

**GEAUGA COUNTY
ENGINEER**

2024 Annual Report

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Thank you for taking the time to review the 2024 Annual Report from the Geauga County Engineer's Office.

This report provides an overview of the projects, maintenance efforts, and core responsibilities undertaken by our Office throughout the year. It is intended to offer insight into the critical services we provide to the residents of Geauga County, Ohio.

In accordance with Section 5543 of the Ohio Revised Code, the County Engineer is responsible for the construction, reconstruction, improvement, and maintenance of all county roads and bridges, as well as township roads. Additionally, the Engineer provides essential engineering services for township infrastructure.

This report outlines how the Geauga County Engineer's Office successfully fulfilled these statutory duties in 2024.

MEET ANDREW W. HAUPT, PE, PS



Andrew began his career in civil engineering after earning a Bachelor of Science in Civil Engineering from Cleveland State University, building on his foundational knowledge with an Associate of Science from Lakeland Community College. Over the years, he has held key roles at the Geauga County Engineer's Office and the Ohio Department of Transportation, where he played an integral part in a wide range of impactful projects. His experience has provided him with deep expertise in civil engineering, project management, and infrastructure development.

Andrew believes in leading through innovation, fostering open and transparent communication, and continually learning to transform and improve public infrastructure for the betterment of the community. 2

ADMINISTRATIVE DEPARTMENT

Katie Taylor - Administrator



The Administrative Department continues to embrace technological advancements to improve its efficiency and effectiveness. Serving a dual role, the department not only supports the daily operations of the Engineer's Office but also guides long-term strategic planning and procedural development.

A major initiative in recent years has been the digitization of historical records, including survey data, correspondence, and documentation of past road projects. Previously, these records consumed significant office space and made locating specific documents a time-intensive process. Through ongoing scanning and digital indexing, these records are now securely stored in a digital format, making them far more accessible. This transformation enables engineering staff to conduct research more efficiently and allows the public to perform streamlined public records searches.

In addition to digital transformation, the Administrative Department is continuously updating and refining policies to ensure the sustainable and effective management of the Engineer's Office.

DEPARTMENT RESPONSIBILITIES:

- Human Resource Administration
- Drug and Alcohol Training & Testing
- Payroll
- Prevailing Wage Compliance
- Records Retention
- Employee Training and Safety Programs
- Benefits Administration
- Invoice Procurement and Processing
- Contract Negotiations
- Ohio Public Records Compliance

BRIDGE DEPARTMENT

Jacob Scotese, PE - Deputy Engineer



The County Engineer is responsible for inspecting and maintaining Geauga County's 186 bridges located on county and township roads.

The Bridge Department, along with other state agencies, utilizes the Ohio Department of Transportation's (ODOT) AssetWise Inventory and Appraisal System to report the condition ratings and inventory updates for the 2024 inspection year. Through efficient management of inspection data, the Engineer has established a scheduled bridge maintenance program aimed at preserving and extending the lifespan of these critical infrastructure assets. In accordance with State and Federal law, each bridge is inspected annually and evaluated based on ODOT's guidelines. Bridges are assigned a sufficiency rating derived from inspection factors.

The "Sufficiency Rating" is a metric used to determine whether or not a bridge is structurally deficient or functionally obsolete. The sufficiency rating is determined by multiple factors such as the structural evaluation, obsolescence of its design, and its importance to the traveling public. The sufficiency rating is the main metric used by the Federal Highway Administration to prioritize the allocation of funds. The rating varies from zero (0) to one-hundred (100). The lower the number, the higher priority the structure receives.

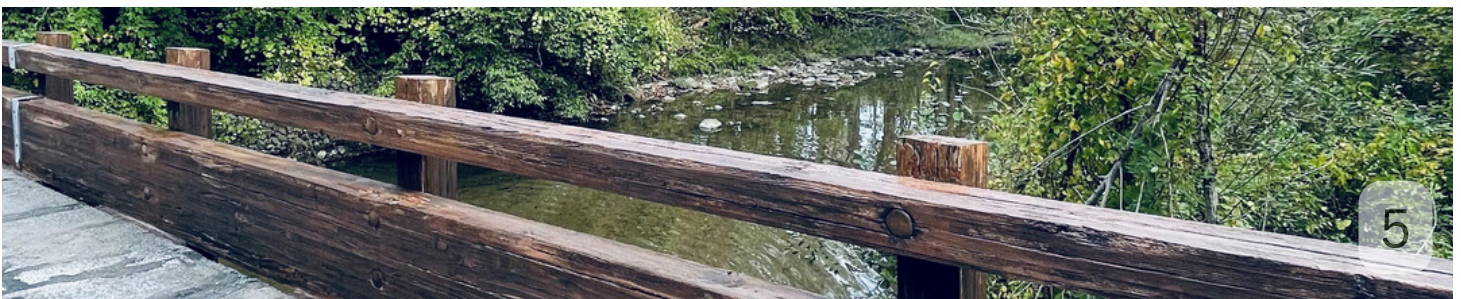


Following annual inspections, each bridge is assigned a "General Appraisal" rating which is a condition coding system derived by the Federal Highway Administration. This general appraisal rating helps prioritize bridges for repair or replacement, based on the condition of various structural elements evaluated during each inspection, in line with state and federal requirements and is the main metric used to determine the overall condition of the structure. The rating is on a scale from zero (0) to nine (9) as follows:

General Appraisal Value	General Appraisal Ranking
7 to 9	Good
5 to 6	Fair
3 to 4	Poor
0 to 2	Critical

It is the policy of the Geauga County Engineer to maintain 95% of the county bridges at a level of fair or better (GA of 5 or greater). The following is a summary of the condition assessment performed on the County’s bridge inventory by year:

General Appraisal	2024		2023		2022	
	Number of Bridges	Percent (%) of Bridges	Number of Bridges	Percent (%) of Bridges	Number of Bridges	Percent (%) of Bridges
Fair or Better	183	98.4%	182	97.8%	181	97.8%
Less than Fair	3	1.6%	4	2.2%	4	2.2%
Total # Bridges	<u>186</u>		<u>186</u>		<u>185</u>	



The following is a breakdown of the general appraisal of the county’s bridge inventory by year:

General Appraisal Value	2024		2023		2022	
	Number of Bridges	Percent (%) of Inventory	Number of Bridges	Percent (%) of Inventory	Number of Bridges	Percent (%) of Inventory
9	9	4.8%	7	3.8%	8	4.3%
8	58	31.2%	63	33.9%	66	35.7%
7	59	31.7%	54	29.0%	54	29.2%
6	42	22.6%	39	21.0%	38	20.5%
5	15	8.1%	19	10.2%	15	8.1%
4	3	1.6%	4	2.2%	4	2.2%
3	0	0%	0	0%	0	0%
2	0	0%	0	0%	0	0%
1	0	0%	0	0%	0	0%
0	0	0%	0	0%	0	0%
<i>Total</i>	<u>186</u>		<u>186</u>		<u>185</u>	

Bridges with a general appraisal rating of 4 that are proposed for replacement and tentative schedule:

- 1. Riverview Drive: 2025
- 2. Pettibone Road: 2026

Bridge Replacements that took place in 2024:

- 1. Robinson Road – 65 ft galvanized steel truss
- 2. Thwing Road – 19 ft x 6 ft precast concrete four-sided box
- 3. Sperry Road – 22 ft x 6 ft precast concrete four-sided box



CONSTRUCTION DEPARTMENT

Jacob Scotese, PE - Deputy Engineer



The Construction Department oversees the management and inspection of all roadway and infrastructure improvement projects across Geauga County, including 236 miles of County-maintained highways, 186 bridges, and 577 miles of township-maintained roads. The following information provides an overview of the department's responsibilities, along with key statistics that highlight the work completed and ongoing efforts to enhance the county's roads and bridges.

DEPARTMENT RESPONSIBILITIES:

- Traffic related studies including, but not limited to, volume counts, speed studies, crash review, and signal warrant analysis
- Culvert Inventory Management and Inspection for County Highways and Township Roads
- Management and inspection of all roadway resurfacing, reconstruction, culvert and bridge replacement projects on all County and Township roads
- Management of all Subdivision Development, including both new and expanded subdivisions
- Prevailing Wage Law Contract Compliance



The County Engineer’s Office performed project management and inspection services on the following County and Township improvement projects in 2024:

- o 3 County Bridge Projects
- o 8 County Highway Resurfacing Projects
- o 2 County Highway Culvert Replacement Projects
- o 1 Embankment Stabilization Project
- o 1 County Highway Roadway Pavement Marking Project
- o 9 Township Roadway Resurfacing Projects
- o 1 Township Roadway Reconstruction Project
- o 1 Township Roadway Widening & Resurfacing Project

The County Engineer is responsible for the Project Management and inspection for all roadway resurfacing, reconstruction, culvert and bridge replacement contracted projects on all County and Township roads.

19.7 miles of County Highways improved.
 21.9 miles of Township roadways improved.

Through diligent project management on County Highway & Bridge projects and Township roadway projects, the Geauga County Engineer project managers saved taxpayers a total of \$76,358.07, the difference between the bid award amount and the final contract amount.

Excel table provided with the statistical breakdown.

County Projects

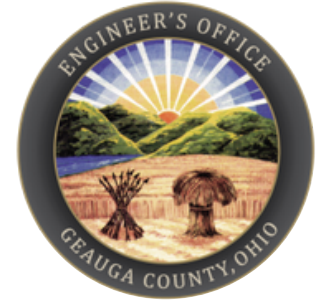
Project Title	Roadway Improvement	
	(miles)	Final Contract Amount
BR-0012-03.59-2024 Sperry Road Bridge	-	\$ 308,410.50
BR-0027-B-02.60-2024 Thwing Road Bridge	-	\$ 302,131.50
BR-0076-01.88-2023 Robinson Road Bridge	-	\$ 1,485,216.14
RS-0003-DE-2024 Claridon Troy Road	2.23	\$ 568,041.52
RS-0004-KM-2024 Auburn Road	2.53	\$ 658,722.38
RS-0008-DF-2024 Wilson Mills Road	2.28	\$ 681,445.25
RS-0010-DF-2024 Bell Street	3.40	\$ 928,903.08
RS-0013-AD-2024 Chardon Windsor Road	3.56	\$ 907,196.00
RS-0016-FG-2024 Fairmount Road	2.63	\$ 729,703.04
RS-0032-EF-2024 Munn Road	1.6	\$ 485,946.49
RS-GEA-V-2024 Various Roads	1.5	\$ 808,500.46
ES-GEA-V-2024 Various Roads	-	\$ 125,886.00
PM-GEA-V-2024 Various Roads	70	\$ 252,336.55
CU-0037-F-06.520-2024 Clay Street Culvert	-	\$ 63,186.10
CU-0037-F-07.140 Clay Street Culvert	-	\$ 73,581.80
<i>Resurfacing Project (miles):</i>	<u>19.7</u>	<u>\$ 8,379,206.81</u>
<i>County Wide Roadway Pavement Markings(miles) :</i>	<u>70</u>	

Township Projects

Project Title	Roadway Improvement	
	(miles)	Final Contract Amount
RS-AUB-V-2024 Various Roads	2.54	\$ 707,055.10
RS-BAI-V-2024 Various Roads	2.12	\$ 1,061,136.63
RS-0140-A-2024 White Road	0.76	\$ 198,377.40
RS-CHE-V-2024 Various Roads	5.06	\$ 1,271,901.41
RS-0109-A-2024 Hall Road	0.73	\$ 260,907.50
RS-HAM-V-2024 Various Roads	1.22	\$ 410,640.20
RC-HUN-V-2024 Various Roads	0.75	\$ 771,603.90
RS-MUN-V-2024 Various Roads	0.98	\$ 380,777.65
RS-NEW-V-2024 Various Roads	4.27	\$ 1,194,290.85
RW-0144-AB-2024 Dines Road	2.2	\$ 900,590.00
RS-TRO-V-2024 Various Roads	1.27	\$ 375,085.70
<i>Township Roadway Projects (miles):</i>	<u>21.9</u>	<u>\$ 7,532,366.34</u>



DESIGN, FUNDING & PLANNING DEPARTMENT



Shane Hajjar, PE - Deputy Engineer

The Design, Funding and Planning Department is responsible for various project designs on the 236 miles of County Roads, 186 bridges, and 577 miles of township roads. This department uses professional engineering expertise to perform statutory engineering responsibilities for all County roads and bridges, and all Township roads in the 16 Townships within Geauga County.

DEPARTMENT RESPONSIBILITIES:

- Design of all bridges, culverts, ditches and roads
- Right-of-way acquisition
- Hydraulic studies
- Preparation of improvement plans, specifications, and estimates



The County reports its roads and bridges infrastructure assets using the modified approach. The following disclosures pertain to the condition assessment and budgeted versus actual expenditure in 2024 for the preservation of these assets.

The Geauga County Engineer administers a five year program for road and bridge repairs and improvements. This plan changes continually based upon conditional inspections and budget allowances. Factors considered when evaluating a roadway include time since the last surface maintenance, current pavement condition from visual observation, traffic volume, and traffic type. A general overall numerical rating ranging from 0 to 9 is assigned to sections of roadways as a result of the yearly visual observations, with 0 being the lowest ranking and 9 being the highest. It is the practice of the Geauga County Engineer’s Office to maintain at least eighty percent (80%) of the mileage of the County highway system at an appraisal rating of 5 or more. The most recent assessment found that one hundred percent (100%) of the County roads have a numerical rating of 5 or higher.

Each bridge is evaluated annually based on the State Law and in accordance with Ohio Department of Transportation (ODOT) recommendations. Each bridge is given an ODOT sufficiency rating and an overall appraisal rating based upon bridge inspection rating factors. It is the practice of the County Engineer to maintain bridges in the County where ninety-five percent (95%) of the structures have an overall bridge appraisal rating of 5 or more. The most recent assessment found that ninety-eight percent (98%) of the County bridges have a numerical rating of 5 or higher.

The general overall ratings for roads and ODOT general appraisal for bridges are as follows:

Failed	0	0	0
Imminent Failure	1	0	0
Critical	2	0	0
Serious	3	0	0
Poor	4	3	0
Fair	5	15	10.30
Satisfactory	6	42	50.53
Good	7	59	44.39
Very Good	8	58	53.55
Excellent	9	9	76.90
Total		186	235.67

The following summarizes the overall ratings as of December 31, 2024, 2023, and 2022:

Condition Assessment	2024		2023		2022	
	Lane Miles	% of Lane Miles	Lane Miles	% of Lane Miles	Lane Miles	% of Lane Miles
Fair or Better	235.7	100%	235.3	100%	235.7	100%
Less than Fair	0	0%	0	0%	0	0%

Condition Assessment	Number of	% of	Number of	% of	Number of	% of
	Bridges	Bridges	Bridges	Bridges	Bridges	Bridges
Fair or Better	183	98%	182	98%	180	97%
Less than Fair	3	2%	4	2%	5	3%

The following is a comparison of the County Budgeted and Actual Expenditures for preservation of existing roads and bridges:

The following is a comparison of the County Budgeted and Actual expenditures for preservation of existing roads and bridges:

Year	Budgeted Expenditures	Actual Expenditures	Difference
2024	\$16,090,766	\$13,655,970	\$2,434,796
2023	\$14,565,392	\$12,292,104	\$2,273,288
2022	\$15,441,011	\$14,056,208	\$1,384,803
2021	\$14,138,178	\$11,122,791	\$3,015,387
2020	\$14,254,799	\$10,281,444	\$3,743,355

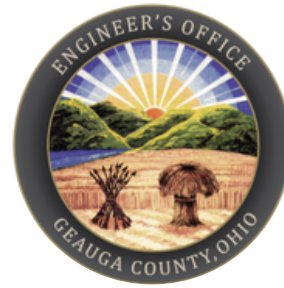


SURVEY DEPARTMENT

Nick Goodrich, PS - Surveyor II

The Survey Department continues to grow and enhance its capabilities as a team. The Engineer's Office effectively and efficiently utilizes newly acquired, cutting-edge survey equipment, including a robotic total station and a GPS receiver configured to use ODOT's Virtual Reference Station (VRS) system. This advanced technology has enabled the Survey Department to increase both efficiency and accuracy, while requiring fewer staff members per survey crew. The department has provided the Engineer's Office with the following survey-related data collection:

- Control
- Topological
- Drainage
- Easement
- Right-of-Way and centerline surveys



The Survey Department supported the Engineering Department by conducting record research, assembling records, and diligently recovering field monuments. Additionally, the Survey Department assisted townships with centerline retracement, right-of-way staking, drainage surveys, and right-of-way vacations and dedications.

DEPARTMENT RESPONSIBILITIES:

- Right-of-Way Relocation
- Vacation of Public Right-of-Ways
- Research of records for improvement projects
- Acquisition of easements for bridges and culverts
- Retracement of county and township road centerlines



Monument Reference/Reset Plats

- Reference plats completed for 2024 projects. 52 Plats
- Reset plats completed for 2024 projects. 48 Plats
- Property pin reset plats completed for 2024 projects. 2 Plats

Monuments Referenced/Cored/Set/Reset

- Monuments referenced for 2024 projects. 145 Monuments
- Monuments cored for 2024 projects. 23 Monuments
- Monuments set for 2024 projects. 19 Monuments
- Monuments reset for 2024 projects. 60 Monuments



Right-of-Way / Centerline Staked

- Approximate centerline and right-of-way staked in 2024. 2.75 Miles
- Approximate County Line staked in 2024. 0.25 Miles
- Miscellaneous Staking (1 Building with offsets and drive apron, project limits, electrical locations, property lines)

Easements

- Easements created in 2024. 10 Easements
- Easements recorded in 2024. 6 Easements

Centerline Plats / Right-of-Way Calculations

- Centerline plats completed in 2024. 7 Plat
- Centerline plats still in progress from 2024. 2 Plats
- Monument location plats completed in 2024. 1 Plat



(The above noted plats include approximately 16.70 Miles of roadway which include research, field investigation, digging for monuments, traversing, office calcs, drafting, setting monuments, etc.)

Topographic Surveys

- 13 projects for 2024/2025 construction season (road improvement, culverts, bridges) covering approximately 60 acres.

Miscellaneous Survey Work

- Assisting private surveyors, government agencies, and the public with requests (recordinformation, field data, field work, locating and recovering monumentation called for inthe roadway). 13 information requests, 2 involving field work.
- Assisting with construction projects (GPS control checks, elevation checks, setbenchmarks, resetting monumentation disturbed during construction). Assisting with 6 projects in 2024.
- GPR (Ground Penetrating Radar) various locations across the county for finding monuments, soil disturbances and underground utilities covering approximately 1.5 acres.

HIGHWAY MAINTENANCE DEPARTMENT



Rob Weigle - Highway Superintendent

The Geauga County Engineer's Highway Maintenance Department is entrusted with the upkeep of approximately 236 miles of county roads and 186 bridges. In 2024, we proudly fulfilled our core mission of ensuring safe and efficient travel within and through Geauga County.

Our department worked in close collaboration with the Engineering Department to enhance public safety and infrastructure. Key initiatives included the removal of hazardous trees, improvements to drainage systems, replacement of driveway and roadway culverts, bridge repairs, asphalt repairs, and crack sealing.

The Highway Maintenance Department is dedicated to serving both residents and the traveling public, providing essential maintenance to extend the lifespan of our infrastructure while ensuring safety. We remain committed to upholding the highest standards and values, ensuring Geauga County remains safe, clean, and beautiful for generations to come.



Summary of 2024 Highway Projects and Activities

Projects	Miles	Number
Asphalt Repair	14.6	
Crack Sealing	35.3	
Ditching ahead of resurfacing	20.0	
Drive Culverts Installed		84
Total Winter Mileage Maintained	94,000	
Tree Hazards Removed		133
Work Orders Completed		429
Total Served	94,069.9	646



TAX MAP DEPARTMENT



Steve Roessner, PS - Tax Map Supervisor

The Geauga County Tax Map Department is responsible for assisting the public in obtaining tax maps and survey information for real property in Geauga County.

DEPARTMENT RESPONSIBILITIES:

- Maintains the GIS map depicting the County Auditor’s tax duplicate
- Reviews property descriptions and plat maps
- Assigns house numbers and business addresses for driveway permit applications



WORK COMPLETED BY THE TAX MAP DEPARTMENT IN 2024

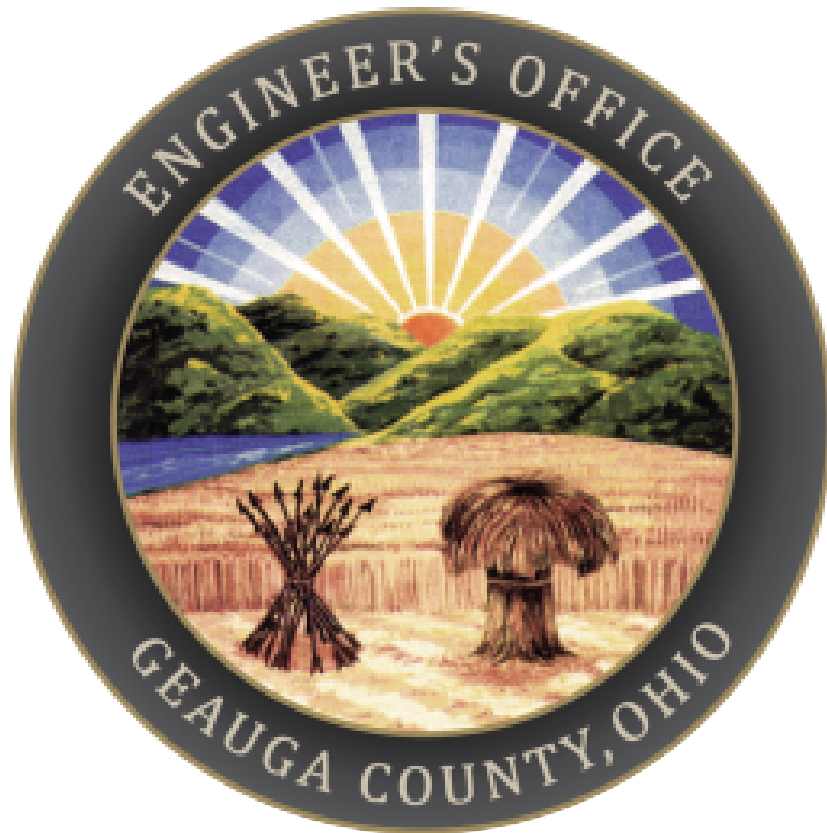
- **339** Addresses Assigned, Changed, Split, Removals, Coordinated
- **404** Descriptions Reviewed
- **11** Easements Reviewed
- **27** Plats Reviewed

CURRENT EMPLOYEES

- Kelly Baeslach, Office Manager
- Aubrey Baker, Admin, Outreach & Development
- Ladell Belvin, Highway Worker I
- Brent Buell, Highway Worker III
- Rick Carlson, Foreman
- Matt Carver, Fleet & Inventory Manager
- Keith Delfs, Survey Technician III
- Brent Eldred, Highway Worker V
- Mark Fritsch, Mechanic I
- Cameron Gatian, PE, Bridge Engineer
- Nick Goodrich, Surveyor II
- Thomas Goodridge, GIS Technician
- Shane Hajjar, PE, Deputy Engineer
- Tyler Hall, Mechanic III
- Elijah Haller, EI Engineer I
- Andrew W. Haupt PE, PS, County Engineer
- Eric Hawk, Mechanic IV
- Luke Horwatt, Highway Worker V
- Jerad Howes, Highway Worker V
- Blake Kalister, Highway Worker I
- Corey Keeney, Highway Worker III
- Brian Kingure, Highway Worker IV
- Jonathan Kreuz, Highway Worker IV
- Nicholas Lowery, Accounts Coordinator
- Susan Martin, Tax Map Technician II
- Ross McKinstry, Highway Worker II
- Evan Miner, Highway Worker IV
- Connor Packard, Highway Worker II
- Ron Quercioli Jr. , Highway Worker V
- Joe Rini, Assistant Highway Superintendent
- Steve Roessner, Tax Map Supervisor
- Tom Ross, Permit Technician Coordinator
- Steve Sabol, Highway Worker IV
- Traci Salkiewicz, PE, Deputy Engineer
- Alec Schreier, Highway Worker I
- Jake Schuenaman, EI, Engineer I
- Tyler Schubert, Highway Worker II
- Jacob Scotese, PE, Deputy Engineer
- Kevin Shea, Highway Worker III
- Matthew Sieracki, Facilities & Infrastructure Mger
- Katie Taylor, Administrator
- Lee Thomas, Foreman
- Anthony Tirabassi, Engineer I
- Tracy Turnbull, Director of Highway Operations
- Chris Villers, Highway Worker V
- David Waid, Highway Worker I
- Rob Weigle, Highway Superintendent
- Tim Woodcock, PE, Engineer IV



This report sets forth the condition of the roads, bridges, culverts and facilities in the responsibility of the County Engineer. It includes an estimate of the funds needed to maintain and improve this infrastructure and complies with the requirements of the Ohio revised Code Chapter 5543.



2024

End