Shane Schneider, P.E. Director of Transportation/ County Engineer Lake County Division of Transportation
Proposed 2019 - 2024 Highway Improvement Program

Public Works, Planning and Transportation Committee

June 5, 2019

FUNDING, PROJECTS OVERVIEW AND ENDORSEMENT REQUEST

Presentation Schedule

PWPTC 2019 Meeting Date

Presentation Topic

May 8 • Overview and Program Priorities

June 5 • Funding and Projects / Draft Program Document

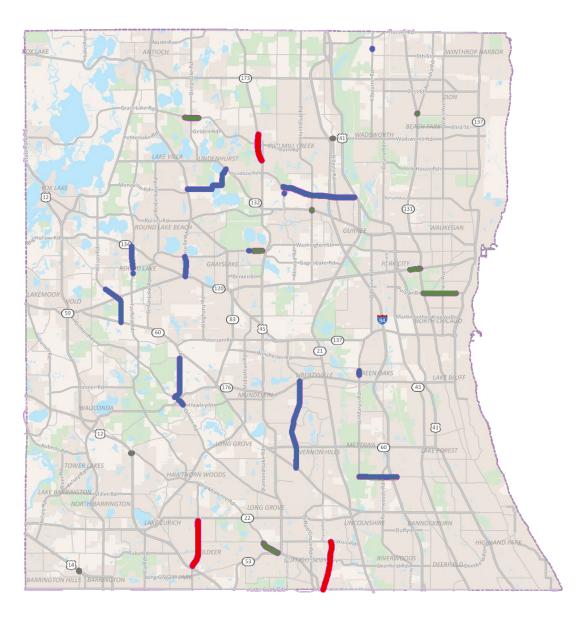
2019 Construction Program

Continued from 2018

Preservation

Modernization

Expansion



\$59M: construction continued from 2018



Quentin Rd

White Pine Rd to IL22 reconstruct and widen to 4 lanes

Old McHenry Rd

at downtown Long Grove intersection improvement





Millburn Bypass of US Route 45

north of Grass Lake Rd to south of Millburn Rd realign and reconstruct (IDOT is lead agency)

Resurfacing projects at

Stearns School Rd*, Everett Rd* and St. Mary's Rd*

\$78M in 2019 construction program

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

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

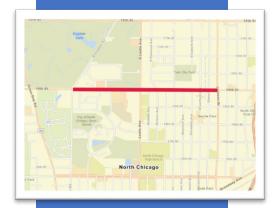
14th St, roundabout and road diet to 3 lanes, Dugdale to Jackson

Operational and Safety Improvements:

- Intersection improvements
- Traffic signal work
- Street light upgrades to LED
- Expand PASSAGE coverage and signal interconnects through more corridors







2019 construction program (continued)

Resurfacing Projects:

Butterfield Road Engle Drive Fairfield Road* Fremont Center Road [3R]* Gilmer Road* Hainesville Road* Wilson Road*

Non-motorized Travel Improvements:

Washington St Bike Path: Lancer Ln to Mainsail Dr Grass Lake Rd west of Deep Lake Rd: Sidewalk gap improvements

Culvert, Drainage and/or Retaining Wall Projects:

Washington St at Mill Creek
Hutchins Rd at Mill Creek
Fairfield Rd at Squaw Creek
Kilbourne Rd at Des Plaines Tributary
St. Mary's Rd at Metra Railroad
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



^{*}project includes adding bike-friendly shoulder

Funding and Revenue

4 LCDOT Capital Program Revenue Streams:

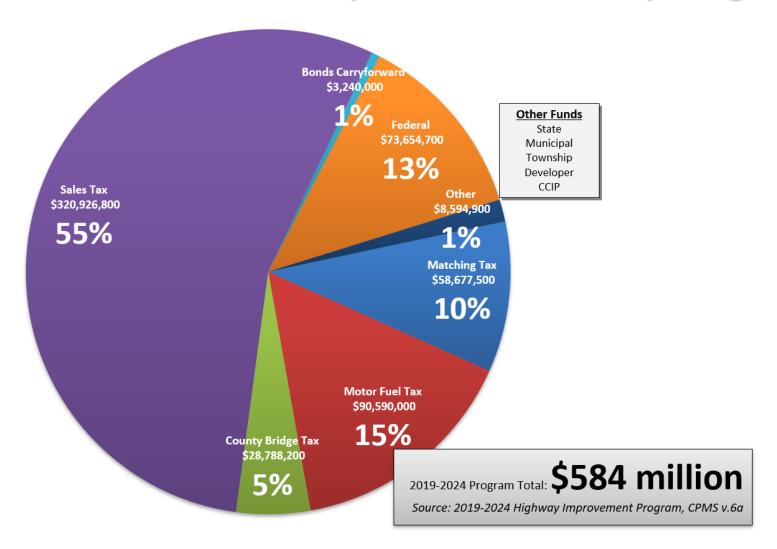
- County Bridge Fund (CB)
- Matching Tax (MT)
- Motor Fuel Tax (MFT)
- Sales Tax (ST)

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

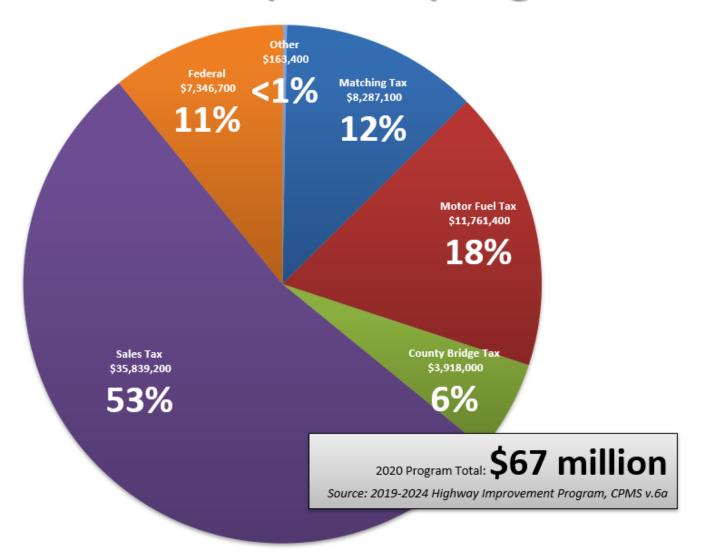
Leverage Outside Funds for Effective Programming

- 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 | 2019-2024 program



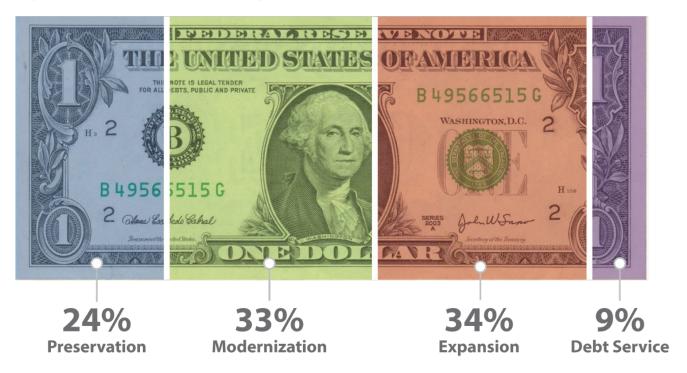
Fund Sources | 2020 program



Balancing Program Needs

Funds Distribution | 2019-2024

by program category



Balancing Program Needs

Funds Distribution | 2020

by program category









2019-2024 Program

- 2019-2024 project maps and lists
- Detail of Preservation, Modernization and Expansion categories
- Becomes our capital budget submittal for CFY 2020

Priority One: Preservation

Preservation projects: approximately

24%

of program

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

\$143 million 163 projects

What's new in Preservation in this 5-year program?

- Resurfacings/microsurfacings
- Culvert replacements
- Pavement rejuvenator
- Upgrade PASSAGE equipment
- Bridge inspections/improvements
- Storm sewer/drainage work
- Annual maintenance items—patching, crack sealing, trees & landscaping, guardrail, retaining walls



Identifying High Risk Culverts

Project set of 15 culverts:

- Greater than 35 years old
- Corrugated metal pipe
- 36" or larger

Replacement schedule:

2017

2021

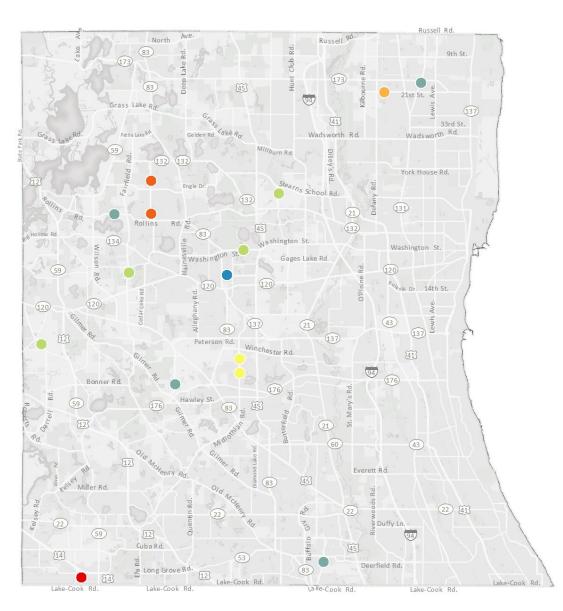
2018

2022

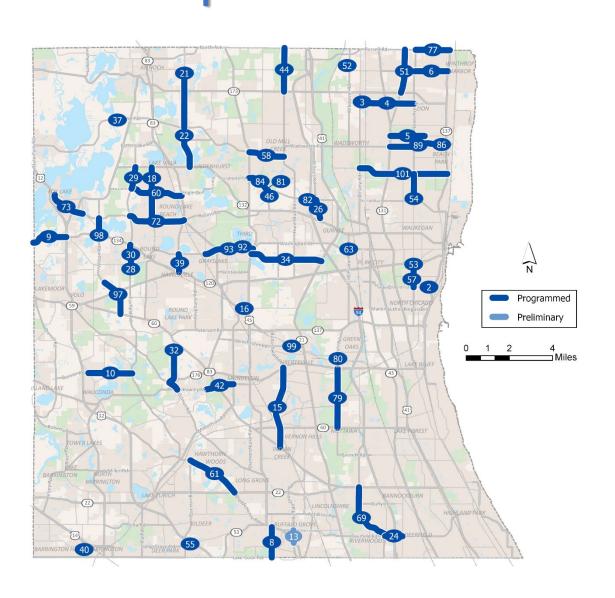
2019

2023

2020



Preservation 2019 – 2024 Program



Preservation Projects

Preservation Projects					
Мар	Route	Work Type	Program Year	CPMS PIN	
2	14th St.	Roadway	2019	B-01002b	
3	21st St.	Culverts	2021	B-01376	
4	21st St.	Resurface	2020	B-01488	
5	33rd St.	Resurface	2022	B-01489	
6	9th St.	Resurface	2022	B-01536	
8	Arlington Hts. Rd.	Reconstruction	2024	B-01182	
9	Big Hollow Rd.	Resurface	2023	B-01492	
10	Bonner Rd.	Resurface	2021	B-01382	
13	Buffalo Grove Rd.	Reconstruction	Post-2024	B-01359	
15	Butterfield Rd.	Resurface	2019	B-01393	
16	Casey Rd.	Resurface	2023	B-01540	
18	Cedar Lake Rd	Resurface	2022	B-01395	
21	Deep Lake Rd.	Resurface	2021	B-00913b	
22	Deep Lake Rd.	3R	2021	B-00913a	
24	Deerfield Rd.	Resurface	2020	B-01397	
26	Dilley's Rd.	Resurface	2022	B-01485	
28	Fairfield Rd.	Culverts	2019	B-01446	
29	Fairfield Rd.	Resurface	2019	B-01394a	
30	Fairfield Rd.	Resurface	2019	B-01394c	
32	Fremont Center Rd.	3R	2019	B-01235a	
34	Gages Lake Rd.	Resurface	2022	B-01537	
37	Grass Lake Rd.	Drainage	2019	B-01481	
39	Hainesville Rd.	Resurface	2019	B-01480a	
40	Hart Rd.	Culverts	2023	B-01372b	
42	Hawley St.	Resurface	2022	B-01490	
44	Hunt Club Rd.	Resurface	2023	B-01539	
46	Hutchins Rd.	Culverts	2019	B-01372a	
51	Kenosha Rd.	Resurface	2024	B-01542	
52	Kilbourne Rd.	Bridges	2019	B-01476	
53	Lewis Ave.	Reconstruction	2024	B-01452b	

Preservation Projects (cont'd)

Preservation Projects				
Мар	Route	Work Type	Program Year	CPMS PIN
54	Lewis Ave.	Resurface	2023	B-01493
55	Long Grove Rd.	Resurface	2022	B-01483
57	Milburn Rd.	Drainage	2019	B-01399a
58	Milburn Rd.	Resurface	2020	B-01399b
60	Monaville Rd.	Resurface	2022	B-01538
61	Old McHenry Rd.	Resurface	2024	B-01484
63	O'Plaine Rd.	Drainage	2020	B-01453
69	Riverwoods Rd.	Resurface	2023	B-01494
72	Rollins Rd.	Resurface	2023	B-01495
73	Rollins Rd.	Resurface	2024	B-01543
77	Russell Rd.	Resurface	2021	B-01535
79	St. Mary's Rd.	3R	2020	B-01381
80	St. Mary's Rd.	Culverts	2019	B-01511
81	Stearns School Rd.	Culverts	2023	B-01499
82	Stearns School Rd.	Bridges	2021	B-01102
84	Stearns School Rd.	Resurface	2023	B-01496
86	Wadsworth Rd.	Maintenance	2019	B-01402b
89	Wadsworth Rd.	3R	2023	B-01402a
92	Washington St.	Culverts	2019	B-01370
93	Washington St.	Resurface	2021	B-01479
97	Wilson Rd.	Resurface	2019	B-01394b
98	Wilson Rd.	Resurface	2022	B-01491
99	Winchester Rd.	Culverts	2023	B-01501
101	York House Rd.	Resurface	2024	B-01534

Priority Two: Modernization

Modernization projects: approximately

33%

of program

Typically intersection and safety improvements, bike and pedestrian accommodations

\$191 million 118 projects

Modernization saves time, fuel, money and the environment

Corridors Studied: 1 (Lewis Ave: Sunset to IL173)

Delays Reduced: 403 hours per day

Fuel Saved: 4380 gallons per year

Annual Benefit: \$2,486,700

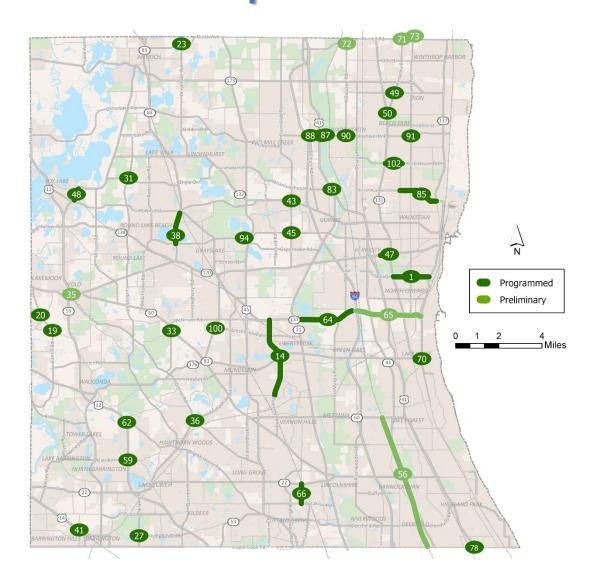
CO₂ Emissions Avoided: 25.2 metric tons per year

What's new in Modernization in this 5-year program?

- Deep Lake Rd at North Ave intersection improvement
- Hainesville Rd south of Rollins to Washington
- Kenosha Rd at 21st St intersection improvement
- York House Rd, Green Bay to McAree
- Connected vehicle study
- Metra pilot program enhancements
- Non-motorized travel gap infrastructure
- Signal equipment and coordination
- Traffic software systems maintenance and upgrades



Modernization 2019-2024 Program



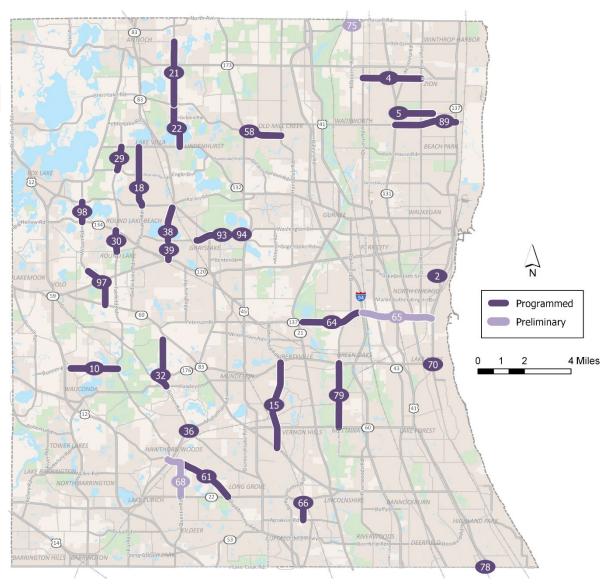
Modernization Projects

Modernization Projects				
Map ID	Road Name	Work Type	Program Year	CPMS PIN
1	14th St.	Roadway	2019	B-01002a
14	Butterfield Rd.	Signals	2020	B-01319
19	Darrell Rd.	Intersection	2021	B-00141a
20	Darrell Rd.	Intersection	2023	B-00141b
23	Deep Lake Rd.	Intersection	2024	B-01547
27	Ela Rd.	Intersection	2020	B-01120
31	Fairfield Rd.	Intersection	2020	B-01184a
33	Fremont Center Rd.	Intersection	2020	B-00474c
35	Gilmer Rd.	Intersection	Post-2024	B-00845
36	Gilmer Rd.	Intersection	2021	B-00728a
38	Hainesville Rd.	Roadway	2024	B-01482
41	Hart Rd.	Intersection	2019	B-00736
43	Hunt Club Rd.	Intersection	2019	B-01115
45	Hunt Club Rd.	Intersection	2022	B-01437
47	IL Rte. 120	Roadway	2019	B-00740
48	IL Rte. 59	Intersection	2021	B-00738
49	Kenosha Rd.	Intersection	2024	B-01548
50	Kenosha Rd.	Intersection	2019	B-00424
56	Metra Pilot Program Universal/Crossover	Railroad	Post-2024	B-01512
59	Miller Rd.	Intersection	2020	B-01263
62	Old McHenry Rd.	Intersection	2019	B-01378
64	Patriot Path	Bikepath	2020	B-01181a
65	Patriot Path	Bikepath	Post-2024	B-01181bcd
66	Prairie Rd.(South of Rte. 22)	Imp Reconstruction	2023	B-01500
70	Robert McClory Bike Path	Bike Path	2019	B-01192
74	Russell Rd.	Intersection	Post-2024	B-01445b
75	Russell Rd.	Intersection	Post-2024	B-01445a
76	Russell Rd.	Intersection	Post-2024	B-01445c
78	Skokie Valley Bike Path	New Bridge	2020	B-01150
83	Stearns School Rd.	Intersection	2021	B-01361
85	Sunset Ave.	Signals	2020	B-01033
87	Wadsworth Rd.	Intersection	2019	B-00737e
88	Wadsworth Rd.	Intersection	2019	B-00737b
90	Wadsworth Rd.	Intersection	2021	B-00737c
91	Wadsworth Rd.	Intersection	2021	B-01119
94	Washington St.	Enhancements	2019	B-01088
100	Winchester Rd.	Intersection	2021	B-01365
102	York House Rd.	Imp Reconstruction	2024	B-01509

\$32M in non-motorized

in non-motorized improvements

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



Non-motorized improvements

Non-Motorized Accommodation Projects Not Identified By Location

Bike Path Singage
Bituminous Maintenance
Materials for Road and Bike Maintenance
Non-Motorized Travel

Non-Motorized Accommodation Projects					
Мар	Category	Route	Work Type	Program Year	CPMS PIN
2	Р	14th St.	Resurface	2019	B-01002b
4	Р	21st St.	Resurface	2020	B-01488
5	Р	33rd St.	Resurface	2022	B-01489
10	Р	Bonner Rd.	Resurface	2021	B-01382
15	Р	Butterfield Rd.	Resurface	2019	B-01393
18	Р	Cedar Lake Rd	Resurface	2022	B-01395
22	Р	Deep Lake Rd.	3R	2021	B-00913a
21	Р	Deep Lake Rd.	Resurface	2021	B-00913b
29	Р	Fairfield Rd.	Resurface	2019	B-01394a
30	Р	Fairfield Rd.	Resurface	2019	B-01394c
32	Р	Fremont Center Rd.	3R	2019	B-01235a
36	M	Gilmer Rd.	Intersection Widening	2021	B-00728a
39	Р	Hainesville Rd.	Resurface	2019	B-01480a
38	M	Hainesville Rd.	Reconstruction	2024	B-01482
64	M	Patriot Path	Bikepath	2020	B-01181a
65	M	Patriot Path	Bikepath	Post-2024	B-01181bcd
58	Р	Milburn Rd.	Resurface	2020	B-01399b
68	Е	Old McHenry Rd	Reconstruction	Post-2024	B-01546
61	Р	Old McHenry Rd.	Resurface	2024	B-01484
66	M	Prairie Rd.(South of Rte. 22)	Imp Reconstruction	2023	B-01500
70	M	Robert McClory Bike Path*	Reconstruction	2019	B-01192
75	M	Russell Rd.	Intersection	Post-2024	B-01445a
78	M	Skokie Valley Bike Path*	New Bridge	2020	B-01150
79	Р	St. Mary's Rd.	3R	2020	B-01381
89	Р	Wadsworth Rd.	3R	2023	B-01402a
93	Р	Washington St.	Resurface	2021	B-01479
94	M	Washington St.	Enhancements	2019	B-01088
97	Р	Wilson Rd.	Resurface	2019	B-01394b
98	Р	Wilson Rd.	Resurface	2022	B-01491

^{*} LCDOT is not lead agency

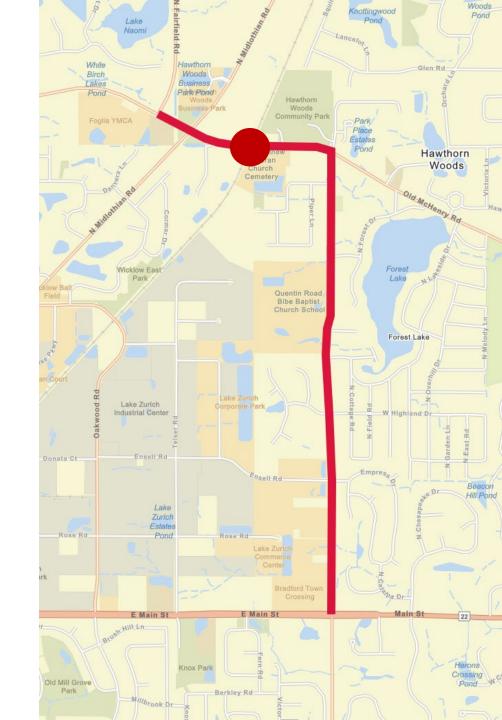
Priority Three: Expansion

Expansion projects: approximately of program Typically add lanes, grade separations, new or extended roads

\$197 million 36 projects

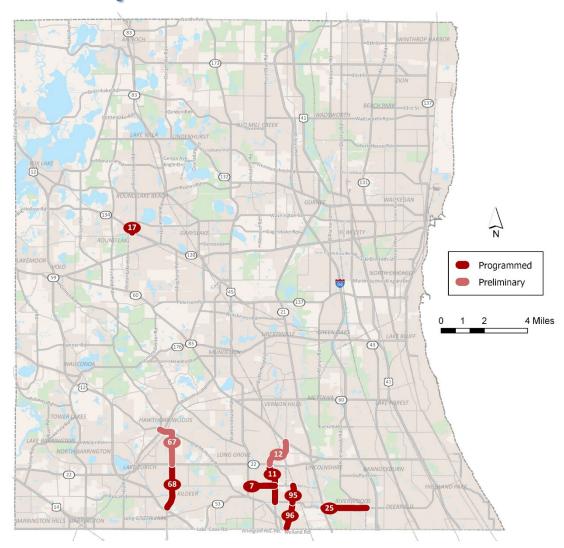
What's new in Expansion in this 5-year program?

- Quentin Road/Old McHenry Rd, IL22 to Fairfield Rd Phase I study
- Paratransit Dial-a-Ride expansion



Expansion |

2019-2024 Program



Expansion Projects

Expansion Projects				
Map ID	Route	Work Type	Program Year	CPMS PIN
7	Aptakisic Rd.	Roadway	2022	B-00739a
11	Buffalo Grove Rd.	Roadway	2020	E-00559
12	Buffalo Grove Rd.	Reconstruction	Post-2024	B-01358
17	Cedar Lake Rd	Roadway	2023	B-00752
25	Deerfield Rd.	Roadway	2022	B-01266a
67	Quentin Rd.	Roadway	2019	B-00378ab
68	Quentin Rd./Old McHenry Rd.	Roadway	Post-2024	B-01546
95	Weiland Rd.	Roadway	2019	E-00259c
96	Weiland Rd.	Roadway	2019	E-00259b

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Thank You!

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