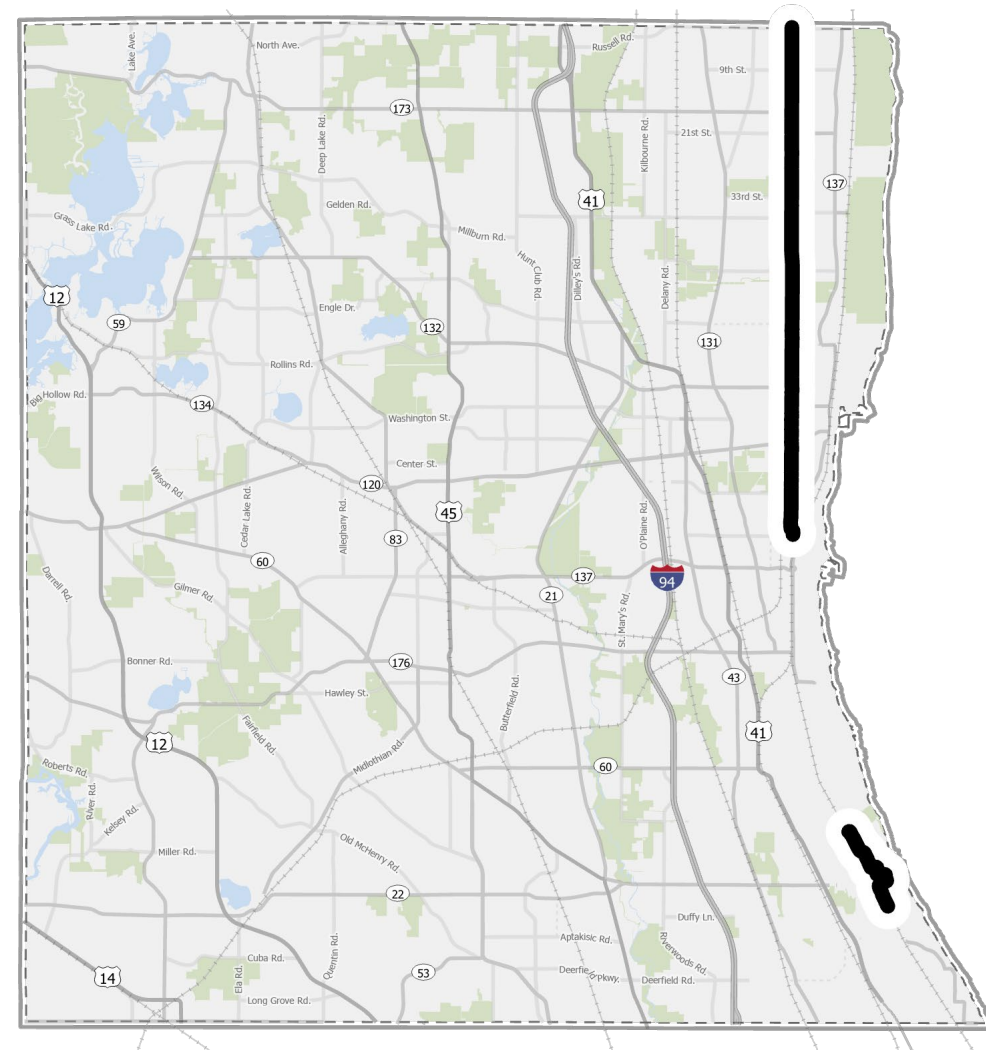
Bike and Sidewalk Gap Analysis

- 2010 study identified 60 strategic gaps, that if filled, would provide regional connectivity
- County pays 100% of cost to fill gaps with local sponsor to own and maintain
- To date, 80% have been programmed or completed



Project Highlight: McClory Bike Path

- **Pave northern 11-mile segment of gravel path**
- **Reconstruct portions of southern segments owned by LCDOT**
- **Improve multiple uncontrolled crossings at 4- & 5-lane roads**
- **Coordinate with local communities to enhance the corridor with trail amenities**



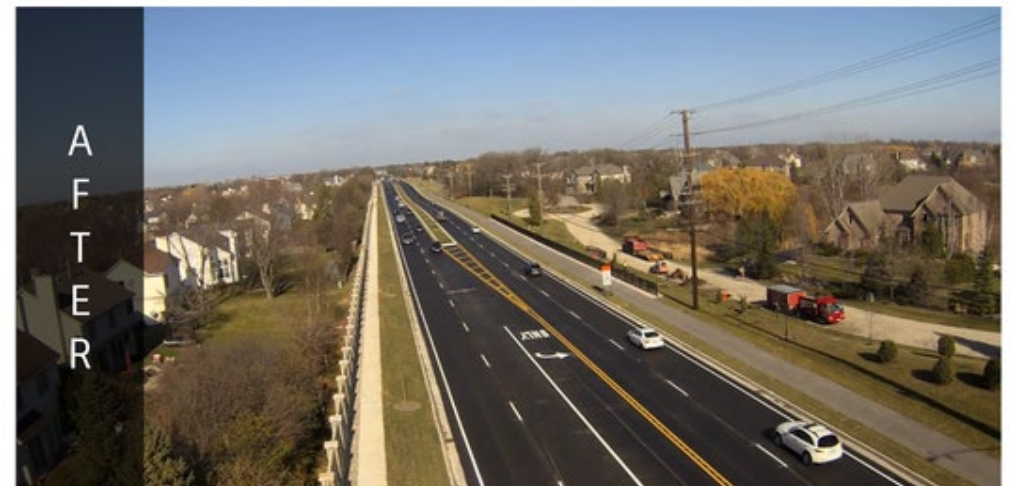
Project Highlight: Wayfinding Signs

- Install Explore Lake County Wayfinding Signage
 - North Shore Path
 - Robert McClory Path
 - Skokie Valley Path
- Purchased sign blanks, posts, film for 870 signs
- Fabrication underway (LCDOT)
- Installation to begin this year (LCDOT)



Priority Three: Expansion

- Project selection tools:
 - Lake County 2040 Transportation Plan
 - State Highway Consensus List
 - CMAP ON TO 2050 Regional Plan
 - IDOT Multi-Year Plan
 - Traffic and Safety Data
 - Demographic Trends
 - Inclusive Growth
- Typical projects include:
 - Add lanes
 - Grade separations
 - Realigned or extended roads
 - Paratransit



Regional Plans

State Highway Consensus Plan for Lake County

Lake County Division of Transportation
lakecountyl.gov/transportation


The State Highway Consensus Plan was developed in 2006 with input from local elected officials and the residents of Lake County. Everyone came together and reached a consensus in support of a transportation system that would be viewed as a model for the state.



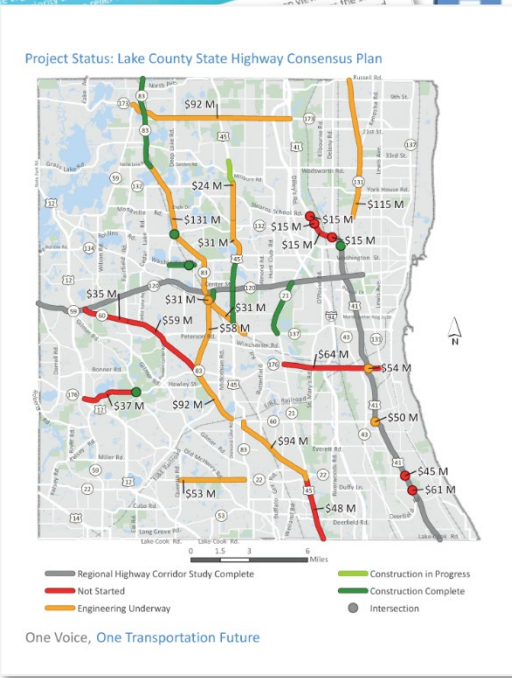
LAKE COUNTY 2040 TRANSPORTATION PLAN

The Lake County 2040 Transportation Plan is a long range plan that identifies deficiencies and recommends improvements necessary to address the future transportation needs of Lake County addressing roadway, transit, and non-motorized modes of travel.

Proposed Highway Improvement Program FY 2023-2028

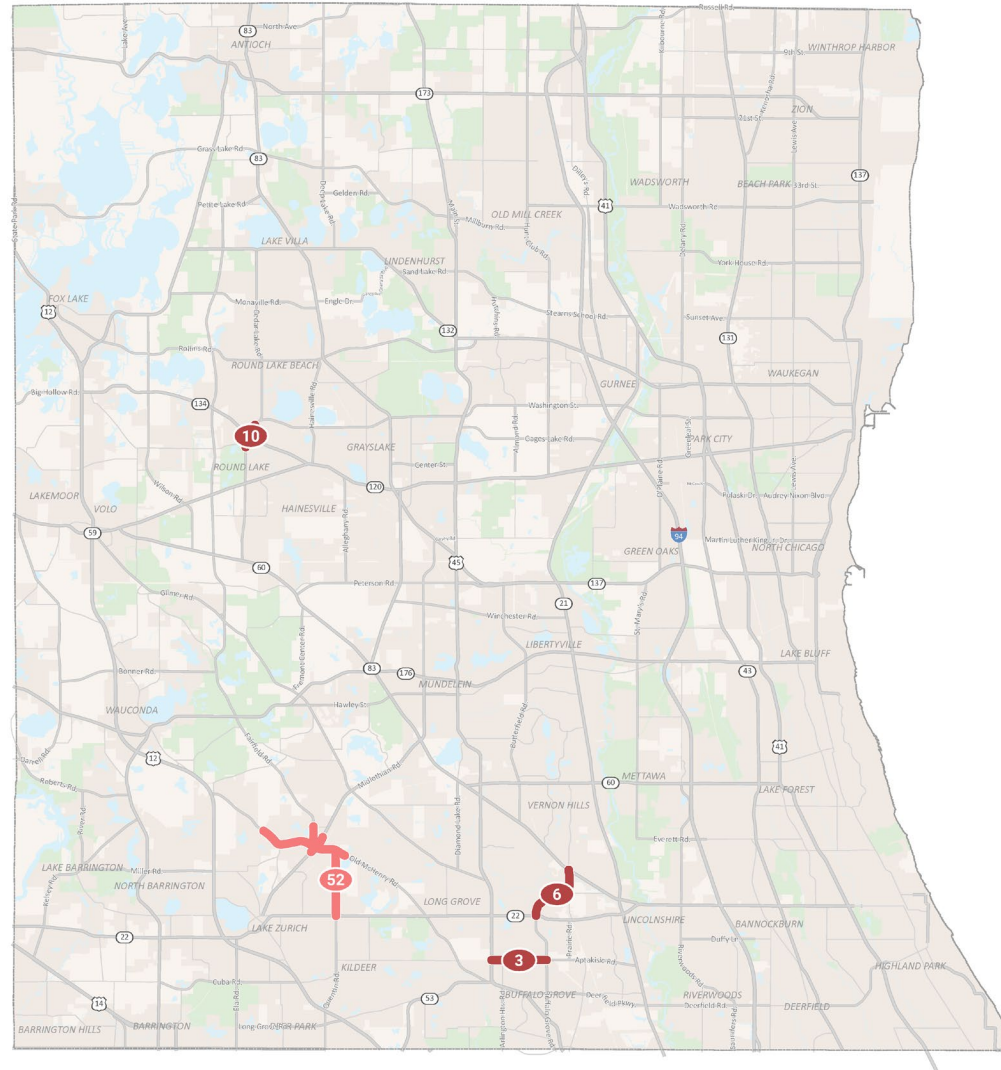




Illinois Department of Transportation



ON TO 2050

Expansion | 2023 - 2028



-  Fully Programmed
-  Partially Programmed



Expansion Projects

Expansion Projects					
Map ID	Route	Type	Program Year	Total Cost	ProjectTracker ID
3	Aptakisic Road	Highway/Road - Add Lanes	2023	\$14,904,780	B-00739a
6	Buffalo Grove Road	Highway/Road - Add Lanes	2026	\$20,516,987	B-01358
10	Cedar Lake Road	Highway/Road - New Road	2025	\$34,842,061	B-00752
52	Old McHenry Road	Highway/Road - Railroad Grade Separation	2025	\$52,270,022	B-01546

What's New in Expansion?

- **Cedar Lake Rd Realignment: Hart Rd – Nippersink Rd (Construction)**
- **Old McHenry Crossings (Partial Construction Funding)**
- **Ride Lake County Borderless Paratransit (Annual Operations)**
- **Long-Range Transportation Plan Update**

Project Highlight: Ride Lake County

- **Countywide Borderless Paratransit Service launched May 1, 2022**
- **Annual county funding to cover 100% of local match**
- **Over 27,000 trips in the first year (and growing)**
- **Nearly 1,000 individual riders**



Book Your Trip!
Call Pace
1-800-201-6646

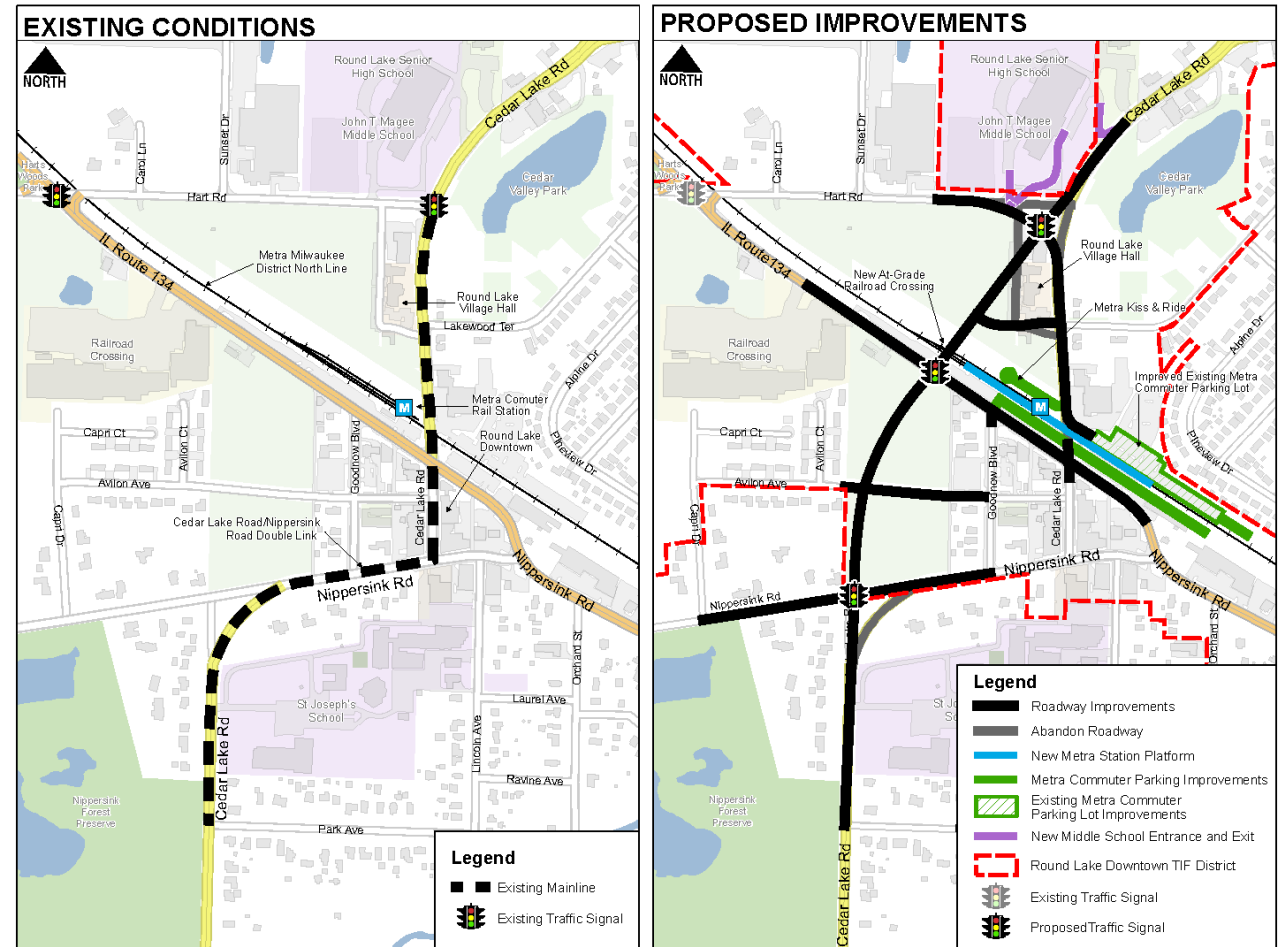


Program Sponsors:



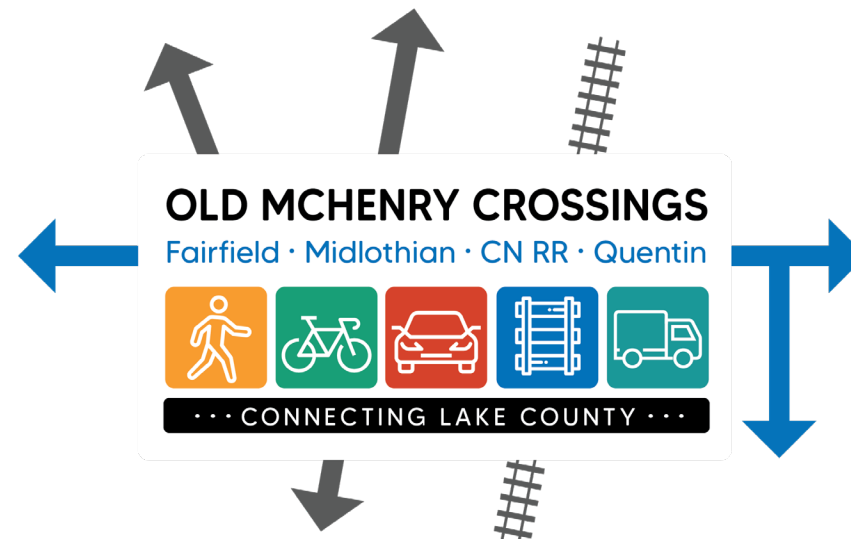
Project Highlight: Cedar Lake Road Realignment

- Improves mobility, safety, transit, and non-motorized transportation
- 10:1 benefit-cost ratio
- Project will build a segment of the Millennium Trail
- Metra site modernization to serve as a mobility hub for improved transit connectivity
- Phase II engineering expected to begin in 2024

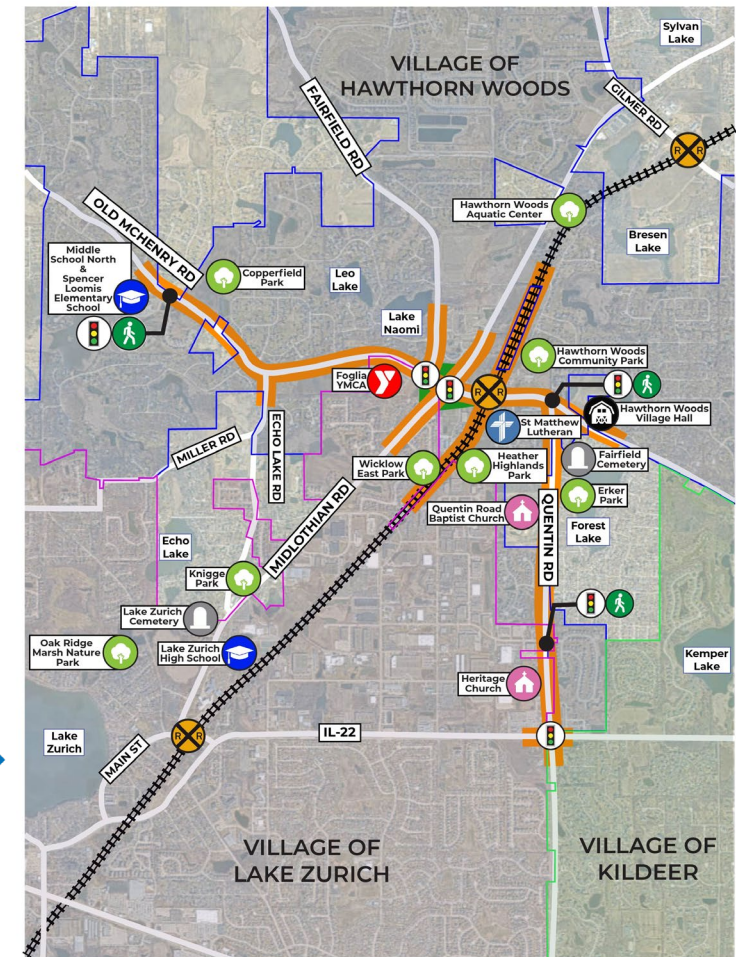


Project Highlight: Old McHenry Crossings

- Final Public Informational Meetings anticipated in 2023
- Phase II engineering to begin in 2024
- Preliminary Cost Estimate: \$148 million (\$90+ million unfunded)



LOCATION AREA MAP



County Option Motor Fuel Tax Project Funding



Total Program Revenue.....\$89M

Awarded Projects

Stearns School Rd Bridge Replacement at Mill Creek (Construction).....	\$1.7M
Lewis Ave Modernization (IL120 to IL137) (Phase I Engineering).....	\$2.5M
Peterson Rd and Monaville Rd at CNRR Grade Separation (Feasibility Study).....	\$1.2M
Kilbourne at Wadsworth Intersection (Construction).....	\$4.6M
Fairfield Rd Corridor Modernization (Engineering).....	\$2.6M

Programmed Projects

Arlington Heights Rd Reconstruction (Lake Cook to IL83).....	\$3.5M
Cedar Lake Rd Realignment (Hart to Nippersink).....	\$12.5M
Libertyville Campus Fuel Facility (LCDOT's Cost Share).....	\$1.5M
Washington Street Bike Path (Sextant to Almond).....	\$2.5M
Russell Road Roundabouts (Kenosha and Lewis).....	\$8.5M
Riverwoods Rd Resurfacing (IL 22 to Deerfield).....	\$6.0M
York House Road Improvements (IL 131 to Sheridan).....	\$12.5M
Gilmer Road Resurfacing (IL 120 to IL 176).....	\$7.7M
Fairfield Rd Corridor Modernization (IL134 to Gilmer).....	\$3.8M
Lake-Cook Rd Bike Path (Skokie Valley Bike Path to North Branch Trail).....	\$4.8M
Lewis Ave Modernization (IL120 to IL137).....	\$13.4M

Project Tracker

Online TIP Resource



Project Filters

Project Type: All | Funding Source: All | Year Programmed: 2023, 2024, 2025, 2026

129 Projects

ID	Municipality	Lead Agency	Project Title	Project Type	Funding Source
B-01002a	North Chica...	LCDOT	14th Street ...	Highway/Ro...	County, Fed...
B-01548b	Wadsworth	LCDOT	21st Street ...	Culvert - Re...	County
23-26	Zion	LCDOT	21st Street ...	Highway/Ro...	County
23-29	North Chica...	LCDOT	22nd St/ML...	Highway/Ro...	County
B-00739a	Buffalo Grove	LCDOT	Aptakisic Ro...	Highway/Ro...	County
B-01182	Buffalo Grov...	LCDOT	Arlington He...	Highway/Ro...	County
B-01492	Fox Lake	LCDOT	Big Hollow ...	Highway/Ro...	County
B-0166					\$1,932,590
22-04					\$720,870
23-42					\$296,594
					\$375,000

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lcdot.ecointeractive.com

B-01452b: Lewis Avenue Reconstruction and Road Diet

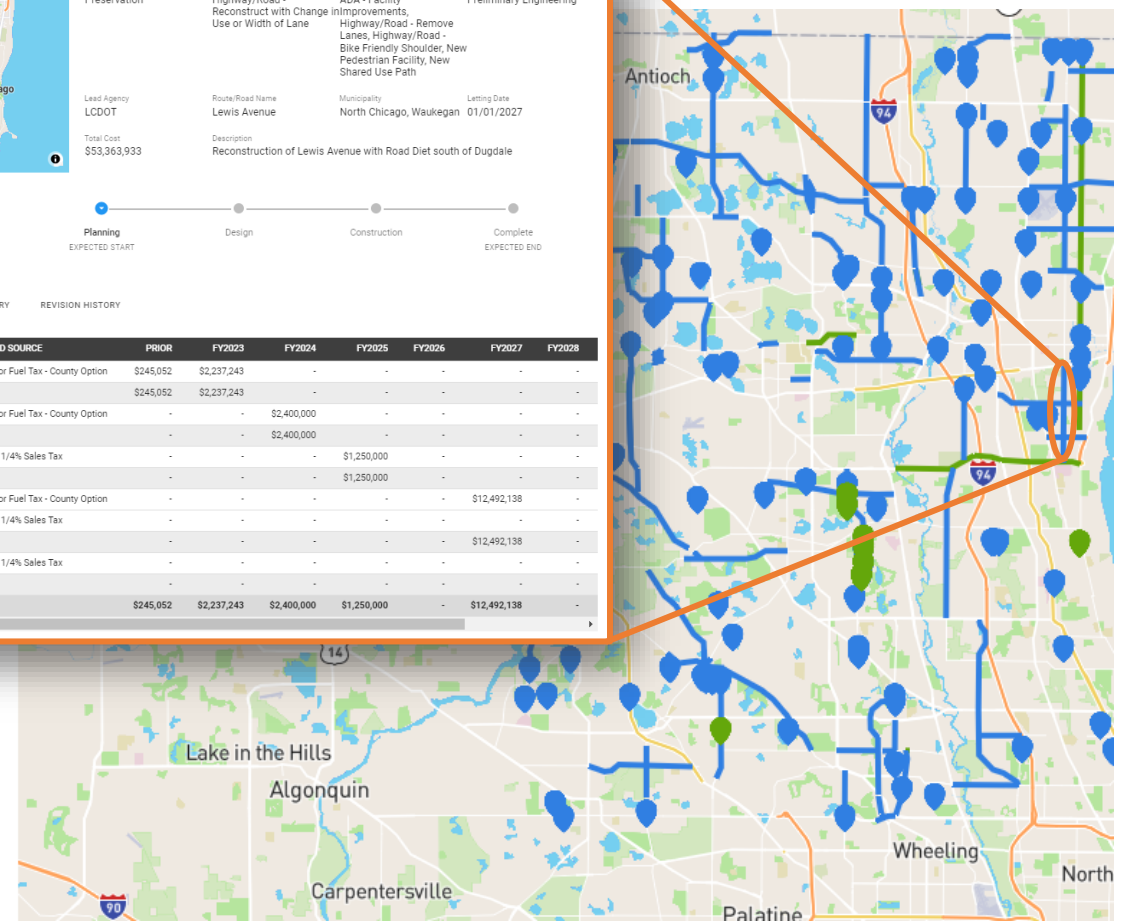
Project Category: Preservation
Project Type: Highway/Road - Reconstruct with Change in Use or Width of Lane
Additional Project Type: ADA - Facility Improvements, Highway/Road - Remove Lanes, Highway/Road - Bike Friendly Shoulder, New Pedestrian Facility, New Shared Use Path
Project Status: Preliminary Engineering

Lead Agency: LCDOT
Road/Road Name: Lewis Avenue
Municipality: North Chicago, Waukegan
Letting Date: 01/01/2027
Total Cost: \$53,363,933

Description: Reconstruction of Lewis Avenue with Road Diet south of Dugdale

PHASE | **FUND SOURCE** | **PRIOR** | **FY2023** | **FY2024** | **FY2025** | **FY2026** | **FY2027** | **FY2028**

Preliminary Engineering	Motor Fuel Tax - County Option	\$245,052	\$2,237,243	-	-	-	-	-
Total Preliminary Engineering		\$245,052	\$2,237,243	-	-	-	-	-
Design Engineering	Motor Fuel Tax - County Option	-	-	\$2,400,000	-	-	-	-
Total Design Engineering		-	-	\$2,400,000	-	-	-	-
Right of Way	RTA 1/4% Sales Tax	-	-	-	\$1,250,000	-	-	-
Total Right of Way		-	-	-	\$1,250,000	-	-	-
Construction	Motor Fuel Tax - County Option	-	-	-	-	-	\$12,492,138	-
Construction	RTA 1/4% Sales Tax	-	-	-	-	-	-	\$12,492,138
Total Construction		-	-	-	-	-	\$12,492,138	\$12,492,138
Inspection/Construction	RTA 1/4% Sales Tax	-	-	-	-	-	-	-
Total Inspection/Construction		-	-	-	-	-	-	-
Total Programmed		\$245,052	\$2,237,243	\$2,400,000	\$1,250,000	-	\$12,492,138	-



Thank You!

Connect with us!



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- twitter.com/lcdot
- Instagram.com/lakecountydot
- lakecountypassage.com
- lakecountyil.gov/RLC
- Radio 1620AM





Questions

Shane E. Schneider, P.E.

Director | County Engineer

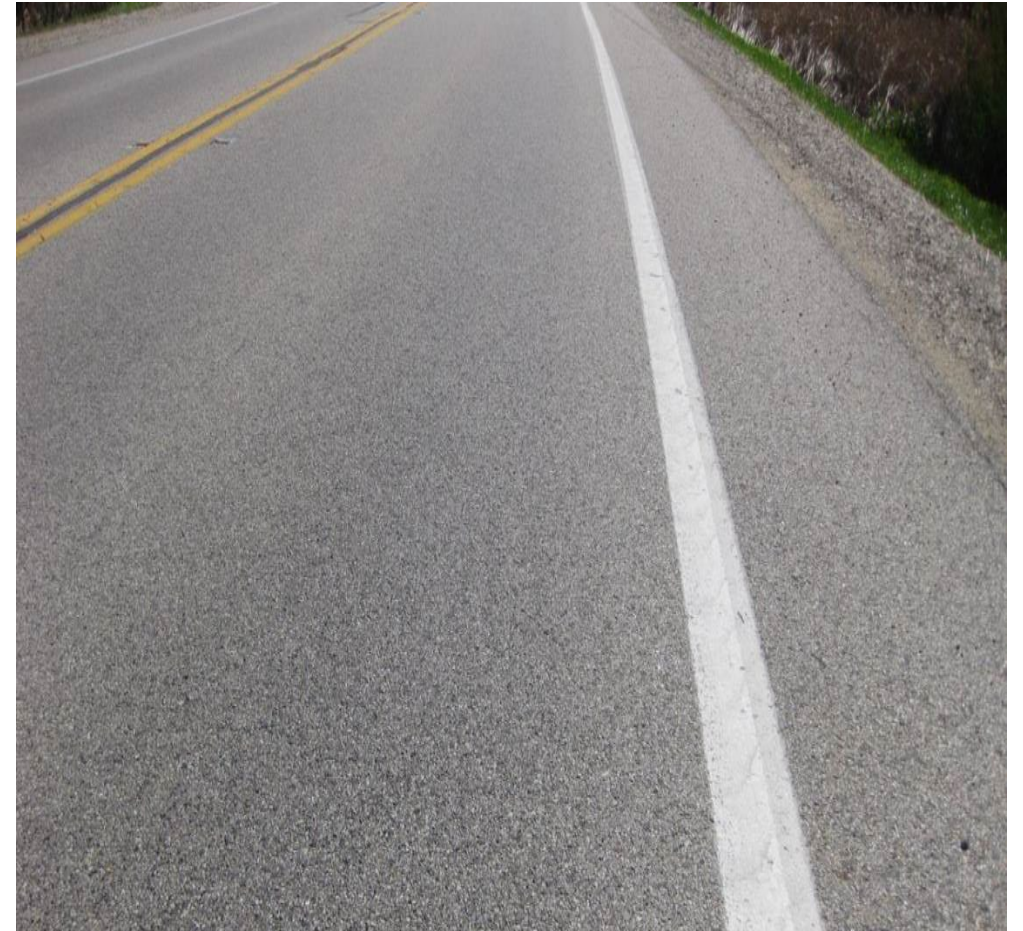
847.377.7400 | dot@lakecountyil.gov



Background Information

Assets: Pavement

- Lane miles 909
- Centerline miles 303
- Miles paved shoulder 242
- Average age of roadway (years) 51
- Average age of surface (years) 10



Assets: Culverts

- **A variety of culvert materials:**
 - Concrete
 - Corrugated metal pipe (CMP)
 - Composite
 - PVC
- **More than 650 individual culverts, totaling over 50,000 feet**
- **Ranging in size from 12 inches to 12 feet in diameter**



Assets: Signs

- 8,390 Regulatory
 - 10,821 Guide
 - 5,979 Warning/Object Marker
 - 2,597 Information
 - 530 School
-
- 28,317 Total Signs



Signs installed/maintained by LCDOT
Source: LCDOT sign inventory, May 2023

Assets: Non-Motorized Travel

- Bike/pedestrian bridges 16
- Tunnels and underpasses 16
- Miles of bike facilities 66
- Miles of bike friendly shoulder 156



Assets: Other

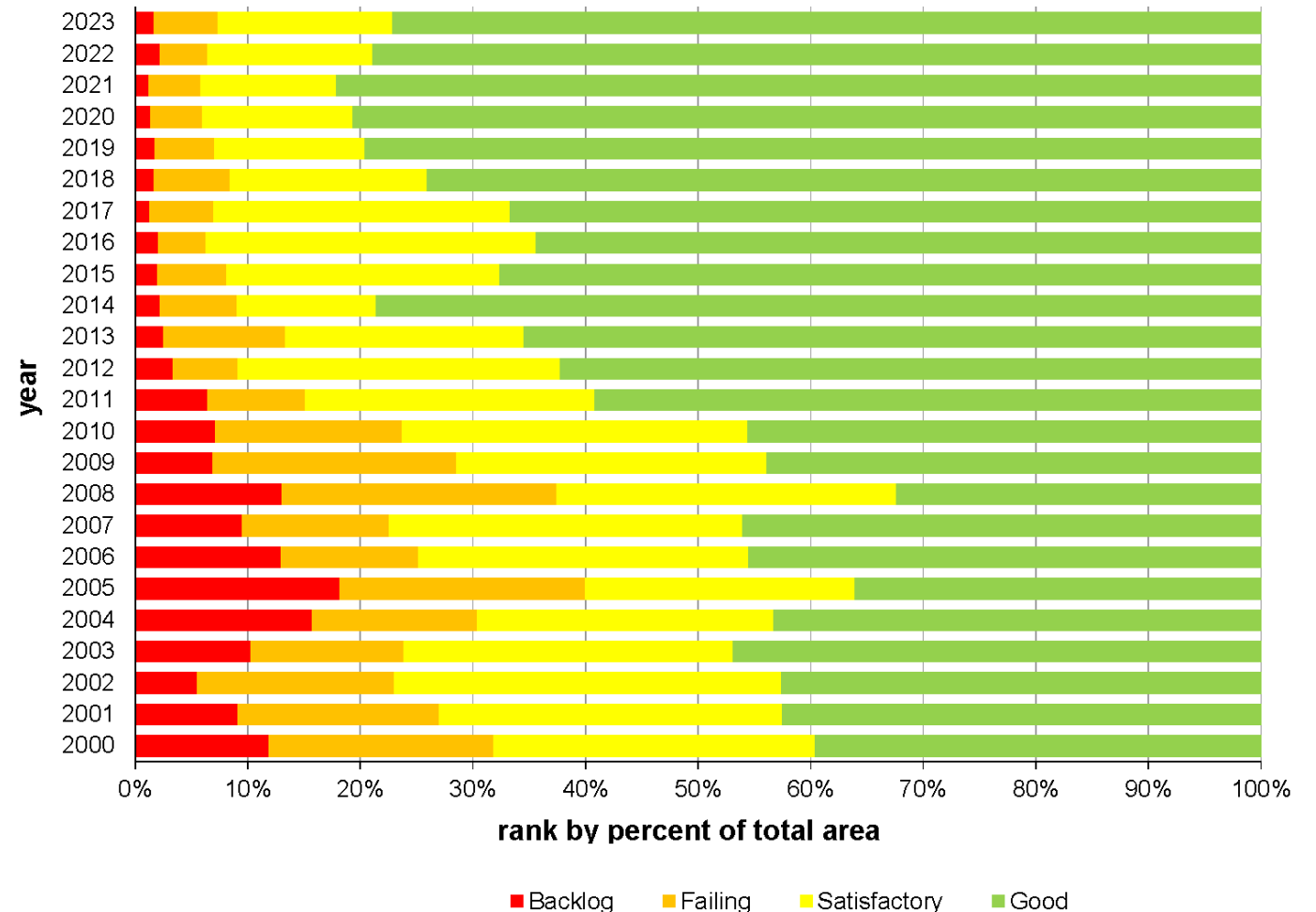
- **17,939 storm sewer structures**
- **198 miles of storm sewer pipe**
- **662 culverts**
- **57 stormwater basins**
- **52,921 feet of fencing**
- **23,733 feet of retaining wall**
- **21 miles of guardrail**
- **43 landscape areas (101 acres)**



LCDOT GIS / May 2023

ARGUS results

- Implemented in **1986**
- Area of failing pavement reduced from 55% to 1%
- For more information, watch LCDOT's 'Pavement Management Techniques' video at: Lakecountyiil.new.swagit.com/videos/16338



ARGUS Pavement Management System

- For data-driven, cost-effective decisions:
 - **Where** repairs are needed
 - **What** repair strategies to use
 - **When** repairs will be most effective
- Using these program components:
 - County highway database
 - Automated pavement testing
 - Repair strategies with costs
 - Pavement aging predictions
 - Optimization program



Laser surface testing



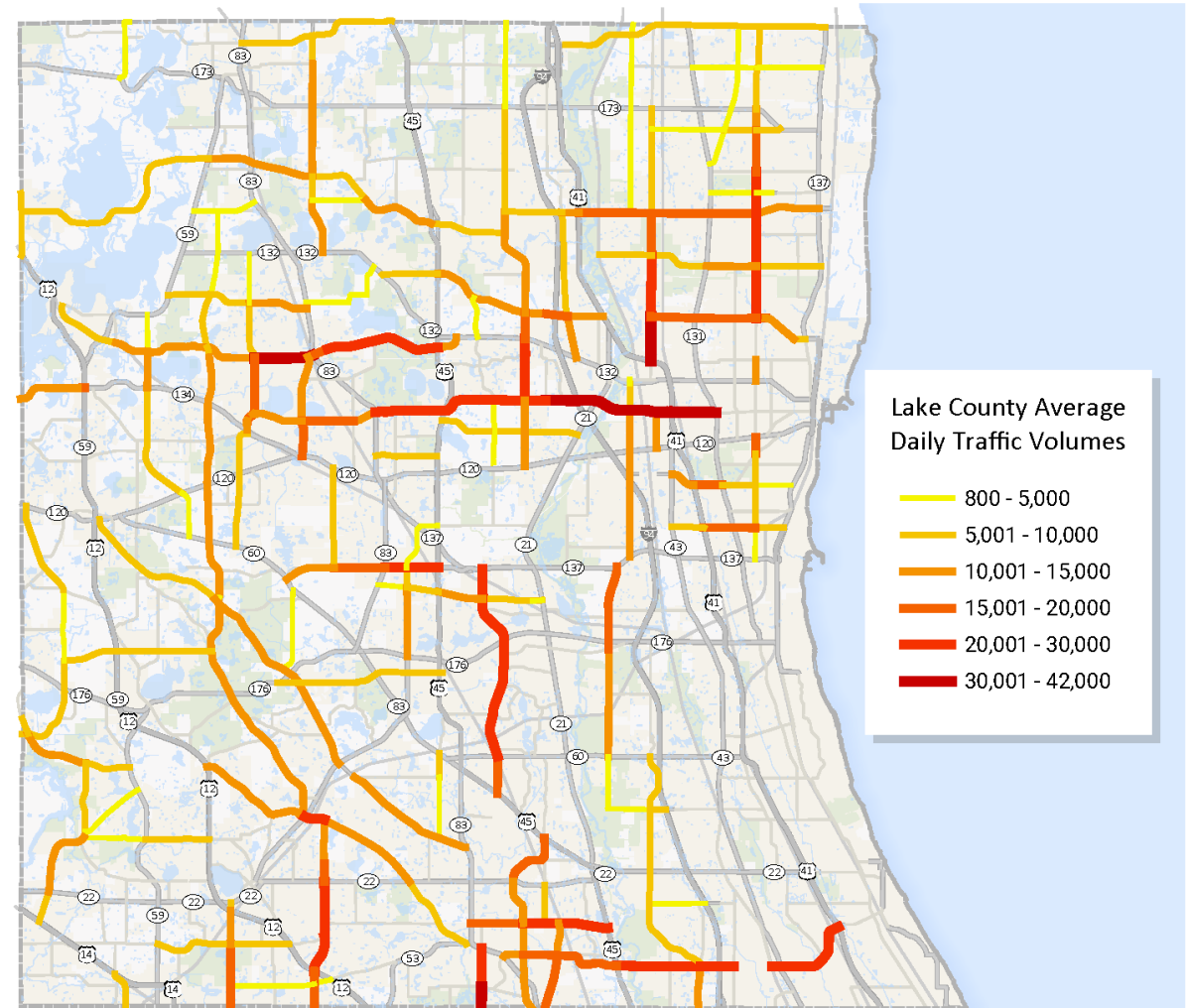
Dynaflect

ARGUS Summary

- **Pavement management system *does*...**
 - **Assess the present condition of the system**
 - **Estimate future road conditions**
 - **Identify and rank road projects**
 - **Maximize the condition of the system within the given budget**
- **Pavement management system *does not*...**
 - **Replace professional judgment**
 - **Provide certain detailed project-specific information**
 - **Evaluate storm sewer and other roadway assets**

Traffic Volumes

- Traffic volumes and truck traffic are key lifecycle indicators
- More traffic and heavier vehicles impose more stress and strain on the roadway



Historical Perspective: Crash Data



5-year averages	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016	2013-2017	2014-2018	2015-2019	2016-2020	2017-2021
Number of crashes	4236	3994	3704	3485	3530	3673	3796	3934	3991	4037	3819	3665
Fatality	8	8	8	7	8	8	10	12	15	15	16	15
Crash with injury	942	931	952	974	978	1004	1046	1085	1102	1113	1054	997
Property damage only	3286	3147	2744	2504	2544	2662	2741	2836	2874	2909	2749	2653

*Data Source: LCDOT Traffic Department, 4/2023
IDOT 2021 crash data (most recent available)*

Computer Aided Dispatch (CAD) Partnerships

- **11 of 12 dispatch centers (via Central Square) connected with Lake County PASSAGE**
- **Two-way data sharing:**
 - **Video (LCDOT provides)**
 - **Incident data (Dispatch centers provides)**
 - **Combined real-time data shared with public via PASSAGE**

