



Union County Engineer's 2020 Annual Report

Jeff Stauch, County Engineer

April 2021

We encourage you to spend a few minutes reviewing last year's summary of work for our organization. This Annual Report is a blend of completed projects, maintenance activities, services provided and a look into our budget that drives the County Engineer operation.

The 2020 happenings of the world challenged our group in so many ways. Our responsibilities were identified as essential from the outset, and because of our varied tasks involving road maintenance-to sewer plants-to building inspections, we adjusted on the fly to keep the work going, while doing our best to keep our customers and employees safe.

As difficult as it was, and still remains to conduct many of our normal duties, I can look back at the positive way in which our employees responded, staying nimble and creative in finding ways to get their work done. Roads were maintained, bridges got built and the local building industry still received timely inspections during the height of the unsettled weeks. And kudos as well to our customers for being understanding and adjusting their normal business practices along the way.

The area's commercial and residential construction remained very strong, despite rising materials prices. Building permit totals increased to nearly 1,700 and single-family home starts rose to 492. Multi-family unit construction continued its upward trend, as we saw completion of

several projects that started in 2019. All of this activity conservatively yielded over \$350 million in construction investment. Our team also continued the development of new permit software which will be rolled out later this year, improving our service to contractors and helping us to better manage the 16,000+ inspections we perform each year.

The majority of the homes being constructed are part of the many active residential subdivisions being built in our central and southeastern areas. A significant portion of our development

workload centered on various stages of new commercial and residential development proposals across the entire county. Traffic impacts are studied, coordination with area agency partners is often necessary, and ultimately prioritizing the road improvements and developer cost shares need to happen before any asphalt is placed. New to the list of development proposals are several solar farms under consideration in the northern part of our county. Our role will involve the necessary improvements for county or township roads should the projects move forward.

Our Environmental staff manages seven small sanitary sewer districts in the unincorporated areas, serving 618 customers. Annual revenues through user fees are around \$450,000 and generally balance with the costs necessary to run the treatment plants. An online payment and information portal was added during the year to add convenience for the users.



County forces replaced five small bridges and installed 33 culverts under local roadways. Our bridge crew performed maintenance repairs on the piers of two structures as a result of underwater inspections at seven sites. Each of our 330 bridges were inspected and rated. Our road crew chip-sealed 91 miles of county and township roads over 20 days at a total cost of \$883,390 - which is our largest expenditure of self-performed work every year. The costs of our continued removal of trees and brush along our roadsides was around \$220,000 through a combination of in-house labor and equipment, and some contract work. It remains an expensive and seemingly never-ending process along our over 900 miles of roadsides, but one that greatly improves safety.

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**Public Service
With Integrity**

County Engineer

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We executed seven contracts for materials and construction projects, valued at \$2.41 million. Local funds covered all but around \$340,000 from two grants. Ten miles were paved and three contracts were let for pavement markings. The Collins Road bridge over Big Darby Creek was rehabilitated and our four historic covered bridges received fresh coats of paint.

The dollars that drive much of the road and bridge work listed in this report are generated from three primary sources; a portion of the county sales tax, fuel tax and license fees. We were fortunate to see enough of our regular revenue to continue with most of our planned projects. Early estimates predicted a reduction of 1/3 of our normal fuel tax numbers, as traffic volumes were reduced by almost 50% in April. Traffic numbers rebounded but were still down about 15% for the balance of the year, thus hurting gasoline sales. However, strong diesel fuel consumption offset much of those losses, and we ended the year down only around \$200,000.

A significant amount of our time is spent looking towards projects that will fill future Annual Reports, prioritizing and finding ways to get them funded. We secured commitments for grants totaling nearly \$5.0 million for four projects slated to be built over the next five years. We also received the final payment for the \$7.0 million Industrial Pkwy corridor contribution from the new FedEx facility. The challenges to get needed improvements in place will continue in many of these primary road corridors as traffic loads continue to increase.

I appreciate the yearly opportunity to share this summary with you. Our entire organization looks forward to being involved in another productive year in 2021, *but* with a little (actually a lot!) less drama.



Jeff Stauch, Union County Engineer

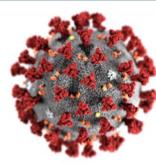
Duties and Responsibilities

- *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 is also responsible for maintaining 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; maintains a record of all surveys*
- *Administrates 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*

COVID-19 CONSIDERATIONS

In response to the current COVID-19 situation, the Union County Engineer has taken several steps to keep customers, employees, and the general public as safe as possible while continuing to provide our necessary services.

Our lobby is currently closed to the public. However, we are maintaining a separate document drop off/pick-up room so we can continue to do business. We will continue to provide services online and by phone as well.



Building permit applications and plans/deed and survey documents may be dropped off at the appropriately marked drop location outside our office. Sewer payments and building fees can be paid online, mailed to our office, or dropped in the drop-box outside our office building.

We appreciate your patience and assistance with these adjustments so that we may continue to provide necessary services while protecting the safety and health of everyone.

Thank you!

WORK BY COUNTY FORCES

Watkins Road Small Bridge Replacement CR104A-0.646

Force Work Labor Cost **\$36,930**
12'x7' Box Culvert **\$32,866**



Langstaff Road Small Bridge Replacement CR189-0.632

Force Work Labor Cost **\$6,991**
10'x5' Box Culvert **\$25,872**

Macklin Road Small Bridge Replacement CR196-0.986

Force Work Labor Cost **\$16,323**
48"x52' Beams **\$118,300**



Kinney Pike Road Small Bridge Replacement CR262C-2.317

Force Work Labor Cost **\$7,258**
14'x4' Box Culvert **\$30,336**

Winnemac Road Small Bridge Replacement CR336C-2.639

Force Work Labor Cost **\$11,763**
16'x6' Box Culvert **\$47,940**

All other culvert replacements (33) \$168,982

Snow and Ice Control **\$447,742**

- \$121,641 labor cost
- \$94,716 equipment cost
- 2,433 tons of salt and 493 tons of salt/stone mix
- \$231,385 material cost



Grader Patching **\$93,085**

- 348 tons of hot mix asphalt applied to County Roads
- 656 tons of hot mix asphalt applied to Township Roads

Chip Seal (labor, equipment, and material) **\$883,391**

- 395,886 gallons of asphalt and 10,322 tons of stone
- 63 miles of county roads and 28 miles of township roads

Roadside Mowing (4 rounds) **\$183,822**

- \$78,206 labor cost
- \$105,616 equipment cost

Tree and Brush Removal **\$220,005**

- \$175,440 labor cost
- \$44,565 equipment cost



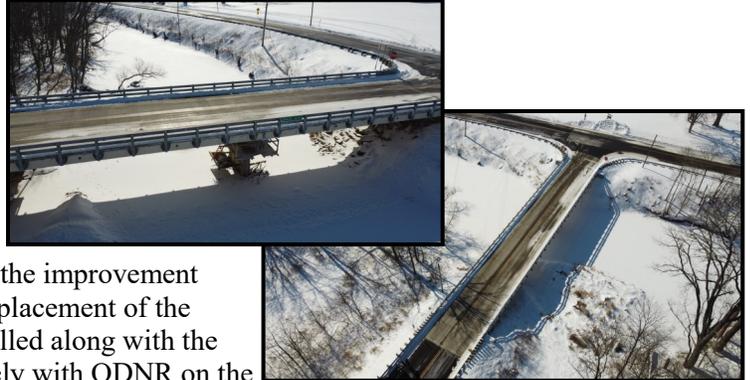
WORK BY CONTRACT

UNI CR78— Collins Road Bridge Replacement

Contractor: *George J. Igel*

Construction Cost: \$760,325
OPWC Grant: \$197,684
Local Share: **\$562,641

The rehabilitation work was substantially completed on the Collins Rd. bridge over Big Darby Creek in November by George Igel & Co. from Columbus. The scope of the improvement consisted of repairs to the two piers, and the complete replacement of the bridge superstructure. New prestressed beams were installed along with the pouring of a new concrete deck. Our office worked closely with ODNR on the construction requirements for the project due to the sensitive nature of Big Darby's designation as a State and National Scenic River. The 167 ft. span replaced a steel truss structure in 1980 when the bridge was damaged by an overweight vehicle. Igel will return this spring to finish off some minor punch list items on the project.



Hot Mix Resurfacing Program

Contractor: *The Shelly Company*

4 miles Allen Center Road, 5 miles Wolford-Maskill Road, and 1 mile Claibourne Road

Construction Cost: \$1,421,378
Local Share: **\$1,372,387
 Jerome Township Contribution \$48,991

Spray Thermo Striping

Contractor: *Griffin Pavement Striping*

Construction Cost: \$144,926
 Federal Grant: \$144,926
Local Share: \$0

Pavement Marking Program

Contractor: *Dura Mark*

88 miles of centerline; 50 miles of edgeline; 20 railroad crossing symbols; 1 school symbol

Construction Cost: **\$80,215

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

MISCELLANEOUS STATS

• Driveway permits issued	175
• Number of addresses issued	117
• Total property transfers	2,643
• Existing deeds checked	1,952
• Foreclosure reviews	34
• Sheriff deed reviews	10
• Total property splits and resurveys	161
• Survey plats recorded	138
• Utility permits issued	97
• Overweight vehicle hauling permits issued	330
• Work order requests completed	83
• Miles of county roads maintained	467
• Sanitary Sewer Customers	618
• Received \$161,630 in funding assistance from townships.	
Darby \$70,000	Millcreek \$16,630
Dover \$25,000	Washington \$10,000
Leesburg \$40,000	

NEW VEHICLES AND EQUIPMENT

(5) Dump Trucks (Payment 2 of 5)	\$201,601	(2) Solar Powered Message Sign Boards	\$22,682	2005 Chip Spreader	\$37,000
(5) Stainless Steel Dump Beds (Payment 2 of 5)	\$277,400	2019 JD track loader	\$52,973	Salt Brine Maker (Payment 1 of 2)	\$5,975
Survey Equipment	\$28,922	2016 Kobelco Excavator (Payment 5 of 5)	\$32,102	2013 Forklift	\$11,500
Vacuum Excavator	\$52,589	Used Gradall Excavator	\$20,000	(2) Case Cab Tractors	\$88,600

UNION COUNTY CONTINUES TO SEE INCREASED GROWTH

While the pandemic has significantly impacted the global economy and forced industry and individual businesses to adjust how they operate and interact, the amount of development activity within Union County has not slowed. As a matter of fact, the volume and diversity of requests that the area has seen has only increased, as the region attacks the imbalance of housing demand versus the inventory available.

The Jerome Village master development continues to move forward at a rapid pace, with over 1,100 homes occupied to date. Current planning, as well as projects already under construction, will add hundreds more of developable lots in the coming year. In addition, a new elementary school within Jerome Village started operation in fall of 2020, and a middle school is currently in construction and planned to open for the 2021-2022 school year. As this mixed-use development adds residential units, the demand for complementary services to support the residents increases. We expect to see this demand result in non-residential development within Jerome Village in the coming year and beyond and have already been part of these planning efforts.

Other residential and commercial/industrial development within the County have created opportunity to leverage public/private partnerships to increase safety and capacity on the public roadway network. One example of this is at the intersection of US 42 and Industrial Parkway, where a significant intersection upgrade is currently in the design phase. Multiple developments, including the recently opened FedEx Ground facility on Industrial Parkway, have made or will make contributions (determined through their individual traffic impact studies) towards this improvement. This project will provide for the safe and efficient travel of people and goods through the area, and would not be possible without private involvement.

With several other examples of development projects that will add traffic to an already taxed roadway system, our office, private development and surrounding agencies will continue to think outside of the box to develop creative funding partnerships to expand, modify and maintain the roadway infrastructure that is so important to the success of Union County.

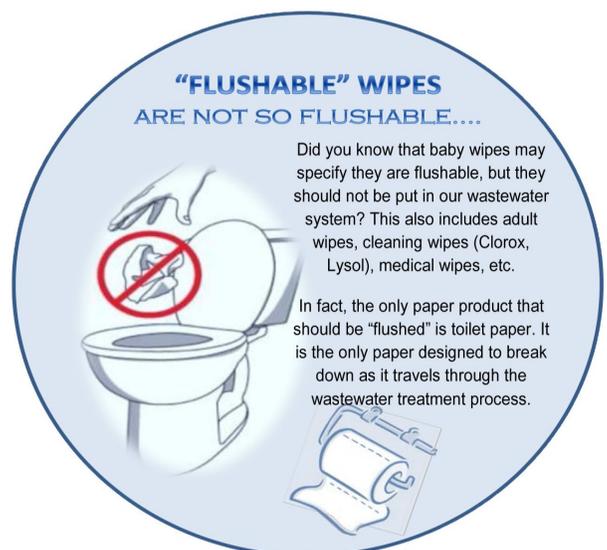
ENVIRONMENTAL DIVISION

In 2020, we were excited to announce the launch of our new online portal for our sanitary sewer customers. This portal allows customers to check their payments and balances online, make payments online, and receive up-to-date information from the sanitary engineer. It also allows customers to set up recurring credit card payments.

To check your balance or make a sewer payment online, go to: unioncountyohio.gov/engineer

SANITARY SEWER NOTE

Amidst the current COVID-19 spread, we have recently seen a significant increase in the amount of disinfectant wipes, pre-moistened wipes and paper towels/towelettes entering our wastewater treatment facilities. Even though these products are sometimes advertised as “flushable” or “septic safe,” please note that only means that they are likely to make their way through your individual drains/fixtures without causing back-up. Because these products do not break down like toilet paper, they get caught up in our pumps and cause clogging and pump burn out. They also combine with grease, hair, and other materials in our system to form larger masses that could cause main line backups. This results in staff call-out time and premature costly pump replacement. These materials also have the potential to cause backup in your individual plumbing network, resulting in sewage backups and costly clean-ups for homeowners. We ask that you please refrain from flushing anything down your toilets or drains other than toilet paper and human waste, and place everything else in your trash receptacle instead. Other items that you should refrain from flushing include: medication, dental floss, cigarette butts, feminine hygiene products, bandages and cotton balls. We aim to keep your monthly user rates as low as possible, and appreciate your cooperation.



Building Department

NEW 1,2,3 FAMILY RESIDENCES	ADDITIONS/ALTERATIONS	ALL OTHER PERMITS	TOTAL RESIDENTIAL PERMITS	VALUATION	INSPECTIONS COMPLETED	CORRECTION NOTICES
492	248	569	1,309	\$172,879,343	12,634	3,321
NEW COMMERCIAL BUILDINGS	ADDITIONS/ALTERATIONS	ALL OTHER PERMITS	TOTAL COMMERCIAL PERMITS	VALUATION	INSPECTIONS COMPLETED	CORRECTION NOTICES
39	111	215	365	\$176,775,784	4,242	1,806

WELCOME...

We would like to welcome Sam Cronk as the newest member of the building department and our future CBO. Sam comes to us from the City of Columbus building department where he spent the last 22 years as a member of the electrical inspection and building compliance team. Sam is a long-time resident of Marysville and is excited to be working in the community in which he resides. Sam will be working as an Assistant Building Official while transitioning into the role of Chief Building Official in the near future.



NEW BUILDING SOFTWARE



After 24 years of using our current in-house building software, we are excited to be introducing a new on-line building software system to both our clients and our staff. OpenGov Citizen Services software will better suit the needs of the building department, contractors, and homeowners alike. This new cloud based software will allow builders to submit all of their paperwork for permits on-line and view progress of plan review and inspections in real time. We have high hopes that this will make the building department more efficient, while at the same time making it easier for the community members that use our services. While we expect that there might be a few minor bumps in the road while we work to institute the new software, this system will allow better tracking of projects and finances, as well as simplifying the process of construction for both our building department staff and builders in the community. Our website has all of the information about how to create a new account: unioncountyohio.gov/engineer.



CONGRATULATIONS RETIREES!

Ronda Conrad joined our office in August of 1990 as our Accounts Administrator. She was responsible for budget planning and review, managing substantial revenues and expenditures, and was an integral part of our office. Ronda retired in August, 2020



Sandy Liedtke was hired as a Building Permit Specialist in April of 1993. She managed both large and small projects and issued building permits for our building department. Sandy was known for her exceptional commitment to customer service. Sandy retired in April, 2020



Ben Laird was hired in November of 1994 as a Maintenance Worker. Over his 25 year career, Ben helped to maintain and build roads, bridges, and culverts. He was a dedicated employee known for his sense of humor, kindness, and loyalty. Ben retired in July of 2020.



Keith Oman became employed with the Engineer's Office in February of 1995. Keith worked as a Maintenance Worker, helping to keep our local roadways safe for the public. Keith retired in September of 2020 with plans to enjoy his retirement in Panama.



2020 NEW EMPLOYEES

Over the past year, we welcomed seven new employees to our organization.

Administrative Team



Michelle Anderson
Accounts Administrator



Lisa Damron
Building Permit Specialist



Susie Martin
Building Permit Specialist

Building Department



Sam Cronk
Assistant Chief
Building Official



Bill Stevenson
Building Inspector

Operations



Brian Tracey
Maintenance
Worker I



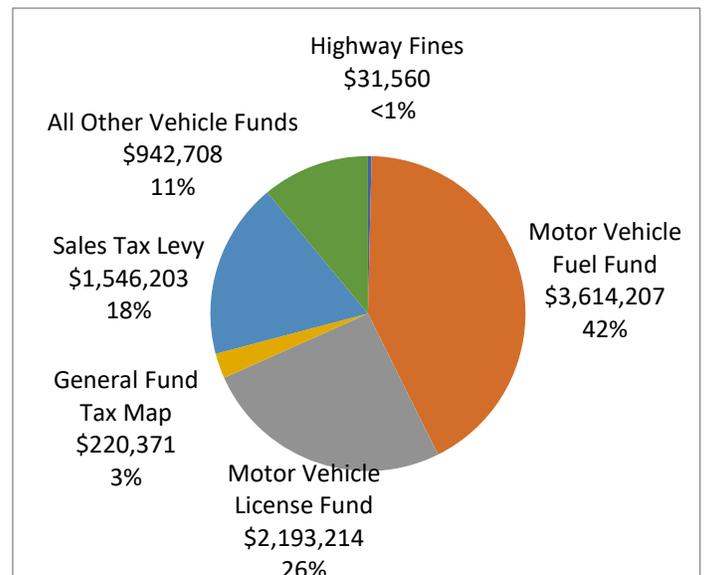
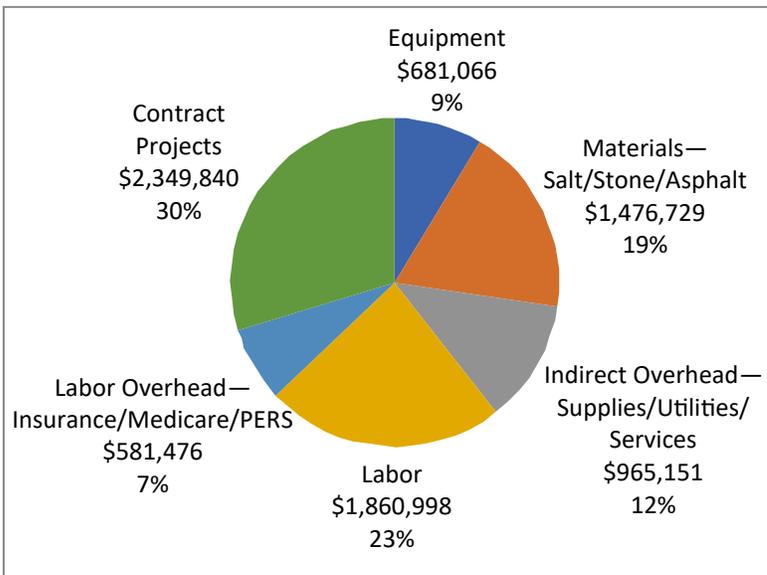
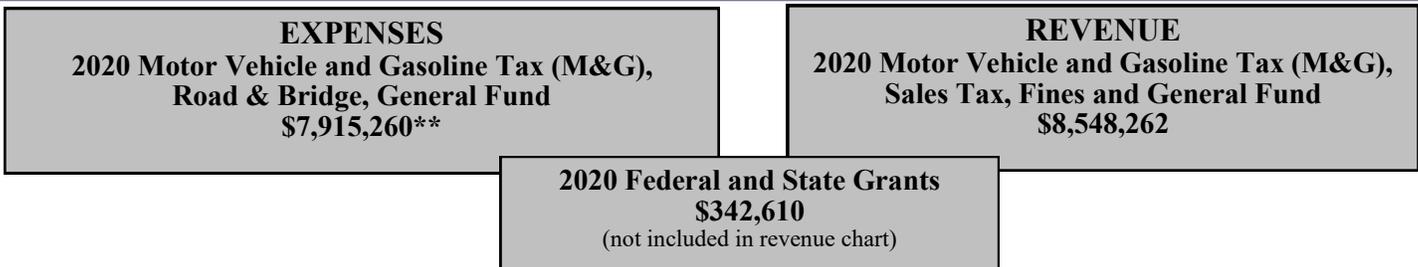
Ken Young
Maintenance
Worker I

Union County Engineer
 Jeff Stauch, PE/PS
 233 West Sixth Street
 Marysville, Ohio 43040

Administrative Offices
 P: (937) 645-3018
 unioncountyohio.gov/engineer

Operations Facility
 P: (937) 645-3017

Budget Breakdown



All sales tax levy funds were used for contract projects in 2020

**This expense value includes some contract projects completed in 2019 but paid in first quarter 2020