

DRAFT

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Director of Transportation/
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Public Works and
Transportation Committee

June 6, 2018

Lake County Division of Transportation
Proposed 2018 - 2023 Highway Improvement Program

**FUNDING, PROJECTS OVERVIEW
AND
ENDORSEMENT REQUEST**

Presentation Schedule

PWTC 2018 Meeting Date

Presentation Topic

April 25 • Overview and Program Priorities

June 6 • Funding and Projects / Draft Program Document

Efficient Transportation Contributes To:



- Quality of life
- Economic vitality
- Environmental value
- Improved safety

2040 Transportation Plan



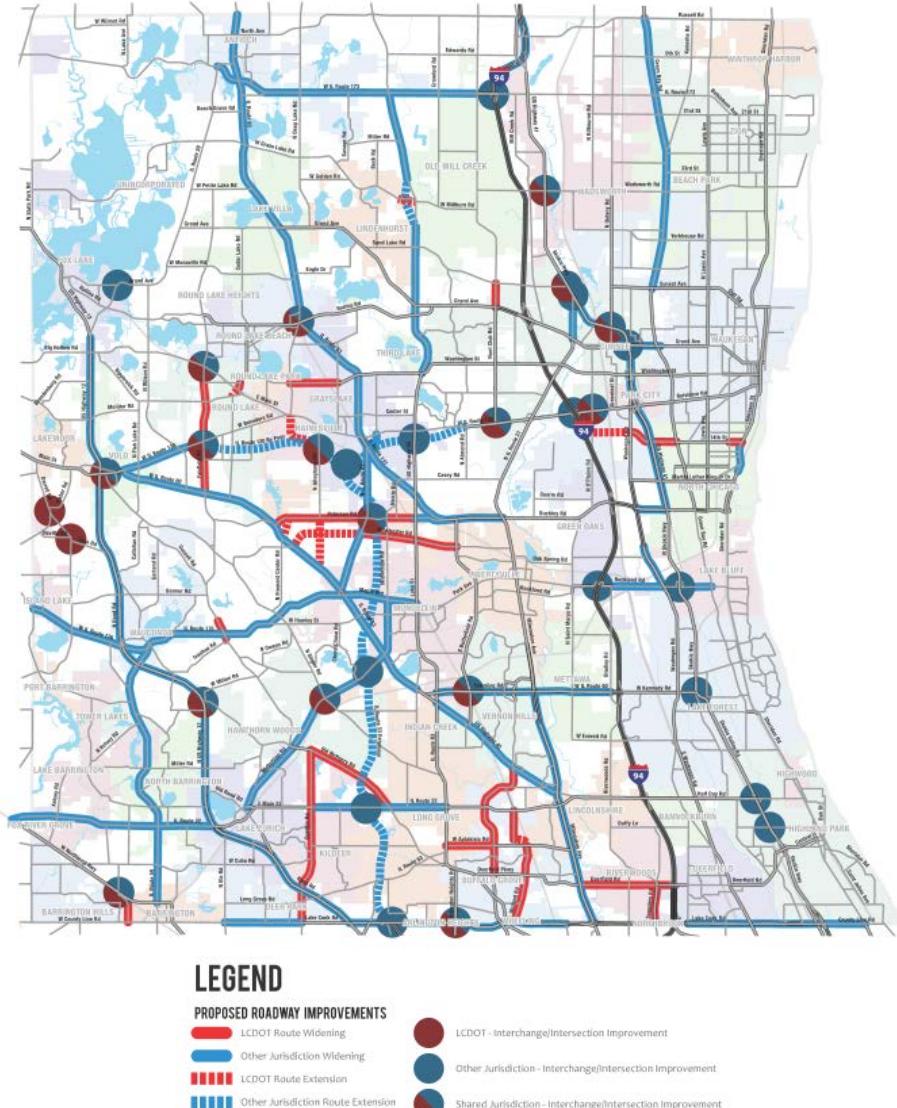
LAKE COUNTY 2040 TRANSPORTATION PLAN

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.



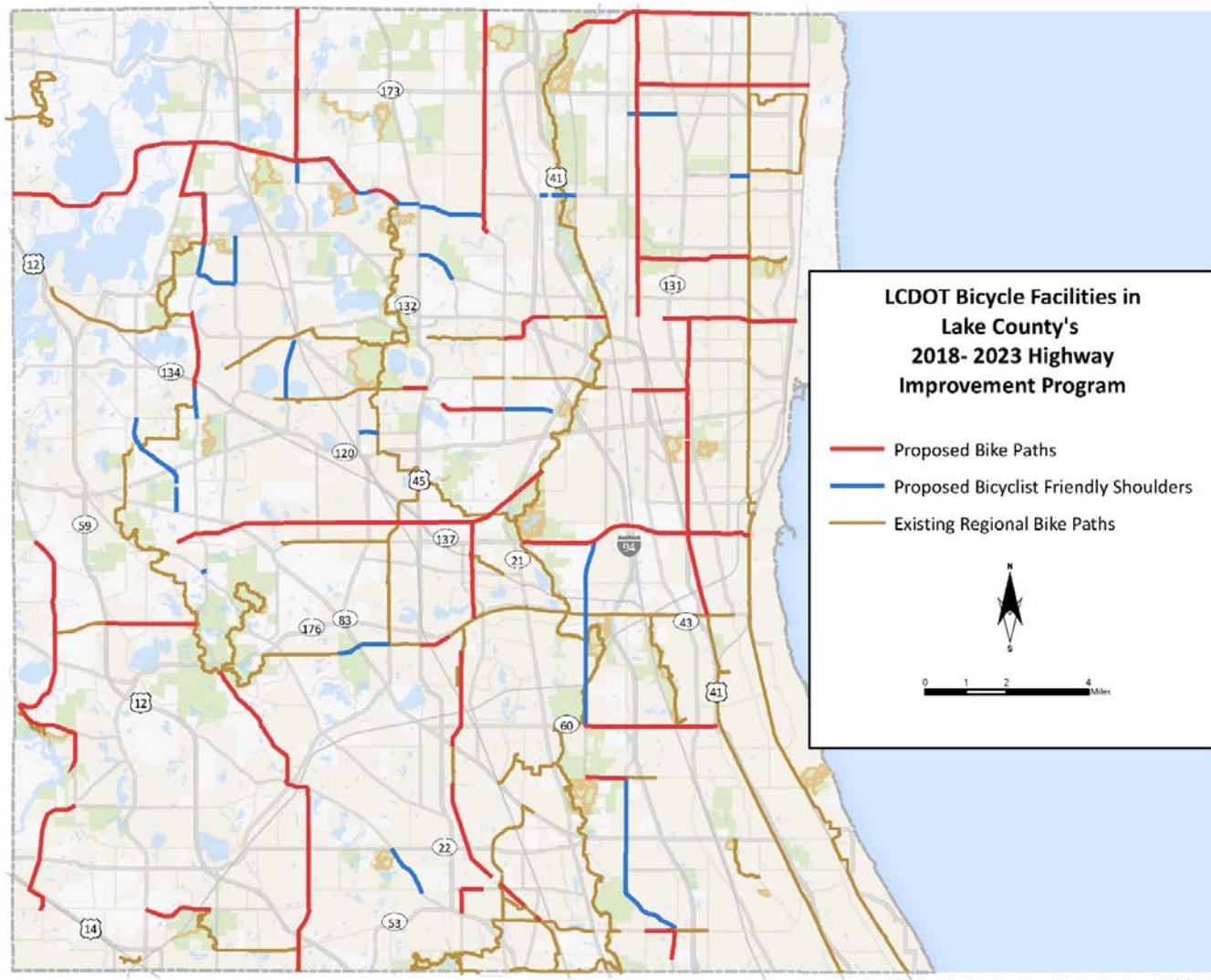
2040 Roadway Priorities

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



* Percent rail road grade separations are noted in the Appendix.

2040 Bike Paths



Improving transportation a top strategic goal for Lake County and regional partners



Lake County Strategic Plan Goals



The graphic features a photograph of a modern, multi-story office building with large windows and a glass entrance. In the foreground, a dark blue rectangular overlay contains the text "LAKE COUNTY STRATEGIC PLAN" in white, with "Investing in People and Our Communities" in smaller white text below it. At the bottom of this overlay, the text "Strategic Goal: Improve Transportation" is visible. To the right of the overlay, the Lake County Illinois logo is displayed, consisting of a stylized sunburst design with the text "LAKE COUNTY ILLINOIS" around it. The background of the graphic is a photograph of the building.

GOAL:
Improve Transportation

STRATEGIC STATEMENT: Advance the development of **State, Regional, County**, and municipal transportation systems that provide for safe, efficient, and flexible movement through an integrated network of **road, rail, public transit**, and non-motorized (**bicycle, pedestrian**) modes of travel.

- Investigate alternatives to single-occupancy vehicles
- Leverage new and emerging technologies (*PASSAGE*)
- Advance transportation solutions by collaborating with state, regional, and local agencies
- Advocate for permanent and sustainable transportation funding
- Reduce number of fatal and serious injury crashes

Goal: Investigate alternatives to single-occupancy vehicles

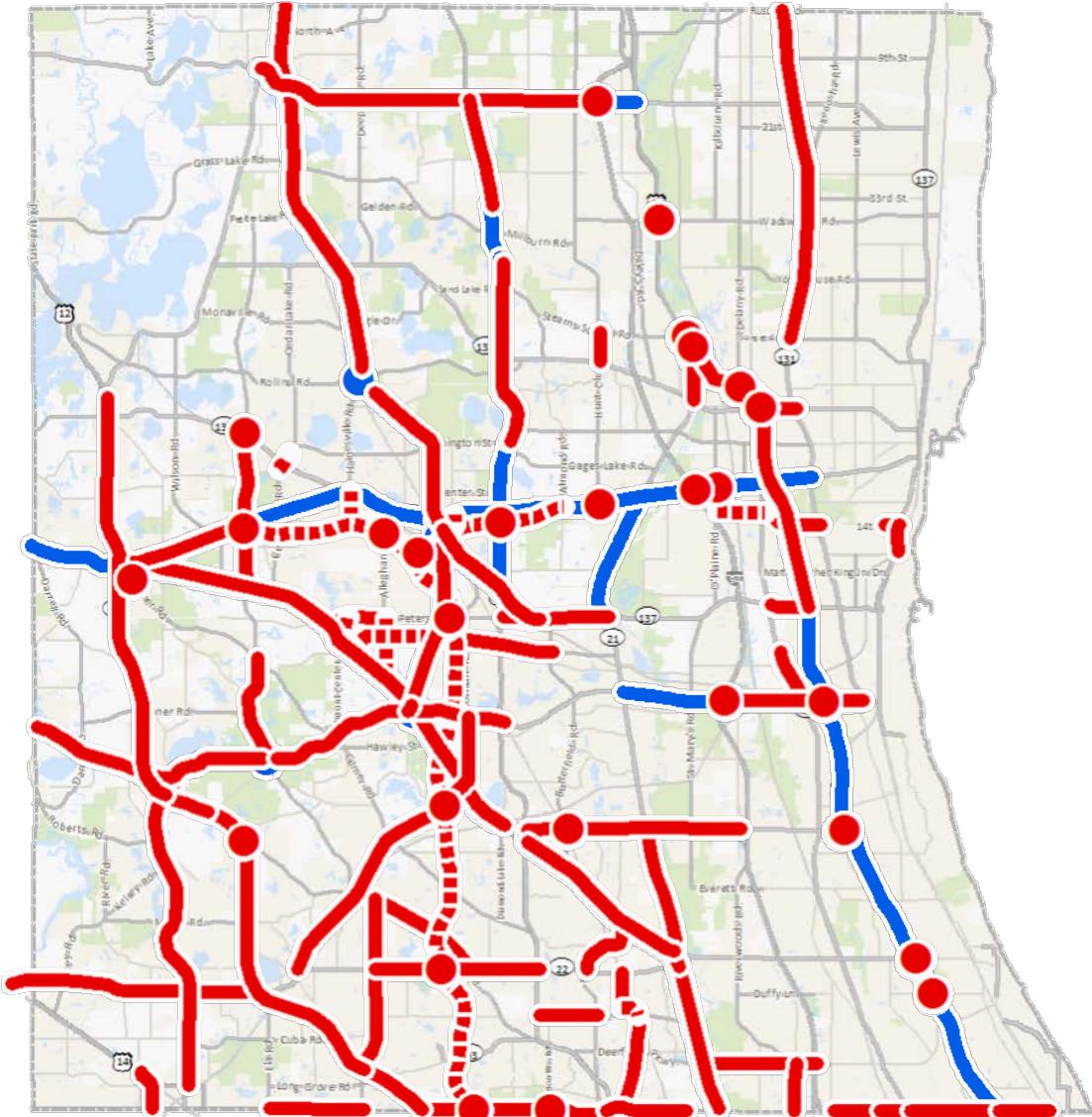


Goal:
Leverage
new and
emerging
technologies



Goal: Advance transportation solutions by collaborating with state, regional, and local agencies

- Consensus projects
- 2040 projects
- Both LCDOT and IDOT projects



Goal:
Advocate for
permanent and
sustainable
transportation
funding



Goal: Reduce number of fatal and serious injury crashes

Here in Lake County, we want to urge everyone to



2018 Construction Program

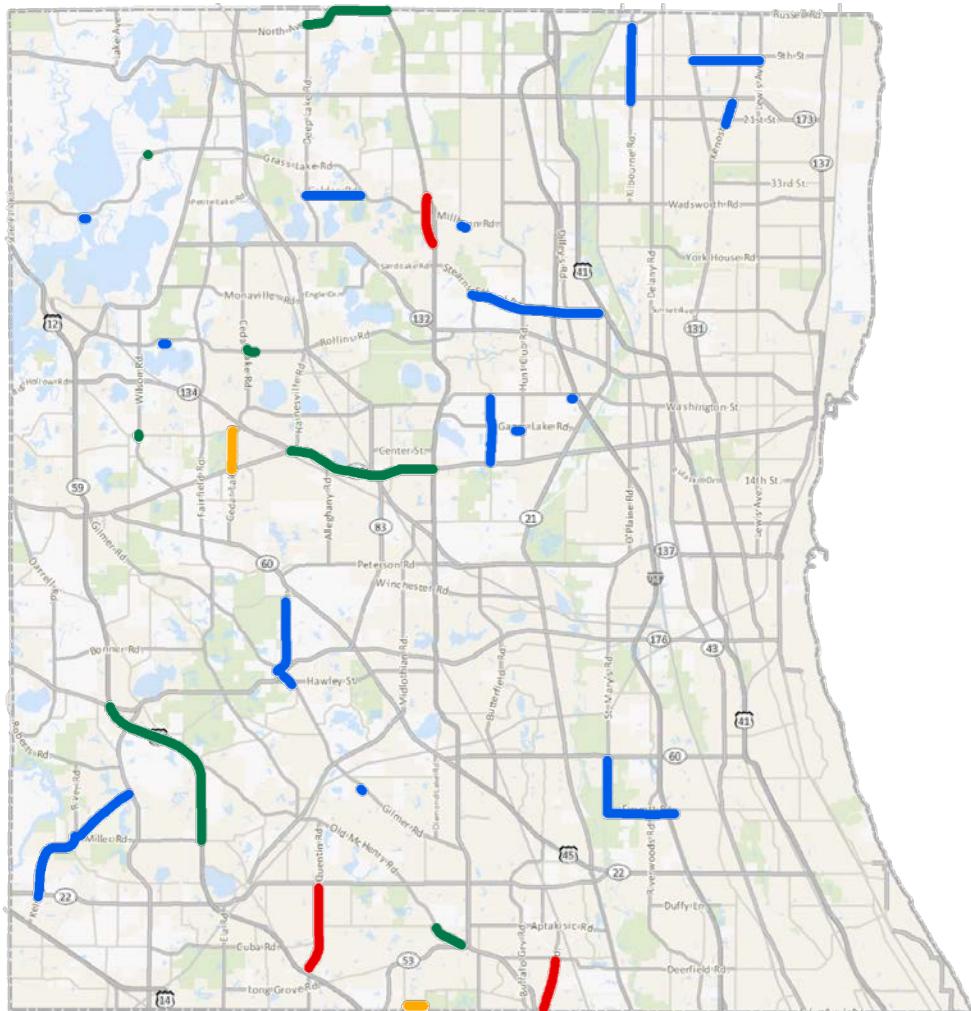
\$100 Million

— Continued from 2017

— Preservation

— Modernization

— Expansion



\$6.6M continued from 2017



Buffalo Creek
Des Plaines River Watershed
new wetland mitigation bank

Cedar Lake Rd
from IL Route 120 to Nippersink Rd
widen and reconstruct



\$94M in new projects

Old McHenry Rd, reconstruction with drainage improvements at Robert Parker Coffin Rd

Quentin Rd, reconstruct and widen to four lanes from White Pine Ln to south of IL Route 22

Weiland Rd, reconstruct and widen to four lanes from Lake Cook Rd to Deerfield Pkwy

Millburn Bypass of US Route 45, realign and reconstruct north of Grass Lake Rd to south of Millburn Rd (*IDOT is lead agency*)

Operational and Safety Improvements:

- Intersection improvements
- Traffic signal work
- Nonmotorized travel accommodations
- Raised reflective pavement markers
- Street light upgrades to LED
- Expand PASSAGE coverage and signal interconnects through more corridors



\$94M in new projects

(continued)

Resurfacing Projects:

Everett Road [3R]
St. Mary's Road [3R]
Kelsey Road
9th Street
Kilbourne Road
Kenosha Road
Almond road
Gelden Road
Fremont Center Road
Gilmer Road
Stearns School Road

Culvert, Drainage and/or Retaining Wall Projects:

Washington St drainage channel at I-94
Gilmer Road at Sequoia culvert and retaining wall
Grass Lake Road at bridge retaining wall stabilization and repair
Rollins Road near Fairfield Rd culvert replacement
Gages Lake Road near Hunt Club Road concrete headwall
Millburn Road near Crawford Road culvert rehabilitation



Funding and Revenue

4 LCDOT Capital Program Revenue Streams:

- County Bridge Fund (CB)
- Matching Tax (MT)
- Motor Fuel Tax (MFT)
- Sales Tax (ST)*



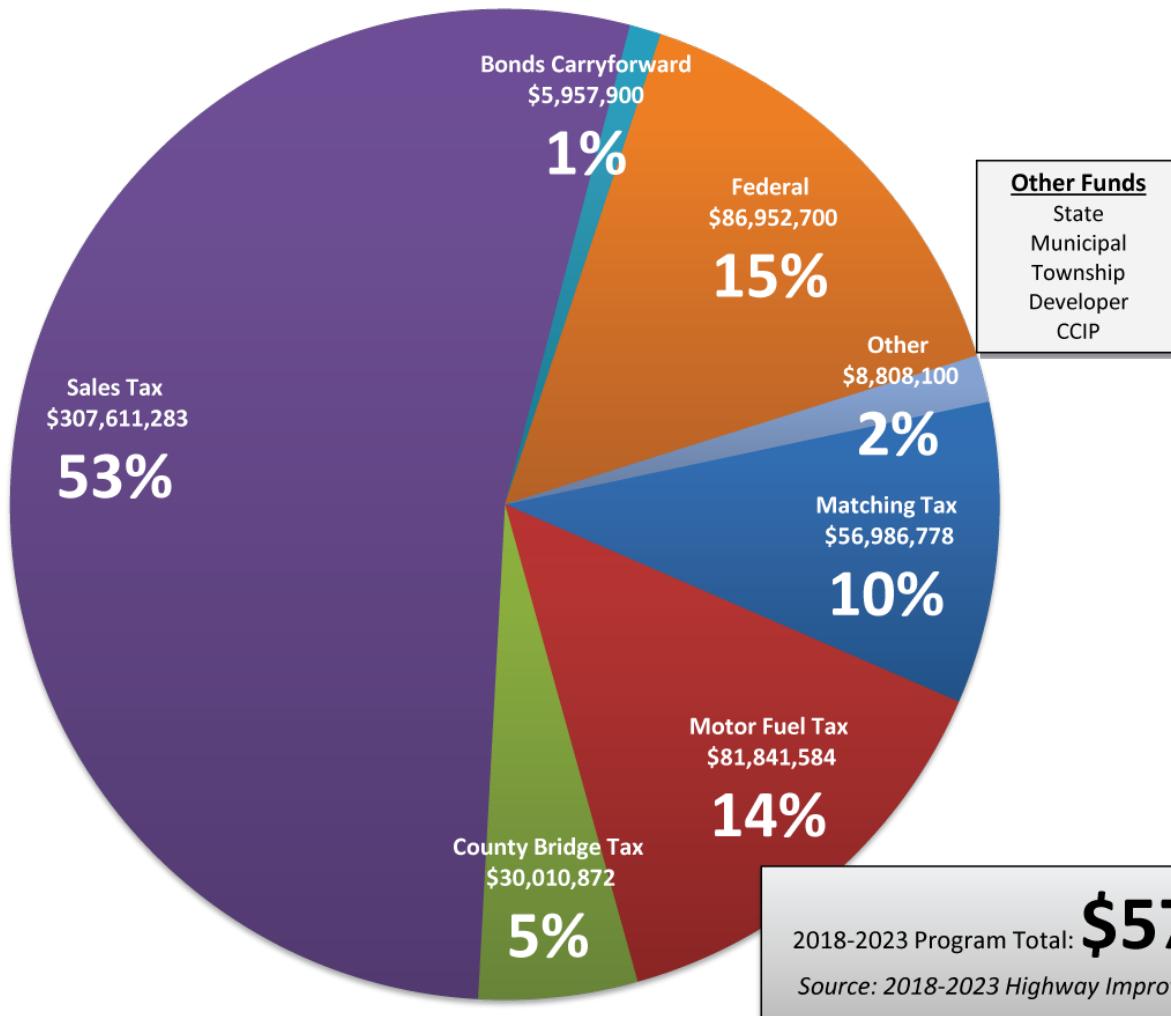
All **zero** growth except ST
ST growth forecast 2%*

**revised down from 3% per RTA, April 2018*

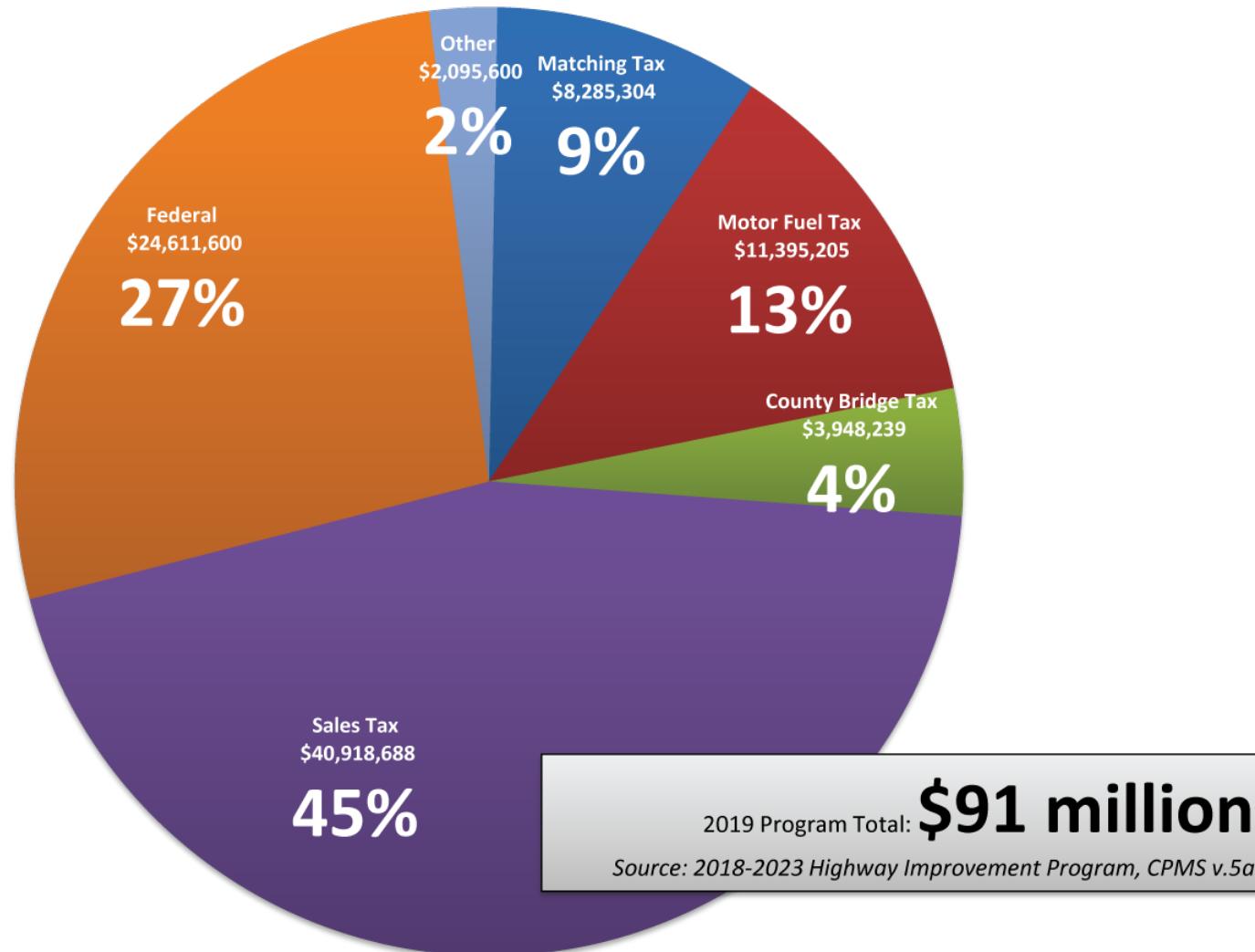
Leverage Outside Funds for Effective Programming

- Illinois Commerce Commission (ICC) Railroad Grade Crossing Protection
- Congestion Mitigation and Air Quality (CMAQ)
- Transportation Alternatives Program (TAP)
- Surface Transportation Block Grant (STPL, STPC, STPE)
- 5310 Funds (for Ride Lake County paratransit)
- Highway Bridge Program (HBP)
- Highway Safety Improvement Program (HSIP)
- TIGER/BUILD
- State of Illinois Funds
- *more*

Fund Sources | 2018-2023 program



Fund Sources | 2019 program



Balancing Program Needs

Funds Distribution | 2018-2023 by program category



25%
Preservation

30%
Modernization

36%
Expansion

8%
Debt Service

Source: LCDOT Information Services | CPMS v.5a

Balancing Program Needs

Funds Distribution | 2019 by program category



Source: LCDOT Information Services | CPMS v.5a

2018-2023 Program

- 2018-2023 project maps and lists
- Detail of Preservation, Modernization and Expansion categories
- Becomes our capital budget submittal for CFY 2019

Priority One: Preservation

Preservation projects:
approximately

25%
of program

Typically resurfacing, reconstruction, patching and
drainage improvements, maintenance activities

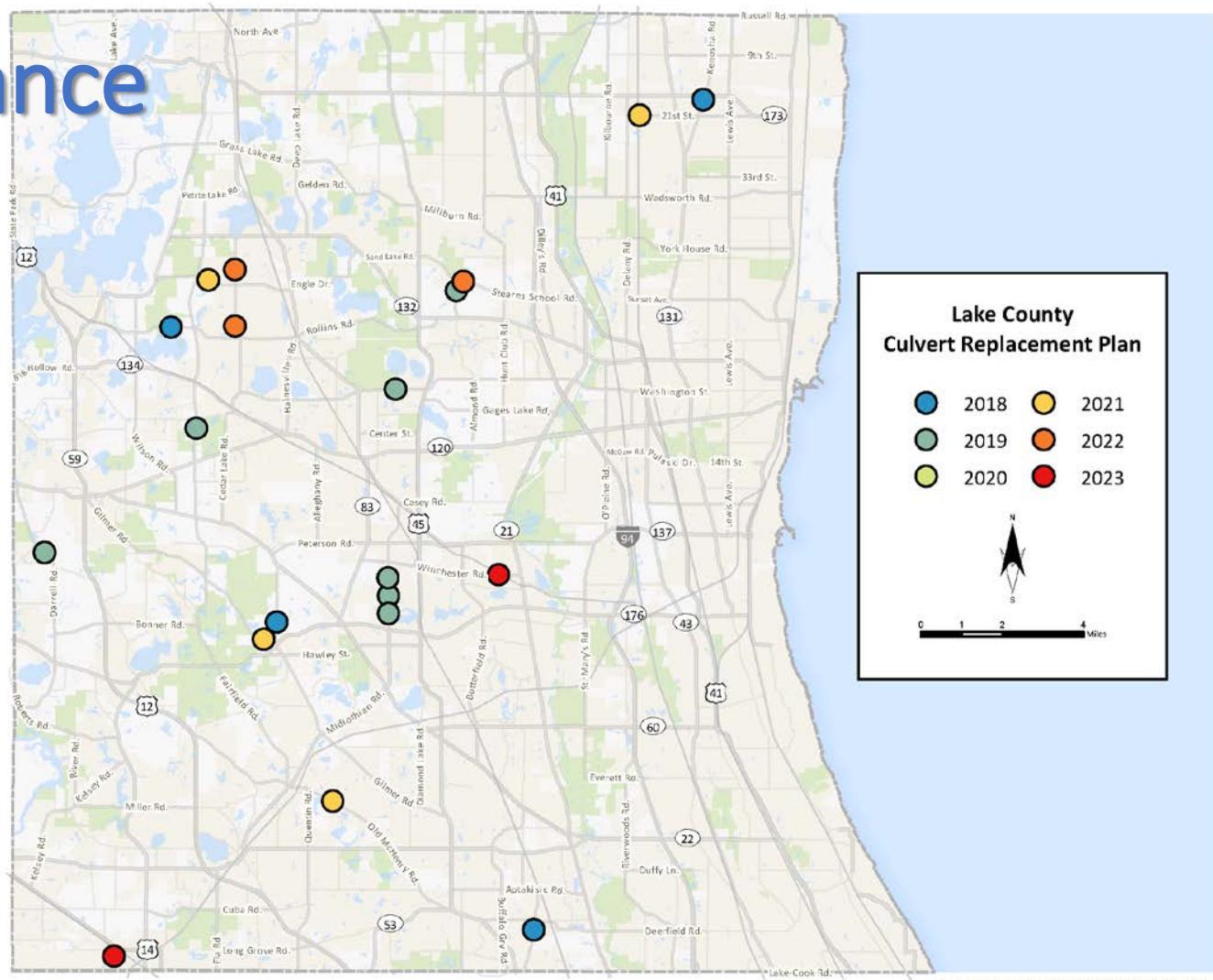
**\$144 million
173 projects**

What's new in this 5-year program?

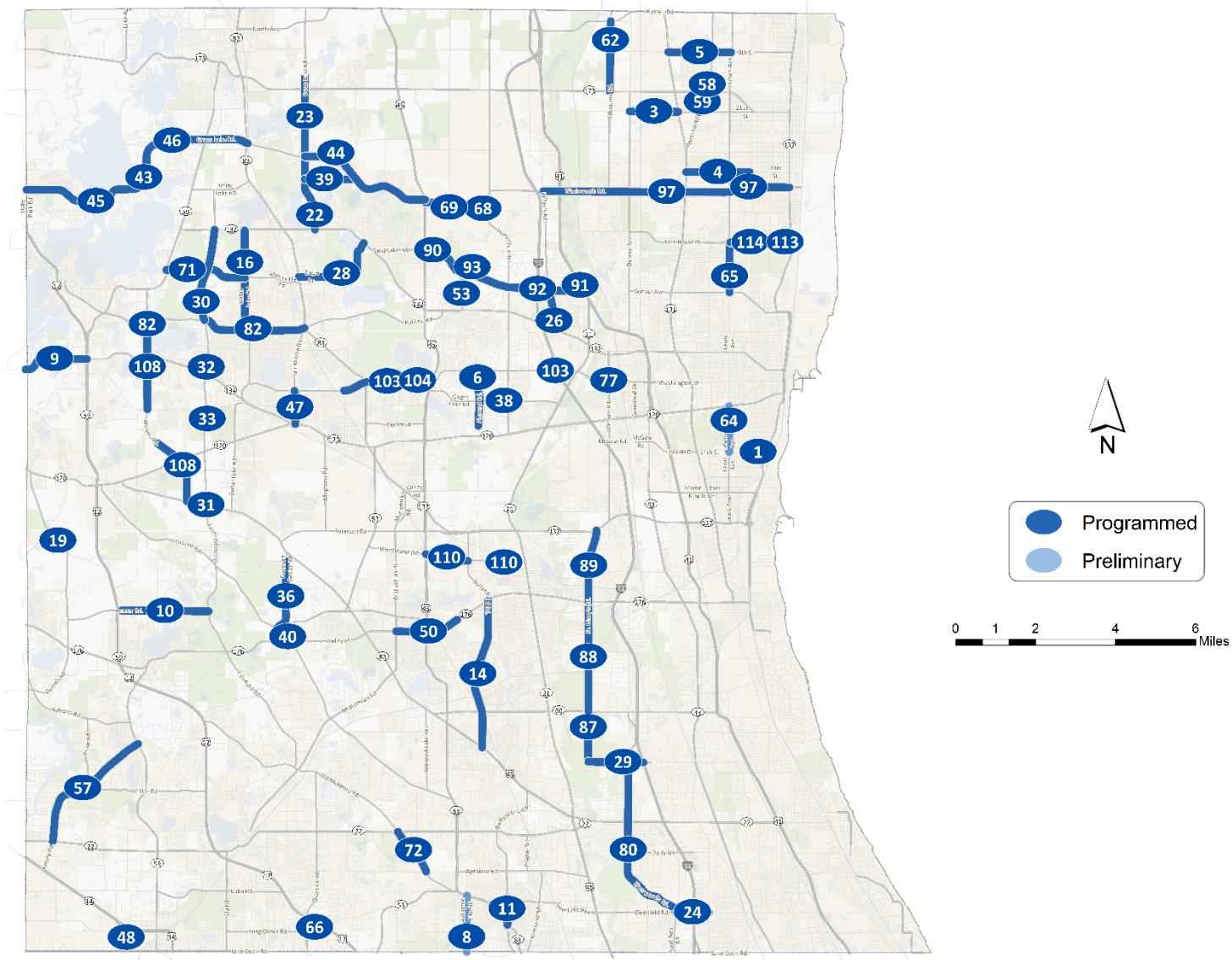
- **Preservation Projects:**
 - Culvert replacements
 - Pavement rejuvenator
 - Upgrade PASSAGE equipment
 - Bridge inspection
 - Storm sewer/drainage work
 - Annual maintenance items—patching, crack sealing, trees & landscaping, guardrail, retaining walls



Culvert Maintenance Program



Preservation | 2018 – 2023 Program



Preservation Projects

Preservation Projects				
Map ID	Route	Work Type	Program Year	CPMS PIN
1	14th St.	Resurfacing	2023	B-01002b
3	21st St.	Resurfacing	2022	B-01488
4	33rd St.	Resurfacing	2022	B-01489
5	9th St.	Resurfacing	2018	B-01163b
6	Almond Rd.	Resurfacing	2018	B-01389
8	Arlington Heights Rd.	Reconstruction	2024	B-01182
9	Big Hollow Rd.	Resurfacing	2022	B-01492
10	Bonner Rd.	Resurfacing	2021	B-01382
11	Buffalo Grove Rd.	Reconstruction	2022	B-01359
14	Butterfield Rd.	Resurfacing	2019	B-01393
16	Cedar Lake Rd	Resurfacing	2021	B-01395
19	Darrell Rd.	Culvert Replacement	2020	B-00141c
22	Deep Lake Rd.	3R Resurfacing	2021	B-00913
23	Deep Lake Rd.	Resurfacing	2021	B-01396
24	Deerfield Rd.	Resurfacing	2020	B-01397
26	Dilley's Rd.	Microsurfacing	2021	B-01485
28	Engle Dr.	Resurfacing	2020	B-01354
29	Everett Rd.	3R Resurfacing	2018	B-01237
30	Fairfield Rd.	Resurfacing	2020	B-01394
31	Fairfield Rd.	Retaining Wall Maintenance	2022	B-01425
32	Fairfield Rd.	Culvert Replacement	2022	B-01434
33	Fairfield Rd.	Culvert Replacement	2019	B-01446
36	Fremont Center Rd.	3R Resurfacing	2018	B-01235a

Preservation Projects (cont'd)

Preservation Projects				
Map ID	Route	Work Type	Program Year	CPMS PIN
38	Gages Lake Rd.	Culvert Replacement	2018	B-01435
39	Gelden Rd.	Resurfacing	2018	B-01170
40	Gilmer Rd.	Resurfacing	2018	B-01235b
43	Grass Lake Rd.	Microsurfacing	2021	B-01391
44	Grass Lake Rd.	Resurfacing	2019	B-01399c
45	Grass Lake Rd.	Bridge Retaining Wall Maintenance	2018	B-01312
46	Grass Lake Rd.	Drainage Improvements	2018	B-01438b
47	Hainesville Rd.	Resurfacing	2020	B-01480
48	Hart Rd.	Resurfacing	2023	B-01480
50	Hawley St.	Culvert Replacement	2022	B-01372b
53	Hutchins Rd.	Resurfacing	2019	B-01490
57	Kelsey Rd.	Culvert Replacement	2018	B-01372
58	Kenosha Rd.	Resurfacing	2018	B-01306
59	Kenosha Rd.	Resurfacing	2018	B-01163c
61	Kilbourne Rd.	Culvert Replacement	2018	B-01163d
62	Kilbourne Rd.	Resurfacing	2019	B-01163a
64	Lewis Ave.	Reconstruction	2024	B-01452b
65	Lewis Ave.	Bridge Repairs	2023	B-01476
66	Long Grove Rd.	Microsurfacing	2023	B-01493
67	Milburn Rd.	Resurfacing	2019	B-01483
68	Milburn Rd.	Resurfacing	2019	B-01399a

Preservation Projects (cont'd)

Preservation Projects					
Map ID	Route	Work Type	Program Year	CPMS PIN	
69	Milburn Rd.	Culvert Repair	2019	B-01399d	
71	Monaville Rd.	Bridge Deck Profiling	2021	B-01399b	
72	Old McHenry Rd.	Microsurfacing	2022	B-01391a	
77	O'Plaine Rd.	Resurfacing	2018	B-01484	
80	Riverwoods Rd.	Drainage Improvements	2023	B-01453	
81	Rollins Rd.	Microsurfacing	2019	B-01494	
82	Rollins Rd.	Resurfacing	2018	B-01323	
87	St. Mary's Rd.	Drainage Improvements	2018	B-01323	
88	St. Mary's Rd.	3R Resurfacing	2020	B-01237b	
89	St. Mary's Rd.	3R Resurfacing	2020	B-01381	
90	Stearns School Rd.	Microsurfacing	2023	B-01482	
91	Stearns School Rd.	Resurfacing	2018	B-01496	
92	Stearns School Rd.	Resurfacing	2021	B-01392	
93	Stearns School Rd.	Bridge Deck Replacement	2022	B-01102	
96	Wadsworth Rd.	Culvert Replacement	2023	B-01499	
97	Wadsworth Rd.	3R Resurfacing	2018	B-01402a	
102	Washington St.	Storm Sewer Maintenance	2021	B-01402b	
103	Washington St.	Resurfacing	2018	B-01479	
104	Washington St.	Drainage Improvements	2019	B-01264	
107	Wilson Rd.	Culvert Replacement	2019	B-01370	
108	Wilson Rd.	Resurfacing	2022	B-01481	
109	Winchester Rd.	Resurfacing	2021	B-01491	
110	Winchester Rd.	Resurfacing	2023	B-01486	
112	York House Rd.	Culvert Replacement	2021	B-01501	
113	York House Rd.	Resurfacing	2018	B-01487	
114	York House Rd.	Drainage Improvements	2018	B-01106	

Priority Two: Modernization

Modernization projects:
approximately

30%
of program

Typically intersection and safety improvements,
bike and pedestrian accommodations

**\$176 million
88 projects**

Modernization saves time, fuel, money and the environment

Corridors Studied:

4

Delays Reduced:

478 hours per day

Fuel Saved:

318 gallons per day

Annual Benefit:

\$3,141,414

CO₂ Emissions Avoided:

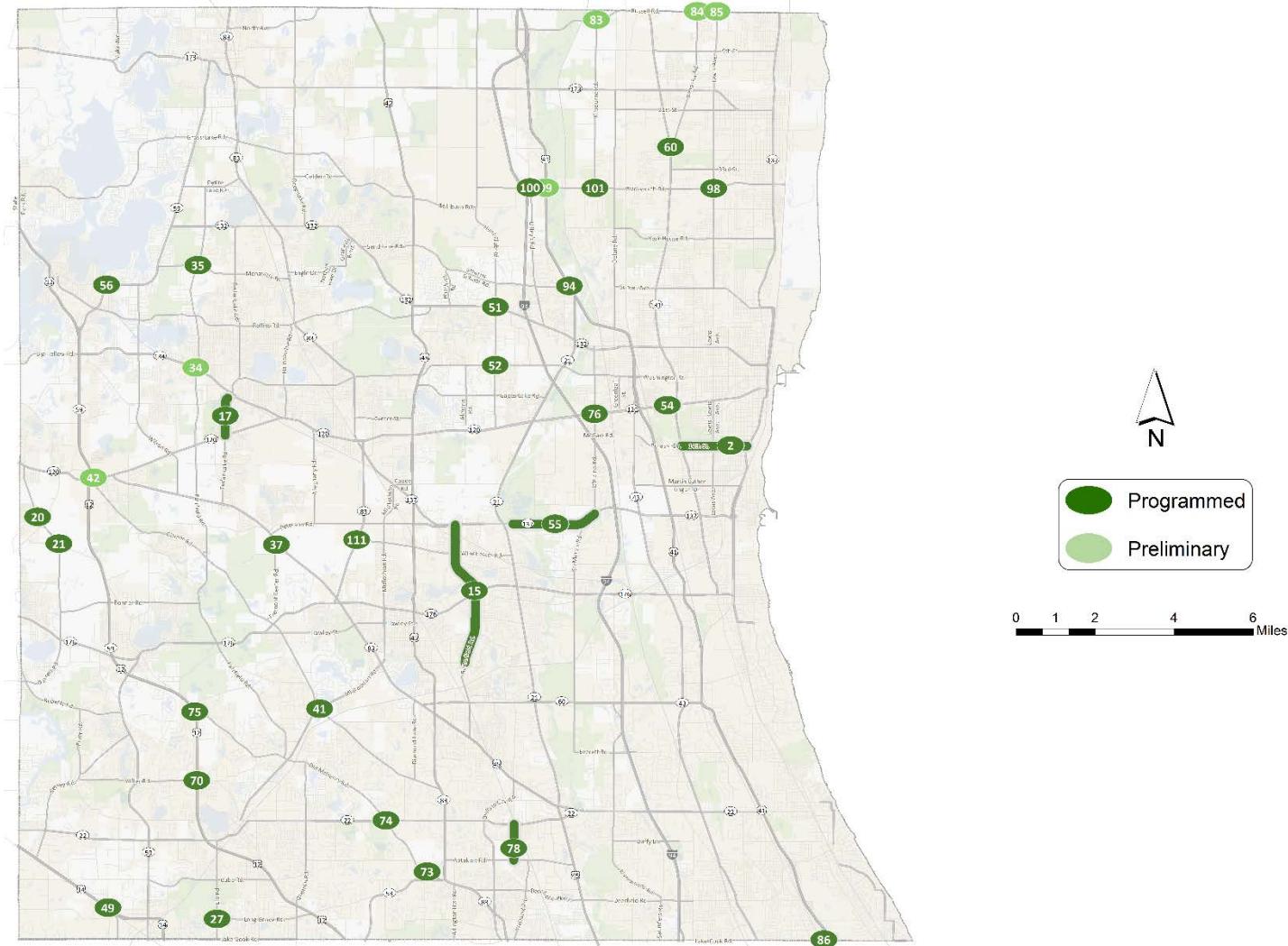
566 metric tons per year

What's new in this 5-year program?

- Hunt Club Rd at Washington St (Phase I study)
- Prairie Rd, Aptakisic to IL 22
- Russell Rd at Kilbourne, Kenosha and Lewis (Phase I study)
- Lewis Ave corridor study (IL 137 to Sunset Ave)
- SOV reduction planning study
- Construction management software
- Traffic software systems maintenance and upgrades
- Signal equipment and coordination
- Heated red LED signal project



Modernization | 2018-2023 Program



Modernization Projects

Modernization Projects				
Map ID	Road Name	Work Type	Program Year	CPMS PIN
2	14th St.	Reconstruction and Signal Interconnect	2019	B-01002a
15	Butterfield Rd.	Adaptive Traffic Signal Control	2019	B-01319
17	Cedar Lake Rd	Widen and Reconstruct	2017	B-00177
20	Darrell Rd.	Intersection Improvement	2023	B-00141b
21	Darrell Rd.	Realign	2021	B-00141a
27	Ela Rd.	Reconstruction	2020	B-01120
34	Fairfield Rd.	Intersection Improvement	2024	B-00730
35	Fairfield Rd.	Intersection Improvement	2020	B-01184
37	Fremont Center Rd.	Intersection Improvement	2019	B-00474c
41	Gilmer Rd.	Intersection Improvement	2021	B-00728a
42	Gilmer Rd.	Realignment	2024	B-00845
49	Hart Rd.	Intersection Improvement	2018	B-00736
51	Hunt Club Rd.	Intersection Improvement	2019	B-01115
52	Hunt Club Rd.	Intersection Improvement	2022	B-01437
54	IL Rte. 120	Widening	2019	B-00740
55	IL Rte. 137	Bike Path (Staged Improvement)	2021	B-01181a
56	IL Rte. 59	Intersection Improvement	2021	B-00738
60	Kenosha Rd.	Intersection Improvement	2019	B-00424
70	Miller Rd.	Intersection Improvement	2019	B-01263
73	Old McHenry Rd.	Reconstruction	2018	B-01020a
74	Old McHenry Rd.	Intersection Improvement	2018	D-00351
75	Old McHenry Rd.	Intersection Improvement	2018	B-01378
76	O'Plaine Rd	Signals	2019	B-01193

Modernization Projects (cont'd)

Modernization Projects				
Map ID	Road Name	Work Type	Program Year	CPMS PIN
78	Prairie Rd.	Intersection Improvement	2023	B-01500
83	Russell Rd	Intersection Improvement	2024	B-01445
84	Russell Rd	Intersection Improvement	2024	B-01445b
85	Russell Rd.	Intersection Improvement	2024	B-01445c
86	Skokie Valley Bikepath	Bike Path Bridge	2019	B-01150
94	Stearns School Rd.	Intersection Improvement	2021	B-01361
98	Wadsworth Rd.	Intersection Improvement	2021	B-01119
99	Wadsworth Rd.	Intersection Improvement	2024	B-00737a
100	Wadsworth Rd.	Intersection Improvement	2019	B-00737b
101	Wadsworth Rd.	Intersection Improvement	2021	B-00737c
111	Winchester Rd.	Intersection Improvement	2020	B-01365

Priority Three: Expansion

Expansion projects:
approximately

36%

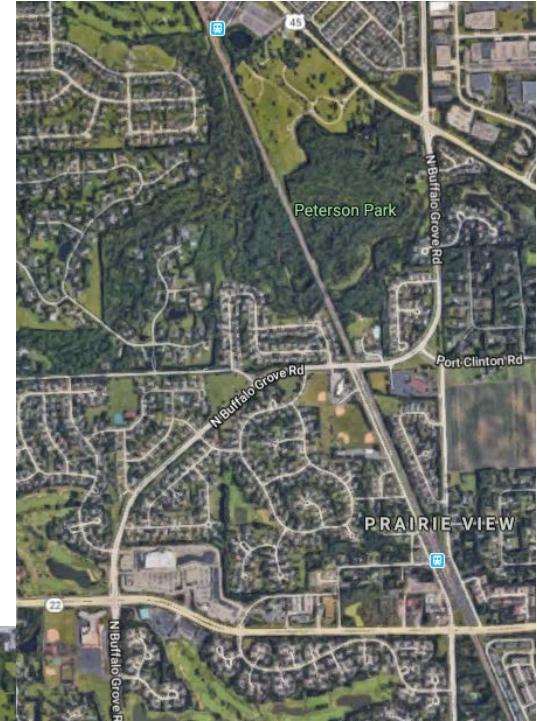
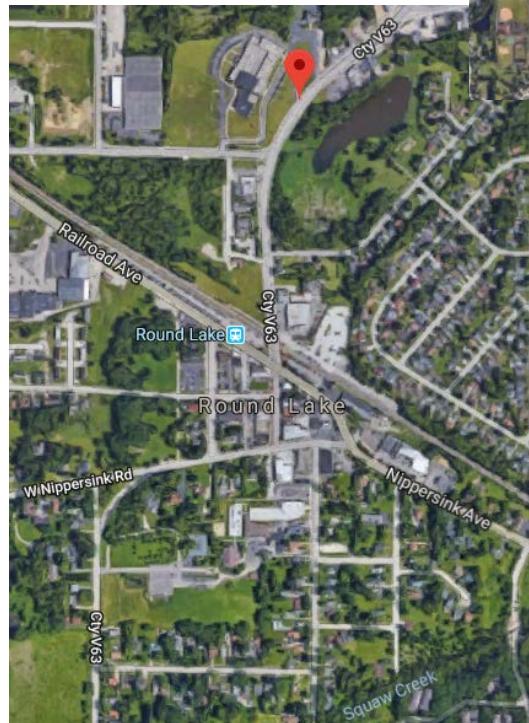
of program

Typically add lanes, grade separations, new or
extended roads

**\$209 million
11 projects**

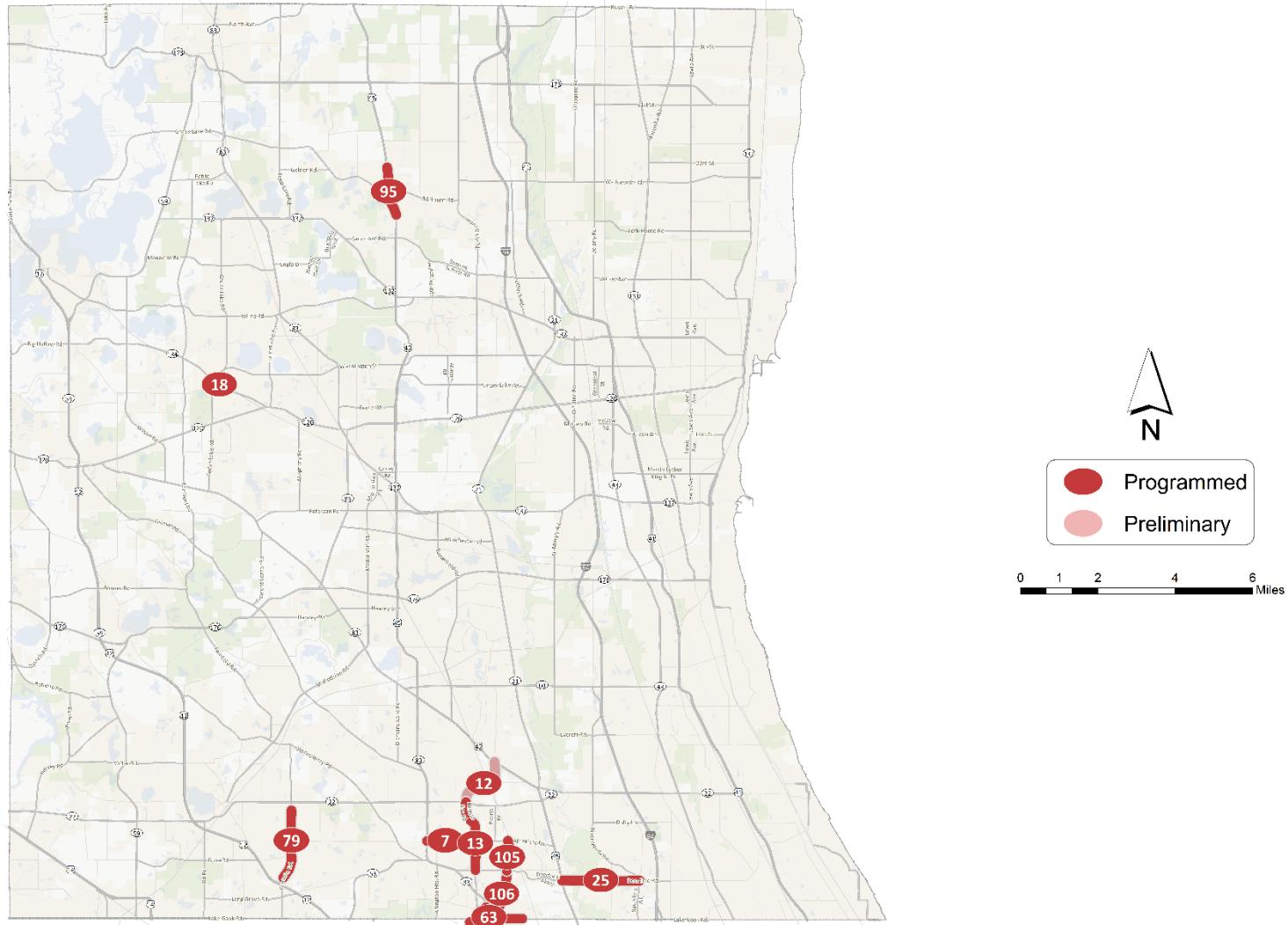
What's new in this 5-year program?

- Buffalo Grove Road, US45 to IL22, capacity analysis
- Cedar Lake Road realignment at downtown Round Lake, Phase I study



Expansion |

2018-2023 Program



Expansion Projects

Expansion Projects				
Map ID	Route	Work Type	Program Year	CPMS PIN
7	Aptakisic Rd.	Widening	2022	B-00739a
12	Buffalo Grove Rd.	Reconstruct and Widen	2024	B-01358
13	Buffalo Grove Rd.	Reconstruct and Widen	2020	E-00559
18	Cedar Lake Rd	Roadway Reconstruction	2023	B-00752
25	Deerfield Rd.	Reconstruct and Widen	2021	B-01266a
63	Lake-Cook Rd.	Roadway Reconstruction	2018	B-01040
79	Quentin Rd.	Reconstruction and Widening	2018	B-00378a
95	U.S. Hwy. 45	Bypass	2018	B-00727
105	Weiland Rd.	Widening	2019	E-00259c
106	Weiland Rd.	Widening	2018	B-00259b

New this year:
digital-only publication [July 2018]



Thank You!

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Division of Transportation



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