

Lake County Engineer Office

Annual Report 2025



Alan L. Exley, PE., PS.
Lake County Engineer

Lake County is located in Northeast Ohio, along Lake Erie. It is the smallest county in Ohio, consisting of 229.4 square miles and an approximate population of 232,360 residents (Census 2024). It includes nine cities, nine villages and five townships.

The Lake County Engineer's Office (LCEO) is responsible for the maintenance, inspection, and construction of 300 lane miles of county roads and 103 county bridges. LCEO, additionally, performs maintenance on a 110 lane mile stretch of State Route 2, which runs through six cities and one township.

County road maintenance includes snow plowing, ice removal, salting, mowing, tree trimming, brush cleaning, cleaning drains, sweeping, picking up litter, repairing pavement, patching potholes, and replacing lighting. Additionally the road maintenance crew takes care of traffic signals, signage, striping, retaining wall maintenance and guardrail.

Lake County Engineer's Office Staff

Chief Deputy Engineer:	Kirk Dimmick, PE.
Administrator:	Colleen Aguirre, MBA
Finance Officer:	Stephanie Giblock
Chief Surveyor:	John Jansky, PS.
Resident Engineer:	Ken Seitz, PE.
Design Engineer/ Prevailing Wage Coordinator	Erin Fink-Rohde, PE.
Field Production Engineer:	Jeff Gertz
Design Engineer:	Bryan Sparks
Design Engineer:	Sam Janas
Survey Tech II:	Mike West
Construction Observer:	Jim Stern
Project Clerk:	Cindy Miller
Administrative Clerk:	Kim Lockhart

Tax Map Staff

Supervisor:	Chris Bernard
Tax Map Technician:	Ingrid Panic

GIS Staff

GIS Director:	Caroline Petersen
GIS Specialist:	Dave Phares
GIS Technician:	Ryan Barshick

Road Maintenance Department

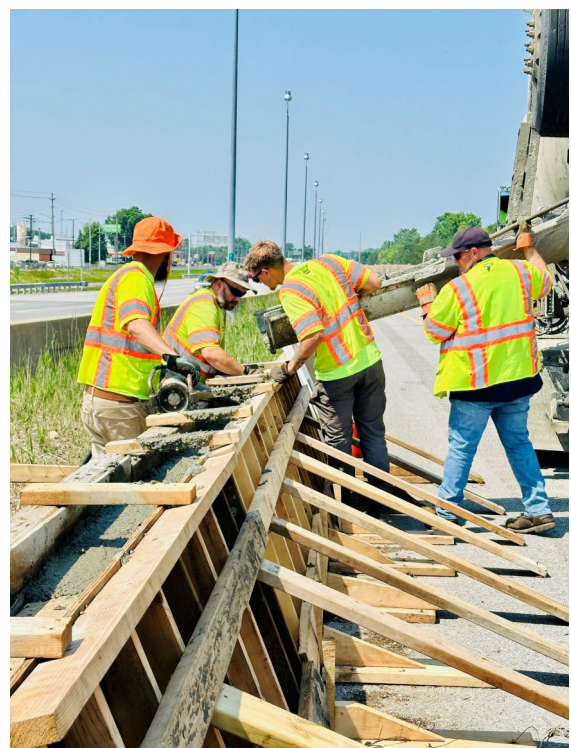
Superintendent:	Ray Martin
Supervisor:	Joe Giblock
Foreman:	Gary Miller
Foreman:	Dennis Sanders
Foreman:	Adam Yankie
Foreman:	Todd Horne
Operator III:	Kevin Dickard
Operator III:	Bob Simmons
Operator III:	Ken Kropac
Operator III:	Tim Ayers
Operator II:	Doug Paine
Operator II:	Dave Sholtis
Operator II:	Dan Bukvic
Operator II:	Steve Borelli
Operator II:	Kumaren Moonesawmy
Operator II:	Brad Campana
Operator II:	George Boch
Operator II:	Brandon Kelly
Operator II:	Ife Onunwa
Operator I:	Rich VanPelt III
Operator I:	Odi Flores
Operator I:	Cole Hejduk
Operator I:	Jason Petrowski
Operator I:	James Jarvis
Operator I:	Will Vicens
Laborer:	Gavin Davenport
Laborer:	Phil Scardino
Laborer:	Rob Smith
Laborer:	Zeff Marcy
Laborer:	Marco Reynoso
Laborer:	Ryan Vollman
Laborer:	Chris Galioto
Laborer:	Ricky Summers
Laborer:	Andrew Marcelli
Laborer:	Michael Vaughan Jr.

Mechanics

Lead Mechanic:	Mike Boch
Mechanic:	Steve Hill
Mechanic:	Adam Wilkinson

Traffic/Sign Shop

Traffic Tech II:	Chad Sines
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TAX MAP DEPARTMENT

Deed Reviews:	1300
New Surveys:	192
Parcel Maintenance Issues:	200



SURVEY CREW

2025 was a busy year for the survey crew, completing projects ranging from establishing centerline plats for County and Township Roads to simple right of way locations and topo and location surveys.

Here are a few of the highlights...

- Completed and recorded a new centerline plat for Carter Road in Concord and Leroy Townships.
- Partnering with the County Soil and Water department to lay out and stake a walking path for our local boy's home.
- Completed a boundary and consolidation survey for the new Lake County Jail site.
- Partnered with Madison Township and our County forces to survey and stake out an intersection and drainage improvement. (Hubbard Road at Madison Avenue)
- Partnered with Concord Township to survey a culvert on Cascade Road.
- Completed a bridge survey on Wood Road for future improvement.
- Completed a topo and location survey of Blackmore Road in Perry Township (approximately 1.3 miles).
- Completed a topo and location survey of Ford Road in Leroy and Madison Townships (approximately 4.3 miles).

Our department strives to assist the Engineer with obtaining the data they need to design and or repair the county infrastructure in a timely but diligent manner. All work is performed under the close supervision of our County Surveyor, John Jansky who has over forty-five years' experience in the industry.

2025 PROJECTS

Brockway Culvert Repair by County Force Account work. The partial wingwall collapse at Brockway culvert over a stream near the Leroy Center Road intersection required immediate repair work to restabilize portions of the structure. This concrete culvert work included rebuilding the dislodged concrete wingwall using over 30 ~ 100+ year old recycled sandstones, earthen embankment reconstruct and steel rod tiebacks to secure the existing structure from further decay. The Lake County Road department completed this work in two weeks using heavy equipment, operators and laborers adding service life back to this deteriorating structure while reducing need for additional planned capital improvements.

St. Clair Street Bridge Repair over the Grand River project was completed using a third-party contractor, Great Lakes Construction Company, to replace portions of the concrete deck wearing surface using hydro demolition techniques to replace the deteriorated deck portions with a more superior dense concrete overlay. The \$686,000 project was mostly funded through Federal Grant monies with the Lake County portion not exceeding 5% of these costs. This repair added a 25-year service life to the structure reducing requirements for major maintenance over this period.

Blair Road Retaining Wall Replacement on the north side of the Grand River Crossing began in July and is ongoing to replace a 300-foot-long portion of 15' tall steel sheet wall supporting Blair Road. The \$1.1M project includes drainage improvements and asphalt pavement replacement that continued into 2026 and will be completed in the early spring. The Alan Stone Company from the Marrietta, Ohio region is performing the work.

Tyler Blvd Bridge Replacement project is currently under design to replace two structures over watercourses in the City of Mentor, Ohio. American Structure Point, Inc. from Cleveland, Ohio has a team of engineers designing two new bridges requiring part-width construction in order to maintain traffic patterns through this busy industrial corridor. Design will be complete in 2026 with construction anticipated in 2027.

In-house Design projects are ongoing to include roadway pavement program, culvert replacements, substantial bridge maintenance work, and traffic school zone upgrades to name a few. The Lake County Engineering staff having a combined 100+ year design experience remains a strong asset within the County providing cost effective professional engineering services to the county highway system and Townships when requested. The staff works closely with the Road Department to allow the team to perform effective skilled repair work at a significant cost savings.

LAKE COUNTY ROADWAY PROJECTS COMPLETED IN 2025

2024-009 Lake County Resurfacing Project – 2025

Construction Contract Award with Change Orders: \$1,810,805.70

Final Cost of Construction: \$1,673,074.65

Project awarded to Shelly Company. Work performed under this contract included Pavement planning, partial depth pavement repairs, fabric, asphalt Intermediate course, asphalt surface course and related items for Lake County roads as well as Concord Township, Leroy Township and Painesville Township roads as listed:

Lake County Roads: Final Cost \$580,343.11

- Fairgrounds Road – Woodland Road to Mentor Avenue
- Auburn Road – Colburn Road to Girdled Road
- Paine Road – Leroy Center Road to Carter Road
- Parking Lot @ 41 East Erie Street
- SR 2 Maintenance work

Concord Township Roads: Final Cost \$736,164.45

- Karaboo Trail – Morley Road to Butler Hill Drive
- Daisy Hill Court – Karaboo Trail to Cul-de-sac
- Butler Hill Drive – Karaboo Trail to Cul-de-sac
- Keystone Drive – Girdled Road to JoAnn Drive
- Easthill Drive – Keystone Drive to Cul-de-sac
- Ledge Lake Court – SR 86 to Cul-de-sac
- Little Mountain Road Extension – Morley Road to End

Leroy Township Roads: Final cost \$213,920.80

- Lester Drive – SR 86 to Cul-de-sac
- Monte Drive – SR 86 to Cul-de-sac
- Taylor Road (West Hill) – Paine Road to 5698 Taylor Road

Painesville Township Roads: Final Cost \$142,646.29

- Center Street – Southwood Road to Spring Lake Boulevard
- Southwood Road – Lyndale Road to Center Street
- Lyndale Road – Hale Road to Southwood Road
- Birch Road – Hale Road to Southwood Road

2024-010 Lake County Chip Seal Program—2025

Final Cost of Construction: \$340,833.00

Project awarded to Specialized Construction under Ohio Buys. Work performed under this contract included partial depth pavement repairs, single chip seal with fog seal for Lake County roads in Leroy Township as listed:

- Paine Road – Leroy Center Road to Carter Road
- Brockway Road – Leroy Center Road to Trask Road
- Balch Road – Trask Road to Lake County East Line
- Leroy Center Road – Brockway Road to Lake County East Line
- Trask Road – Lake County South Line to Ford Road

2025-009 Auburn Road Waterline Extension

(Joint project with Concord Township)

Resurfaced full width from Ravenna Road to 6428 Auburn Road and the north lane from 6428 Auburn to 6570 Auburn Road

2025-005 Lake County Pavement Marking – SR2 – 2025

Construction Contract Award: \$129,031.00

Final Cost of Construction: \$119,388.15

Project awarded to American Roadway Logistics. Work performed under this contract included the application of centerlines, edge lines, and related work on SR2 and the various interchanges.

LAKE COUNTY ROADWAY PROJECTS COMPLETED IN 2025

2025-004 Lake County Pavement Marking – 2025

Construction Contract Award: \$77,696.30

Final Cost of Construction: \$75,143.00

Project awarded top American Roadway Logistics. Work performed under this contract included the application of centerlines, edge lines, and related work on various County and Township roads as listed:

Lake County Roads: Final Cost \$58,024.25

- Bacon Road – Blasé-Nemeth Road to US 20
- Blasé-Nemeth Road – Bacon Road to US 20
- Call Road – Madison Village Corp Line to US 20
- Cashen Road – Dock Road to County Line Road
- Fairgrounds Road – Woodland Road to SR 84
- Girdled Road - SR 608 to SR 86 & SR 44 to Hermitage Road
- Haines Road – US 20 to Chapel Road
- Hale Road – intersection @ US 20
- Hardy Road – SR 535 to End
- Hoose Road – Mentor Corp Line to Morley Road
- Nye Road – US 20 to Jackson Street
- Ravenna Road – SR 84 to Auburn Road
- Riverside Drive – SR 84 to RR Tracks
- Williams Road – SR 608 to SR 86

Concord Township: Final Cost \$1,294.00

- Capital Parkway – Auburn Road to SR 44

Madison Township: Final Cost \$15,824.75

- Arcola Road – Middle Ridge Road to US 20
- Bates Road – SR 307 to River Road
- Chapin Road – Stocking Road to Ross Road
- Cunningham Road – Dock Road to County Line Road
- Dock Road – Lake Road to Lake Erie
- Emerson Road – Griswold Road to Ross Road
- Green Road – Chapel Road to Lake Erie
- Red Bird Road – Lake Road West to Chapel Road
- River Road – SR 528 to Bates Road
- Stocking Road – Ledge Road to Chapin Road



2025-007 Heatherstone Village Roadway Improvements

Construction	Contract	Award
\$675,933.75		

Final Cost of Construction: \$797,520.00

Township decided to do more roadway as per Bid Prices.

(OPWC Project and Construction Administration by the Lake County Engineer office)

Project awarded to Tri-Mor Corporation. Work performed under this contract included full depth concrete removal, 4" base removal, subgrade repair as needed, geotextile fabric as needed, 4" drainage base, rigid pavement replacement, curb drains, and related items on roads as listed:

- Westfield Circle – Dartmouth Drive to and including the Cul-de-sac
- Garwood Drive – Radley Drive to Dartmouth Drive
- Fanwood Drive - Garwood Drive to and including the Cul-de-sac
- Radley Drive – Garwood Drive to Bowdoin Court



2025 BRIDGE INSPECTION SUMMARY

The Lake County Engineer owns and maintains 103 bridges located throughout the county. 103 bridge inspections were performed last year in full compliance with the National Bridge Inspection Standards (NBIS) and requirements established by the Ohio Department of Transportation (ODOT). This includes maintaining an accurate inventory of bridges and ensuring all inspection data is current and properly reported. The program is intended to ensure the continued safety, serviceability, and structural integrity of bridges within the county roadway system.

Bridge Inspections consist primarily of detailed visual evaluations of:

- Bridge decks, superstructures, and substructures
- Load-carrying components and connections

Safety features such as railings and approach conditions

Inspection findings are documented in accordance with ODOT standards and entered into the state's bridge management system, Asset Wise.

Deficiencies identified during inspections were prioritized and incorporated into the County's maintenance and capital improvement plan. Various maintenance plans include:

- Bridge deck patching and sealing
- Cleaning and painting of structural steel
- Minor repairs to substructure elements

Guardrail and safety feature improvements

Bridges requiring more significant rehabilitation or replacement have been programmed for future funding through local, state, and federal sources.

The Lake County bridge inspection program remains a critical component of the County Engineer's responsibilities. Through regular inspections, timely maintenance, and strategic planning, the County continues to provide a safe and reliable transportation network for the traveling public.

Bridge Inspection Reports

Bridges that are inspected by the Lake County Engineer (LCE), are reported to ODOT every year, through their Assetwise Bridge Information Portal. These reports are generated in ODOT's format and uploaded into their system. Separate reports are generated for each community by LCE to report the condition of the bridges that reside in their communities. A report is also sent to the Lake County Commissioners summarizing the condition of all the inspected bridges. This is required by Ohio Revised Code. LCE produces these reports to the 18 communities and the Lake County Commissioners in their entirety. Among the contents in each report are a cover letter, condition rating, explanation of operational status, and inspector comments.

Right-of-Way Usage Permitting

The Lake County Engineer's Department reviews submitted permit applications and issues a Right-of-Way Usage permit to private utilities and property owners for any work in our county road Right-of-Ways. Plan reviews, determining bond amounts, and inspecting the work are all included in this process. In conjunction with this, a review of all 811 (Ohio Utilities Protection Service) notifications are completed on a daily basis to determine if a permit is needed for future work in our Right-of-Ways.

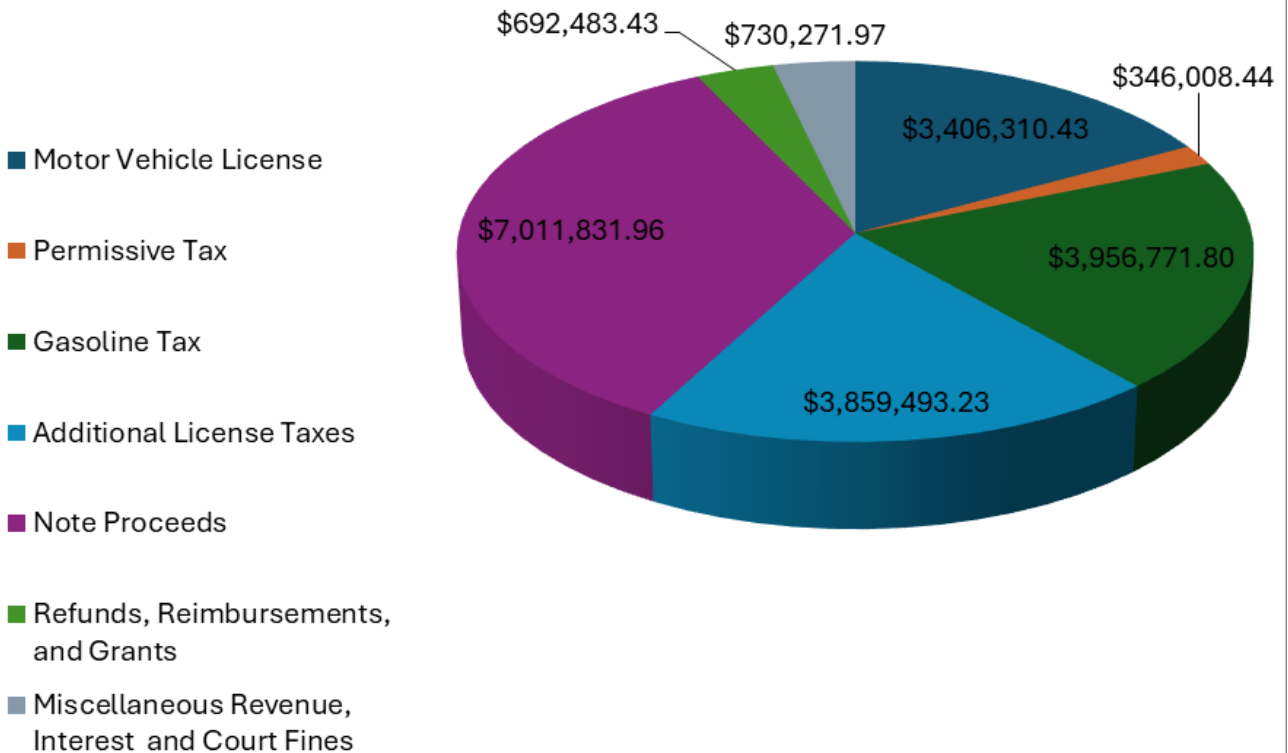
Plan reviews and field inspection of non LCE projects were completed, to enforce good engineering practice and LCE standards on other agencies and their contractors for proper restoration and to avoid damage to our county roads. These projects included the Perry Park Road Sanitary Sewer Improvement (LCDU), the Auburn and Girdled Road Waterline Projects (Concord Township), and two residential subdivisions



FINANCES

Motor Vehicle License	\$3,406,310.43
Permissive Tax	\$346,008.44
Gasoline Tax	\$3,956,771.80
Additional License Taxes	\$3,859,493.23
Note Proceeds	\$7,011,831.96
Refunds, Reimbursements, and Grants	\$692,483.43
Miscellaneous Revenue, Interest and Court Fines	\$730,271.97
TOTAL REVENUE:	\$20,003,171.26

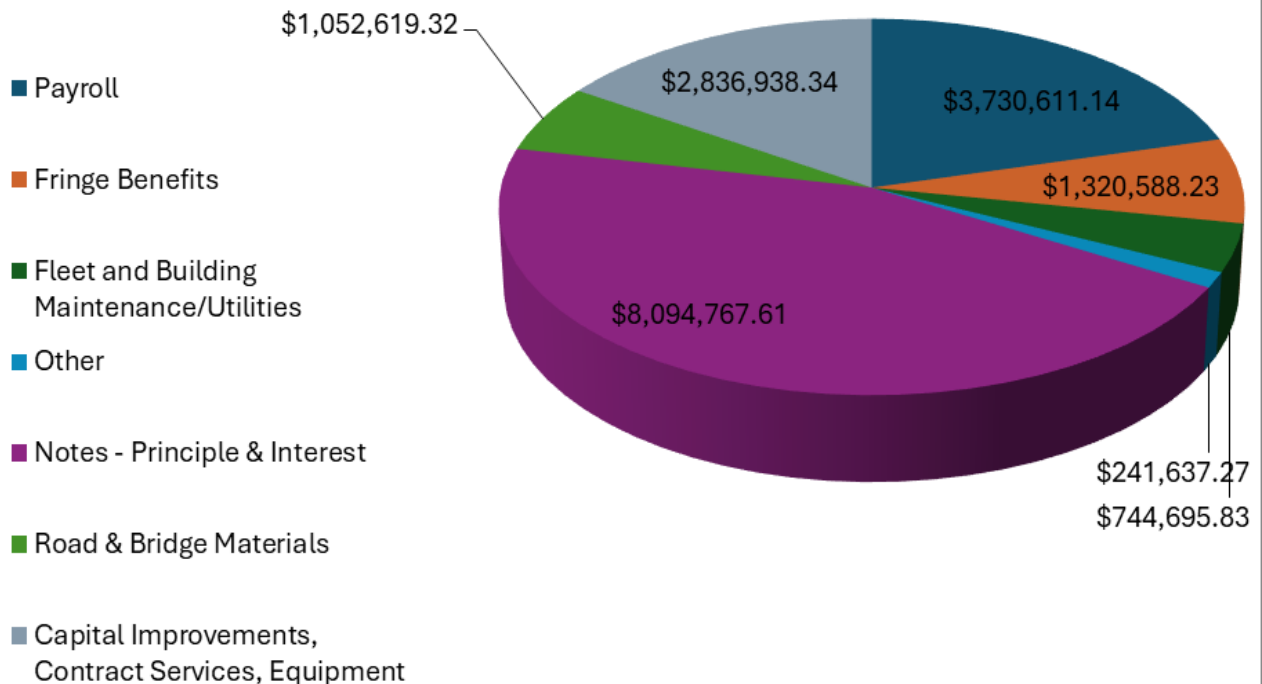
2025 REVENUE



FINANCES

Payroll	\$3,730,611.14
Fringe Benefits	\$1,320,588.23
Fleet and Building Maintenance/Utilities	\$744,695.83
Other	\$241,637.27
Notes - Principle & Interest	\$8,094,767.61
Road & Bridge Materials	\$1,052,619.32
Capital Improvements, Contract Services, Equipment	\$2,836,938.34
TOTAL EXPENDITURES:	\$18,021,857.74

2025 EXPENDITURES



Engineer x GIS Annual Report: Projects and Accomplishments

Caroline Petersen, Lake County GIS Director

Engineer Asset Inventory: In coordination with the Lake County Engineer, GIS has created an asset inventory of bridges, retaining walls, and roadways with essential documents for mobile/field applications. The application is accessible with Esri Field Maps, allowing staff and road crews to easily pull up information when assessing sites. The site was also added to the main Lake County Engineer website for staff to easily find and navigate. [Engineer Asset Search](#)

Impervious Surfaces: Previously the role of the Engineer's office, Lake GIS has taken on the responsibility of digitizing impervious and gravel surfaces used for stormwater billing for commercial and industrial properties.

Road Authority Map: a simple Map Dashboard displaying the authority of Roads in the County's. This Dashboard was created for the public and service departments to visually see who maintains roads. [Road Authority Map](#)

Flood Risk App: Following up on public and department requests, we launched a new Flood Risk application. Biannually, we check for updates to the National Flood Hazard Layer and Flood Insurance Rate Map (FIRM) from FEMA. Users can search their parcel or address to analyze flood risk, generate a report, and enable the 2-foot contour layer to produce a topo map. The app lists overlapping FIRM panels with direct links to FEMA's website and associated flood hazard risks, and a link was also added to the parcel pop-up on Lake Nav 3.2 for easy lookup. [Lake County Flood Risk Map](#)

GIS & NG9-1-1: NG9-1-1 is the modern, internet-based 9-1-1 that uses GIS (addresses, roads, service areas) for precise call routing and supports text, images, video, and better location. Lake County GIS received a score of 100% for NG911 Readiness Phase 1. This places Lake County ahead of many adjacent neighboring counties and well positioned for the next phase of development. [Ohio NG911 Deployment Readiness Dashboard](#)

Lake GIS Enterprise Update: GIS has modernized their ArcGIS Enterprise in line with the latest ESRI standards with compliancy with traditional applications. The enterprise is a part of a single sign-on network with County credentials. The enterprise serves as the user directory and data inventory for all data, including Utilities, Stormwater, Parcels, Roads, Bridges and more.

Lake Engineering GIS Hub: A work in process but hopefully will serve as the Engineer's data storage and editing site for construction and road projects. [Lake County Engineer GIS](#)

2025 CEAO GIS Conference: The Lake County GIS Department made conference history at the 2025 Ohio Statewide GIS Conference in Columbus by winning 3 awards across 7 categories, with GIS Director Caroline Petersen, Senior GIS Specialist Dave Phares, and GIS Technician Ryan Barshick each earning recognition. Entries are evaluated by a panel of GIS professionals on concept, technical merit, and overall design, with this year's awards selected from 55 map submissions and hundreds of attendees representing all 88 Ohio counties in attendance.

- **1st Place – Small Format:** *Lake County Land Use* by **Caroline Petersen**, showing land use by Auditor classification, parks, and vacant land.
- **1st Place – Fantasy:** *Shadowrun: Eureka 2083* by **Ryan Barshick**, an imaginative map inspired by the tabletop role-playing game *Shadowrun*.

People's Choice – Dynamic Maps: *The Western Reserve Story Map* by **Dave Phares**, an interactive journey through the history of Northeast Ohio from 1795 to today.



LAKE COUNTY GEOGRAPHIC INFORMATION SYSTEM BOARD

2025 Annual Report

Statistics

Map & Data Requests ((12/31/2024 – 12/19/2025)

Total: **194** Average: **16 per month**

Yearly Summary:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2022	n/a	n/a	16	20	12	13	15	20	19	15	9	12	142
2023	24	31	26	29	32	35	32	22	38	24	23	27	343
2024	21	25	16	16	21	15	20	23	28	19	21	15	240
2025	13	15	17	19	18	9	21	17	26	13	15	11	194

Internal: **99** (19 Departments)

GIS Board Affiliates	Other County Departments		
Auditor	Board of Elections	Prosecutor	IT Department
Engineer	Sheriff / Dispatch	Stormwater	Landbank
Commissioners	Tax Map	LCGHD	Mosquito Control
Utilities	Planning	EMA	Soil & Water
	GIS	Health Department	Parole Authority
	Port Authority	Building Department	

Various			
City of Mentor	Madison Township	Painesville City	Willoughby City
Willoughby Hills	Eastlake City	Wickliffe City	Tyler Tech
Willoughby City PD	Willoughby City Service Dept	Willoughby Hills Fire Dept	Willoughby Hills / Bowen
Painesville Township	Painesville Twp Fire Dept	Perry Township	Perry Fire District
Concord Township	Concord Fire Dept	Fairport Fire Dept	Fairport Zoning
Madison Village	Madison Township Police	Civic Server / Painesville City	iWorQ
Burgess & Niple	MS Consultants	SmithGroup	NOACA
Hexagon	Syte Services	Envision	West Creek
WRLC	Holden Arboretum	University of Florida	Vernandas
Major Waste	Residents	Ashtabula County GIS	

External: **95** (41 various)

Customer Service (12/31/2024 – 12/19/2025)

Total: **219** Average: **20 per month**

Yearly Summary:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2022	n/a	n/a	34	28	22	9	11	26	28	22	30	24	180
2023	20	24	16	17	20	21	19	16	16	13	22	16	220
2024	15	26	19	13	18	19	22	11	19	17	22	13	214
2025	15	18	27	24	24	15	n/a	16	10	13	32	25	219

Internal: 112 (20 Departments)

Auditor	Board of Elections	Prosecutor	Sheriff / Dispatch
Engineer	Building Dept	Stormwater	Tax Map
Utilities	EMA	Soil & Water	Telecommunications
Commissioners	Health Department	Planning	IT Department
Port Authority	Adult Parole	Treasurer	Land Bank

LakeNavigator 3.0 Usage Statistics (12/31/2024 – 12/19/2025)

Item Views Total (Sessions) : **337,282**

Average Views per Day: **926.6**

Per Month/Day Calculations for 2025

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Item Views	18,241	27,342	28,071	28,470	33,631	26,307	30,081	60,669	26,175	27,495	30,788	13,550
Daily Average	793	911	936	1,017	989	974		979	969	982	880	678

Lake Nav 3.0 ESRI Map Usage Total by Year (Activated 2/28/2022)

	Total Views	Average Views per Day
2022	n/a	n/a
2023	244,804	727.57
2024	303,031	830.22
2025	337,282	926.6

** ESRI Usage Statistics from 2/28/2022 to 1/26/2026 calculates 1,142,242 Views**

Lake Navigator 3.0 Google Analytics (6/22/2025 – 12/31-2025) (Tracking was activated on June 2025)

Total Users	New Users	Returning User
43411	43648	14449

* Website usage tracking wasn't started until June 1st, 2025. These numbers are for the last 213 days of 2025

LakeNav 4.0 Experience Builder App	Health Dept Outfall Application Update	ESRI License Model Update
GIS - Enterprise Update 10.81 to 11.5	GIS - Database Migration	Auditor Dashboard
Dispatch - CAD/ GIS Server Update	NG911 Data GIS Deployment	Stormwater Update
Nearmap to Pictometry	Building Dept - EPL Datamap	Historical Mapping
Road Authority Map	Engineer Data Hub	Engineer Bridget/Retaining Wall Dashboard
Plat Button	GIS - Portal Deployment	Site Plan Search
Reoccurring Projects		
Board of Election - Map Update	Stormwater - Billing	Local Fire Department - Mapping
Tax Map/ GIS Parcel Fabric	Address and Centerline Updates	ArcGIS Online Applications
Dispatch - Ongoing Data Updates	EMA PNPP Drill	GIS Script Updates -Plats, Site Plans, Locator
Stormwater Assets Updates	Auditor Sales Dashboard	GIS - Flood Hazard Map
Parole Authority Maps	Prosecutor Maps	County Offices Map

2025 Lake County Engineer Tax Map and GIS Annual Report