

2023 Annual Report

Lucas County Engineer's Office



LUCAS COUNTY
ENGINEER
Mike Pniewski, P.E., P.S.



LUCAS COUNTY ENGINEER

Mike Pniewski, P.E., P.S.



TABLE OF CONTENTS

Front Cover	1
Table of Contents	2
2023 in Review	3
Engineer’s Message	4
Current Conditions-Highlighted Project Constructed in 2023	5-7
County Road Projects	7-9
County Bridge Projects	10
County Stormwater Projects	11
County Stormwater Petitions	12
County Stormwater Activities	13
Construction Summary of County Projects for 2023	14
Construction Summary of Township Projects for 2023	15
Expenses, Revenue and C.I.P.	16-17
License/Gasoline Tax Revenue History and Projections	18
Lucas County Pavement Information	19
Lucas County Bridge Information	20
Lucas County Culvert Information	21
Lucas County Drainage Engineering Information	22
Significant Projects Planned	23
Office Updates	24
New Employees of 2023—2023 Service Awards	25-27
Locating History—A Historic Map is Discovered	28
Staff Directory & Office Locations	29

2023 in Review

Lucas County Engineer's Office



4 Bridge Projects



1 Culvert Project



1 Stormwater Project



3 Roadway Improvement Projects



2 Roundabout Projects



16 Miles of Resurfacing and Thin Overlay

Road Miles By Township	
Harding Township	6.099
Jerusalem Township	26.097
Monclova Township	64.982
Providence Township	42.952
Richfield Township	9.376
Spencer Township	10.678
Springfield Township	77.287
Swanton Township	21.058
Sylvania Township	139.882
Washington Township	10.909
Waterville Township	12.262

- Lucas County Population: 431,279 (2020)
- Lucas County Land Area: 341 sq. miles
- Total County Road Miles: 283.98
- Total Township Road Miles: 421.58
- Total U.S. Routes, State Routes and Interstate Road Miles: 323.2



Engineer's Message

To the Honorable Board of County Commissioners and the Citizens of Lucas County:

I am honored and privileged to submit the 2023 Report of the Lucas County Engineer, which outlines the activities of the Office of the Lucas County Engineer during Calendar Year 2023. The past year brought successes as well as challenges. The Federal Bipartisan Infrastructure Law has brought additional funds for projects. In addition, the Governor and the General Assembly have provided more funds for transportation safety projects as well. However, each of these sources of funding requires local funding to match the Federal and state monies. We are also seeing significant challenges in workforce, especially in the engineering and construction field in Northwest Ohio, needed to design and build these vital improvements. Growth in other areas of the state are also placing pressures on materials and labor pricing.

The past year brought accomplishments that we can build on for a prosperous future including the following:

- Continued expansion of I-475 from Airport Highway to US-24, including the construction of a new interchange at US-20A to facilitate future growth for the Kranz Toledo Express Airport, Maumee and Monclova Township.
- Completion of two new roundabout intersections, which will improve safety and traffic capacity in Western Lucas County
- Receiving a Safe Streets and Roads for All Grant from the U.S. Department of Transportation to produce a Transportation Safety Action Plan, which identifies measures and projects in a four-county area (Lucas, Ottawa, Sandusky, and Wood). This collaboration will position our region for the possibility of future funds for highway safety.
- Processing a record number of permit applications to our office. The new Cityworks permitting management system has significantly improved permit processing workflows and provide transparency and efficiency in permit reviews.
- Implementation of the Lucas County Stormwater Management Plan, which guides the Office's efforts to comply with the requirements of the County's Stormwater Permit improving water quality. This includes the establishment of a water quality lab in the Office to monitor water quality in our streams and better detect illicit discharges.
- Completion of an innovative regional retention/wetland complex at Secor Metropark at the location of the former Spuyten Duyval Golf Course. Working with the Toledo Metroparks, this area will serve to retain stormwater before entering Ten Mile Creek.
- Commencement of Two-Stage Channel improvements on Ford Ditch in Richfield Township and receipt of H2Ohio Grant Funding for design and construction of three miles of Two-Stage Ditch channels on Bench-Hagerman Ditch in Swanton Township.
- Completion of a Ditch and Stream Condition Assessment for Lucas County. This assessment is the basis of predicting issues and selecting projects for improvement and maintenance in our drainage system.

These stormwater improvements better manage flow during significant storms while improving water quality. They have already demonstrated marked improvements in reduced flooding and improved water quality in our streams. We continue to pursue state and federal grant funding as well as collaborating with neighboring agencies.

As discussed in previous Annual Reports, the current system of funding provided by the Ohio General Assembly through Gas User and Permissive License Plate Fees is not keeping up with the increased costs to keep our roadways in good condition in the future. Without grants, our important work to maintain and keep our transportation network competitive must be paid with flat and reducing revenue. The passage and implementation of the Bipartisan Infrastructure Law has certainly opened up another funding source to improve our roadways. However, obtaining these funds requires a matching contribution, which uses funding allocated for other priorities of the Office.

Over the past year, the purchasing power of our available funds has eroded due to higher prices, longer lead times, and a shortage of skilled trades. Material prices and labor costs in northwest Ohio and across the state are continuing to increase at a rate greater than the rate of inflation, while our revenue does not have any way to keep pace with these pressures. As material and labor costs continue to significantly rise, it will become more difficult to sustain the level of service and maintenance people expect. Solving this issue will become difficult in the years to come if the trend of increased prices and flat or reduced revenue continues. Our staff will continue to give our best serving the citizens of Lucas County in providing a functional and efficient transportation and drainage system.

This report provides an overview of our activities in 2023 as well as our goals, projects, and challenges for the future. We provide our most up-to-date information through our website as well as on social media. Thanks again for the privilege to serve the citizens of Lucas County.

Mike Pniewski, P.E., P.S.
Lucas County Engineer

2023 ANNUAL REPORT

To: The Honorable Board of County Commissioners & the Citizens of Lucas County

The purpose of this report is to discuss the current condition of our highway system, significant projects completed, underway, and planned, and to discuss the long term outlook and needs. This report is required under the O.R.C. (Ohio Revised Code 5543.02).

CURRENT CONDITIONS

Currently, more than half of the 283.98 centerline miles of county maintained roads have paved shoulders, 2 to 10 feet wide on each side, and many of the deeper roadside ditches have been enclosed for additional safety. Additional lanes have been added to accommodate increased traffic, and we currently maintain 879 lane miles. Most all of the pavements are in relatively good condition with very few potholes or other forms of significant distress. Out of all of our bridges, only one is posted for a reduced load limit. Many improvements have been made to our traffic signals and all have energy efficient LED bulbs with battery backup for power outages. Most of our signing has been recently upgraded and is in very good condition. Numerous improvements at intersections have been made over the past fifteen years resulting in minimal delay at most intersections. More improvements are needed, but overall, the system is in relatively good condition.

Highlighted Projects Constructed in 2023

Brint Road & Centennial Road Roundabout—0.22 mi.

Installation of a modern, single lane roundabout at the intersection of Brint Road and Centennial Road. The project included new asphalt pavement, concrete pavement, concrete curbs and gutters, drainage improvements, earthwork, pavement markings and signing.



Before



After

Total Project Cost

Federal: \$ 674,212.32

OPWC: \$ 168,553.08

Awarded Contract Cost: \$ 842,765.40

Sylvania Avenue & Kilburn Road Roundabout—0.22 mi.

Installation of a modern, single lane roundabout at the intersection of Sylvania Avenue and Kilburn Road. The project included new asphalt pavement, concrete pavement, concrete curbs and gutters, drainage improvements, earthwork, pavement markings and signing.



Before



After

Total Project Cost

Federal: \$ 747,363.84

OPWC: \$ 186,840.96

Awarded Contract Cost: \$ 934,204.80

Highlighted Projects Constructed in 2023...(cont.)

Laskey Road Resurfacing—PID #116429—0.65 mi.

Milling and two course asphalt resurfacing, performing spot full depth pavement repairs, placement of pavement markings and RPM's, sidewalk construction along the north side of Laskey Road and other related work.



Before



After

Total Project Cost

Federal: \$ 292,080.04

OPWC: \$ 47,463.01

Lucas County Engineer: \$ 25,557.00

Awarded Contract Cost: \$ 365,100.05

Bancroft Street & McCord Road Resurfacing—PID #115923—0.34 mi.

Milling and two course asphalt resurfacing, performing spot full depth pavement repairs, placement of pavement markings and RPM's, sidewalk construction along the west side of McCord Road and other related work.



Before



After

Total Project Cost

Federal: \$ 329,855.94

OPWC: \$ 53,601.59

Lucas County Engineer: \$ 28,862.40

Awarded Contract Cost: \$ 412,319.93

King Road & University Parks Trail Traffic Signal Improvement—PID #116429

Installation of a new traffic signal at the intersection of King Road & University Parks Trail. The project included the installation of a combination signal support, one mast arm, foundations, signal conduit, pull boxes, and vehicular and pedestrian signal heads.



Before



After

Total Project Cost

Federal: \$ 118,883.38

Lucas County Engineer: \$ 29,720.84

Awarded Contract Cost: \$ 148,604.22

Highlighted Projects Constructed in 2023 (cont.)

Total Project Cost

Monclova Road Crosswalks—PID 117152—0.05 mi.

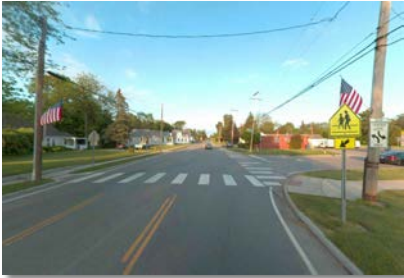
Installation of Rectangular Rapid Flashing Beacons with new high visibility crosswalk signs mounted on pedestal poles for two crosswalks in the Monclova Elementary School Zone.

Federal: \$ 55,438.37

Lucas County Engineer: \$ 6,159.82

Awarded Contract Cost: \$ 61,598.19

At Monclova Road & Waterville Monclova Road



Before



After

At Waterville Monclova Road & the Wabash Cannonball Trail (North Fork)



Before



After

County Road Projects

Total Project Cost

Shoreland Avenue Curb Repair—0.70 mi.

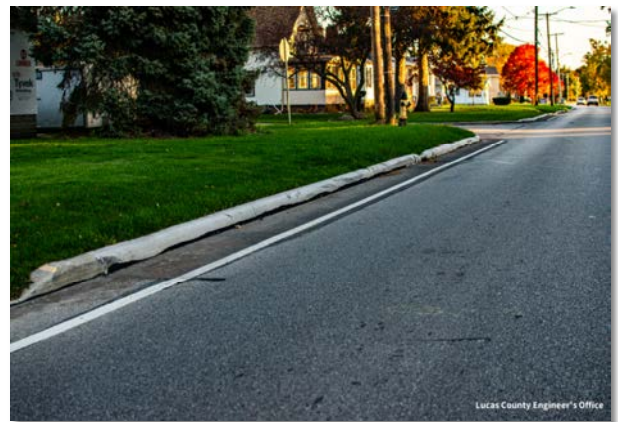
The project consisted of removing curb and installing new curb in its place, along with driveway repair, pavement repair, catch basin adjustments, and seeding in disturbed areas.

Lucas County Engineer: \$ 204,432.00

Total: \$ 204,432.00



Before



After

County Road Projects (cont.)

2023 Lucas Co. OPWC Resurfacing Phase 1— 3.78 mi.

Total Project Cost

- Brint Road (C.R. #8) — Centennial Rd. to Summer Dr.
- Dutch Road (C.R. #133) - Finzel Rd. to Fischer Dr.
- Eber Road (C.R. #118) - Weckerly Rd. to Obee Rd.
- Mitchaw Road (C.R. #39) - Brint Rd. to Pelican Grove Ct.

OPWC: \$ 990,570.37
 Lucas County Engineer: \$ 1,044,939.92
 Other: \$ 390,542.03
 Total: \$ 2,426,052.32

Brint Road



Before



After

Dutch Road



Before



After

Eber Road



Before



After

Mitchaw Road



Before



After

2023 Lucas Co. OPWC Resurfacing Phase 2— 3.69 mi.

Total Project Cost

- Neapolis Waterville Road (C.R. #136) — Schradel Rd. to Waterville City Limits
- Stitt Road (C.R. #128) - Weckerly Rd. to Keener Rd.

OPWC: \$ 320,474.80
 Lucas County Engineer: \$ 1,014,836.85
 Total: \$ 1,335,311.65

Neapolis Waterville Road



Before



After

Stitt Road



Before



After

County Road Projects (cont.)

2023 O.P.W.C. Resurfacing Project, Phase 3 — 3.08 mi. Total Project Cost

- Dorr Street (C.R. #24) - King Rd. to McCord Rd. OPWC: \$ 727,412.55
- Holland Sylvania Road (C.R. #1572) - Angola Rd. to South Ave. Lucas County Engineer: \$ 1,399,959.96
- Nebraska Avenue (C.R. #26) - Centennial Rd. to Oak Park Rd. Total: \$ 2,127,372.50
- Sylvania Avenue (C.R. #5) - Corey Rd./Whiteford Rd. to City of Toledo Limits

Dorr Street



Before



After

Holland Sylvania Road



Before



After

Nebraska Avenue



Before



After

Sylvania Avenue



Before



After

2023 Annual Thin Overlay — 5.67 mi. Total Project Cost

- Dorr Street (C.R. #24) - Centennial Rd. to Oak Park Rd. Lucas County Engineer: \$ 767,393.95
- Garden Road (C.R. #84) - Garden Creek Dr. to W. bridge approach @ I-475 Total: \$ 767,393.95
- Heller Road (C.R. #151) - Neapolis Waterville Rd. to Stiles Rd.
- Hite Road (C.R. #131) - Fulton Lucas Rd. to Providence Neapolis Swanton Rd.
- Neapolis Waterville Road (C.R. #136) - Providence Neapolis Swanton Rd. to S.R. 295
- Perrysburg Holland Road (C.R. #1571) - 0.221 mi. south of S.R. 2 to S.R. 2

Dorr Street



Before



After

Garden Road



Before



After

Heller Road



Before



After

Hite Road



Before



After

Neapolis Waterville Road



Before



After

Perrysburg Holland Road



Before



After

County Bridge Projects

Perrysburg Holland Road Bridge #616 Replacement —PID #112146

This project consisted of the replacement of a bridge located on Perrysburg Holland Road over Cairl Creek with approximately 460 feet of approach roadway work.



Before



After

Total Project Cost

Federal: \$ 842,700.00

OPWC: \$ 53,265.11

Lucas County Engineer: \$ 169,337.04

Total: \$ 1,065,302.15

Corduroy Road Bridge #1437—PID #110345

This project consisted of the replacement of a bridge located on Corduroy Road over Reno Side Cut and the improvement of the approach roadway located between Howard Road and Teachout Road in Jerusalem Township.



Before



After

Total Project Cost

Federal: \$ 565,323.95

OPWC: \$ 47,463.01

Lucas County Engineer: \$ 29,753.89

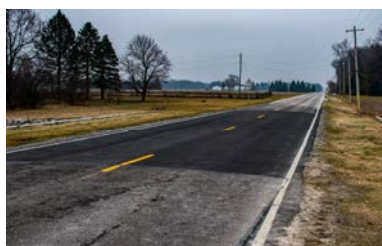
Total: \$ 595,077.84

Jeffers Road Bridge #860

This project consisted of the replacement of a bridge located on Jeffers Road over Harris Ditch and the improvement of the approach roadway located between Neowash Road and Perry Road in Providence Township.



Before



After

Total Project Cost

OPWC: \$ 180,721.94

Lucas County Engineer: \$ 282,667.66

Total: \$ 463,389.60

County Stormwater Projects

Ford Ditch Two-Stage Ditch

A H2Ohio Grant for this project was awarded by the Ohio Department of Natural Resources in May 2022. Construction activities were initiated in March 2023 to remove trees, and the main construction activities began in late fall of 2023 with completion of the construction scheduled for the end of March 2024. The project will install 3,400 feet of a two-stage channel and floodplain, 2.8 acres of enhanced riparian area, and an adjacent 10-foot buffer strip. Future maintenance of the project will be performed under Ditch Petition #1058.



Before



After Construction

Total Project Cost

H2Ohio: \$ 636,345

Lucas County Engineer: \$ 90,000

Total: \$ 726,354

Bench Ditch and Hagerman Ditch Two-Stage Restoration

A H2Ohio Grant through the Ohio Department of Agriculture was awarded in March 2023 for this project. Surveying and design activities were begun by the Lucas County Engineer's Office in 2023. Construction activities will be initiated in early 2024 to remove trees and the main construction activities are scheduled to begin in late summer of 2024. Completion of construction is anticipated to occur by the end of 2024. The project will install 7,360 feet of a two-stage channel and floodplain, enhanced riparian area, and an adjacent 10-foot buffer strip. Future maintenance of the project will be performed under Ditch Petition #1917.



Before Construction



Total Project Cost

H2Ohio: \$ 1,263,4160

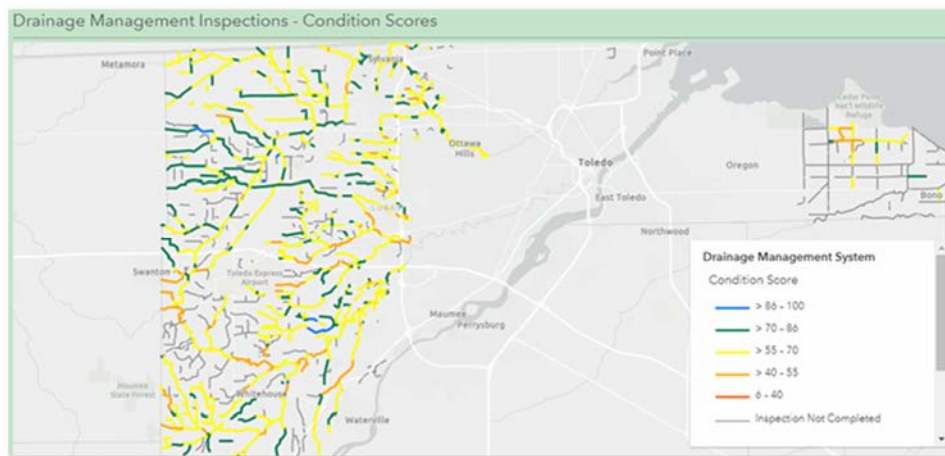
Lucas County Engineer: \$ 0

Total: \$ 1,263,4160

County Stormwater Petitions

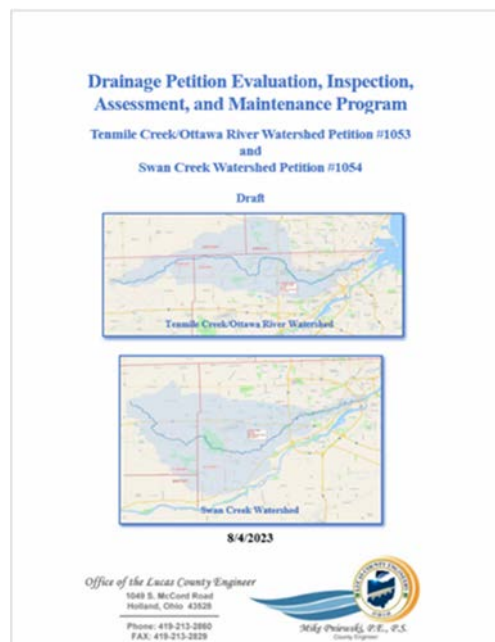
Ten Mile Creek/Ottawa River Watershed Petition Ditch #1053 and Swan Creek Watershed Petition Ditch #1054 Inspections and Project Assessment

The petition ditch process outlined in ORC 6131 allows Lucas, Fulton, and Henry Counties to expend public funds for continued/long-term maintenance of private creeks and ditches which provide a public benefit. A petition ditch process was initiated separately for the Tenmile Creek/Ottawa River and Swan Creek Watersheds in 2021. In 2023, Lucas County staff evaluated, assessed, and prioritized the results of the ditch segment inspections that were completed in 2022 in both watersheds. Preliminary cost estimates were developed in 2023 for the prioritized improvements and refinements to those cost estimates continue. In 2023, Lucas County staff also began the task of identifying a preliminary list of the yearly prioritized projects to be included the 6-Year Plans of the maintenance to occur in both petitions in preparation for the Final Hearings anticipated to occur in the summer of 2024. Further refinements to the draft of the Drainage Petition Evaluation, Inspection, Assessment, and Maintenance Program document also continued in 2023 .



Drainage Management Inspections—Condition Scores Map

Drainage Petition Evaluation, Inspection, Assessment, and Maintenance Program



Contributor: Jay Mosley

County Stormwater Activities

Municipal Separate Storm Sewer System (MS4)

Holding a small MS4 permit from Ohio EPA, Lucas County has requirements set forth in the permit regulations that must be accomplished over a five-year permit term. The required activities include ensuring that pollutants are eliminated or reduced from entering the drainage systems that are County-owned and operated, ultimately draining out in to state and federal bodies of water. The latest permit from Ohio EPA was issued in April of 2021, and the Stormwater department's achievements for the 2023 year include:



- Estimated amount of over 260,000 residents received outreach material and educational opportunities related to stormwater.



- 723 residents participated in the Partner for Clean Streams "Clean Your Streams" event in 2023. Over 14,950 pounds of marine debris were removed from 37 river miles at 70 different sites throughout our area.



- 1,194 construction site inspections occurred throughout the year. These inspections do not include the numerous drainage and illicit discharge complaints received at our office.
- Post-construction best management practices (BMP) at 235 sites throughout the County were performed, ensuring the proper operation of all structures.



- County and Township garages were inspected and the Stormwater Pollution Prevention Plans (SWPPP) were updated for all 12 sites to ensure work environments are safe and mitigate the release of pollutants.

- A total of just under 9,100 tons of road salt was used for de-icing, between the County garage and affiliated Township services. Trucks are calibrated annually to ensure accurate usage of road salt and brine, as well as an asset management program tracking the totals. Around 150,000 gallons of brine was used before winter storms to help offset the usage of road salt, which is only applied in the final two hours of a storm event.



- Over 10,000 tons of street sweepings and leaves were collected and disposed of at authorized locations over the year.
- The first of its kind, a complete water quality lab was created and setup within the department. The lab's study plan was approved by Ohio EPA as a part of their Credible Data Program for chemistry water quality. This lab will test for over ten pollutants known to be of issue in our public waterways.

CONSTRUCTION SUMMARY OF COUNTY PROJECTS FOR 2023

Let by County Engineer

PROJECT NAME	PROJECT MANAGER	PROJECT LET DATE	AWARDED CONTRACTOR	AWARDED AMOUNT
Bancroft Street and McCord Road Resurfacing, PID 115923 (0.34 miles)	SLR	12/09/2022	Gerken Paving, Inc.	\$ 412,319.93
King Road at University Parks Trail signalization, PID 115926	MAS	12/15/2022	US Utility Contractor	\$ 148,604.22
Sylvania Avenue at Kilburn Road Roundabout, PID 111414 (0.22 miles)	KPW	12/15/2022	Vernon Nagel, Inc.	\$ 934,204.80
Jeffers Road Bridge # 860 Replacement	BAZ	12/20/2022	Vernon Nagel, Inc.	\$ 463,389.60
2023 Lucas Co. OPWC Resurfacing Phase 2 (Stitt, Neapolis Waterville) (3.69 miles)	JRS	12/20/2022	Gerken Paving, Inc.	\$ 1,335,311.65
2023 Lucas Co. OPWC Resurfacing Phase 3 (Sylvania, Dorr, Nebraska, Holland Sylvania) (3.08 miles)	SLR	01/06/2023	The Shelly Co.	\$ 2,127,372.50
Perrysburg Holland Road Bridge #616 Replacement, PID 112146 (0.22 miles)	BAZ	01/12/2023	Vernon Nagel, Inc.	\$ 1,065,302.15
Brint Road at Centennial Road Roundabout, PID 110345 (0.22 miles)	KPW	01/12/2023	Crestline Paving & Excavating Co., Inc.	\$ 842,765.40
Corduroy Road Bridge #1437 Replacement, PID 108877	BAZ	01/26/2023	E.S. Wagner Co.	\$ 595,077.84
Shoreland Avenue Curb Repair	ATP	02/07/2023	Smith Paving & Excavating, Inc.	\$ 204,432.00
Annual Thin Overlay Program (Dorr, Garden, Heller, Hite, Neapolis Waterville, Perrysburg Holland) (5.67 miles)	JSP	02/10/2023	Gerken Paving, Inc.	\$ 767,393.95
Monclova Crosswalks, PID 117152 (0.05 miles)	MAS	02/16/2023	A & A Safety	\$ 61,598.19
Laskey Road Resurfacing (Monroe Street to Talmadge Road) PID 116429 (0.65 miles)	SLR	03/01/2023	Gerken Paving, Inc.	\$ 365,100.05
2023 Lucas Co. OPWC Resurfacing Phase 1 (Dutch, Brint, Mitchaw, Eber) (3.78 miles)	SLR	03/09/2023	Gerken Paving, Inc.	\$ 2,426,052.32
Annual Crack Seal Program (26.46 miles)	JSP	03/13/2023	National Industrial Maintenance	\$ 76,040.00
Annual Bridge Repair Program (Garden Road Bridge No. 2448 - New Concrete Overlay)	BAZ	03/16/2023	Catts Construction	\$ 373,700.63
2023 Long Line Painting Program	MRM	03/31/2023	Griffin Pavement Striping	\$ 227,939.50
TOTAL				\$ 12,426,604.73

CONSTRUCTION SUMMARY OF TOWNSHIP PROJECTS FOR 2023

Bid by Township or County—Design and Inspection by County Engineer

PROJECT NAME	PROJECT MANAGER	PROJECT LET DATE	AWARDED CONTRACTOR	AWARDED AMOUNT
2023 Resurfacing Project (Arvilla N&S, Woodbridge, Westminster, Davenport, Crestridge N&S, Ginger Hill) (Sylvania Township)	ATP	LET 1/4/23	Bowers Asphalt & Paving Inc.	\$ 504,550.20
2023 OPWC Road Improvement Project Stone Oak (Plat 1) (Springfield Township)	ATP	LET 1/27/23	Bowers Asphalt & Paving Inc.	\$ 656,968.55
2023 Monclova Twp. Crack Sealing Program (To be Bid w/ LCE by Monclova Twp) (Monclova Township)	JSP	LET 3/13/23	National Industrial Maintenance	\$ 42,600.00
2023 Sylvania Twp. Crack Sealing Program (To be Bid w/ LCE by Sylvania Twp) (Sylvania Township)	JSP	LET 3/13/23	National Industrial Maintenance	\$ 19,145.00
2023 OPWC Road Improvement Project (Forest Lakes Subdivision and Twelve Lakes Subdivision) (Sylvania Township)	ATP	LET 3/24/23	Gerken Paving, Inc.	\$ 851,628.27
Bailey Road Culvert No. 980 (Providence Township)	BAZ/JRS	LET 3/24/23	D2 Excavating, LLC	\$ 64,779.00
2023 Long Line Painting Program-Sylvania Twp (Bid by LCE) (Sylvania Township)	MRM	LET 3/31/23	Griffin Pavement Striping	\$ 5,929.00
2023 Long Line Painting Program-Waterville Twp (Bid by LCE) (Waterville Township)	MRM	LET 3/31/23	Griffin Pavement Striping	\$ 10,744.50
2023 Long Line Painting Program-Monclova Twp (Bid by LCE) (Monclova Township)	MRM	LET 3/31/23	Griffin Pavement Striping	\$ 24,294.50
2023 OPWC Resurfacing Project (Crosscreek Woods, Homestead at the Quarry, Stonebrooke Farms and Winterbourne Station (Plat 1 & 2) Subdivisions, Deep Water Ln) (Monclova Township)	ATP	LET 4/10/23	Bowers Asphalt & Paving Inc.	\$1,464,598.24
Wilkins Road Improvement Project (Swanton Township)	SLR	LET 4/19/23	Gerken Paving, Inc.	\$ 219,009.16
LUC-2-9.67 SR-2 Side Path (PID 111513) (Bid by LCE) (Springfield Township)	MAS/JRS	Moved to FY2024		
		TOTALS		\$ 3,864,246.42

Expenses, Revenue & CIP

Detailed information regarding our Revenue, Expenses & the Capital Improvement Program (CIP) over the past 20 years is provided on pages 12 and 13.

Dedicated Revenue

All dedicated revenue for Lucas County maintained roads and bridges comes from Motor Vehicle License Plate User Fees and a portion of the Ohio Motor Fuel User Fee. We receive no revenue from other taxes, such as property tax, sales tax, or income tax. Since 2006, the cost for constructing road infrastructure has generally doubled while dedicated revenue has increased about 26%. Revenue from property tax, sales tax or income tax normally increase as costs increase over a long period. However, a constant fee per vehicle or a constant fee per gallon of fuel while vehicles are becoming more fuel efficient does not cover increasing costs. Over the past 20 years about 80% of our dedicated revenue has come from Motor Vehicle License Plate User Fees and the other 20% from a portion of the Ohio Motor Fuel User Fee.

Increased Dedicated Revenue

In 2018 the Board of Lucas County Commissioners enacted the fourth \$5 County Permissive Motor Vehicle License Plate User Fee. The first \$5 county-wide fee was allowed in 1967, two \$5 fees were enacted when allowed in 1988 and we began collecting that fourth and last authorized fee on 2019 registration. This \$5 annual fee is expected to generate \$1.4 Million per year, a 11.8% increase in dedicated revenue.

In early 2019 the Ohio Legislature authorized an increase in the Ohio Motor Fuel User Fee which will begin being collected July 1, 2019. Currently, all counties receive about \$2.4 Million per year from the Ohio Motor Fuel User Fee, this increase is expected to generate an additional \$1.5 Million per full year which will increase our total dedicated revenue by an additional 12.6%.

The two increases combined provided (on average) an additional \$3.1 Million (26% increase) in dedicated revenue in 2020 and 2021 compared to our 2018 revenue. This will not fully cover the \$7 Million in lost purchasing power over the past 20 years, but it certainly helps. Over the past ten years we have been doing a lot of patching and sealing trying to keep our pavements in relatively good condition until more permanent repairs can be made. This increased funding will allow us to make these necessary improvements. If we had not received this increased funding at this time many of those roads would have deteriorated so much that more expensive repairs would have been necessary.

Revised Dedicated Revenue

The table below compares the Lucas County Dedicated Revenue before and after the two increases:

Lucas County Dedicated Funding		
<u>Source</u>	<u>2018</u>	<u>2022</u>
Ohio Motor Vehicle License User Fee	\$6.1 Million (51%)	\$6.3 Million (40%)
Lucas County Permissive License User Fee	\$3.4 Million (29%)	\$5.5 Million (35%)
Ohio Motor Fuel User Fee	\$2.4 Million (20%)	\$3.8 Million (24%)
Total Dedicated Revenue	\$11.9 Million (100%)	\$15.6 Million (100%)

Lucas County Engineer Expenses, Revenue & CIP

EXPENSES

	<u>2008-2012</u>	<u>2013-2017</u>	<u>2018-2022</u>	<u>2023</u>	<u>2024-2028</u>
Operating	\$ 30,168,608	\$ 31,699,390	\$ 31,940,459	\$ 6,589,285	\$ 49,708,832
CIP	\$ 49,930,767	\$ 82,244,645	\$ 79,419,960	\$ 18,457,822	\$ 66,833,970
Total	\$ 80,099,375	\$ 113,944,035	\$ 111,360,419	\$ 25,047,107	\$ 116,542,801

REVENUE

	<u>2008-2012</u>	<u>2013-2017</u>	<u>2018-2022</u>	<u>2023</u>	<u>2024-2028</u>
Outside	\$ 23,502,940	\$ 60,312,869	\$ 48,463,250	\$ 15,965,730	\$ 40,405,000
Dedicated	\$ 57,300,751	\$ 58,262,253	\$ 71,815,859	\$ 15,556,525	\$ 64,445,398
Carryover/Reserve					
Total	\$ 80,803,691	\$ 118,575,122	\$ 110,279,109	\$ 31,522,255	\$ 104,850,398

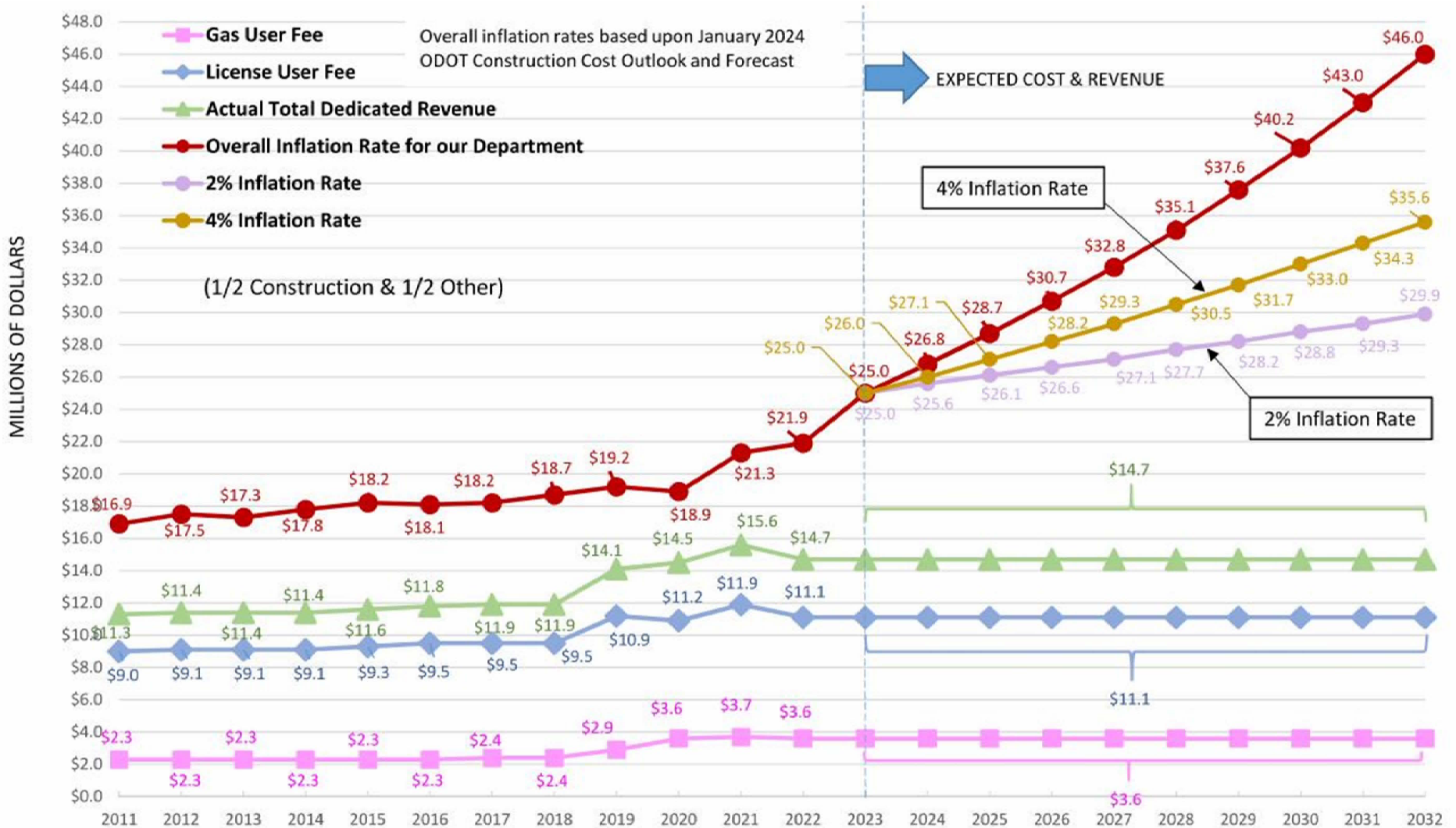
CIP

	<u>2008-2012</u>	<u>2013-2017</u>	<u>2018-2022</u>	<u>2023</u>	<u>2024-2028</u>
Bridge Repairs	11 (5)	6 (5)	5 (5)	1 (1)	7 (5)
Bridge Replacements	8 (5)	6 (5)	5 (5)	3 (1)	3 (5)
Road Rehabilitation/Reconstruction	191 (175)	218 (175)	142 (225)	32 (45)	156 (225)
Road Preservation	74 (75)	68 (75)	56 (60)	12 (12)	29 (60)
Drainage	15 (10)	16 (10)	11 (10)	0 (2)	5 (10)
Intersections	4 (3)	8 (3)	10 (3)	2 (1)	4 (5)
Signals/Upgrades	26 (2)	2 (2)	0 (2)	1 (2)	0 (2)
Traffic-Annual Programs	10 (10)	13 (10)	8 (10)	1 (3)	8 (10)

() State Goals

License/Gas Tax History and Projections—Gap in Dedicated Funds

All dedicated funding for Lucas County maintained roads and bridges comes from Motor Vehicle license Plate Fees and a portion of the Ohio Motor Fuel User Fee. The bottom line shows the past and expected Lucas County revenue from the Ohio Motor Fuel User Fee. Revenue has been flat for the past eleven years.



The drastic 81% increase in asphalt prices between 2004 and 2008 caused a \$3 Million Gap between funding and the amount of revenue needed to properly maintain our roads and bridges. The recent increases closed about half of that gap, but with normal inflation the gap will continually widen as shown by the shaded area on the graph. Annual increases tied to construction prices or the CPI would solve that problem, but are not currently allowed.

LUCAS COUNTY PAVEMENT INFORMATION

	2021 Miles	2022 Miles	2023 Miles
Total Centerline Miles	286.8	286.8	284.0
Crack Seal (Contract)	24.8	25.2	26.5
Chip Seal and Microsurfacing	8.8	7.5	7.5
Thinlay, Resurfacing, Widening & Resurfacing or Reconstruction (Contract)	21.6	17.2	17.9
TOTAL:	55.2	49.9	51.9
% of System (Overall)	19.2%	17.3%	18.3%

Width Summary	Miles	% of System
24' Wide or more	122.19	42.0%
22' to 24' Wide	60.90	21.1%
20' to 22' Wide	59.91	20.8%
18' to 20' Wide	40.23	14.0%
16' to 18' Wide	4.95	1.7%
Less than 16' Wide	0	0.0%

- Average Lucas County Road Width is 27.4 feet.
- Total lane miles is 879 +/-.
- Approximate travel lane surface area = 4,053,482 sq. yds.
- Approximate paved berm surface area = 732,906 sq. yds.
- Average Lucas County Maintained Road ADT is 2,923 vehicles per day +/-.
- 148.2 miles (51.3% of System) has paved asphalt berms.
- Total County Road Mileage: 283.98 (includes shared mileage)
- Total Township Road Mileage: 421.58
(Lucas County Engineer provides design and inspection services, and Maintenance of bridges for Township Roads)

LUCAS COUNTY BRIDGE INFORMATION

Summary of Structures Inspected By the Lucas County Bridge Engineer			
Categories	Vehicle Bridges	Pedestrian Bridges	Culverts
Lucas County Roads	104	0	0
Township Roads	57	0	0
BLCC Trails	0	4	0
Metroparks	2	4	0
Municipalities			
Berkey	3	0	0
Holland	1	0	0
Maumee	0	0	0
Ottawa Hills	2	0	0
Oregon	0	0	0
Sylvania	0	0	0
Toledo	3	0	0
Whitehouse	0	0	0
Sub-Totals:	172	8	0

Inspection, Inventory and Reporting
By Lucas County

Municipal Trails	0	1	0
County Roads over US23 / I475	6	0	0
Municipalities			
Toledo	1	0	0
Whitehouse	0	1	0
Sub-Total:	7	2	0
TOTAL:	179	10	0

Inventory by Others,
Cursory Inspection by
Lucas County

General Appraisal Rating

Type of Work	GAR	Number of Bridges		Change from Last Year
		2023	2022	
None	8 or 9	82	81	Up 1
Minor Maintenance	7	41	41	Up 4
Major Maintenance	5 or 6	33	32	Up 1
Major Rehabilitation	3 or 4	5	7	Down 2
Critical Condition	1 or 2	0	0	None
TOTAL:		161	161	

Data includes 104 bridges on County Roads, 57 on Township Roads

Garden Road Bridge #2448—Bridge Repairs
Lucas County Engineer: \$ 373,700.63
Total Cost: \$ 373,700.63

Bridges with Load Limits	
Lucas County	Ohio Co. Avg. (2014) Datum
1.24%	6.60%
2 of 161	1,735 of 26,298

Lucas County has 3 bridges posted for a reduced load capacity compared to state wide average of 19.7 bridges per county.



LUCAS COUNTY CULVERT INFORMATION

Township / Location	Number of Culverts on County / Bikeway Road System
Harding	12
Jerusalem	18
Monclova	30
Providence	29
Richfield	20
Spencer	17
Springfield	38
Swanton	11
Sylvania	42
Washington	1
Waterville	17
*Sub-Total (See Culvert Note):	235
Bike Trails	19
Total:	254

Physical Condition	County Road System	Bike Trails
Good	226	17
Fair	9	2
Poor	0	0
Critical	0	0
Sub-Total (See Culvert Note):	235	19
Total:	254	

Note:

The above numbers represent structures with spans greater than or equal to 2', but less than 3' with both ends open, and spans greater than or equal to 3', but less than 10' regardless of open ends.

LUCAS COUNTY DRAINAGE ENGINEERING INFORMATION

YEAR	DITCH-CREEK NAME	GRANT(S) DOLLARS	COUNTY DOLLARS	TOWNSHIP DOLLARS	TOWNSHIP	TOTAL DOLLARS
PAST PROJECTS						
2020	Smith Ditch	\$250,000.00	\$111,386.11			\$361,386.11
2020	Ten Mile Creek	\$200,000.00	\$1,668,595.50			\$1,868,595.50
2020	Drennan Ditch	\$20,000.00	\$109,674.00	\$120,000.00	Spencer	\$249,674.00
2021 PROJECTS						
2021	Morrison Ditch	\$113,170.00	\$99,880.00			\$213,050.00
2022 PROJECTS						
2022	Ford Ditch (ongoing)	\$636,534.00	\$90,000.00			\$726,354.00
2022	Zink-Heldman Ditch (completed)	\$300,000.00	\$588,926.00			\$888,926.00
2022	Van Fleet Ditch (completed)	\$1,030,451.00	\$31,752.00			\$1,062,203.00
2022 MISCELLANEOUS ACTIVITIES						
2022	Ten Mile Creek/Ottawa River Watershed Petition Ditch Inspections and Project Assessment					
2022	Swan Creek Watershed Petition Ditch Inspections and Project Assessment					
FUTURE PROJECTS AND ACTIVITIES						
2023	Ten Mile Creek/Ottawa River Watershed Petition Ditch Inspections and Project Assessment, Costing, and Prioritization					
2023	Swan Creek Watershed Petition Ditch Inspections and Project Assessment, Costing, and Prioritization					
2024	Bench and Hagerman Ditches	\$1,263,416.00	\$0.00			\$1,263,416.00
POSSIBLE FUTURE GRANT PROJECTS						
2025	Nachtrab-Taylor Ditches	TBD	TBD			TBD
TBD	Whidden Ditch	TBD	TBD			TBD

Significant Projects Planned

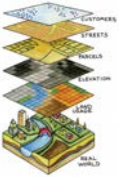
A complete listing of our Capital Improvement Program 2024—2028 is available on the Lucas County Engineer website, under Administration.

Below is a list of programmed Safety and Capacity Projects:

Year	Project Description
2024	LUC-2 Sidepath along SR-2 near I-475
2024	McCord at Central McCord at Central U-turns
2024	Bancroft at McCord Roundabout and widening
2024	Hill & Centennial Roundabout
2024	Garden & Albon Roundabout
2024	Holloway & Salisbury Roundabout
2024	Holl-Syl/Syl & Holl-Syl/Cntl Resurfacing
2024	Sylvania Met (Berkey) Resurfacing
2025	Hill & McCord Roundabout
2025	Shoreland & Summit Roundabout
2025	Monclova Widening
2025	Frankfort & Crissey Roundabout
2026	Monclova & Wilkins Roundabout
2026	Monclova Roundabouts Roundabouts
2026	Wab Can N Fork Resurf Resurfacing
2026	PNS & Arch White Roundabout
2027	Angola (East) & Crissey Roundabout
2028	Bancroft at Centennial Roundabout
2028	Dutch at AWT Roundabout

Office Updates for GIS, Records, IT, Survey, CAD & Tax Map

GIS



Continued updates and maintenance of our ArcGIS Enterprise, which powers mapping and visualization, analytics, and data management and also allows the Engineer's Office to create custom maps and applications.

We continue to grow our Asset Management and Permitting software known as Cityworks, which allows a direct link to our GIS Enterprise and GIS maps.

Asset datasets continue to grow into GIS features, giving spatial awareness to our assets in the field and the ability to link inspections and work orders to them in Cityworks.

Records



Maintained and indexed record plans, surveys and plats for importing into the OnBase imaging system.

Addressed public records requests.

IT



Provided computer equipment and any technical support to new hires for the year.

Survey

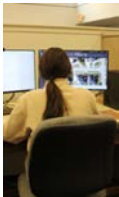


Typical surveys collected throughout the year for various projects.

Drone deployment to collect imagery and videos for site disturbances.

Also flew drone missions to collect videos for ditch petitions.

CAD



Engineering students and new hires taught in-house CAD standards and procedures.

Tax Map



Maintained and updated the Lucas County Tax Map.

Assigned new Assessor numbers for parcels being created in Lucas County.

Assigned and verified addresses for the county's unincorporated areas.

Read Legal descriptions for the transfer of properties within Lucas County.

Reviewed subdivision plats for the creation of new subdivisions in Lucas County.

Maintained County and Township Road Card Records.

Completed the yearly submittal to ODOT for Road Mileage acceptance.

New Employees of 2023



William Halterman
Highway Worker I

William Halterman graduated from Woodward High School. Prior to joining the Lucas County Engineer's Office, he worked as a small business owner and general contractor in HVAC and home remodeling. William is also a skilled mechanic with experience in fabrication and welding. His many talents are an asset to the department. William began as a Laborer I/Highway Worker I in the Road Maintenance Department on June 12, 2023.

Nihal Alhanyi is an Architectural Engineer. She is a global citizen who has lived in three continents and visited many more. She has a passion for creating beautiful and functional spaces that reflect the culture and identity of the people who use them. She has a Bachelor's degree in Architectural Engineer from Jordan University of Science and Technology, a Master's degree in Engineering Business Management from the UK, and a Master's in Construction Management from the Bowling Green State University. She has 10 years' experience in design and project management, working on several international projects. She is also a proud mother of twin girls who share her artistic flair. Nihal enjoys painting and collaging, and traveling where she can explore the architecture and urban planning of different cities around the world. She has a bucket list of places she wants to see and experience and is always looking forward to her next adventure! Nihal began a new career in the Engineer's Stormwater Division as the Stormwater Technician on July 17, 2023.



Nihal Alhanyi
Stormwater Technician



Alexa Vogel
Stormwater Coordinator

Alexa Vogel was born and raised in St. Clair Shores, Michigan. She graduated from the University of Toledo with a Bachelor's degree in Environmental Science in 2016. Staying in Toledo after graduation, Alexa has worked in the private and public sector, including the City of Toledo 7+ years before joining the Stormwater Department as the Stormwater Coordinator. Alexa currently lives in Sylvania Township with her two kids and husband. In her free time, she enjoys gardening, yoga, and baking. Alexa began employment with the Lucas County Engineer's Office on August 28, 2023.

Michele Pennell previously worked at ODOT for 26 ½ years, most recently in the Permits Department, before joining the Engineer's Office. She resides in McClure, Ohio, and has a son, daughter, son-in-law and two beautiful grandkids. Michele loves attending her grandkid's sporting events, taking family vacations (most notably an Alaskan cruise!), gardening, hiking, canning and mushroom hunting. You might also find her cruising around town with her significant other, Matt, on their Harleys. Michele began employment with the Lucas County Engineer's Office as a Permit Technician on September 11, 2023.



Michele Pennell
Permit Technician

New Employees of 2023



William Miller
Highway Worker I

William Miller is a native of northwest Ohio. He was raised in Swanton, Ohio where he attended Swanton High School. After high school, William worked for Wayne Lumber for five (5) years before starting his career with the Engineer's Office. William began as a Highway Worker I in the Road Maintenance Department on November 21, 2023, and states he "couldn't be happier".

Mindi Dickman was born and raised in Northwood, Ohio. Mindi previously worked at TARTA as a coach operator for almost ten years. She enjoys fishing and kayaking, as well as traveling and camping with her family. Mindi has been married for eight years to her husband, and has three children ages 5-17. In her spare time, Mindi likes to podcast with her husband and friends. She is excited at the employment opportunity offered to her in the Road Maintenance Department. Mindi began as a Highway Worker I in the Road Maintenance Department on November 22, 2023.



Mindi Dickman
Highway Worker I



Charles Hamilton
Highway Worker I

Charles Hamilton was born and raised in Toledo, Ohio. He previously spent 11 years working for R.J. Corman Railroad Services, first as a Labor and later promoting to Assistant Supervisor. For the past 6 years, he has worked as a Supervisor at U.S. Utility, before joining the Engineer's Office. In his spare time, Charles loves all things sports and is an avid Buckeye and Bengals fan. Between Charles and his wife, they have four children and four grandchildren who keep them very busy. Charles began as a Highway Worker I in the Road Maintenance Department on November 27, 2023.

Jerry Kelly, Jr. was born and raised in Toledo, Ohio. He has always had a love for and worked in the trades. Jerry loves sports, rooting for the LSU Tigers and the Green Bay Packers. He is a devoted family man and father to his son, Jerry Kelly III. Jerry began his employment with the Lucas County Engineer's Office in the Road Maintenance Department as a Highway Worker I on December 6, 2023.



Jerry Kelly, Jr.
Highway Worker I

Contributor: Josie Smith

2023 SERVICE AWARDS

30 Years



John Bowser
Road Maintenance Superintendent

30 Years



Troy Walborn
Fleet Manager



20 Years



Steve Beers
Survey Crew Chief

10 Years



Alan Pfaff
Professional Engineer 2

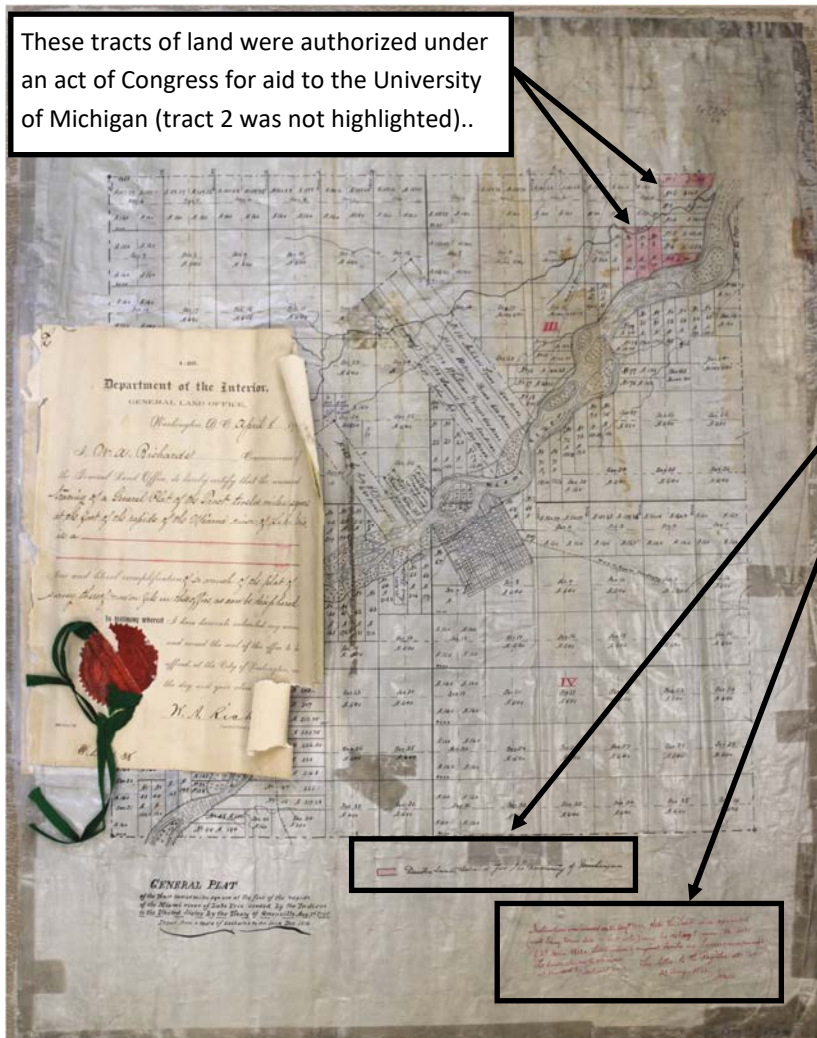
Locating History

A Historic Map is Discovered

I have worked for the Lucas County Engineer's Office for almost 25 years and have been the Records Manager for about 10 of those years. I have never seen a map or any other type of map for that matter more intriguing or surprising than that of a 1904 administrative map that is a direct copy of the 1816 general plat map housed at the National Archives in the cartographic collection at their College Park, MD office. I discovered this map buried in a group of 1960's township maps I was in the process of archiving.

An excerpt from a book called "A Story of Early Toledo" by John H. Doyle © 1919 states "...by special act of Congress, at the session of 1816-1817, this twelve miles square reserve at the foot of the rapids at the Miami of Lake Erie was ordered surveyed and sold. The tract was surveyed and divided into several tracts numbered from one up. River tracts one and two are interesting here. A company of men, including William Oliver, Martin Baum, Jacob Burnet, William C. Schenck, John Piatt, Robert Piatt, William N. Worthington and others, purchased at the sale of these two tracts, with others, from the government at \$76.06 per acre on terms requiring one fourth down and the balance in three equal annual payments, and these gentlemen, before making any but the down payment, adopted a plat, with streets and town lots, and called it Port Lawrence, and immediately offered these lots for sale at an auction to be held September 17, 1817, at Fort Meigs..."

These tracts of land were authorized under an act of Congress for aid to the University of Michigan (tract 2 was not highlighted)..



The original 1816 general plat of the Tract 12 miles square was surveyed Dec. 1816. Copying original maps was a common practice for local General Land Offices. The attached certification (Exhibit 38) is from the Dept. of Interior, General Land Office and is dated 8 April, 1904.

This note reads "Denotes Lands Selected for the University of Michigan".

This note reads, "Instructions were issued on 21 Aug. 1821, that the lands above represented (not being town lots, but lots) may be relinquished under the Act of 2d Mar 1821. Subdivisions of original tracts are however, inadmissible. The lands alluded to are those not bounded by Sectional lines. See letter to the Register at Woo (Wooster) 21 Aug. 1821. J.M.M"

J.M.M. - John M. Moore, Chief Clerk, General Land Office, appointed by Josiah Meigs.

Lucas County Public Works Complex
 Lucas County Engineer's Office
 1049 S. McCord Road
 Holland, OH 43528
 419-213-2860



Road Maintenance Department

Office of the Lucas County Engineer

1049 S. McCord Road
 Holland, Ohio 43528

Phone: 419-213-2860
 FAX: 419-213-2829



Lucas County Engineer's Office
 Tax Map Department
 1 Government Center, Suite 770
 Toledo, OH 43604
 Phone: 419-213-4658
 Fax: 419-213-4438

The Lucas County Engineer's Office Staff

ADMINISTRATION

Mike Pniewski, P.E., P.S.	County Engineer
Kelleigh Decker, M.P.A.	Administrative Deputy
Josie Smith	Director of Human Resources
Mike Tatar	Public Information Officer
Missy Dixon	Clerical Supervisor
Kara Moore	Account Specialist

ENGINEERING

Michael Stormer, P.E.	Chief Deputy Engineer
Bryan Zienta, P.E.	Engineering Project Manager
Kyle Warner, P.E.	Stormwater Engineer
Sarah Rowland, P.E.	Engineering Project Manager
Alan Pfaff, P.E.	Engineering Project Manager
Nick Kissoff, P.E.	Designer
Jenna Smith, E.I.	Engineer Intern
Jordan Kreglow, E.I., S.I.	Engineer Intern
Michael Melnyk, E.I.	Traffic Operations E.I.T.
Zachary Mikolaczky	Traffic Operations Specialist
Mark A. Smith	Permit Manager
Michele Pennell	Permit Technician
Chad Thomas	Signal Technician
Tina Mack	GIS Manager
Michael Swaile	GIS/Permits Specialist
Matt McFadden, C.E.S.S.W.I.	Stormwater Coordinator
Jay Mosley, P.E., C.F.M., C.P.E.S.C.	Stormwater Program Manager
Nihal Alhayani	Stormwater Technician
Alexa Vogel	Stormwater Coordinator
Roger Shope	Project Inspector
Robert Neubert, C.F.M.	Engineering Technician
Tina Richey	Engineering Technician
Daniel J. Gibson	GIS/Engineering Technician
Brian S. Miller, A.S.C., A+ C.P.	Records/IT/CAD Manager
Joe Shultz	Right-of-Way Coordinator

CONSTRUCTION

Joel Palermo, P.E.	Construction Engineer
Josh Hazard, P.E.	Deputy Construction Engineer
Anthony Schumaker, P.E.	Construction Project Manager
Mike Sowers	Inspector
Julie Zemnicki	Inspector

SURVEY & TAX MAP

Matt Puhl, P.E., P.S.	Chief Surveyor
Steve Beers	Survey Crew Chief
Jeff Knueve, E.I., S.I.	Engineer Intern
Shawn Shaffer	Tax Map Supervisor
Stacy R. Davis	Assistant Cadastral Map Specialist II

ROAD MAINTENANCE

John Bowser	Road Maintenance Superintendent
Albert Hilt	Ass't. Road Maint. Superintendent
Troy Walborn	Fleet Manager
Halie Steingraber	Account Specialist
Ryan Antonacci	Highway Worker 2
William Halterman	Highway Worker 1
Todd Boatfield	Sign Technician
Melvon Collins	Stock/Service Tech
Daniel Cunningham	Highway Worker 2
Cody Currier	Mechanic
Matt Dierker	Highway Worker 2
Tim Durfey	Highway Worker 3
Tamon Greene	Drainage Tech
Michael Johnston	Mechanic
Ken Limes	Highway Worker 3
Jennifer McConnell	Highway Worker 2
Steve Meinen	Mechanic
Russell Palmer	Highway Worker 3
Tim Palmer	Highway Worker 3
Phil Scofield	Highway Worker 3
Asa Smith	Highway Worker 2
Jeff Smith	Sign Technician
Tim Taylor	Highway Worker 2
James Terry	Highway Worker 2
William Miller	Highway Worker 1
Mindi Dickman	Highway Worker 1
Charles Hamilton	Highway Worker 1
Jerry Kelly	Highway Worker 1
Josiah Gerity	Highway Worker 2

Editor-Brian S. Miller
 Photography Contributions:
 Mike Tatar and Josie Smith