

# LUCAS COUNTY OHIO



**Keith G. Earley**  
Lucas County Engineer, P.E./P.S.

## LUCAS COUNTY ENGINEER'S 2014 ANNUAL REPORT



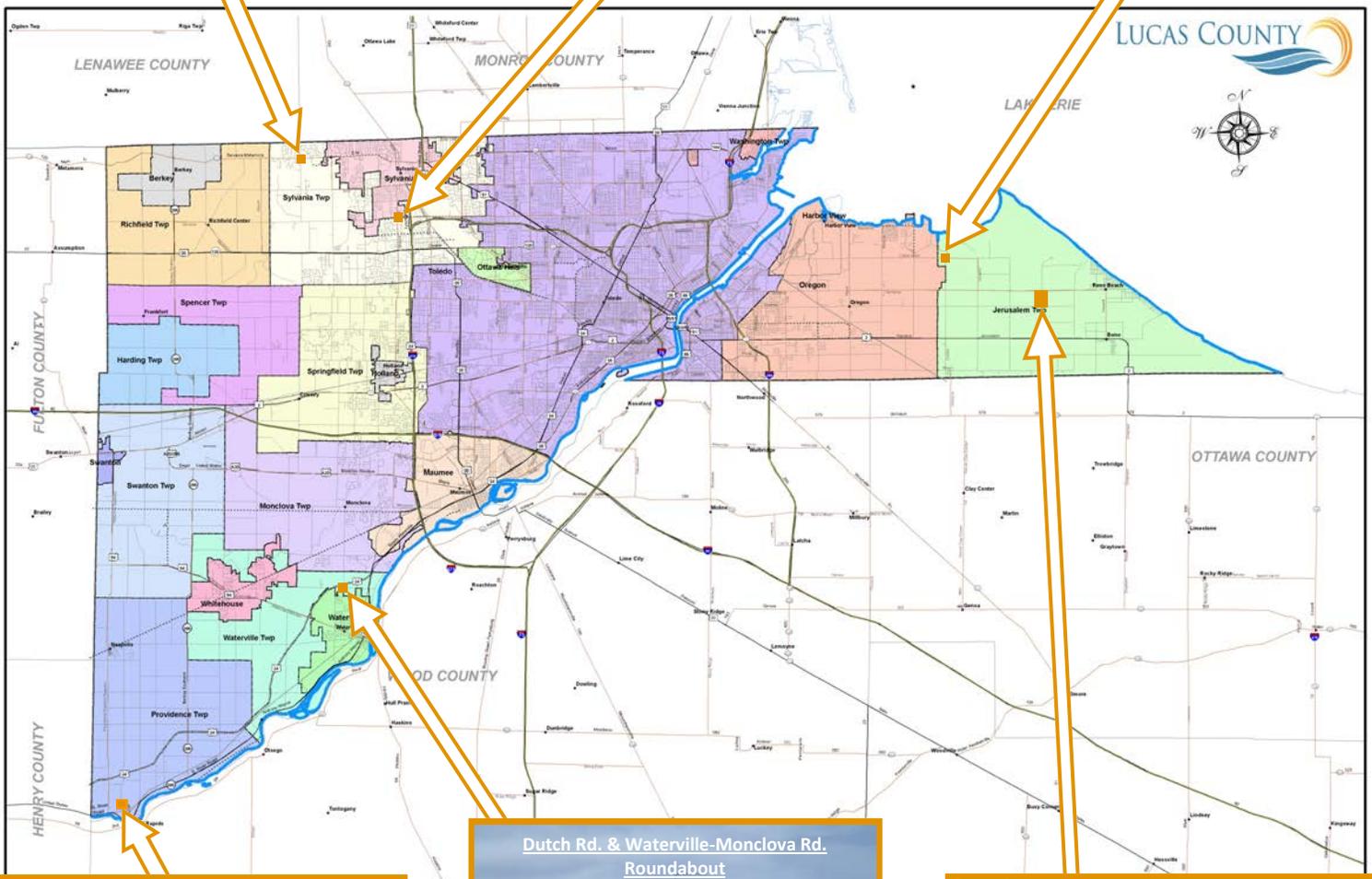
Sylvania-Metamora Rd. & Brint Rd. Roundabout



Sylvania Avenue - Sylvan Wood to McCord Road



Bridge #1427- Cedar Point Rd. at N. Curtice Rd.



Culvert #1038 - Manore Rd. N. of Ludwig Rd.



Dutch Rd. & Waterville-Monclova Rd. Roundabout



Yondota Rd.- Seaman Rd. to Corduroy Rd.

**Lucas County Engineer's Office**

1049 S. McCord Road  
Holland, Ohio 43528  
Phone: 419-213-2860



*Keith G. Earley, P.E., P.S.*  
*Lucas County Engineer*

**Tax Map Department**

One Government Center  
Suite 770  
Toledo, Ohio 43604-2258  
Phone: 419-213-4652  
Fax: 419-213-4438

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## **RESPONSIBILITIES OF THE**

### **LUCAS COUNTY ENGINEER'S OFFICE**

1. Inspection, maintenance, repair, widening, resurfacing and reconstruction of pavements and storm drainage for the Lucas County Highway System. Road maintenance duties include traffic control, safety projects, mowing, snow removal, bridge/culvert maintenance, berming, pavement repair, roadside ditch and storm drainage improvements and similar functions.
2. Maintaining public surveying records, bridge/culvert data, property tax maps and the County/Township's road, culvert and drainage records.
3. Advising and providing engineering/surveying services to the eleven (11) Townships in regard to maintenance, construction and repair of the Township Highway System.
4. Overseeing design and construction of new subdivisions and reviewing site plans and permits for development projects in the Townships.
5. Inspection, repair, reconstruction and replacement of bridges on the County and Township roadway systems.
6. Maintaining and repairing ditches and retention areas that have been petitioned by affected property owners. Working with the Toledo Area Sanitary District on needed ditch cleanouts.
7. Administering District 12's (Lucas County) Program for the Ohio Public Works Commission to implement the State Capital Improvement Program, and the Transportation Improvement Program.
8. Participating by co-operative agreements, in certain road and bridge projects with the Townships, Cities and Villages of the County.
9. Managing the new Lucas County Phase 2 Storm Water District

# **2014 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.

## **Current Conditions**

Currently, more than half of the 303 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 653 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 in very good condition. Numerous improvements at intersections have been made over the past eleven 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 2014**

### **Intersection Improvements with Roundabouts**

These modern roundabouts were constructed to address the impact brought on by increased traffic, backups and delays. In addition to the improved operation, capacity, and overall safety associated with the construction of a modern roundabout, these projects also incorporated improvements to the roadway, storm sewer systems, and traffic controls.



Panoramic view of Brint Road & King Road Roundabout



Mitchaw Road & Sylvania -  
Metamora Road Roundabout



Centennial Road & Dorr Street  
Roundabout



Dutch Road & Waterville-Monclova  
Road Roundabout (South on Water-  
ville-Monclova Road)



Dump truck easily passes through  
Dutch Road & Waterville-  
Monclova Road Roundabout  
(North on Waterville-Monclova  
Road)

Federal Funds: \$ 2,516,243
OPWC Funds: \$ 1,054,820
Engineer: \$ 818,460
Total Cost: \$4,389,523

## 2014 Resurfacing Program-7.95 mi.

Thirty-nine percent of the County projects let to construction in 2014 were devoted to road resurfacing. The following list of roads were selected to ensure that most of the county was represented in this annual resurfacing program:

1. Dorr Street (Raab Rd. to Schwamberger Rd.)
2. Neowash Road (Yawberg Rd. to S.R. 295)
3. Rachel Road/East Avenue (Howard Rd. to Van Dyke Ave.)
4. Yondota Road (Seaman St. to 0.52 mi. north of Corduroy Rd.)
5. Crissey Road (Geiser Rd. to Angola Rd.)

Federal Funds: \$ 248,498
OPWC Funds: \$ 358,847
Engineer Funds: \$ 1,566,555
Total Cost: \$2,173,900

(See page 6 for remainder of projects completed)

Dorr Street  
Before



After



Neowash Road  
Before



After



Rachel Road  
Before



After



Yondota Road  
Before



After



Crissey Road  
Before



After



## 2014 Resurfacing Program (continued)

6. Sylvania Avenue (0.10 mi. west of McCord Rd. to Sylvan Wood Dr.)
7. Holloway Road (0.76 mi. north to 0.166 mi. south of Garden Rd.)
8. Albon Road (Salisbury Rd. to Longworth St.)
9. Mohler Road (plus widening - Henry-Lucas Rd. to Providence-Neapolis-Swanton Rd.)

### Sylvania Avenue

Before



After



### Holloway Road

Before



After



### Albon Road

Before



After



### Mohler Road

Before



After



## 2014 Microsurfacing and Emulsified Seal Coat Programs-5.99 mi.

1. Bancroft Street (Centennial Rd. to King Rd.)
2. Hill Avenue (Dorcus Rd. to City of Toledo Limits)
3. Stitt Road/East Avenue (Weckerly Rd. to 0.19 mi. east of Weckerly Rd.)
4. N. Curtice Road (Ottawa Co. Line to Cedar Point Rd.)
5. Bancroft Street (Fulton-Lucas Rd. to S.R. 295)
6. Wilkins Road (Shaffer Rd. to Old State Line Rd.)

Engineer: \$ 599,251



Before

### Stitt Road



After

## Significant ODOT Projects

2015

### I-475 / US 23 at Central Avenue Interchange

Reconstruction of the interchange

### I-475 Various Bridge Locations

Replacement of bridge decks at Angola Road, Hill Avenue, Dorr Street and Bancroft Street.  
Replacement of the I-475 bridge over the Ohio Turnpike.

### US 20A @ Eber Road Intersection Roundabout

Reconstruction of the standard intersection at US 20A and Eber Road to a roundabout intersection

2016

### Sylvania Avenue and Centennial Road Intersection Roundabout

Construction of a modern roundabout at the intersection of Sylvania Ave and Centennial Rd.

### Airport Highway (State Route 2)

A multi-lane district allocation funded project to resurface SR-2 in Lucas County from near the Turnpike to near Holloway Road.

### U.S. 20

A district allocation funded program to resurface US-20 from Fulton County Line to near King Rd.

### State Route 2 (Jerusalem Township)

A 2 lane district allocation funded project to resurface SR-2 in eastern Lucas County from N. Curtice Rd to near Ottawa County Line.

### Berkey-Southern Road (State Route 295)

A 2 Lane district allocation funded project to resurface SR-295 in Lucas County from Sylvania Ave to Michigan State Line.

## Long Term Outlook

Our roadway system of 303 miles is currently in good condition. In 2014, we paved approximately 9.4 miles. We will pave 10.6 miles in 2015 and 17 miles in 2016. We can maintain our roadway system's good condition if we do 35 miles of preventative maintenance and 15 miles of rehabilitation and reconstruction miles per year within the 5-year C.I.P. **We are projecting an average of 14 miles of resurfacing and 34 miles of preventative maintenance per year for the next five years (2014 – 2018).** Depending on what other improvements are planned for any given year, road construction miles will vary.

Our bridges and culverts are in good condition as well. Many of our bridges and culverts have been replaced and/or repaired with prior road construction projects. There are currently 6 major bridge replacement projects scheduled to be let in the next 5-year period. These particular bridges will be stand alone construction projects. Matching funds from outside sources have helped increase our construction output over the past several years, and our continuous effort to secure additional matching funds for 2014 and beyond is a necessity if we are to maintain our system and try to keep up with inflation and high fuel costs. For our 5-year C.I.P budget (2014 – 2018) approximately 40.5% will be matching funds from other public agencies:

Federal Funds	\$32,500,000
Ohio Public Works Commission	\$ 7,700,000
Other Agencies	\$ 3,400,00
	<b>\$43,600,000*</b>

\*This amount includes the Federal dollars for the McCord Road Grade Underpass Project.

## **McCord Road Underpass Project**

The following are the highlights of construction that has begun on and scheduled for the completion of the McCord Road Underpass Project:

- The Beaver Excavating Company began construction of the McCord Road Grade Separation Project on August 11, 2014.
  - Construction of a Temporary Railroad Bypass to be completed in August of 2015.
  - Relining of the 66" Sanitary Sewer under McCord Road to be completed in June of 2015.
  - Closure of McCord Road to thru traffic on May 1, 2015.
  - Construction of Holland Park Blvd. Temporary Bypass Road and Roundabout to be completed by August 15th of 2015.
  - Upon completion of the Holland Park Blvd. temporary bypass road, Angola Road will be closed for 90 days for bridge work on 1475/US23.
  - Begin construction of the railroad underpass structure in July of 2015 to be completed in April of 2016.
- Project Construction to be completed by September 1 of 2016.



Holland Park Blvd.-Looking north towards Spectrum Drive



Holland Park Blvd.– Temporary Access Road looking south that will connect Holland Park Blvd. to N. Mall Drive



McCord Road-in front of the Lucas County Engineer's Office, looking north towards Angola Road



McCord Road-in front of the Lucas County Engineer's Office.



McCord Road-looking south towards Airport Highway

## COUNTY PROJECTS AWARDED IN 2014

PROJECT NAME	PROJECT MANAGER	PROJECT LET DATE	CURRENT ENGINEER ESTIMATE	AWARDED CONTRACTOR	AWARDED AMOUNT
Crissey Road Resurfacing Project (1.01 miles)	JML	02/12/14	\$ 354,812	Gerken Paving, Inc.	\$ 304,239.05
Providence-Neapolis-Swanton Road Storm Sewer Project	BWM	02/12/14	\$ 88,782	PHC, Inc.	\$ 59,846.00
Mitchaw Road @ Sylvania-Metamora Road Roundabout	RLM	02/26/14	\$ 798,007	Geddis Paving & Excavating, Inc.	\$ 813,862.03
Annual Crack Seal Program (LCE Only) (27.5 miles)	JSP	04/16/14	\$ 181,700	W.L. Markers	\$ 159,385.00
Old State Line Road Storm Sewer Project	BWM	04/23/14	\$ 163,798	B & J Concrete Construction	\$ 141,414.41
Annual Bridge Repair Program Cedar Point Road Bridge #1427 & Weckerly Road Bridge #780	BAZ	04/23/14	\$ 349,800	Vernon Nagel, Inc.	\$ 384,632.75
Dutch Road @ Waterville-Monclova Road Roundabouts	KPW	05/14/14	\$ 1,325,276	Crestline Paving & Excavating Co., Inc.	\$ 1,224,936.55
Salisbury Road @ Butz Road Left Turn Lane	SLR	06/04/14	\$ 371,150	Crestline Paving & Excavating Co., Inc.	\$ 334,874.90
Albon Road and Holloway Road Resurfacing Project (2.36 miles)	JML	06/11/14	\$ 754,113	The Shelly Co.	\$ 601,831.50
Annual Emulsified Seal Coat Program (4.9 miles)	JSP	07/09/14	\$ 156,795	D.G. Slurry Seal of Toledo, Inc.	\$ 160,921.90
Mohler Road Widening & Resurfacing Project (0.43 miles)	JML	07/09/14	\$ 229,020	Gerken Paving, Inc.	\$ 217,481.85
2014 Annual Resurfacing Program Dorr Street, Neowash Road, Rachel Road / East Avenue, Yondota Road (LCE Only shown) (3.94 miles)	JSP	07/16/14	\$ 858,118	The Shelly Co.	\$ 772,047.20
Microsurfacing Program (LCE Only shown) (5.09 miles)	JSP	07/30/14	\$ 303,318	Roadway Services, Inc.	\$ 294,174.84
Sylvania Avenue Resurfacing Project (0.21 miles)	JML	07/30/14	\$ 216,661	Crestline Paving & Excavating Co, Inc.	\$ 204,726.95
Annual Traffic Safety Program 2 - Guardrail	DJP / ATP	08/06/14	\$ 163,782	M.P. Dory Company	\$ 139,826.00
Centennial Road @ Dorr Street Roundabout	KPW	08/13/14	\$ 656,040	Vernon Nagel, Inc.	\$ 660,335.70
Fulton Lucas Road Bridge # 1 Replacement Project	BAZ	08/13/14	\$ 418,175	R & I Construction, Inc.	\$ 403,600.20
Salisbury Road Culvert #646	PMO	QUOTES 08/15/14	\$ 44,986	Crestline Paving & Excavating Co., Inc.	\$ 41,900.00
2014 Various Traffic Signal Upgrades	RLM	QUOTES 08/19/14	\$ 19,388	FET Construction Services, LLC	\$ 17,277.00
Annual Traffic Safety Program 1 - Pavement Markings	RLM / KPW	08/27/14	\$ 94,956	A & A Safety, Inc.	\$ 79,980.84
East Avenue Drainage Improvement Project	BWM / ATP	09/10/14	\$ 75,733	Cash Services, LLC	\$ 62,073.00
Lucas County Fairgrounds, Various Road Improvements	DJP	09/10/14	\$ 162,251 w/Alternate	Anderzack-Pitzen Construction, Inc.	\$ 177,414.50 w/Alternate
<b>TOTALS</b>			<b>\$ 7,786,661</b>		<b>\$ 7,255,782.27</b>

# CONSTRUCTION FOR 2014

Bid by Townships ~ Design & Inspection performed by County Engineer

PROJECT NAME	PROJECT MANAGER	PROJECT LET DATE	CURRENT ENGINEER ESTIMATE	AWARDED CONTRACTOR	AWARDED AMOUNT
<b>2014 Culvert Project</b> (#935 Jeffers Road, #989 Perry Road & #1038 Manore Road) (Providence Township)	SLR / PMO	04/09/14	\$ 90,991	PHC, Inc.	\$ 84,794.00
<b>Raab Road Improvement Project</b> (To be Let by LCE) (Harding Township)	SLR	04/09/14	\$ 115,617	Geddis Paving & Excavating, Inc.	\$ 102,425.63
<b>Annual Crack Seal Project</b> (Monclova Twp. Only) Bid w/LCE (Monclova Township)	JSP	04/16/14	\$ 15,920	W.L. Markers, Inc.	\$ 14,687.00
<b>Annual Crack Seal Project</b> (Jerusalem Twp. Only) Bid w/LCE (Jerusalem Township)	JSP	04/16/14	\$ 23,330	W.L. Markers, Inc.	\$ 21,310.50
<b>2014 OPWC Road Improvements</b> (Gradwohl, Central Park West, Edgewater Place & High Oaks Subdivision) (Sylvania Township)	SLR	07/02/14	\$ 488,072	Gerken Paving, Inc.	\$ 509,791.19
<b>2014 Road Improvements</b> (Sylvan Green, Fairways & Miakonda Subdivision) (Sylvania Township)	SLR	07/02/14	\$ 155,963	Henry W. Bergman, Inc.	\$ 152,367.20
<b>2014 OPWC Road Improvements</b> (Shadow Valley, Heritage Green, Heather Glen, & Valley Stream Subdivisions and Pilliod Road) (Springfield Township)	SLR	07/02/14	\$ 1,318,155	Gerken Paving, Inc.	\$ 1,448,471.60
<b>Lose Road Reclamation Program</b> (Monclova Township)	SLR	07/02/14	\$ 413,464	Gerken Paving, Inc.	\$ 360,059.12
<b>Murd Road Drainage Improvement</b> (Richfield Township)	BWM / SLR	07/07/14	\$ 106,392	Schoen, Inc.	\$ 97,343.00
<b>Van Dyke Avenue Pavement Repairs Project</b> Bid w/LCE 2014 Resurfacing Project (Jerusalem Township)	JSP	07/16/14	\$ 12,000	The Shelly Co.	\$ 13,200.00
<b>Monclova Twp. Microsurfacing Project</b> (Lose Road, Brynwyck Subd., Waterside Subd. Plats 1, 2, 3, 4, 5&7) (Monclova Township)	SLR / JSP	07/30/14	\$ 103,343	Roadway Services, Inc.	\$ 86,408.96
<b>Springfield Twp. Microsurfacing Project</b> (Henthron Road & Wyandotte Blvd.) Bid w/LCE (Springfield Township)	SLR / JSP	07/30/14	\$ 20,453	Roadway Services, Inc.	\$ 15,067.84
<b>Lose Road Guardrail Project</b> Bid w/ LCE (Monclova Township)	ATP	08/06/14	\$ 77,138	M.P. Dory Company	\$ 66,907.48
<b>Corey Road Guardrail Project</b> Bid w/ LCE (Sylvania Township)	ATP	08/06/14	\$ 9,798	M.P. Dory Company	\$ 8,071.60
<b>TOTALS</b>			<b>\$ 7,786,661</b>		<b>\$ 7,255,782.27</b>



Before

Gradwohl Road  
Part of the 2014 OPWC  
Road Improvement  
Program  
(Sylvania Township)



After

## **Expenses, Revenue & CIP**

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

### **Expenses**

Since many capital improvement costs such as asphalt resurfacing have risen dramatically we have devoted a larger proportion of our revenue to those needed capital improvements. Our operating costs include maintenance activities such as snow and ice control, mowing, forestry, pot-hole filling, drainage repairs etc. The cost of performing those activities has increased with rising fuel costs, higher salt costs, increased utility costs and increased labor costs, but we have tried to control those costs as much as possible. Between 2011-2014, we spent on average, 70% of our revenue on capital improvements; previously we were spending around an average of 55% on capital improvements.

### **Dedicated Revenue**

All of the dedicated revenue for Lucas County maintained roads and bridges come from motor vehicle license plate fees and a portion of the state gas tax. We receive no income from other taxes, such as property taxes. Our total dedicated revenue in 2014 (\$11.45 Million) is only slightly more the \$11.0 Million received in 2000, while costs have nearly doubled.

The primary source of dedicated revenue (80%) is from motor vehicle license plate fees. The blue line on page 12 shows that revenue. In 2000 we received \$9.6 Million and in 2014 we received \$9.1 Million. Evidently businesses are not licensing as many vehicles and many families are going without that second or third vehicle.

The other source of dedicated revenue is a portion of the state gas tax, the purple line on page 12 shows that revenue. In 2000 we received \$1.4 Million and in 2014 we received \$2.3 Million. The state gas increased from 22 cents per gallon in 2003 to 28 cents per gallon in 2007. However, revenue from gas tax has declined since 2007, primarily because of more fuel efficient vehicles.

Dedicated revenue in the future is expected to be flat or slightly declining without any increases in the license plate fees or state gas tax.

### **Outside Revenue**

Over the past 15 years, we have averaged receiving \$1.4 Million per year in federal grants plus \$1.9 Million per year in Ohio Public Works Commission (OPWC) grants or loans for specific capital improvement projects.

Federal funding has been used to replace structurally deficient or functionally obsolete bridges in poor condition. We have utilized all federal funds available over the past fifteen years, but very few of our bridges are likely to be eligible for several years. Roadway improvements on federal aid routes are eligible for federal funding, but very limited funds are available. We have utilized federal funds on safety projects, such as modern roundabouts at high crash intersections, when qualified.

We will continue to pursue all outside funding available, but the amount of available grants could decline. We are using about 93% outside funding on our \$36.5 Million McCord Road underpass, but no similar projects are planned in the near future.

State funding for the next ten years of the OPWC program was recently approved at the May 2014 Primary Election, so that program will continue, but this is a very competitive program. Considering the infrastructure needs of all public agencies in Lucas County, we expect to receive less than the \$1.9 Million per year that we have averaged over the past 15 years.

**EXPENSES**

	<b><u>1999-2003</u></b>		<b><u>2004-2008</u></b>		<b><u>2009-2013</u></b>		<b><u>2014-2018</u></b>
Operating	\$ 36,011,574	\$	33,184,708	\$	27,918,421	\$	31,677,000
C.I.P.	\$ 43,015,029	\$	46,765,736	\$	64,477,316	\$	60,169,000
	\$ 79,026,603	\$	79,950,444	\$	92,395,737	\$	91,846,000

**REVENUE**

Outside	\$ 18,304,734	\$	18,171,452	\$	30,160,808	\$	24,347,000
Dedicated	\$ 57,409,727	\$	62,344,807	\$	59,647,929	\$	63,596,000
Carryover/Reserve	\$ 3,312,142				2,587,000	\$	3,903,000
	\$ 79,026,603	\$	80,516,259	\$	92,395,737	\$	91,846,000

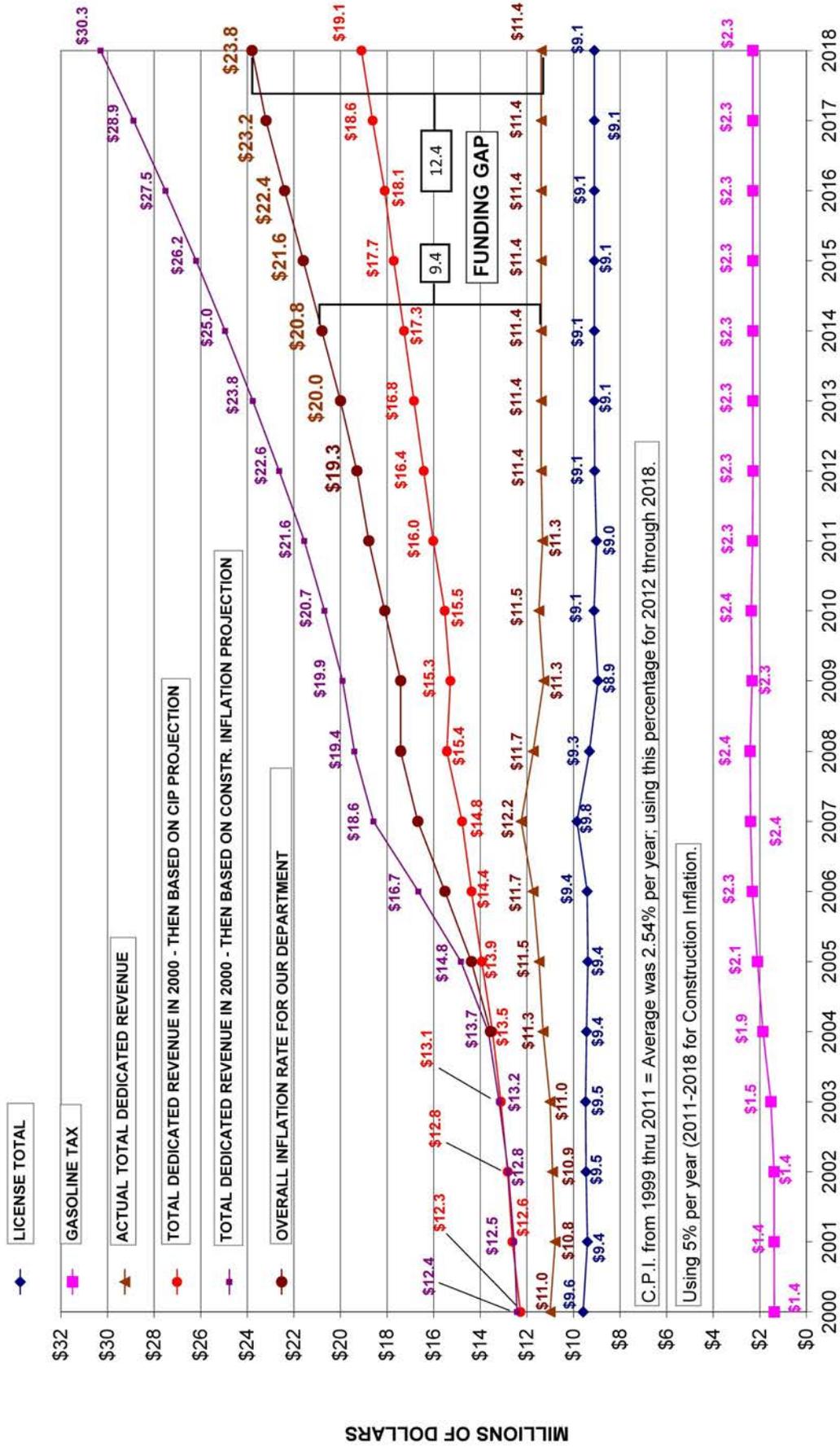
**C.I.P.**

	<b><u>1999-2003</u></b>	<b><u>2004-2008</u></b>	<b><u>2009-2013</u></b>	<b><u>2014-2018</u></b>
Bridge Repairs	9(6)	5(6)	11(6)	3(3)
Bridge Replacements	15(10)	7(6)	6(6)	6(6)
Road Rehabilitation/ Reconstruction	104 (75)	74(75)	81(75)	71(75)
Road Preservation	132(175)	169(175)	215(175)	168(175)
Drainage	11(10)	7(10)	15(10)	15(10)
Intersections	6(3)	5(3)	5(3)	7(3)
Signals/Upgrades	9(2)	5(2)	26(2)	1(2)
Traffic – Annual Programs	10(8)	12(8)	9(8)	8(5)

( ) Stated Goals

## License/Gasoline 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 Gasoline Tax. In 2014, Lucas County received \$9.1 million from license plates, \$460,000 less than received in 2000. In 2014, Lucas County received \$2.3 million from the gas tax, making the total dedicated funding \$11.5 million, which was \$490,000 more than the \$10.96 million received in 2000, but approximately \$810,000 less compared to 2007 when the dedicated funding peaked at \$12.26 million.



While dedicated revenue has remained static or slightly declining, costs have increased considerably. The overall Consumer Price Index has increased 35% over the past 12 years, but highway construction costs have increased 78%. Since at least half of our costs are related to highway construction, we had at least a \$9.5 million shortfall in 2014 compared to our 2000 purchasing power. By 2018, that shortfall is expected to increase to \$12.5 million. We would need double our anticipated revenue in 2018.

<b>LUCAS COUNTY PAVEMENT INFORMATION</b>		
<b>Pavement Rankings*</b>	<b>2013 Miles</b>	<b>2014 Miles</b>
Best: No Work	121	120
Maintenance Work	134.7	126.1
Resurface	45.5	55.7
Poorest: Reconstruction	0.6	1.6
	301.8	303.4

Includes Shared Roads with Other Jurisdictions

<b>Pavement Work</b>	<b>2013 Miles</b>	<b>2014 Miles</b>
Crack Seal (Contract)	31.0	30.5
Surface Seal (Contract)	11.0	10.0
Resurfacing, Widening & Resurfacing or Reconstruction (Contract)*	18.8	9.4
<b>TOTAL:</b>	60.8	49.9
% of System (Overall)	20.1%	16.5%

<b>Width Summary</b>	<b>% of System</b>
24' Wide or more	41.7%
22' to 24' Wide	20.0%
20' to 22' Wide	20.5%
18' to 20' Wide	15.8%
16' to 18' Wide	1.8%
Less than 16' Wide	0.2%

- Average Lucas County Road Width is 23.8 feet.
- Total lane miles is 653 +/-.
- Approximate travel lane surface area = 4,210,996 sq. yds.
- Approximate paved berm surface area = 725,691 sq. yds.
- Average Lucas County Maintained Road ADT is 2,580 vehicles per day +/-.
- 159.8 miles (53% of System) has paved asphalt berms.

Resurfacing Project



Neowash Road  
(See Page 5)

Resurfacing Project



Mohler Road  
(See Page 6)

## LUCAS COUNTY BRIDGE INFORMATION

Summary of Structures Inspected By The Lucas County Bridge Engineer				
Category		Vehicular Bridges	Pedestrian Bridges	Culverts
Inspection, Inventory and Reporting by Lucas County	Lucas County Roads	105	0	0
	Township Roads	57	0	0
	BLCC Trails	0	4	0
	Metroparks	3	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
Subtotals	<b>174</b>	<b>8</b>	<b>0</b>	

Inventory by Others, Cursory Inspection 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
	Subtotals	<b>7</b>	<b>2</b>	<b>0</b>

<b>Totals</b>	<b>181</b>	<b>10</b>	<b>0</b>
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General Appraisal Rating				
Type of Work	GAR	Number of Bridges		Change From Last Year
		2013	2014	
None	8 or 9	75	83	Up 8
Minor Maintenance	7	50	43	Down 7
Major Maintenance	5 or 6	37	35	Down 2
Major Rehabilitation	3 or 4	7	8	Up 1
Critical Condition	1 or 2	0	0	None
Close to Traffic	0	0	0	None
<b>TOTAL:</b>		169	169	

	Lucas County	Ohio's County Average (2014 Data)
Bridges with Load Limits	0.06% 1 of 169	6.6% 1,735 of 26,298

Lucas County has 1 bridge posted for a reduced load capacity compared to state wide average of 19.7 bridges per county.

Data includes 105 bridges on County Roads, 57 on Township Roads, 3 in Metroparks, and 4 on Bike Trails.



Bridge #1427 on Cedar Point Road



Bridge #780 on Weckerly Road

# LUCAS COUNTY CULVERT INVENTORY

Township / Location	Number on County/Bikeway Road System
Harding	12
Jerusalem	20
Monclova	35
Providence	25
Richfield	20
Spencer	21
Springfield	40
Swanton	12
Sylvania	38
Washington	2
Waterville	16
<b>Sub-Total :</b>	241
Bike Trails	19
<b>Total :</b>	260

PHYSICAL CONDITION		BIKE-TRAILS
Good	232	17
Fair	6	1
Poor	3	1
Critical	0	0
	241	19
<b>Total :</b>	260	

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.



Culvert #1038-North of Ludwig Rd.



Culvert #989-Perry Rd.



Culvert #935-Jeffers Rd.

## **Lucas County Transportation Improvement District (LCTID)**

As a result of an Ohio Department of Transportation request to local stakeholders on March 6<sup>th</sup> of 2014 for a local sponsor to advance potential interchanges along the I-475 corridor, and the input by these local stakeholders at meetings which followed this request, the Lucas County Engineer advanced the formation of a Transportation Improvement District (TID).

On April 22, 2014, the Lucas County Board of County Commissioners created the LCTID. Subsequently, on May 28, 2014, the Ohio Department of Transportation (ODOT) approved the TID registration. A TID is authorized under the *Ohio Revised Code* Chapter 5540 to finance, construct, maintain, repair, and operate street, highway, and other transportation projects, and in relation construct, alter, and repair roads, highways, and other related infrastructure and facilities. The TID enables various political subdivisions to participate and take advantage of the opportunities and benefits made available only through a TID. A TID is particularly effective on regional or multi-jurisdictional projects to deliver these projects in an efficient and cost-effective manner. Generally these improvements are driven by an economic development component.

All Lucas County public agencies are encouraged to consider using the LCTID to manage multi-jurisdictional transportation improvement projects especially if the project has strong economic development potential. One of the benefits is being eligible to apply for TID Grants administered by the Ohio Department of Transportation Division of Jobs and Commerce.

The LCTID Board of Trustees has five voting members and two non-voting members appointed by the Ohio Legislature. Bill Brennan-Senior Economic Development Manager of the Lucas County Planning & Economic Development Department is the Chairman, Richard Martinko, P.E.- former Director of the University of Toledo Transportation Research and Intermodal Institute is the Vice Chairman, Keith Earley, P.E.,P.S.- Lucas County Engineer is the Secretary-Treasurer, Warren Henry, P.E.- City of Toledo Water Program Manager is a Trustee, and Paul Toth Jr., P.E- President of the Toledo- Lucas County Port Authority is also a Trustee. The non-voting members are State Senator Edna Brown and State Representative Barbara Sears. Projects will be managed for the TID by the Office of the Lucas County Engineer. Jeff Lohse, P.E., Chief Deputy Engineer will be the point of contact and manage the projects.

Current projects include Dorr Street at I-475 and US 20A at I-475 interchanges. The LCTID was successful in obtaining ODOT Jobs & Commerce TID grants for these two projects (\$150,000 each). As a result, Burgess & Niple, LLC is preparing an Alternative Evaluation Report at each location for the LCTID in cooperation with ODOT to determine a preferred alternative. The LCTID also was successful in its presentation to the ODOT Transportation Review Advisory Council (TRAC) for preliminary engineering funds in State FY 2016 for the next engineering phase for these regional long range plan projects. This work will include the environmental and preparation of design plans through Stage 2. We hope to be underway in the Fall of 2015 and expect about an 12 to 18 month schedule to complete. Construction funding has not yet been secured and construction is dependent on ODOT's project to add a lane in each direction on I-475 between US 24 and Central Ave.

A third project with a more limited role for the LCTID contemplates certain public roadway and traffic system management improvements to Briarfield Blvd., Brandyway Lane, and Salisbury Road intersection in Monclova Township. This project has Lucas County as a partner and will benefit the proposed headquarters of The Andersons, Inc.

For additional information of the Lucas County TID, go to our website.



## Drainage Department

The Lucas County Commissioners, by resolution, approved the formation of the Lucas County Stormwater Utility on May 11, 2011. Monies were then assessed on tax duplicates to fund Ohio EPA's unfunded stormwater program mandates and capital improvement projects in the Phase II area as determined by the Stormwater Utility Board.

Approximately half of stormwater utility funding goes towards meeting unfunded Ohio EPA mandates associated with Lucas County being designated a Phase II Small MS4 Community. Lucas County along with 9 other communities within Lucas County are part of a joint permit, designed to meet 6 minimum control measures set by the Ohio EPA. The measures include: a public education program, a public involvement program, an illicit discharge detection and elimination program, construction site runoff program, post construction runoff control, and pollution prevention and good housekeeping program. Each year the Lucas County Engineer's office submits an annual report to Ohio EPA outlining what we have done to meet each of the minimum control measures.

Just under half of the funds collected go to Capital Improvement Projects. To date, the stormwater utility has done over two million dollars worth of drainage improvements. Some of the ditches that have been cleaned and improved are Newton, Gruenke, Babst, Geiser, and Butler Ditch. Numerous log jams on Swan Creek, Blue Creek, Ten Mile Creek, Silver Creek, Drennan Ditch and Schlicker Ditch have been removed. Many township roads have had drainage improvements funded by the stormwater utility, such as Calvin, Janet, Estes, Planview, Wilford, Blossman, Lose, Villamar, Kieswetter, Sherborn, Sudbury, Huntley, Cemetery, Obee, Eber, Meilke and many others.

## EPA Grants

The Lucas County Engineer's Office was the recipient of two Ohio EPA Stormwater Improvement Fund Grants. The first grant was in the amount of \$41,300. This grant was for work to be performed at the new Lucas County Engineer's Office at 1049 South McCord Road. The Lucas County Engineer's Office installed approximately 2,900 square feet of permeable pavement and a 6,700 square foot rain garden. Permeable pavement has been shown to reduce the amount of sheet flow run off from impervious surfaces, by allowing water to infiltrate down through the pavement, and into the ground. Rain gardens are beneficial in capturing and treating storm water runoff from parking lots, and rooftops. The rain garden at the LCE's office captures run off from the parking lot, several rooftop downspouts, and adjacent lawn areas. It has also been placed in public view along McCord Road, and planted with many different species of native plants. Planting was performed by Jacob Neubert and other Boy Scouts, for Jake's Eagle Scout Project.

The second Stormwater Improvement Fund Grant provided by the Ohio EPA, in the amount of \$40,600, was used to place 3,600 square feet of permeable concrete at the Lucas County Board of MRDD at 1154 Larc Lane. The permeable pavement installation at Larc Lane focused on placing the pavement around catch basins, therefore intercepting and infiltrating flow prior to reaching the storm sewer system. Additionally the specification was changed for the Larc Lane installation, requiring 6 inches more sub base, as well as underdrains. Permeable pavement is relatively new to Northwest Ohio, and the Lucas County Engineer's Office is thankful for the Ohio EPA for allowing the installation of this practice as a demonstration project. There have already been several groups out to the Larc Lane site to view the permeable pavement, and to learn more about what makes a successful installation.



Rain Garden in front of the Lucas County Engineer's Office at McCord Road



Larc Lane

## Traffic Department

### **Dorr Street and Centennial Road Roundabout Center Island Landscaping**

In the fall of 2013, the construction plans for the roundabout at the intersection of Dorr Street and Centennial Road in Springfield Township were nearing completion. As the intersection is located within the Oak Openings Region, special consideration was given to the design of the center island landscape and how it would be maintained. To avoid introducing non-native plants into this area, our office coordinated efforts with Dr. Todd Crail, a lecturer in the Environmental Science Department at The University of Toledo, to assist in plant selection and provide recommendations for post construction maintenance. After a few meetings with Dr. Crail, a plan was developed that would both address the needs of the County Engineer and provide an educational opportunity to both the general public and students at the University of Toledo.

Dr. Crail had agreed to coordinate and lead volunteer workers in the initial planting and continued maintenance of a native species center island landscape at the intersection once construction was complete. Doing so provides hands on educational opportunities for both students and the general public, while also promoting the Oak Openings Region flora. By providing these services at no cost, Dr. Crail enabled the Lucas County Engineers to acquire a greater quantity and variety of native species plants. The additional plants allow for a denser planting pattern, promoting the native species landscaping and reducing the growth opportunity for undesired plants and/or weeds.

Construction of the roundabout was completed in the fall of 2014. Shortly thereafter, our office began coordinating with growers to purchase native species plants. The plants grew throughout the winter and were delivered to the intersection on Saturday May 9<sup>th</sup>, 2015. The day began at 7:45 am when Dr. Crail and volunteers were on site to help unload plants and began preparing the site for the remaining plants to be delivered. They were able to plant over 6500 plants before storms came in forcing them to stop for the day. The remaining plants were planted by additional volunteers later during the following two weeks.

The native species landscape will benefit the community not only by its pleasing appearance, but the plants selected in the center island landscape for this intersection will not require fertilization or need nearly as much water as compared to a standard gardening landscape. These plants have adapted to survive, flourish, and reproduce in the native soils and adjacent environment, thus preventing the need for ongoing expenses due to watering, fertilizer, and additional plant purchases. We anticipate having a fully sustained center island landscape, requiring little or no maintenance within the next three to four years. Until then, with the ongoing assistance from Dr. Crail and his volunteers, we look forward to watching the native species landscape grow and reproduce in their native environment.

A special thanks goes out the Wood County Park District's Native Seed Nursery and Greenhouse. This project could not have happened without their great staff and desire to promote native species plants throughout the area.

Shrubby St. John's Wort (*Hypericum prolificum*)



Photo Source: Dr. Todd Crail, University of Toledo



## ArcGIS Online Maps

### Public Utilities Map

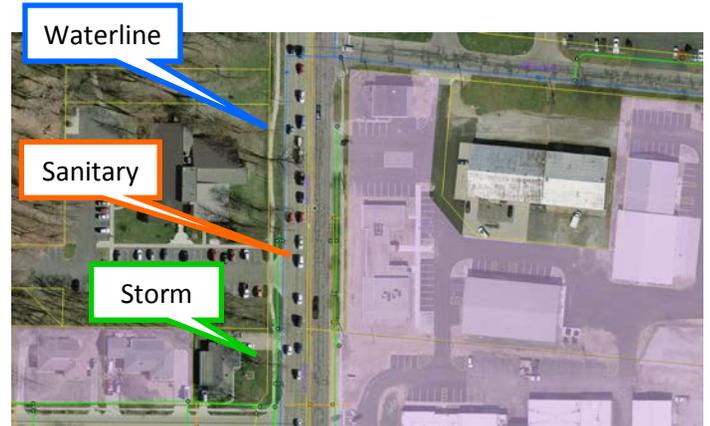
The Lucas County Engineer is pleased to announce the addition of the Public Utilities Map. This map includes storm and drainage information, as well as, sanitary and waterline locations with linked plans. Just go to the Lucas County website, under the Engineers, and click the Public Utilities Map link:



When the map comes up, you can enter an address in the search bar or just zoom into the area of the map you want to see:



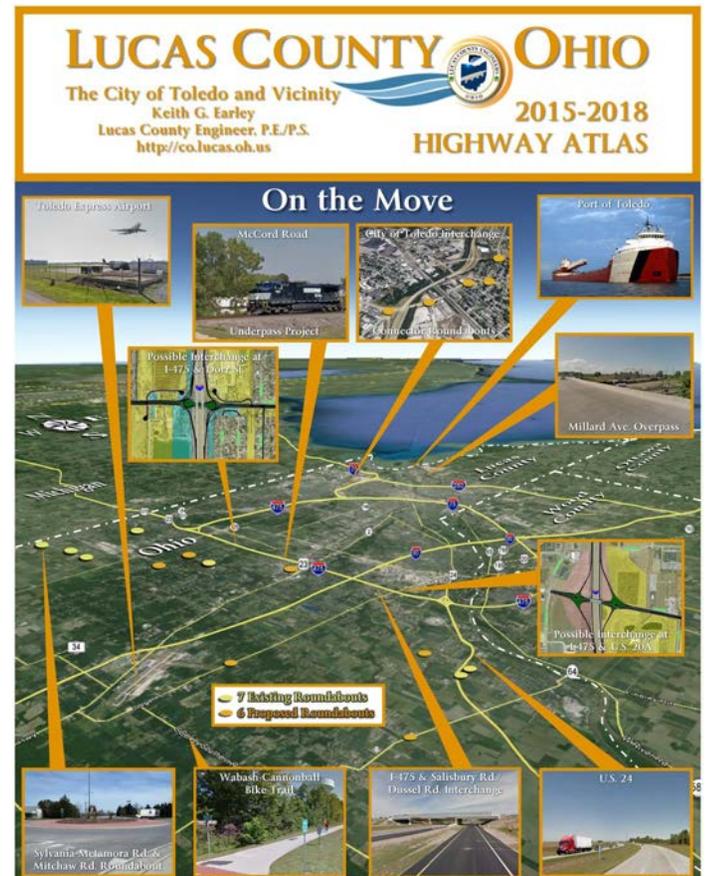
You can also turn the legend on and off, layers on and off, and change the base map format from Streets to Imagery. Other options are an overview map, measuring, or share the map using social media or email.



## Highway Atlas 2015-2018

The Lucas County Engineer's Office is currently working on the new release of the Lucas County Highway Atlas (both booklet and folded map versions). The theme for this release of the Highway Atlas is "On the Move", spotlighting the various modes of intermodal transportation within Lucas County, along with the continued construction of modern roundabouts for increased intersection safety, as well as, the continued maintenance and construction of bike trails.

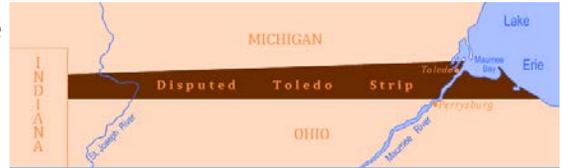
There are also two possible interchanges for I-475 shown; one at Dorr Street and one at US20A. Further details are on page 17 of this report.



## Locating History...

### **The Original Michigan Ohio Border Battle**

The Toledo War (1835–36), also known as the Michigan–Ohio War, was the almost bloodless boundary dispute between the U.S. State of Ohio and the adjoining territory of Michigan. Originating from conflicting state and federal legislation passed between 1787 and 1805, the dispute resulted from poor understanding of geographical features of the Great Lakes at the time. Varying interpretations of the law caused the governments of Ohio and Michigan to both claim sovereignty over a 468-square-mile (1,210 km<sup>2</sup>) region along the border, now known as the Toledo Strip.



The portion of the Michigan Territory claimed by the State of Ohio known as the Toledo Strip

When Michigan petitioned for statehood in 1835, it sought to include the disputed territory within its boundaries; Ohio's congressional delegation was in turn able to stall Michigan's admission to the Union. Beginning in 1835, both sides passed legislation attempting to force the other side's capitulation. Ohio's governor Robert Lucas and Michigan's 24-year-old "Boy Governor" Stevens T. Mason were both unwilling to cede jurisdiction of the Strip, so they raised militias and helped institute criminal penalties for citizens submitting to the other's authority. The militias were mobilized and sent to positions on opposite sides of the Maumee River near Toledo, but besides mutual taunting there was little interaction between the two forces. The single military confrontation of the "war" ended with a report of shots being fired into the air, incurring no casualties. During the summer of 1836, Congress proposed a compromise whereby Michigan gave up its claim to the strip in exchange for its statehood and approximately three-quarters of the Upper Peninsula. The compromise was considered a poor outcome for Michigan; nearly all of the Upper Peninsula was still Indian territory at the time. Voters in a state convention in September soundly rejected the proposal. In December 1836, the Michigan government, facing a dire financial crisis and pressure from Congress and President Andrew Jackson, called another convention (called the "Frost-bitten Convention") which accepted the compromise that resolved the Toledo War. The later discovery of copper and iron deposits and the plentiful timber in the Upper Peninsula more than offset Michigan's economic loss in surrendering Toledo.

### **The First Roads in Lucas County**

Beginning as early as 1822 up to and including 1835, there were some major routes planned, surveyed and begun through the area of what is now Lucas County by the State of Ohio with authorization and funding from Congress. In 1827, the first road was laid out by Michigan authorities in Port Lawrence Township, which included, what is now present day Toledo and about half of Lucas County. The last official act of the Port Lawrence Township authorities, before surrendering to the Ohio officials in 1835, was the laying out of a road from Tremainsville to Toledo, three miles and twenty-three chains in length, which this road, later became what is present day Cherry Street in Toledo.

At a meeting of the Board of County Commissioners of Lucas County, held Dec. 7, 1835, four County Roads were established.

On June 20, 1836, two appropriations for road improvements were made; one of twenty dollars between Toledo and Tremainsville, and one of \$500, between Toledo and the head of the Rapids.

On Dec. 5, 1836, County Roads numbered 14, 15, 16 and 17 were established.

At the March meeting of 1837, a survey was ordered for a road to extend from the northern termination of Monroe Street, Toledo, to the intersection of the Indiana Road with the turnpike leading from Maumee to Monroe.  
(From the Records Dept.)

#### Main Office Employees 15 Years

Brian S. Miller

Bob Neubert

Bryan Zienta

Margie Knopp

#### **SERVICE AWARDS**

#### Road Maintenance Employees

Mike Harris - 10 Years

Dave Machoukas - 20 Years

Ryan Belinske - 25 Years

Rudy Mravec - 30 Years

Ed Schutte - 30 Years

Greg Wimberly - 30 Years

# LUCAS COUNTY OHIO



**Keith G. Earley**  
 Lucas County Engineer, P.E./P.S.  
<http://co.lucas.oh.us>

*Engineering safety today  
 for a better tomorrow*

## STAFF DIRECTORY

### LUCAS COUNTY ENGINEER

Keith G. Earley, P.E., P.S. 213-2839

### ADMINISTRATION

Administrative Deputy	Mark Drennen, MPA	213-2851
Clerical Supervisor	Missy Dixon	213-2848
Account Specialist	Kara Moore	213-2849
Account Specialist	Kimberly Kettman	213-2892

### ROAD MAINTENANCE DEPT.

Superintendent	Greg Wimberly	213-2890
Assistant Superintendent	Ryan Belinski	213-2891
Operations Officer	Dennis Boyle	213-2879
Road Foreman	John Bowser	213-2879

M.P.A. Masters of Public Administration  
 P.E. Professional Engineer  
 P.S. Professional Surveyor  
 E.I. Engineer Intern

### DESIGN, CONSTRUCTION & TRAFFIC STAFF

Chief Deputy Engineer	Jeffery Lohse, P.E.	213-2858
Bridge Engineer	Bryan Zienta, P.E.	213-2859
Chief Surveyor	Denny Pritscher, P.S.	213-2834
Construction Engineer	Joel Palermo, P.E.	213-2840
Const. Project Supervisor	Joshua Hazard, E.I.	213-2841
Design Engineer	Patrick O'Boyle, P.E.	213-2855
Drainage Engineer	Brian W. Miller, P.E.	213-2830
Drainage & GIS	Robert Neubert	213-2832
Planning Engineer	Doug Parrish, P.E.	213-2856
R/W Coordinator	Joe Shultz	213-2864
Tax Map Supervisor	Kelly Forgette	213-4652
Township Engineer	Sarah Rowland, P.E.	213-2857
Traffic Operations Eng.	Ronald Myers, P.E.	213-2854
Traffic Operations	Kyle Warner, P.E.	213-2875

### RECORDS DEPT.

Records/IT/CAD Mgr.	Brian S. Miller	213-2852
Engineering Records Tech.	Sheila Marciniak	213-2874

## Office Locations

