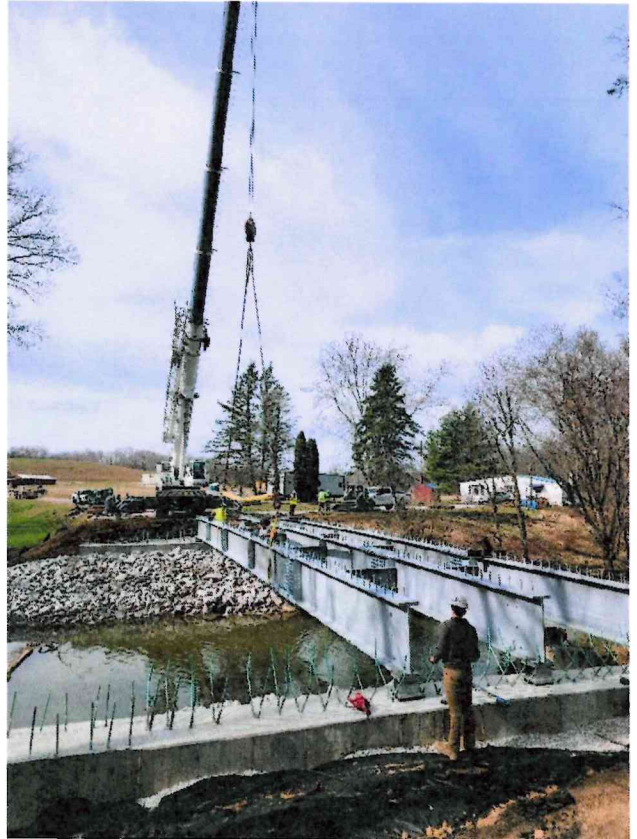
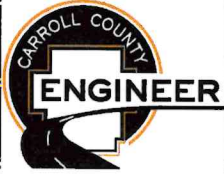
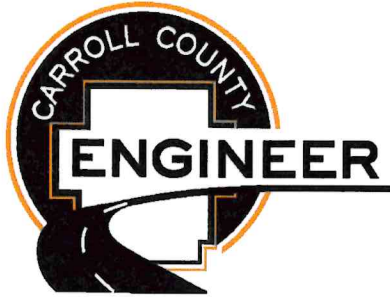


ANNUAL REPORT



2025





Carroll County Engineer's 2025 Annual Report

Brian J. Wise, P.E., P.S.
Carroll County Engineer

To the BOARD OF COMMISSIONERS and CITIZENS OF CARROLL COUNTY:

This document is prepared in compliance with the Ohio Revised Code as an annual report to the Carroll County Commissioners on the status of our roads, bridges and culverts. The report also serves to keep the public informed of how your highway tax dollars are used for road and bridge construction and maintenance. I will continue to update this report to provide useful information in an easy-to-use format.

I want to thank all the employees of the County Engineer's Office, the Highway Department and the Tax Map Department for their hard work and dedication over the past year. Without their determined efforts, the volume of work completed in this report would not be possible. I would also like to thank the County Commissioners, Township Trustees and Township Road Crews for their continued cooperation over the past year.

This year we completed a couple of large, notable projects in the County. On the cover of this report is the Arbor Rd., C.R. 14, bridge replacement project in Augusta Township over Still Fork Creek. We replaced the existing 63-foot span steel truss with a 78-foot span galvanized steel beam bridge complete with a reinforced concrete composite deck and deep steel piling foundations. While this is not the longest bridge in Carroll County's inventory, it certainly is the most expensive. This bridge was constructed using the Design-Build project delivery method. U.S. Bridge of Cambridge, Ohio, partnered with DGL Consulting Engineers of Maumee, Ohio, to submit a low bid for the work at \$1.455 million. I am proud to report that we were able to secure a federal grant to fund 100% of the construction cost of the project. Other than county funds which paid for the field inspection and material testing, no local money was required to design or build the bridge.

The other notable project of 2025 was several years in the making. The County was able to acquire the former ODOT maintenance facility on Kensington Rd. Through negotiations with the State that date back almost a decade, multiple County Officials, past and present, had a hand in bringing this opportunity to fruition. I would personally like to thank all the dedicated people who contributed to making this acquisition a reality. The Engineer's Office, Map Office, and Highway Department will now begin the process of planning, designing, and building modern facilities on the site to serve the County well into the future.

I thank the residents of Carroll County for the opportunity to serve you. This department will continue to manage your tax dollars as efficiently as possible while providing a safe road and bridge system for the traveling public.

I respectfully submit this annual report for the year 2025 as required by Ohio Revised Code §5543.02.

Brian J. Wise, P.E., P.S.
Carroll County Engineer



TABLE OF CONTENTS

Table of Contents

Department Staff

Revenue

Expenditures

Road & Bridge Maintenance Operations

Status of County Roads

Status of County Bridges

Status of County Culverts

Equipment

Resource Allocation



County pipe crews replacing culverts and storm sewers on Bay Rd., C.R. 27 in Lee Township



County bridge crew begins replacement of a triple arch culvert bridge and constructs new headwalls on Dew Drop Rd., T.R. 121 in Perry Township. This project is scheduled for completion in spring 2026.



On the Cover:

Contractor U.S. Bridge of Cambridge, Ohio replacing a truss bridge with a steel beam and composite deck structure on Arbor Rd., C.R. 14, in Augusta Township over Still Fork Creek.

The Carroll County Engineer Maintains:

- **307 Miles of Road** (ADT = Average Daily Traffic)
 - 6 miles > 2,000 ADT (High = 2,282)
 - 27 miles between 1,000 and 2,000 ADT
 - 74 miles between 400 and 1,000 ADT
 - 157 miles between 100 and 400 ADT
 - 43 miles < 100 ADT (Low = 11)
- **144 Bridges**
 - 32 span from 10' to 20'
 - 106 span from 20' to 100'
 - 6 span from 100' to 134'

Department Staff

County Engineer
Brian J. Wise, P.E., P.S.

Assistant Engineer
Lane Hartong

Superintendent
Mike Bryan

Administrative Secretary
Tracy Flanagan

Administrative Assistant
Janice Leggett

Inspector
Vacant

Surveyor
Jared Akins

Map Office Supervisor
Diane Wirkner

Map Office Assistant
Jaycee Hudson

Roadway / Bridge / Culvert / Maintenance Supervisors
Rodney Days Allan Furbie Ryan Roberts Dave Seck

Sign Department Manager
Dale George

Night Watchperson
Darl Walton

Highway Workers

Zeph Casper
Kevin Criss
Kyle Foltz
Brenen Green
Chris Hawk

Tim Hawk, Jr.
Tom Jones
Greg Kinkade
Mike Krupczak
Wayne Lippincott

Calvin Logan
Scott Lumley
Pete McIntire
Bill Miller
Oscar Plazak

Rich Rennie
Nick Roudebush
Brad Rutledge
Dale Tinlin
Jimmy Ujcich



*Arrow Rd., C.R. 15
resurfacing paved under
contract with Superior Paving
of Canton, OH in Harrison
Township. (Left)*

*Moving county equipment into
the recently acquired, former
ODOT facility, on Kensington
Rd, S.R. 9. (Right)*



2025 REVENUE

Our total revenue received for 2025 was \$6,596,700.43 which shows a small increase over last year. Proceeds from the State Motor Fuel Tax and Vehicle License Fees are the primary revenue sources for the operation of the Carroll County Engineer's Office and Highway Department.

Our largest source of revenue is the State Motor Fuel Tax. Counties statewide share an equal amount of the per gallon tax the State collects on motor vehicle fuel. The State Legislature began to address the declining revenues in 2019 by adjusting motor fuel taxes and hybrid vehicle registration fees. In 2025 we received \$3,956,771.80 in fuel tax revenue, which is slightly more than 2024 and is a significant improvement over years prior.

Vehicle License Plate Fees are the second largest source of revenue. This revenue is generated only from vehicles that are registered in Carroll County. In 2025 we received \$1,495,419.13 from vehicle registrations, which is slightly more than last year.

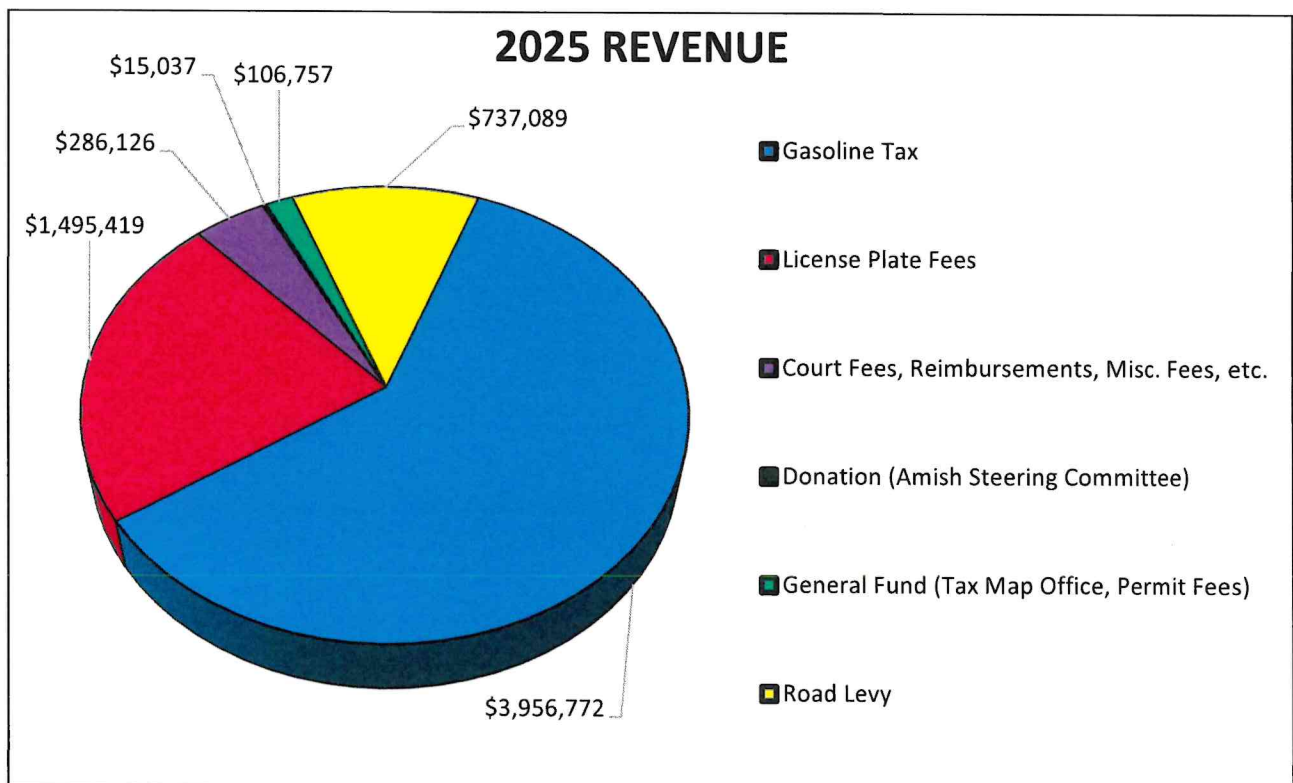
Court Fees, Reimbursements and Miscellaneous income contributed \$286,126.00 in revenue in 2025.

County Road Levy funds collected have fluctuated considerably over the years since its inception. The County Engineer's Office continued this year to grant financial assistance to the 14 townships of Carroll County in the amount of \$150,000.00 as well as a grant for \$50,000.00 to the Carroll County Sheriff's Office for patrol car fuel. In 2025, the Highway Department collected \$737,089.30 in road levy funds.

The General Fund contributes to the operation of the Tax Map Office as well as a portion of right of way permit fees collected. In 2025, \$106,757.00 in revenue was received from the General Fund.

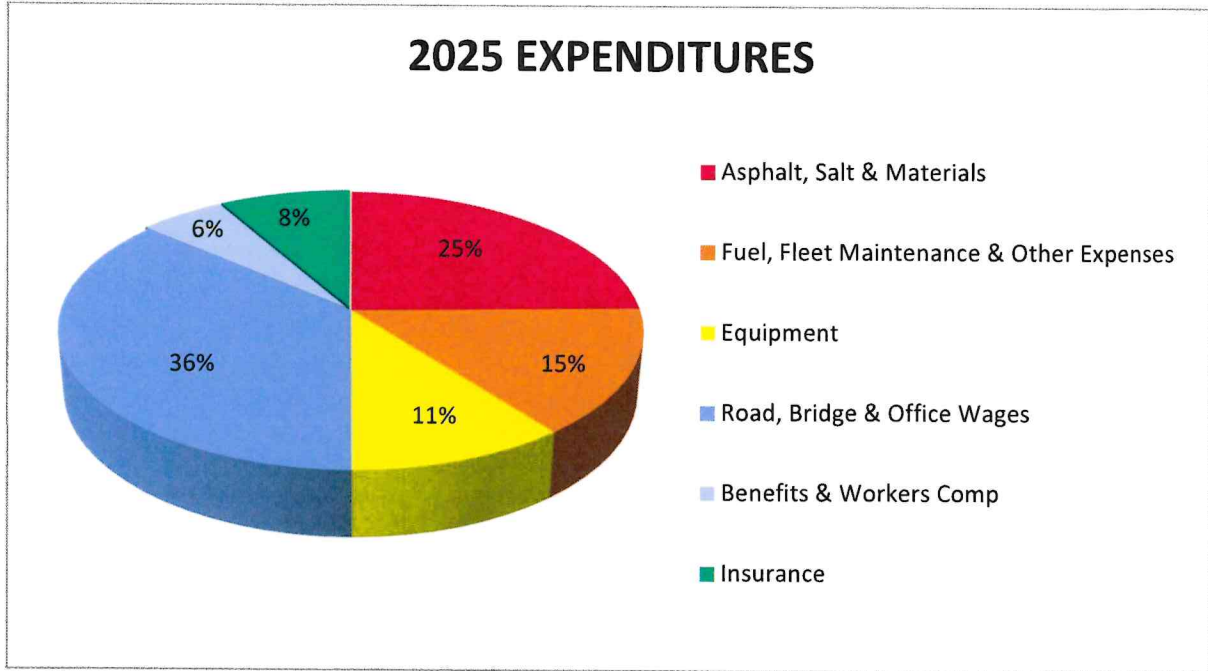
The Amish Steering Committee donated \$15,037.20 toward road maintenance costs in 2025 bringing the balance in that fund to \$25,464.42. These funds will be put toward a future project.

In an effort to inform the public about a common misconception: Property taxes do not contribute toward road maintenance revenues.



2025 EXPENDITURES

Our total expenditures in 2025 were \$6,099,461.74.



Not shown in the above graph are grant monies received and paid directly to contractors.

We received two grants from the Ohio Public Works Commission which allowed us to resurface approximately 4.6 miles of Arrow Rd.-CR15 in 2025. The grants total \$481,230.



We also received a grant from the Ohio Department of Transportation's Local Roads Oil & Shale Program which will allow us to resurface a portion of Canyon Road-(CR54) in 2026. This grant totals \$339,040.



A grant from the Ohio Department of Transportation's HSIP Program will allow us to conduct speed zone studies in 2026 on approximately 20 miles of county roads. The grant totals \$27,720.

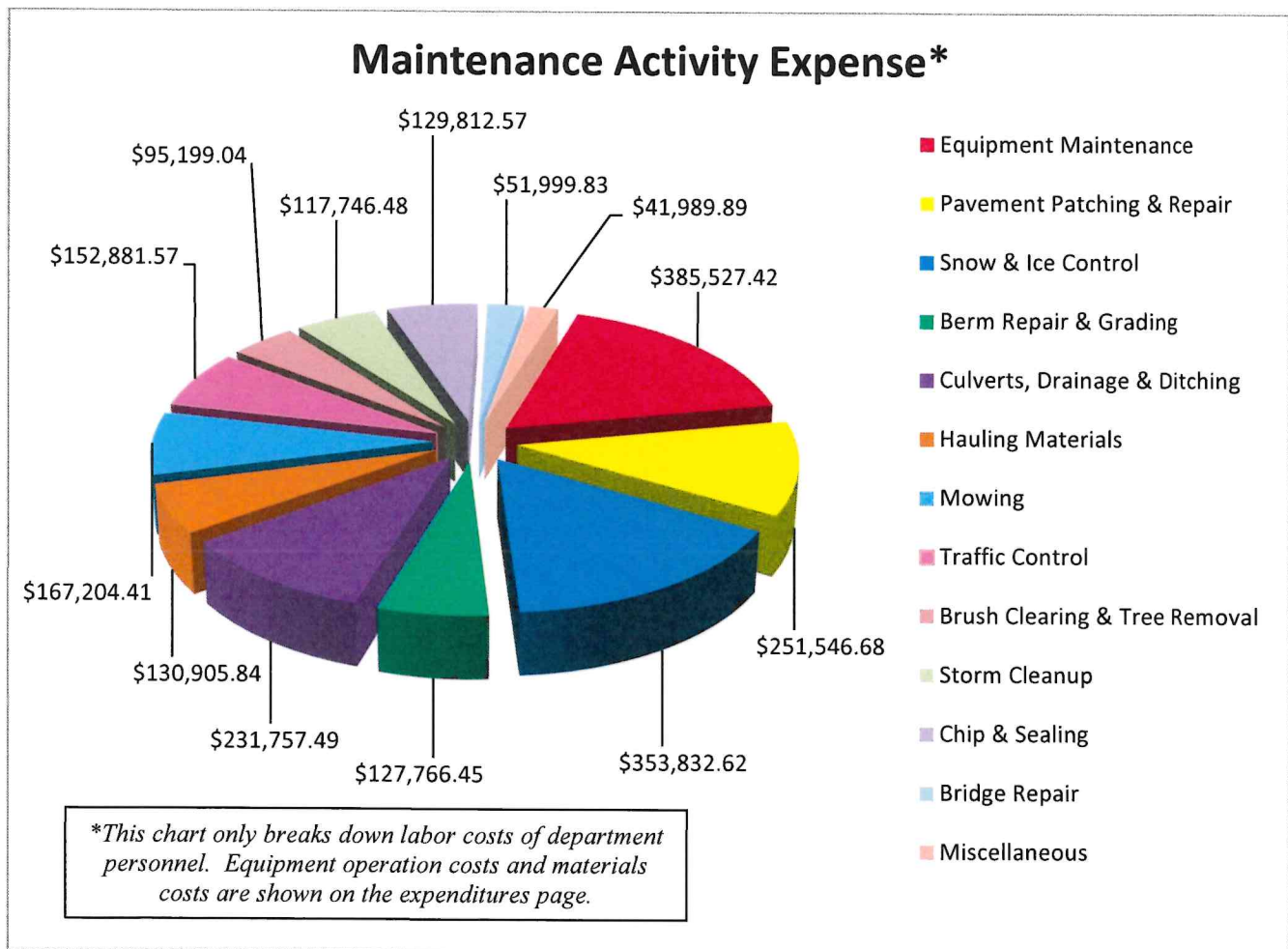


ROAD & BRIDGE MAINTENANCE

It is a pleasure to report the amount of work our forces were able to accomplish this year. Maintenance work is the primary service the highway department provides for the public.

The winter of 2024-2025 was much harsher than the previous winter with twice as many snow/ice events. Our forces treated the roads with 11,021 tons of winter mix and 28 tons of salt over 62 separate callouts.

In 1990, there were 34 employees at the highway department. In 2024 the number of employees remained at 26. That represents a 24% reduction in work force over a 33-year period. The following chart highlights the amount of work that we were able to accomplish with departmental forces.



The above chart represents over 53,000 labor hours of maintenance work performed by highway department personnel on County roads. At a total cost of over \$2,238,170.00, we were able to provide a substantial cost savings to the County over contracting this work out. We estimate the savings to be well over \$250,000.00. Performing road & bridge repair and maintenance work with our own personnel is one of the most cost-effective ways we can manage our resources more efficiently.

STATUS OF CARROLL COUNTY ROADS

The Carroll County Engineer has responsibility for maintaining approximately 307 miles of county roads. Road conditions are rated by in house staff and receive a rating on a 100-point scale. The Pavement Condition Rating System (PCR) employed by ODOT is used to develop this rating. The data represented in the chart below was gathered in 2015 and it is our intent to periodically update this information in the future. Defects in the roadway are given certain values and the sum of those defects is subtracted from 100 to reveal the pavement condition rating of the road. A PCR of 100 represents a perfect new pavement, a PCR of 0 represents a pavement with distress present at the highest or most extensive level of severity. A rating of 65 or less indicates that rehabilitation work should be considered. Please keep in mind that the rating calculations were designed around the State Highway system and result in conditions skewed toward the low end of the scale when applied to rural low volume County highways like ours. Rehabilitation projects will continue to be selected based on an in-depth engineering analysis of the particular highway section in need of repair. We have chosen to utilize this rating method merely as a tool for monitoring pavement condition variations over a period of time.

CONDITION DESCRIPTION	PCR	TOTAL MILES	PERCENTAGE OF TOTAL MILES	ACCUMULATING PERCENT OF TOTAL MILES
EXCELLENT	>90	5.73	1.87%	
GOOD	>80	105.97	34.52%	36.38%
FAIR	>65	42.27	13.77%	50.15%
POOR	<65	149.67	48.75%	98.91%
NOT RATED	-	3.36	1.09%	100.00%
	TOTAL	307		

This system only addresses the pavement surface condition as it exists on the day of evaluation and does not attempt to evaluate whether a particular road should be surfaced with a particular type of pavement.

County road mileage is classified by three surface types. Currently, approximately one third of the County mileage has an asphalt surface course, approximately one third of the County mileage has received a profile or leveling coat of asphalt and the remaining one third of the County mileage is a surface built up from years of chip and seal application. This last group contains a few miles that are still classified as a stone surfaced road and were not rated as part of this process.

The average life span of an asphalt surface course is 12 years under minimal truck traffic. For the County's 307 miles of road, that means that almost 26 miles needs to be paved every year just to keep up with normal wear and tear on our system. It currently costs around \$120,000.00 per mile to pave a 1½" overlay on a 20' wide portion of road. To pave 26 miles per year we would need an additional \$3,120,000.00 adjusted to the construction price index to keep up with material cost inflation.

STATUS OF CARROLL COUNTY BRIDGES

The Carroll County Engineer has responsibility for maintaining 144 bridges on County and Township roads. Bridges are classified as any structure with a span greater than 10 feet. Bridge conditions are rated every year by an independent engineering consultant and receive a rating on a scale of 1 to 9. A rating of 9 indicates excellent condition while a 1 indicates that the bridge is closed and out of service.

Based on the annual inspection of bridges, the following table indicates the condition of the 144 bridges in Carroll County.

CONDITION DESCRIPTION	GENERAL APPRAISAL RATING	NUMBER OF BRIDGES	PERCENTAGE OF TOTAL BRIDGES	ACCUMULATING PERCENT OF TOTAL BRIDGES
EXCELLENT	9	6	4.17%	
VERY GOOD	8	11	7.64%	11.81%
GOOD	7	47	32.64%	44.44%
SATISFACTORY	6	55	38.19%	82.64%
FAIR	5	23	15.97%	98.61%
POOR	4	1	0.69%	99.31%
SERIOUS	3	1	0.69%	100.00%
CRITICAL	2	0		
OUT OF SERVICE	1	0		
	TOTAL	144		

It is a goal of this department to keep 90% of our bridge inventory at an appraisal rating of 5 or higher. As you can see from the chart above, we have accomplished that goal. Unfortunately, we are in a continuing battle with both time and weather to keep our inventory maintained at that level.

In 2015 the Federal Highway Administration revised the way that Ohio was load rating bridges. Special Hauling Vehicles (SHVs) and Emergency Vehicles (EVs) are now included in the load rating calculations. This change has increased our number of bridges requiring reduced load postings to a total of 7; 4 are posted due to SHVs and 3 for EVs only.

The average useful life of a bridge is 50 years. For the County's 144 bridges, that means that 3 bridges need to be replaced every year just to keep up with normal wear and tear. The bridges on the Carroll County highway system range in size from a 10' span to 134' span. Replacement costs for that span range vary from \$150,000.00 to over half a million dollars. Using our average bridge size for calculation purposes it currently costs around \$325,000.00 to replace an entire bridge. At 3 bridges per year, we would need an additional \$975,000.00 adjusted to the construction price index to keep up with material cost inflation.

STATUS OF CARROLL COUNTY CULVERTS

The Carroll County Engineer has responsibility for maintaining approximately 187 large diameter culverts and about 2,000 small diameter culverts on County roads. Culverts of 3' diameter and larger on County roads are rated every two years by our in-house staff. Ratings are issued from excellent to critical. The 186 large diameter culverts range in size from 3' diameter to 10' span, the 2,000 smaller culverts include anything less than 3' diameter and are not rated on a regular basis due to their smaller size.

Based on the latest inspection of culverts, the following table indicates the condition of the 187 large diameter culverts on Carroll County roads.

CONDITION DESCRIPTION	CONDITION RATING	NUMBER OF CULVERTS >3'	PERCENTAGE OF TOTAL CULVERTS >3'	ACCUMULATING PERCENTAGE
EXCELLENT	9	0	0.00%	0.00%
VERY GOOD	8	12	6.45%	6.45%
GOOD	7	147	79.03%	85.48%
SATISFACTORY	6	3	1.61%	87.10%
FAIR	5	21	11.29%	98.39%
POOR	4	3	1.61%	100.00%
SERIOUS	3	0	0.00%	100.00%
CRITICAL	2	0	0.00%	100.00%
OUT OF SERVICE	1	0	0.00%	100.00%
	TOTAL	186		

It is a goal of this department to keep 90% of our large diameter culvert inventory at a condition rating of 5 or higher. As you can see from the chart above, we have accomplished that goal. Unfortunately, we have 24 culverts in the fair to poor rating category that are nearing the end of their useful life span and will require replacing over the next several years.

The average useful life of a culvert is 50 years. For the County's 187 large diameter culverts, that means that 4 culverts need to be replaced every year to keep up with normal wear and tear. The large diameter culverts on the Carroll County highway system range in size from a 3' diameter to a 10' span. Replacement costs for that size range vary from \$15,000.00 to \$150,000.00. Using an average current cost for calculation purposes of \$82,500.00 to replace a large culvert, at 4 culverts per year we would need an additional \$330,000.00 adjusted to the construction price index to keep up with material cost inflation.

EQUIPMENT

We added 2 Western Star plow trucks to our fleet of 11 primary plow trucks and 4 spare plow trucks in 2025. While the useful life of a plow truck in main line service is typically 12 years, we need to purchase at least one new truck per year to keep up with our 11 snow routes.

In 2025 we also purchased a used Leeboy broom, a used Bomag tandem roller, a new Ford F250 survey truck, and a used Bomag rubber roller.



To report in compliance with §5549 of the Ohio Revised Code, other equipment that will need replaced in the near future includes:

One Plow Truck per year: \$280,000

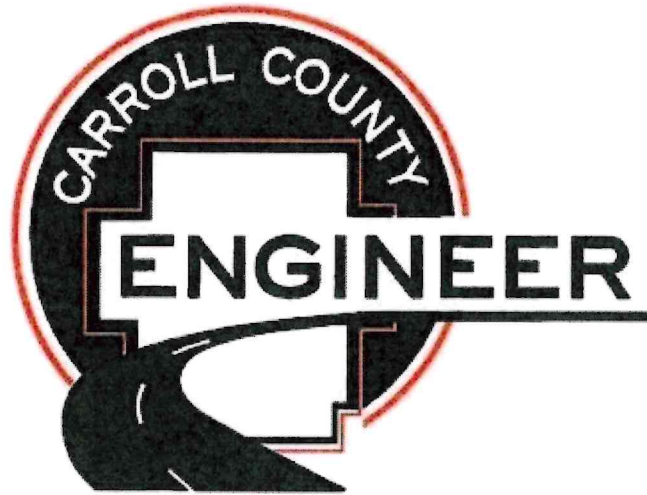
Road Broom: \$85,000

Distributor Truck: \$175,000

Hydraulic Excavator: \$225,000

Used Road Grader: \$150,000

Various hand tools, misc. small equipment and attachments, approx. \$25,000 per year



2025

RESOURCE

ALLOCATION

REPORT

HIGHWAY DEPARTMENT

The 26 full-time employees of the Carroll County Highway Department performed the following road and bridge work in 2025.

PAVEMENT

- 243 tons of permacoat asphalt for pothole patching.
- 34 miles of roadway chip & sealed using
- 4,430 tons of #8 gravel and
- 168,720 gallons of liquid asphalt.
- 3,392 tons of permacoat and
- 94 tons of hotmix asphalt for road leveling totaling
- 52 miles.
- 31 miles of berm work totaling
- 1,842 labor hours.

ROADWAY

- 916 labor hours for spot ditch cleaning and re-shaping.
- 1,368 labor hours for roadway storm cleanup.

ROADSIDE

- 3,383 labor hours of roadway mowed by County employees.
- 454 labor hours of arm mower work to clear brush on steep banks.
- 2,089 hours manually removing brush and trees from roadways and road banks.
- 0- gallons of herbicide spray by others for brush control on the right-of-way (canceled due to drought conditions).
- 355 gallons of herbicide spray by others for brush control at guardrails.
- 74,603 linear feet of guardrail sprayed with herbicide by others.

CULVERT

- 1,133 labor hours to clean and check pipes.
- 34 culvert pipes replaced

BRIDGES

- 144 bridges inspected.

TRAFFIC OPERATION

- 690 traffic signs replaced or newly erected.
- 53 traffic signs replaced due to theft.
- 145 gallons of herbicide for weed control at intersections and sign posts.

WINTER EMERGENCY

- 62 days of snow and ice control performed.
- 28 tons of salt for snow & ice control.
- 11,021 tons of snow & ice control mix.
- 6,433 labor hours.
- 6,204 equipment hours.
- 1,601 labor hours expended for winter emergency preparation.

EQUIPMENT MAINTENANCE

- 6,881 labor hours.
- 54 licensed trucks, cars and trailers.
- 41 non-licensed construction equipment and other miscellaneous equipment such as chainsaws, compactors, welders and generators.

HAULING/STOCKPILING ROAD MATERIALS

- 1,345 labor hours to haul and stock pile road materials.

ROAD WORK FOR OTHERS

The Highway Department provided labor hours for other county, township and village agencies which include:

Center Twp.	4.00
Harrison Twp.	24.50
Perry Twp.	6.00
Carroll County Agricultural Society (Fair)	41.00
Carroll County Sheriff	10.00
Carroll County Commissioners	16.00
Carroll Golden Age Retreat	8.00
Carroll County Historical Society	11.00
Carroll Soil & Water	7.50
Carroll County Dog Pound	188.00
	316.00

ENGINEER'S OFFICE

The Engineer's Office consists of 5 full-time staff personnel in addition to the Engineer. Highlights achieved in 2025 include:

- The administration of 107 right-of-way permits and 109 driveway permits.
- 21 special hauling permits were required.
- The preparation of payroll, statements for payment, billings and associated administrative work for our budget was performed on a daily basis.
- Application for grant funding from the Ohio Public Works Commission/State Issue I program for road, culvert and bridge projects.
- Applications for grant funding from the Ohio Department of Transportation's Local Roads Oil and Shale Program for resurfacing portions of Avon Road (CR21), Antigua Road (CR11), and Citrus Road (CR68).
- Application for grant funding from the Ohio Department of Transportation's HSIP Program for speed zone studies along 20 miles of county roads.
- The preparation of specifications and bid documents for a variety of projects. These included: (a) approximately 51 miles of centerline striping on various county roads, and (b) resurfacing of approximately 4.6 miles of Arrow Rd (CR15).
- The performance of daily inspection and inspection reports on all contract work.
- Administration of the Wheeler Bill for ODOT, which includes all township & county roads.
- Daily coordination of highway improvements on County and Township roadways for oil and gas production.
- In addition to the day-to-day requirements of meeting County objectives, the Engineer's Office provided professional services for numerous townships, villages and the Carroll County Commissioners, including:
 - Dew Drop Road Culvert Replacement (PER-T121-2372)
 - Crocus Road (TR109) for Orange Twp. Trustees – center line and right-of-way determination and topographic survey
 - Countywide road right-of-way determination
 - Boundary and topographic surveys for proposed salt storage
 - Initial planning for newly acquired garage/office site (ODOT)
 - Began implementing section and quarter section location plan
 - Reviewed and revised County Conveyance Standards

MAP OFFICE

The 2 full-time employees of the Tax Map Office record deed transfers and surveys. They maintain the tax plat information by lot, parcel or acreage on a daily basis in support of the County Auditor. In 2025 this office processed 1,964 deeds, 1,091 e-file deeds, 2,020 transfers and 132 surveys.

The Map Office provides advice, copies of maps and answers questions in support of many Carroll County Government offices. These include the Auditor's Office, the Board of Commissioners, Regional Planning Commission, Economic Development, Health Department, Title Office and many of the villages and townships. Services are also provided to the public which include attorneys, surveyors, appraisers, and private citizens.

PERSONNEL TRAINING

Random drug testing was completed quarterly and pre-employment drug tests were conducted on all new hires. Safety films/instructors were presented throughout the year to provide employees with safety tips, reminders and precautions when performing their assigned tasks. Training seminars attended by various employees included:

- 01/24/25 - Loader training for Scott Lumley
- 01/29/25 - Winter Safety Slips, Trips & Falls
- 02/11/25 - Excavator Program (Paradigm/Ohio 811)
- 02/19/25 - Defensive Driving class attended by Zeph Casper
- 03/18/25 - New employee training: Flagging, Chipper, Snow & Ice Control
- 03/24/25 - First Aid: Stop the Bleed, Bone/Joint Injury, Bee Stings & Tornado Safety
- 04/03/25 - Deep Foundations & Ground Improvements
- 04/04/25 - Engineering Ethics & Consequences
- 04/14/25 - Slope Stabilization and Landslide Prevention
- 04/29/25-04/30/25 - Bridge Workers, Supervisors & Engineers Conference
- 04/30/25 - Clearinghouse annual queries - no drivers prohibited
- 05/08/25 - Jarraff training (held by Frontier Right-of-Way)
- 05/12/25 - Trenching training (Eric White, BWC)
- 05/14/25 - Flagging & Work Zone Safety
- 06/25/25 - Defensive Driving (CORSA)
- 06/26/25 - Heat Stress
- 07/28/25 - Defensive Driving
- 08/12/25 - Defensive Driving
- 08/18/25 - New employee training: Flagging, Chipper, Snow & Ice Control
- 08/25/25 - New employee training: Flagging, Chipper, Snow & Ice Control
- 08/29/25 - Fire extinguisher inspection
- 09/04/25, 09/18/25, 09/22/25, 09/24/25, 09/25/25, 09/26/25 - Winter training
- 09/24/25 - Brush chipper
- 10/07/25, 10/10/25, 10/15/25, 10/16/25, 10/17/25 - Winter training
- 10/29/25 - Snow & Ice Control (LTAP)
- 10/30/25, 10/31/25 - Winter training
- 11/04/25, 11/5/25, 11/7/25, 11/17/25, 11/18/25, 11/26/25 - Winter training
- 11/06/25 - AC machine demonstration
- 12/8/25 - Winter training
- 12/22/25 - Chainsaw Safety & Onspot chains

Brian J Wise, P.E., P.S.
Carroll County Engineer