



Union County Engineer's *2022 Annual Report*

Jeff Stauch, County Engineer

We invite you to take a moment to peruse our 2022 Annual Report, which showcases a comprehensive overview of our organization's completed projects, maintenance activities, services provided, and financials. Our report covers the highlights of our building and development efforts, environmental engineering work, as well as details on road and bridge construction throughout the year.

As our county continues to experience growth and development, our Building Department has been kept busy with an increase in plan review and inspection workload. We processed over 2,000 commercial and residential permits in 2022, which generated over 17,400 inspections. While there was a slight decrease in single-family home starts compared to the previous year, we saw a 12% increase in commercial permits, totaling 444, which resulted in \$438,636,947 in construction investment. We also continued our efforts to build our inspection staff to help deliver our services to the community.

Our road maintenance and construction employees have a long-standing tradition of performing as much in-house work as possible. By doing so, we are able to save significant dollars and develop the versatility of our crews. In 2022, our crews worked on 7 small bridge replacements, 21 new culverts, and a substantial chip-seal program. Our largest in-house expenditure was the chip seal surface treatment

operation, which totaled \$1.68 million and covered 104 miles of southern county and township roadways. We also continued the innovative use of recycled asphalt pavement, which helped us to save substantial costs amid increasing prices of virgin aggregate.

Our engineering staff continued to work on multiple residential and commercial development projects throughout the year, ranging from prospective to completed construction. We coordinated with regional planning, studied future traffic impacts, and



worked with adjacent agencies and developers to build the necessary improvements that have a direct connection to economic development in our county and region.

We also coordinated on the proposed solar energy projects in the area, where we collaborated with the representatives of the Union Solar project in York and Washington townships to create a Road Use Maintenance Agreement (RUMA). The RUMA covered select county and township roads, where construction haul roads were identified, surveyed, and evaluated for expected truck traffic. The solar company committed to covering approximately \$750,000 in future road work, including the widening and paving of Wellwood Road. We are also working with Cadence Solar on a similar RUMA for local roads in Liberty and York townships, and another project is being planned in the Leesburg township area as well.

In addition to these efforts, we are excited to announce that our "force account" limits were increased for the first time since 2003, as part of the recent transportation budget approval at the statehouse. This helps us to stretch our construction dollars going forward, allowing us to perform projects with our in-house crews that we would otherwise not be permitted to complete.

Looking ahead to construction plans in 2023 and 2024, we have a number of projects in various stages of planning to bidding. We expect to replace two large bridges and five smaller structures this year and to build our Industrial Parkway-Mitchell DeWitt roundabout towards the end of the construction season. We are partnering with the City of Dublin on the widening of Hyland-Croy Road, and planning and design are underway for two road extensions in the southeast portion of our county, helping to distribute increasing traffic volumes.

Continued on Page 2

Inside This Issue :

2. *Duties and Responsibilities*
3. *Building Department*
4. *Operations Division*
5. *Engineering Division*
6. *Engineering and Environmental Divisions*
7. *Employee News*
8. *Budget Breakdown*



**Public Service
With Integrity**

County Engineer

Continued from Page 1

It will be a challenge to find the funding to build these expensive new projects while maintaining our annual road and bridge programs. Inflation has touched nearly every facet of our lives and construction materials and labor have been especially impacted. The revenues we rely on to perform this work haven't matched the pace of construction inflation, but we will continue to review our needs and find ways to get the priority projects built. We were especially grateful to see our sales tax levy for roads and bridges be approved again for another 5-year term. It averages around \$1.45 million annually for our work program. And it remains important that our development projects continue to help pay for road and intersection improvements based on their traffic impacts, whether it be a solar project, or commercial and residential developments. Many of them have been good partners in helping us bring upgrades to our local road system as the area's growth continues.

In conclusion, we are proud of the work our organization accomplished in 2022, including completed projects, maintenance activities, and services provided. We are committed to continuing our efforts to help support the economic development of our county and region by providing essential services such as building and development highlights, environmental engineering work, and a comprehensive road and bridge program. We thank our dedicated staff and partners for their contributions and look forward to continuing to work with them in the years to come.



Jeff Stauch, Union County Engineer

Duties and Responsibilities

- *Maintains, repairs, widens, resurfaces, constructs, or reconstructs county roads, bridges, culverts, and roadside ditches*
- *Engineering advisor to all fourteen Boards of Trustees for the maintenance, repair, widening, resurfacing, and construction of township roads and culverts. Bridges on township roads are the full responsibility of the Union County Engineer*
- *Prepares and maintains a road map of the county, and works with the Auditor to maintain Union County's tax map system*
- *Operates, maintains, repairs, constructs or reconstructs six small (package) wastewater treatment plants in the unincorporated areas of the County*
- *Building plan reviews and inspections for residential, commercial and industrial construction in the unincorporated areas of the county as well as in the City of Marysville, in the Villages of Milford Center, Magnetic Springs and Richwood*
- *Issues house numbers/driveway permits for all new residences or new businesses in the unincorporated areas of the county. Approves legal descriptions before transfer; approves new surveys; maintains a record of all surveys*
- *Administers and enforces Union County's Flood Damage Prevention Regulations in the unincorporated areas of the County*
- *Reviews preliminary and final plats, reviews construction plans, coordinates other agency reviews, inspects construction, and approves construction for all major/minor subdivisions planned and constructed in the unincorporated areas of the County*

NEW VEHICLES AND EQUIPMENT

Single Axle Dump Truck	\$159,227	Emulsion Storage Tank	\$95,200
Single Axle Dump Truck	\$161,102	Caterpillar Excavator	\$116,994
Salt Storage Building	\$206,863	Vehicle Lift	\$11,529
		(2) Mowing Tractors	\$50,000
		Freightliner Semi (used)	\$78,150
		Kobelco Excavator (second payment)	\$34,541

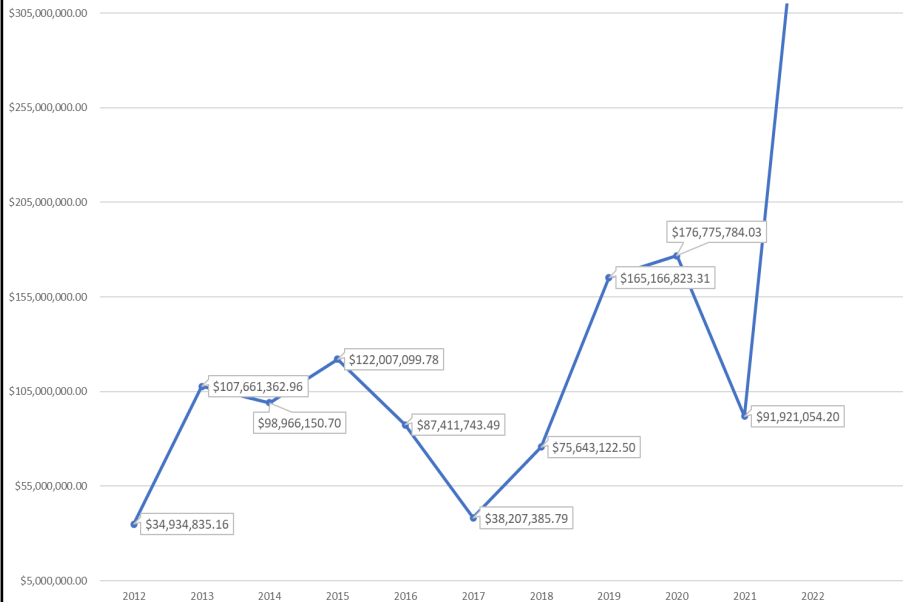


John Deere Loader (first payment)	\$32,950
36" Digging Bucket	\$2,392

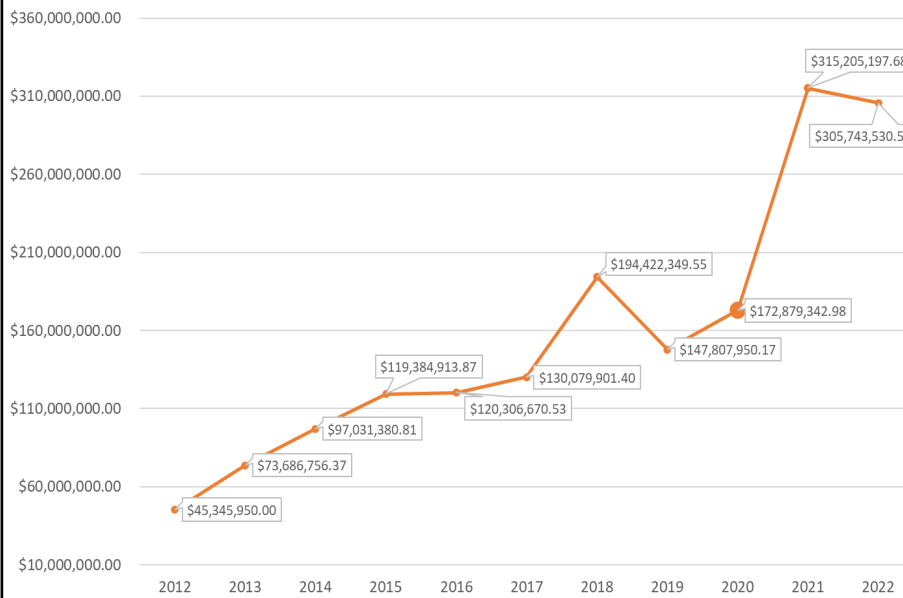
Building Department

Page 3

Commercial Construction Costs



Residential Construction Costs



County Growth

Union County has experienced remarkable growth over the past several years, as evidenced by the consistent uptick in commercial and residential construction costs. In 2012, commercial construction costs amounted to \$34,934,835, setting the stage for the upward trajectory that would follow. The subsequent years saw significant expansion in the commercial sector. Although there was a slight dip in 2016, the upward momentum resumed and brings us to 2022, with commercial construction costs soaring to an impressive \$438,636,947, showcasing the county's robust business climate.

In parallel to the growth in the commercial sector, residential construction costs also exhibited significant increases. In 2012, residential construction costs stood at \$45,345,950, and this figure continued to rise in the following years. Despite a slight decrease in 2022, with residential construction costs totaling \$305,978,530, the overall trend underscores the county's attractiveness as a desirable location for housing development and its growing population.



NEW SINGLE FAMILY HOMES	ADDITIONS/ ALTERATIONS	ALL OTHER PERMITS	TOTAL RESIDENTIAL PERMITS	VALUATION	INSPECTIONS COMPLETED
648	204	749	1,601	\$305,978,531	15,343
NEW COMMERCIAL BUILDINGS	ADDITIONS/ ALTERATIONS	ALL OTHER PERMITS	TOTAL COMMERCIAL PERMITS	VALUATION	INSPECTIONS COMPLETED
36	81	327	444	\$438,636,947	2,085

WORK BY COUNTY FORCES

Wheeler Green Road Small Bridge Replacement

CR205F-SLM 4.365

Force Work Labor Cost

12'x4' Box Culvert

\$20,029

\$31,812

West Darby Road Small Bridge Replacement

TR167D-SLM 2.388

Force Work Labor Cost

7 new B12-48X18' prestressed box beams

\$18,742

\$56,700

Holycross Epps Road Small Bridge Replacement

TR158A-SLM 0.113

Force Work Labor Cost

12'x6' Box Culvert

\$27,874

\$38,920



All other culvert replacements (21)

\$199,188

Snow and Ice Control

\$486,571

- \$172,963 labor cost
- \$131,444 equipment cost
- 2,851 tons of salt
- \$182,164 material cost

Durapatcher

\$22,467

- 8,473 gallons RS-2 Liquid Asphalt
- 286 tons #8 Stone



Lingrell Road Small Bridge Replacement

CR344B-SLM 1.316

Force Work Labor Cost

2 60" Concrete Pipes—66' length

\$31,500

\$37,423

Osbourne Road Small Bridge Replacement

CR299F-SLM 5.586

Force Work Labor Cost

10'x4' Box Culvert—40' length

\$17,016

\$22,560

Powderlick Road Small Bridge Replacement

CR289B-SLM 1.377

Force Work Labor Cost

7 new B12-48X23' prestressed box beams

\$34,549

\$87,850

CR289A-SLM 0.802

Force Work Labor Cost

7 new B12-48X23' prestressed box beams

\$24,990

\$79,800



Grader Patching

\$162,756

- 1,997 tons of hot mix asphalt

Chip Seal (labor, equipment, and material)

\$1,682,016

- 569,189 gallons of asphalt and 10,048 tons of stone
- 57.626 miles of county roads
- 46.96 miles of township roads

Roadside Mowing (4 rounds)

\$163,328

- \$86,698 labor cost
- \$76,630 equipment cost

Tree and Brush Removal

\$136,675

- \$111,703 labor cost
- \$24,972 equipment cost

Road Sign Material

\$33,142

- 7,725 signs in the sign inventory

WORK BY CONTRACT

CR194 Leeper-Perkins Bridge Replacement

Contractor: J & J Schlaegel

Construction Cost: \$773,692

Work was completed by J&J Schlaegel to replace the Leeper-Perkins Bridge spanning Blues Creek.



Guardrail Upgrade Program

Contractor: MP Dory

22 different locations and over 400 linear feet of guardrail were upgraded with new guardrail and end treatments.

Construction Cost: *\$327,532



Hot Mix Resurfacing Program

Contractor: The Shelly Company

2.34 miles Wells Road, 2.40 miles Harriott Road, 3.80 miles Winnemac Road, 1.90 miles Weaver Road, and 0.234 miles North Street, 0.210 miles Railroad Street, .295 miles Sugar Mill Lane, Wells Road Curve, Raymond Road (portion), Wellwood Road

Construction Cost: \$2,938,566

Jerome Township \$117,227

City of Marysville \$75,000

Contribution from Select Sires \$50,000

Contribution from Acciona \$327,681

Local Share: *\$2,369,339



Pavement Marking Program

Contractor: Griffin Pavement Striping

80 miles of centerline; 42 miles of edgeline; 16 railroad crossing symbols; 1 school symbol

Construction Cost: *\$124,734

* Portions of local shares were furnished by the Sales Tax Levy

COUNTY ENGINEER OF THE YEAR

Congratulations to **Jeff Stauch** on being named Ohio County Engineer of the Year for 2022! This prestigious award, presented by the County Engineers Association of Ohio (CEAO), recognizes the dedicated service of county engineers to the Association and their leadership roles within various committees.

The County Engineer of the Year award has a rich history, with the first award being presented in 1994. The winner is selected by a vote from previous award winners, making this a truly special honor.

Jeff Stauch has been an active member of the CEAO for many years, holding various leadership positions including serving as the 2020 President of the Association. He currently serves as Co-Chair of the Public and Local Support Committee.

We were thrilled to see Engineer Stauch receive this well-deserved recognition at the CEAO/CCAO Winter Conference on December 8, 2022. Congratulations again, Jeff, on this incredible achievement!



Engineering and Environmental Divisions

Page 6

THANK YOU!

Thank you for your continued support of the County Sales Tax Levy! In November of 2022, Union County voters voted overwhelmingly to renew the County Sales Tax Levy. This levy provides 16% of our annual funding and all money is spent towards road and bridge improvements.

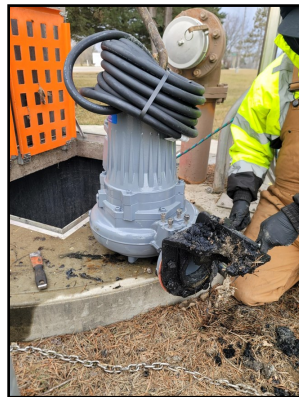


ENVIRONMENTAL DIVISION

Union County manages and oversees six wastewater treatment facilities, which collectively provide services to a clientele of 615 customers. The majority of these treatment plants were erected in the 1970s and necessitate continuous upkeep. In 2022, several enhancements were made to various wastewater treatment plants to help keep them running efficiently.



Pump Replacement at the Raymond Plant



Lift Station at the Crottinger Estates Plant



Diffuser replacements

MISCELLANEOUS STATS

• Driveway permits issued	61
• Number of addresses issued	517
• Total property transfers	3,325
• New deed parcels	220
• Existing deeds checked	2,210
Foreclosure reviews	59
Sheriff deed reviews	5
• Total property splits and resurveys	249
New property surveys	232
New subdivision approvals	17
• Survey plats recorded	191
• Utility permits issued	76
• Overweight vehicle hauling permits issued	429
• Work order requests completed	53
• Miles of county roads maintained	469
• Sanitary Sewer Customers	615
• Received \$163,316 in funding assistance from townships.	
Darby	\$70,000
Jackson	\$25,000
Leesburg	\$25,000
Millcreek	\$23,316
Washington	\$20,000

PLANNED FOR 2023

Looking ahead to 2023, our engineering department has plans to upgrade the current intersection of Mitchell-Dewitt and Industrial Parkway with a roundabout. The roundabout option was selected because of better overall traffic performance and increased safety compared to a traffic signal. Construction for this roundabout is estimated to cost approximately \$2.2 million and is planned to begin in late summer or early fall.



Employee News

Page 7



Snow plows lined up and ready to go

25 YEARS

Congratulations to **Kevin Grose**, Maintenance Worker 4, and **Dave Putney**, Maintenance Worker 2, for 25 years of service. They were both hired on the same day in October of 1997. 25 years of working together!



2022 NEW EMPLOYEES



Scott Elliott
Maintenance
Worker 2
Hired 9/6/22



Joe Hackney
Building
Inspector 2
Hired 4/11/22



Dan Kibbey
Maintenance
Worker 2
Hired 10/24/2022



Wade Lallathin
Maintenance
Worker 2
Hired 1/18/22



Jerry McClary
Building
Inspector 2
Hired 5/2/22



Dave Ross
Building
Inspector 2
Hired 10/3/22



Todd Simmons
Waste-Water
Treatment Support/
Maintenance
Worker 2
Hired 5/2/22



Luke Sutton
Project Engineer
Re-Hired 2/21/22



Bill Watkins
Building
Inspector 2
Hired 3/7/22

Union County Engineer
 Jeff Stauch, PE/PS
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Administrative Offices
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Budget Breakdown

Page 8

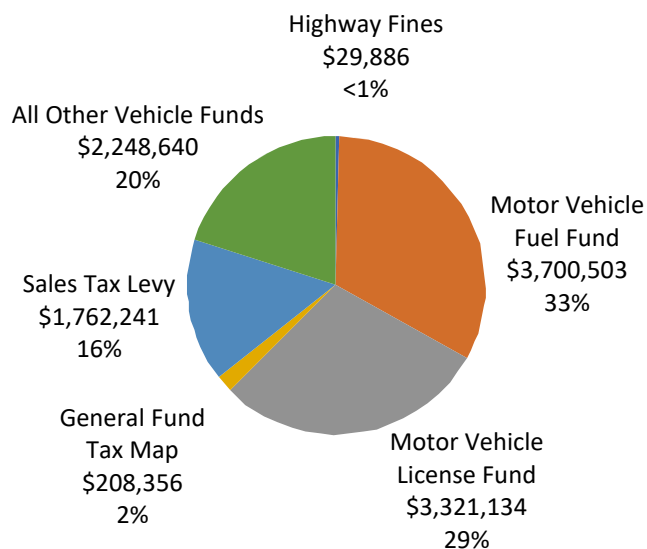
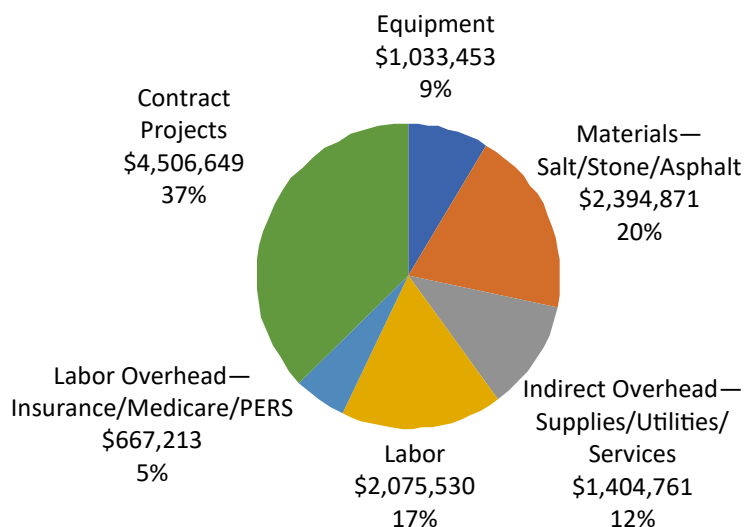
EXPENSES

**2022 Motor Vehicle and Gasoline Tax (M&G),
 Road & Bridge, General Fund
 \$12,084,677***

REVENUE

**2022 Motor Vehicle and Gasoline Tax (M&G),
 Sales Tax, Fines and General Fund
 \$11,292,360**

**2022 Federal and State Grants
 \$21,600**
 (not included in revenue chart)



All sales tax levy funds were used for contract projects in 2022

*This expense value includes some contract projects completed in 2021 but paid in 2022