



BOONE COUNTY ROAD & BRIDGE 2021 ANNUAL REPORT

*A cooperative effort between the
Engineering Division of Resource
Management and Road & Bridge*

Vision Statement

All citizens of Boone County benefit from a safe, modern and well maintained transportation system which results in a high level of trust and confidence placed in Boone County Road and Bridge & Boone County Resource Management-Engineering Division.

Letter from the Chief Engineer

Dear Boone County Commissioners and Boone County Residents,

The Boone County Resource Management – Engineering Division is pleased to present our Annual Report which highlights major activities and accomplishments for fiscal year 2021. Our mission is to maintain and improve the County's 772-mile road network and associated drainage structures. We remain confident that our proactive approach and data-driven programs are the core reasons for our success.

The dedication of our employees and their ability to communicate and coordinate with each other and with the Road and Bridge employees is the key to our accomplishments. Together, we will continue to provide a safe, modern, and well-maintained transportation system while serving the citizens of Boone County with excellence and integrity.

Thank you for the continued support and the opportunity to serve.

Respectfully,



Jeff McCann, P.E.
Chief Engineer

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Requirement #1

Report the money expended for construction, repair and maintenance of such roads, highways, bridges and culverts during the preceding year.



Fiscal Year 2021 Expenses

FY2021 Expenses

Road & Bridge Expenditures Yearly Comparison

Expenditures by Function–Budget Basis – Road & Bridge Fund (Major Fund)

	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual
Maintenance	\$ 8,423,002	\$ 7,316,481	\$ 8,025,593	\$ 7,136,781	\$ 7,095,987
Road Infrastructure Rehab Preservation	2,225,936	3,287,483	4,161,622	3,488,468	5,171,587
Road Inspection	2,280,728	2,232,145	1,147,802	1,122,565	1,037,361
Stormwater Planning	32,078	42,957	85,783	115,563	117,043
Administrative Services Charge	241,755	241,755	241,755	329,163	405,000
Insurance Activity	12,904	30,590	2,753	10,870	8,647
Facility Repair & Replacement	50,000	50,000	50,000	50,000	50,000
Property Tax Distribution	218,667	224,663	249,839	247,149	258,052
Sales Tax Distribution	2,354,854	2,464,895	2,694,854	2,680,370	2,739,268
CART/MV Distribution to Road District	79,381	83,799	87,359	87,494	89,271
Other	4,247	(473,324)	517,760	13,246	6,487
Total	\$ 15,923,552	\$ 15,501,444	\$ 17,265,120	\$ 15,281,669	\$ 16,978,703
	2018 Actual	2019 Actual	2020 Actual	2021 Estimated	2022 Budget
Maintenance	\$ 7,063,077	\$ 7,128,059	\$ 6,960,412	\$ 6,144,615	\$ 7,238,846
Road Infrastructure Rehab Preservation	3,706,517	6,646,329	3,741,156	4,250,944	4,865,000
Road Inspection	2,586,288	1,195,385	1,022,210	229,268	300,610
Stormwater Planning	114,620	110,767	114,628	140,409	169,087
Fleet Maintenance Operations	-	-	-	1,497,889	1,616,431
Traffic/Sign	-	-	-	134,869	146,686
R&B -Administration	-	-	-	289,588	290,000
Facilities Maintenance/Custodial	-	-	-	127,618	100,442
RM-Administration	-	-	-	133,238	264,258
RM-Engineering	-	-	-	1,319,367	535,830
R&B IT Hardware & Software	-	-	-	-	70,726
Administrative Services Charge	538,000	630,000	675,000	615,030	675,000
Insurance Activity	44,941	23,862	1,782	376,972	199,168
Facility Repair & Replacement	150,000	150,000	150,000	150,000	150,000
Property Tax Distribution	264,403	271,372	279,453	290,725	306,010
Sales Tax Distribution	2,718,437	2,757,898	2,745,457	2,783,805	3,039,427
CART/MV Distribution to Road District	88,168	89,095	86,126	94,925	97,570
Other	131,927	158,964	182,193	8,000	10,000
Total	\$ 17,406,378	\$ 19,161,731	\$ 15,958,417	\$ 18,587,262	\$ 20,075,091

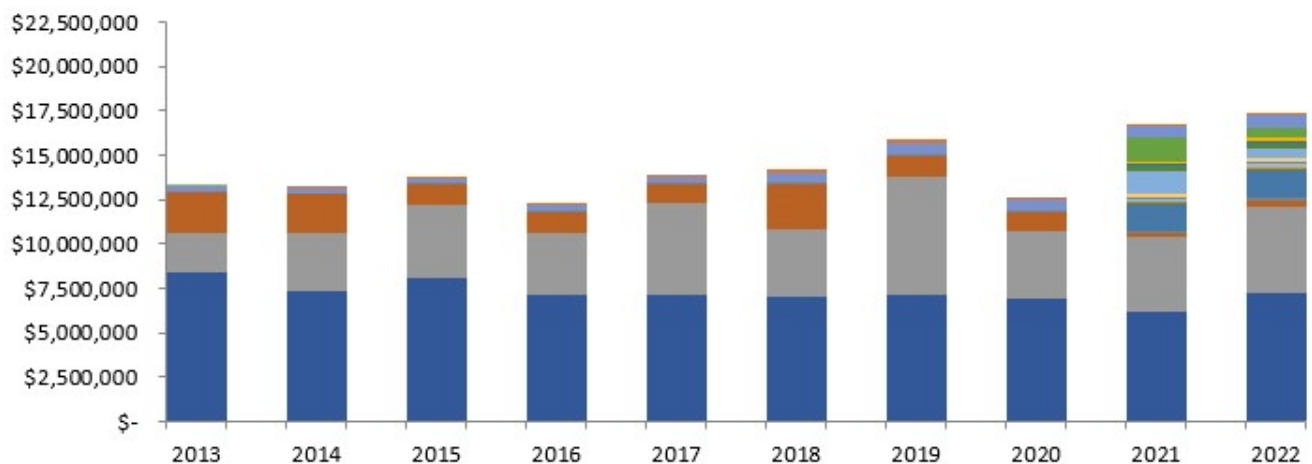
FY2021 Expenses

Road & Bridge Expenditures Yearly Comparison

Amounts shown below are actual dollars spent for 2013 through 2020, projected dollars spent for 2021 and budgeted dollars for 2022.

Prior to 2015 money dedicated to Pavement Preservation and Rehabilitation projects were budgeted in different categories. Beginning with the 2015 budget Pavement Preservation and Rehabilitation projects were classified in the same category.

Expenditures by Function - Road & Bridge

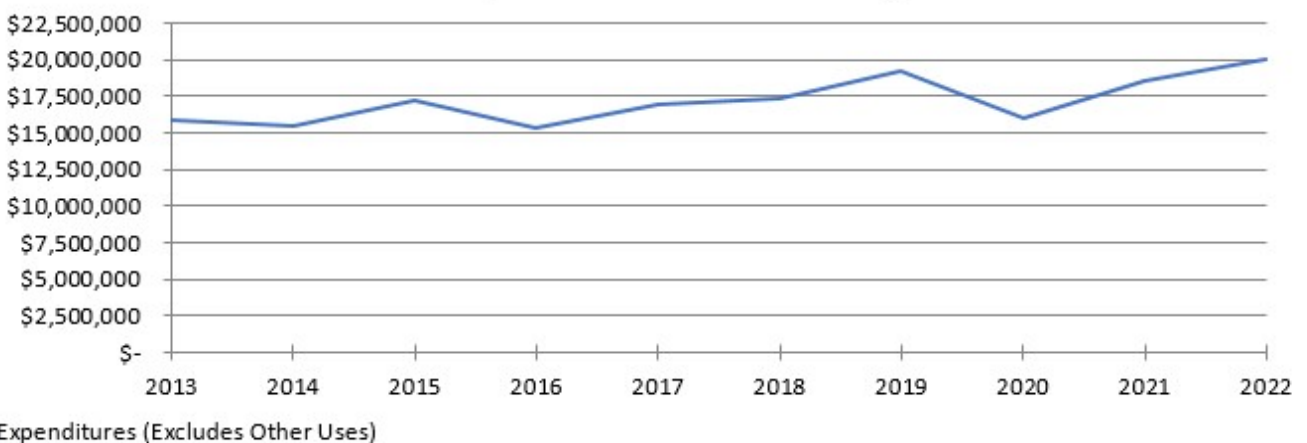


- Maintenance
- Stormwater Planning
- R&B -Administration
- RM-Engineering
- Facility Repair & Replacement
- CART/MV Distribution to Road District
- Road Infrastructure Rehab Preservation
- Fleet Maintenance Operations
- Facilities Maintenance/Custodial
- Administrative Services Charge
- Property Tax Distribution
- Road Inspection
- Traffic/Sign
- RM-Administration
- Insurance Activity
- Sales Tax Distribution
- R&B IT Hardware & Software
- Other

FY2021 Expenses

Road & Bridge Expenditures Yearly Comparison

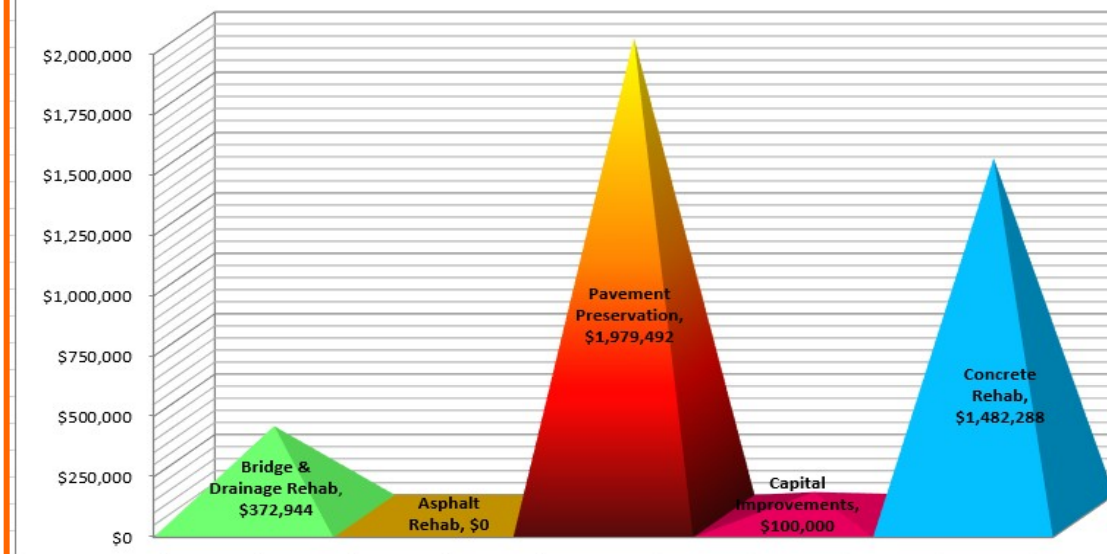
Expenditures - Road & Bridge



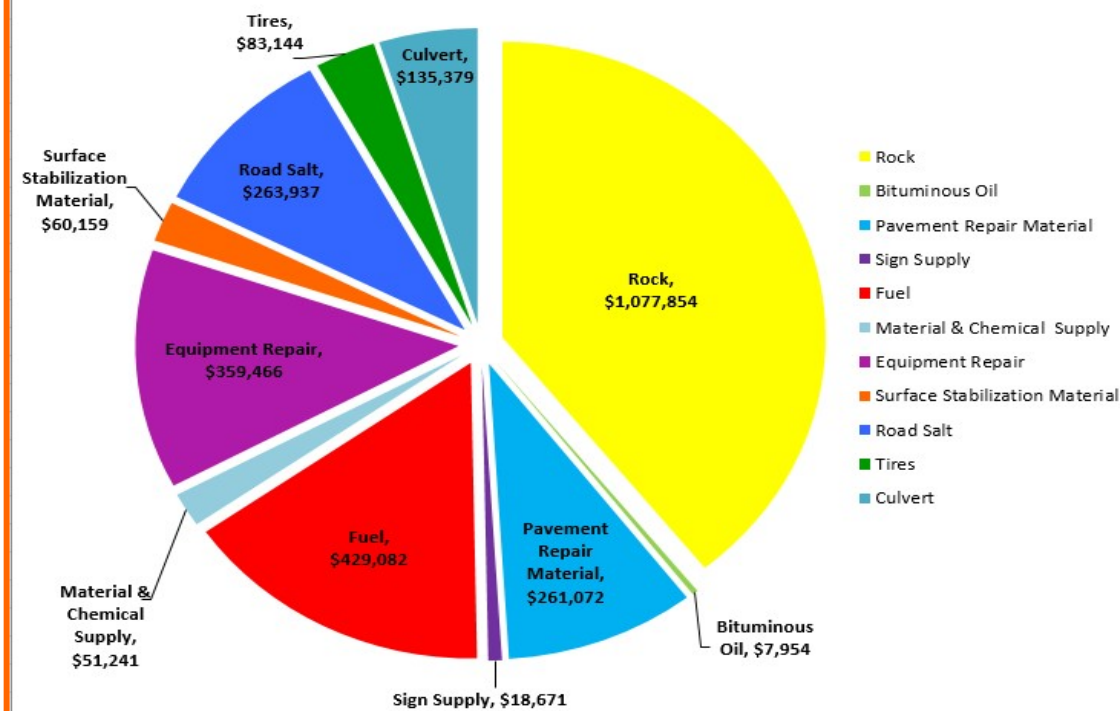
- ◆ 2019 Infrastructure Preservation & Rehab funding level increased for the El Chaparral Concrete rehab project
- ◆ 2020 Infrastructure Preservation & Rehab funding level increased for County participation in the replacement of the I-70 bridge at Rocheport
- ◆ 2021 Infrastructure Preservation & Rehab funding appears to be larger than normal due to re-appropriation of 2020 budgeted funds for planned projects that were postponed.

FY2021 Expenses

Program Expenses 2021



Road & Bridge Major Supplies Expenses 2021



FY2021 Project Money Expended

Pavement Preservation

Preserve: to keep safe from destruction

Webster's Collegiate Dictionary 10th edition

Pavement Preservation is the application of

the right treatment,

to the right pavement,

at the right time.

The philosophy of pavement preservation is to perform lower cost restoration applications to roads while they are in excellent or good status; to keep them in good condition, rather than performing higher cost treatments to roads in a worse state of repair. By applying this management strategy, Boone County protects the investment made in paved roads, extends the life of paved roads, and avoids more costly reconstruction remedies. Evidence of this approach to maintaining roads works is proven by our road condition rating and our pavement preservation budget. Using a prescribed cycle of asphalt overlay, surface seal and preservation chip seal maintenance techniques Boone County has consistently maintained ratings of our paved roads at an acceptable or better condition within a two million dollar budget; which has remained constant since 2011 or before.



FY2021 Project Money Expended

Asphalt Overlay

Project Overview:

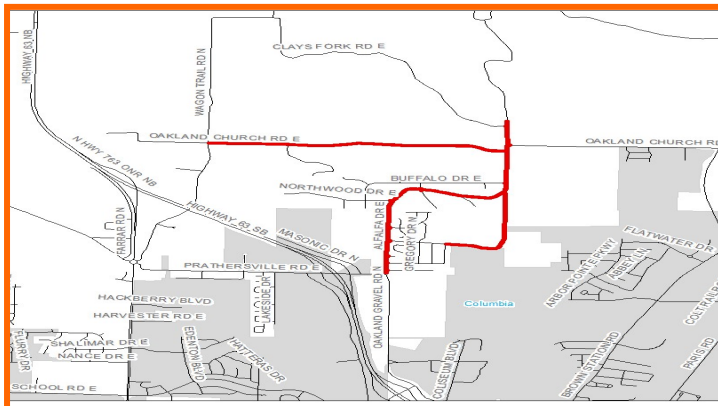
- ◆ Preventative maintenance typically applying 2" of new asphalt mix to roads showing moderate distress

Project Explanation:

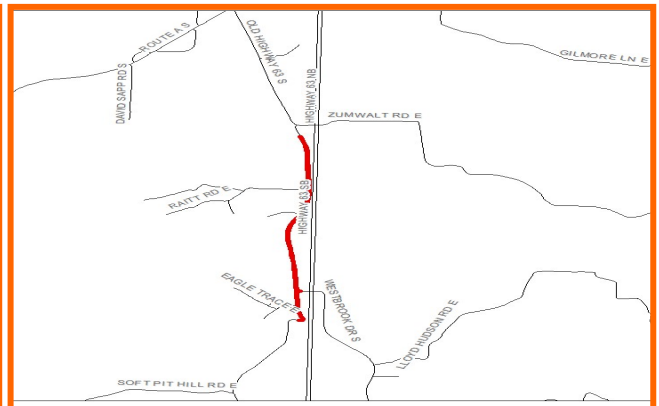
- ◆ Asphalt Overlays are performed on roads that exhibit some moderate distresses and smoothness irregularities, but otherwise are in good condition

Project Location:

- ◆ Alfalfa Drive
- ◆ Mount Pleasant Road
- ◆ Oakland Church Road
- ◆ Oakland Gravel Road
- ◆ O'Rear Road
- ◆ Trade Center Drive.



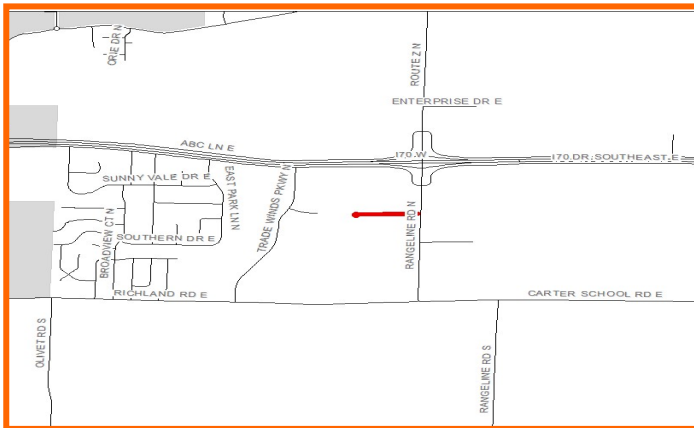
Alfalfa Dr, Oakland Church, Oakland Gravel



Mount Pleasant

FY2021 Project Money Expended

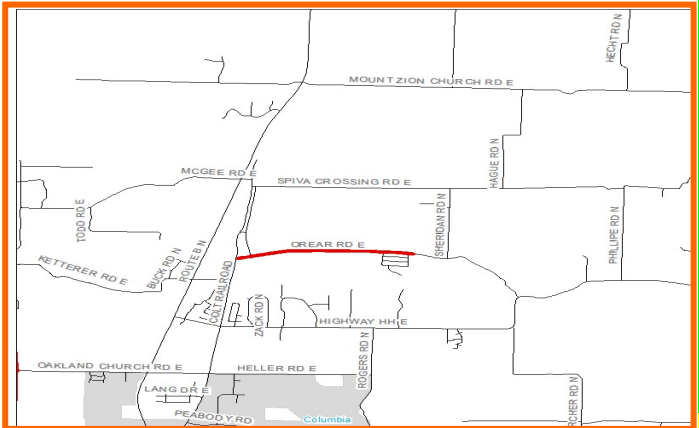
Asphalt Overlay



Trade Center Dr

2021 Asphalt Overlay

- ◆ 35,125 linear feet or 6.7 centerline miles
- ◆ Covered 87,675 square yards
- ◆ Total Contracted Cost \$980,295.81
- ◆ Contracted Cost per mile \$146,312.80
- ◆ Contracted Cost per square yard \$11.18



O'Rear Rd

2021 Asphalt Rejuvenator

- ◆ 33,060 linear feet or 6.3 centerline miles
- ◆ Covered 96,041 square yards
- ◆ Total Contracted Cost \$88,069.59
- ◆ Contracted Cost per mile \$13,979.30
- ◆ Contracted Cost per square yard \$0.92

Asphalt Rejuvenator

Project Overview:

- ◆ Preventative maintenance applying an asphalt rejuvenator to replenish components that have been lost to oxidation.

Project Explanation:

- ◆ Asphalt rejuvenators are applied to roads in excellent condition.

Project Location:

- ◆ Prairie Meadows, Old Plank, Concord Estates, El Chaparral, Willow Way, & Settlers Ridge Subdivisions

FY2021 Project Money Expended

Preservation Chip Seal

Project Overview:

- ◆ Preventative maintenance applying a combination of rock chips and an asphalt emulsion oil to recently overlaid or constructed roads

Project Explanation:

- ◆ Preservation Chip Seals are performed on roads in excellent condition, typically within 2-3 years of being constructed or receiving an asphalt overlay. The heavy application of asphalt emulsion oil and hard rock chips creates a very robust barrier between the pavement and the environment, limiting the deteriorating effects of sunlight and moisture to the road. The chips used in this process (Iron Mountain Trap Rock) are a very hard, durable rock which provides a wearing surface and traction to the road.

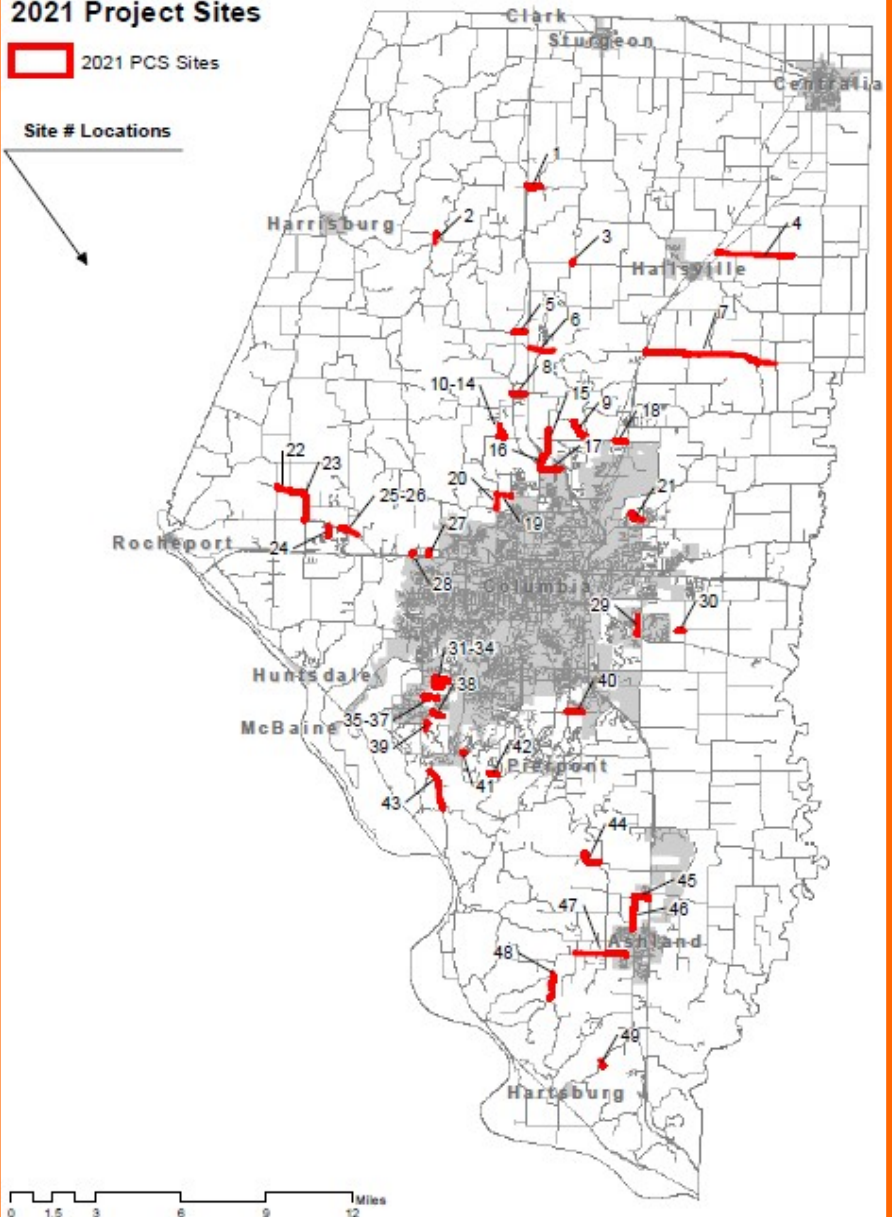
Project Location:

- ◆ Shown in red on this map

2021 Project Sites

2021 PCS Sites

Site # Locations



2021 Preservation Chip Seal

- ◆ 156,875 linear feet or 29.7 centerline miles
- ◆ Covered 396,915 square yards
- ◆ Total Contracted Cost \$911,126.81
- ◆ Contracted Cost per mile \$30,677.67
- ◆ Contracted Cost per square yard \$2.30



FY2021 Project Money Expended

Asphalt Rehabilitation

In late summer of 2017, when planning began for the FY2018 budget, no projects met the criteria for development of an asphalt rehabilitation project. Based on that knowledge, Resource Management Engineering prepared a work plan that included additional spending on concrete and bridge projects that met requirements in those classifications. The Boone County Commission accepted the recommendation to redistribute funds typically used for asphalt rehabilitation to concrete and bridge rehabilitation projects for budget construction years 2018 through 2022. To date, there have been no developments that would alter this plan.

Chip Seal

Within the pages of this report you will see reference to two types of chip seal. The major differences and uses between the two is shown below.

Limestone Chip Seal is a surface treatment consisting of a heavy application of emulsified road oil and limestone chips. This routine maintenance activity is applied by the Road and Bridge Department, on a four year cycle, to gravel roads that have previously had a limestone chip seal. Many years ago this treatment was used as an interim dust control method and to control erosion on gravel road segments with steep hills. In recent years, the aggregate has been changed to river rock for increased durability. The name "Limestone Chip Seal" is now a bit of a misnomer. This remedy as a dust control method for additional roads was discontinued due to high cost.

Preservation Chip Seal is a surface treatment using Iron Mountain Trap Rock, a very hard and durable rock, that provides a wearing surface and traction. The heavy application of asphalt emulsion oil, the other ingredient in this process, creates a very robust barrier between the pavement and the environment, limiting the deteriorating effects of sunlight and moisture.

Concrete Rehabilitation

Management of concrete roads is quite different than management of asphalt roads. The rigid nature of concrete pavement tends to stay in good condition for a long time and then fail very quickly. At this time, no products have been identified for use as a low cost, preventative maintenance treatment for rigid pavements. Since 2011, Boone County has managed concrete roads using a systematic replacement of failed panels. When only a small number of panels are damaged in a specific area, targeted panel replacements are performed by the Road and Bridge department. This consists of removing the damaged panel and replacing it with another concrete panel. When a large number of damaged concrete panels are concentrated in a single area, a rehab project is developed. Rehab projects consist of the removal of existing concrete pavement and replacement with full depth asphalt pavement. Conversion from concrete to asphalt allows those road segments to be included in our asphalt pavement preservation program.

Bi-annually, Boone County Resource Management staff inspect and rate each individual panel making up the concrete roadways of the Boone County transportation network. Each panel is mapped and given a rating of "Good," "Damaged," or "Replace." Staff analyzes this data to determine when a rehabilitation project may be needed.

FY2021 Project Money Expended

Concrete Rehabilitation



Completed project Boone Industrial Blvd.



Project Location:

- ◆ Boone Industrial Blvd.
- ◆ Interstate Dr.

Project Explanation:

- ◆ The number of damaged and failed concrete pavement panels warranted a reconstruction project to lessen the ongoing maintenance burden and provide a longer lasting, maintainable solution.

Project Overview:

- ◆ Reconstruct existing concrete streets (Boone Industrial Blvd. & Interstate Dr.) by removing existing roadway, prepare subgrade, install geosynthetic, install aggregate base and install full depth asphalt pavement. Additional work included installation of stormwater inlets and piping, traffic control, erosion control, joint sealing and restoration.

Project Cost:

- ◆ 0.62 centerline miles
- ◆ Covered 11,863 square yards
- ◆ Total Contracted Cost \$1,476,929.47
- ◆ Contracted cost per mile \$2,382,144.31
- ◆ Contracted cost per square yard \$124.50

FY2021 Project Money Expended

Drainage Structures

Project Location:

- ◆ Hartsburg Bottom Road over Hart Creek, southwest of Hartsburg

Project Overview:

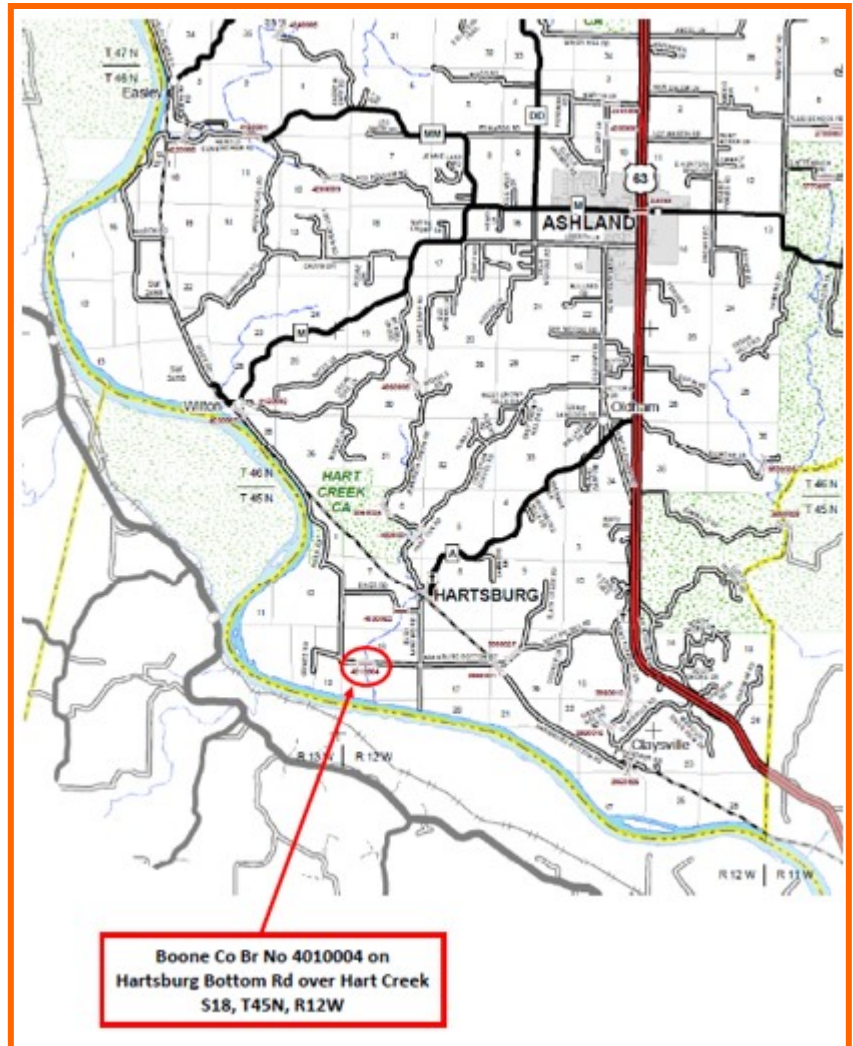
- ◆ Construction of a new 130 foot long, single span bridge

Project Explanation:

- ◆ Replace a deficient, load restricted, one-lane truss bridge, constructed in 1930

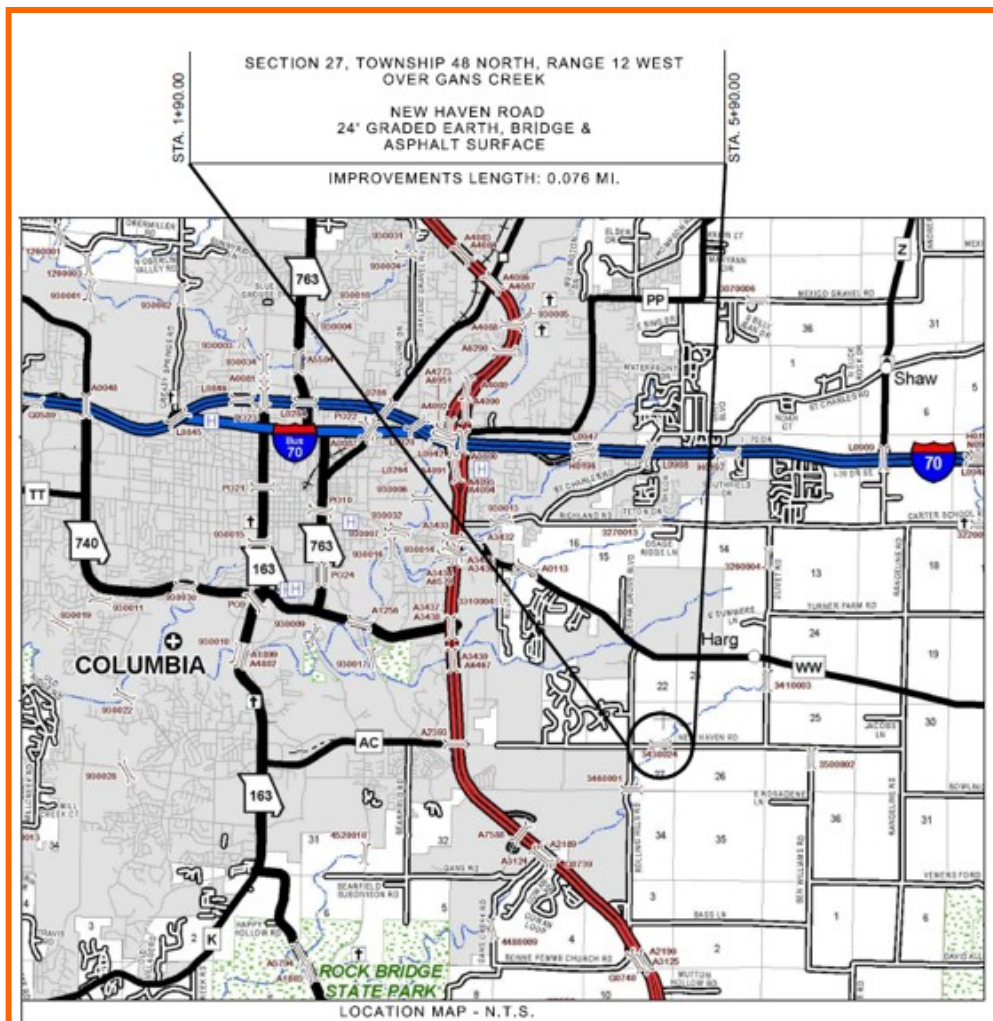
Project Construction Cost:

- ◆ \$758,946.39
- ◆ Total cost of this project was reimbursed by FHWA (Federal Highway Administration) through the Off-System Bridge Replacement Program (BRO) and the use of Soft-Match Credit.



FY2021 Project Money Expended

Drainage Structures



Project Location:

- ◆ New Haven Road east of Rolling Hills Road

Project Overview:

- ◆ Construction of a new 94 foot long, single span bridge

Project Explanation:

- ◆ Replace a load restricted, single span bridge, constructed in 1970

Project Construction Cost:

- ◆ \$366,974.16

Requirement #2

Submit a plan for construction, reconstruction, maintenance and repair of existing established public highways, roads, bridges, and culverts proposed to be undertaken and completed during the current year.



Fiscal Year 2022 Plan

FY2022 Work Plan

Road & Bridge Revenue Yearly Comparison

Revenues by Source – Road & Bridge Fund (Major Fund)

	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual
Property Tax	\$ 1,360,971	\$ 1,435,135	\$ 1,449,860	\$ 1,506,835	\$ 1,542,304
Sales Tax	13,149,084	13,754,107	14,017,758	14,270,107	14,322,240
Motor Vehicle Sales Tax	428,153	478,831	508,312	508,987	534,408
County Aid road Tax	1,161,599	1,207,067	1,233,074	1,246,749	1,255,175
Intergovernmental	71,397	30,684	228,034	38,716	132,025
Charges for Services	78,538	341,568	129,040	35,054	34,170
Interest & Other	20,117	99,792	99,198	115,961	174,186
Total	\$ 16,269,859	\$ 17,347,184	\$ 17,665,276	\$ 17,722,409	\$ 17,994,508

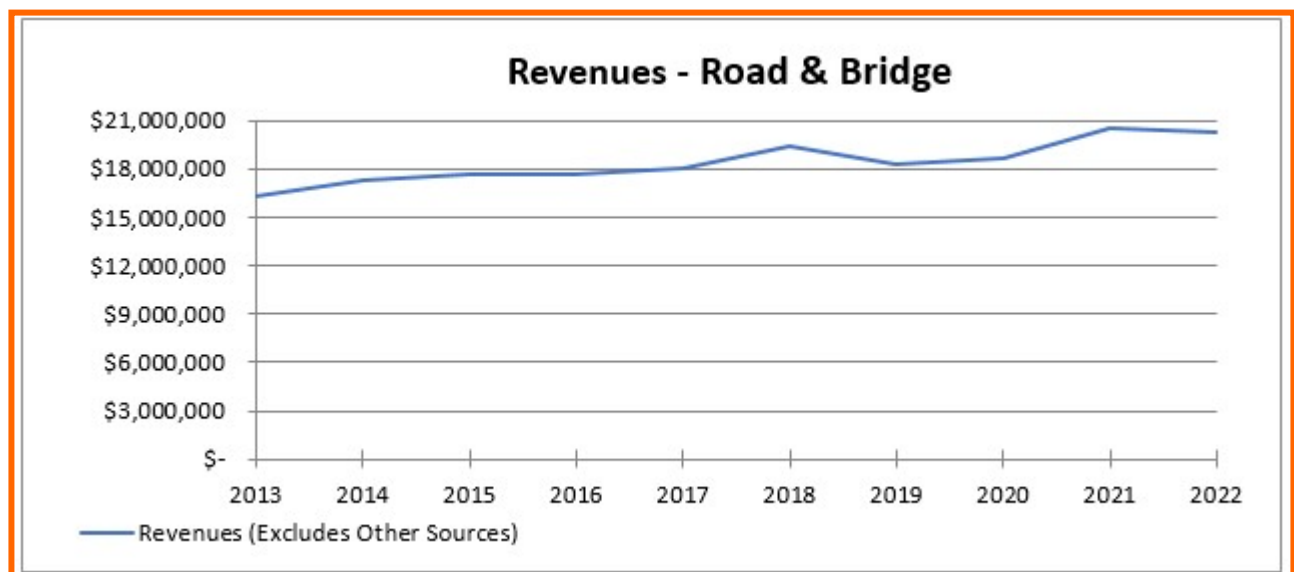
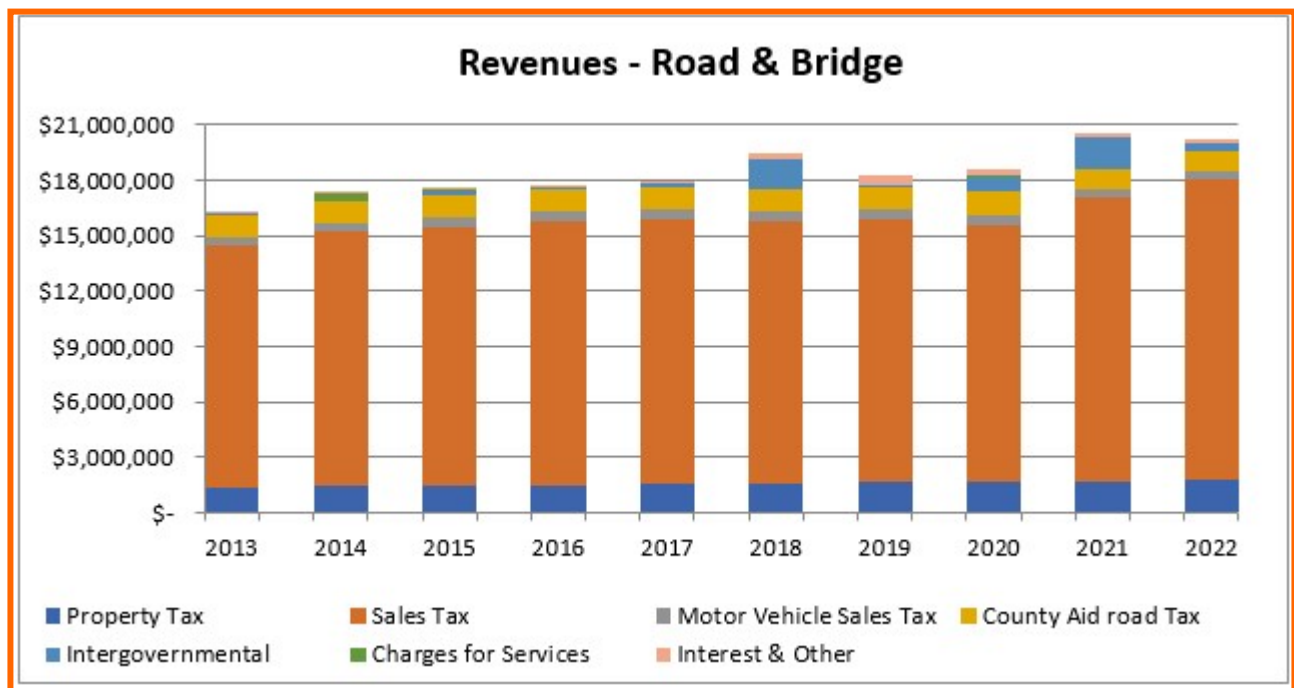
	2018 Actual	2019 Actual	2020 Actual	2021 Estimated	2022 Budget
Property Tax	\$ 1,577,547	\$ 1,654,751	\$ 1,703,606	1,640,980	\$ 1,790,075
Sales Tax	14,215,362	14,181,969	13,911,381	15,408,195	16,216,000
Motor Vehicle Sales Tax	526,497	541,022	541,022	489,805	489,750
County Aid road Tax	1,229,266	1,229,266	1,229,266	1,113,550	1,114,000
Intergovernmental	1,554,369	70,274	824,130	1,674,711	408,674
Charges for Services	32,559	36,096	47,790	8,162	8,105
Interest & Other	307,549	518,392	350,888	203,850	195,570
Total	\$ 19,443,149	\$ 18,231,770	\$ 18,608,083	\$ 20,539,253	\$ 20,222,174

- ◆ 2018 Revenue includes \$1,516,384.95 reimbursement on a Federal Grant.
- ◆ 2019 Revenue includes \$4,584.65 reimbursement on a Federal Grant and \$23,630.80 from a State Grant reimbursement.
- ◆ 2020 Revenue includes \$58,113.37 reimbursement on a Federal Grant and \$22,833.09 from a State Grant reimbursement.
- ◆ 2021 Revenue includes \$766,058.73 reimbursement on a Federal Grant and \$7,793.25 from FEMA



FY2022 Work Plan

Road & Bridge Revenue Yearly Comparison



FY2022 Work Plan

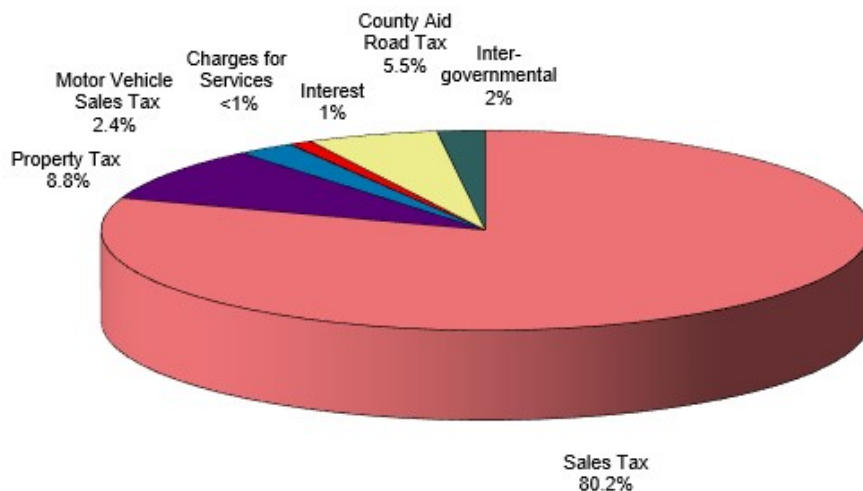
Road & Bridge Revenue By Source

Where the Money Comes From

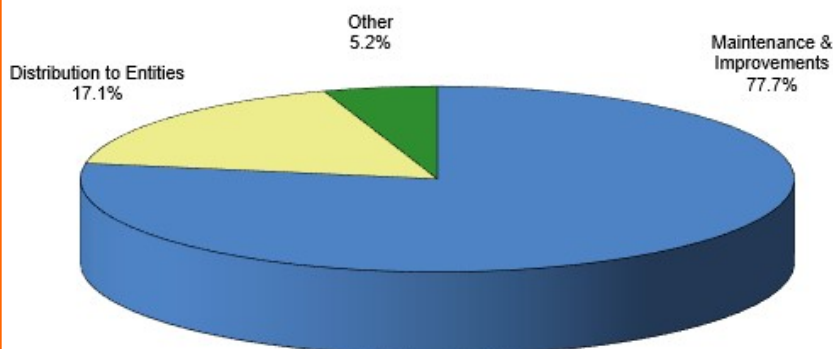
Sales Tax	\$16,216,000
Property Tax	\$1,790,075
Motor Vehicle Sales Tax	\$489,750
Charges for Services	\$8,105
Interest	\$195,570
County Aid Road Tax	\$1,114,000
Intergovernmental	\$408,674
Total	\$20,222,174



Where The Money Comes From - Total Revenues Road & Bridge Fund



What The Money Is Used For - Total Expenditures Road & Bridge Fund



What The Money Is Used for

Property Tax Distribution	\$306,010
Sales Tax Distribution	\$3,039,427
Road Maintenance	\$7,238,846
Fleet Maintenance Operations	\$1,616,431
Traffic/Sign	\$146,686
Infrastructure Preservation/Rehab	\$4,865,000
Design & Construction	\$300,610
Stormwater Administration	\$169,087
R&B & RM Administration	\$554,258
Engineering	\$535,830
R&B IT Hardware & Software	\$70,726
Administrative Services Charge	\$675,000
Facilities Maintenance/Custodial	\$100,442
Facility Repair & Replacement	\$150,000
Insurance Activity	\$199,168
CART/MV Distribution to Road District	\$97,570
Other	\$10,000
Total Expenditures	\$20,075,091



FY2022 Work Plan

Asphalt Rehabilitation Projects

- ◆ There are currently no asphalt rehabilitation projects under consideration

Capital Improvement Projects

- ◆ There are currently no capital improvement projects under consideration

Concrete Rehabilitation Projects

- ◆ There are no current plans for individual panel replacements.
- ◆ Bellview Drive and Bethany Drive Rehabilitation is in the final design stage and planned for construction in 2022.
- ◆ Gillespie Bridge Road and Obermiller Road Rehabilitation is in the conceptual planning phase and proposed for construction in 2023.

Drainage Structure Projects

- ◆ Booth Lane and Graham Road Large culvert rehab/replacement is currently in final design and planned for construction in 2022.
- ◆ Olivet Road Bridge #BR3410003 is in the final design-easement acquisition phase and planned for construction in 2022.
- ◆ Woodie Proctor Bridge #BR4970024 is in the final design stage and planned for construction in 2022.
- ◆ Ben Williams Bridge #BR3500002 is in the conceptual planning phase and proposed for construction in 2023.
- ◆ Sycamore Creek Road large culvert drainage structure in the conceptual planning stage and proposed for construction in 2022 or 2023.

Pavement Preservation Projects

These projects are under design and planned for construction in 2022:

- ◆ Asphalt Overlay
- ◆ Preservation Chip Seal
- ◆ Surface Seal

Requirement #3

Report the general condition of all established public highways, roads, bridges and culverts in the county.

Evaluation



<input type="checkbox"/>	OUTSTANDING
<input type="checkbox"/>	Excellent
<input type="checkbox"/>	Very Good
<input type="checkbox"/>	Average
<input type="checkbox"/>	Below Average

Fiscal Year 2021 Condition

FY2021 Condition of Boone County Maintained Roads, Bridges and Culverts

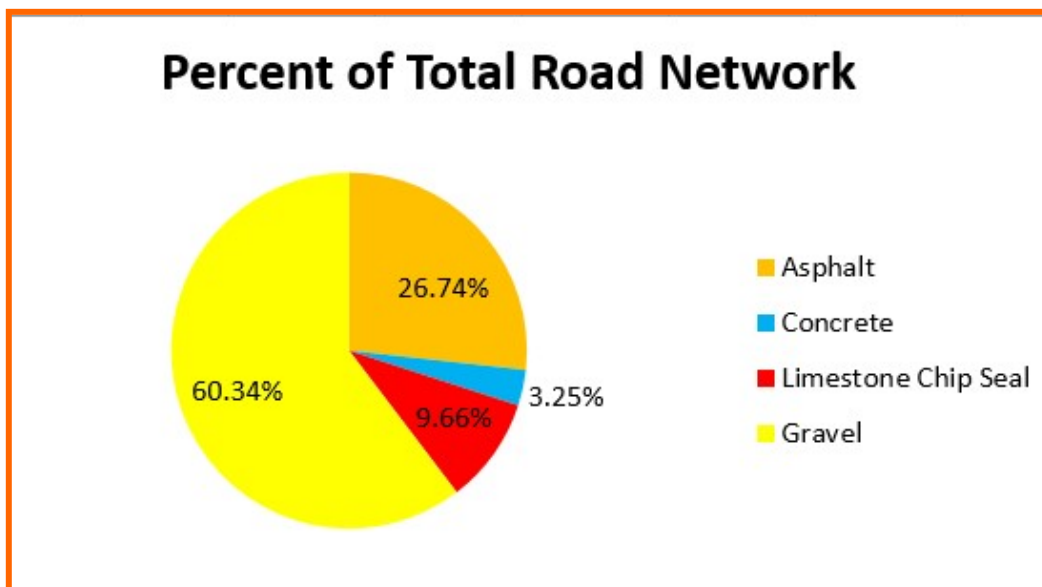
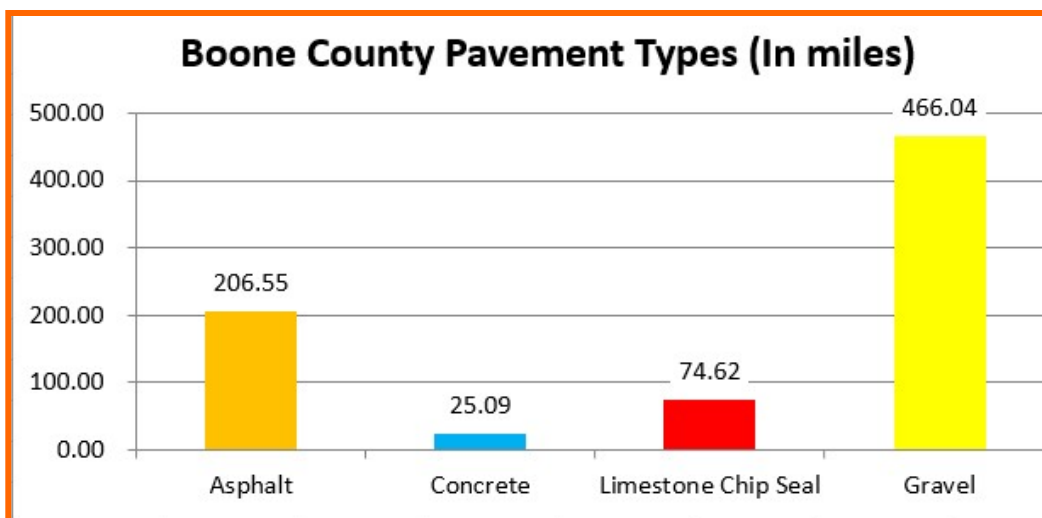
The following charts are based on information stored in Cartegraph, the County's infrastructure database program. These values are for only non-retired roads that are currently maintained by Boone County. Roads that are partially owned by the County, but not maintained by the County are not considered in these calculations. The streets are separated into categories and are based on surface types. A preservation chip seal surface, is considered the same as an asphalt surface and is therefore included in the Asphalt category in these statistics.

Surface Type	Total Miles	Percent of Total Road Network	Change in Total Miles from 2019
Asphalt	206.55	26.74%	-0.48
Concrete	25.09	3.25%	-0.31
Limestone Chip Seal	74.62	9.66%	+0.06
Gravel	466.04	60.35%	+0.60
Total	772.29	100.00%	-0.13

**Total miles of county maintained road changes due to: acceptance of new roads built by someone other than Boone County, annexations, change of surface type (asphalt over concrete roads), our maintenance agreement with the City of Columbia for roads that are accessed by both County and City properties and data error corrections.

FY2021 Condition of Boone County Maintained Roads, Bridges and Culverts

Total Miles of Road Maintained by Boone County



FY2021 Condition of Boone County Maintained Roads, Bridges and Culverts

2021 Asphalt Surface Ratings

Records pertaining to asphalt roads are identified by segment, from one specific point to another. Information used to assign scores for each asphalt road segment is obtained using several different methods. Boone County uses 1) visual inspection of a segment, 2) work performed on a segment and 3) weighted averages for normal use of a segment. These assessments are entered in Cartegraph where they are combined to generate the grade or condition of each segment based on established curves. The following values are used for the classifications:

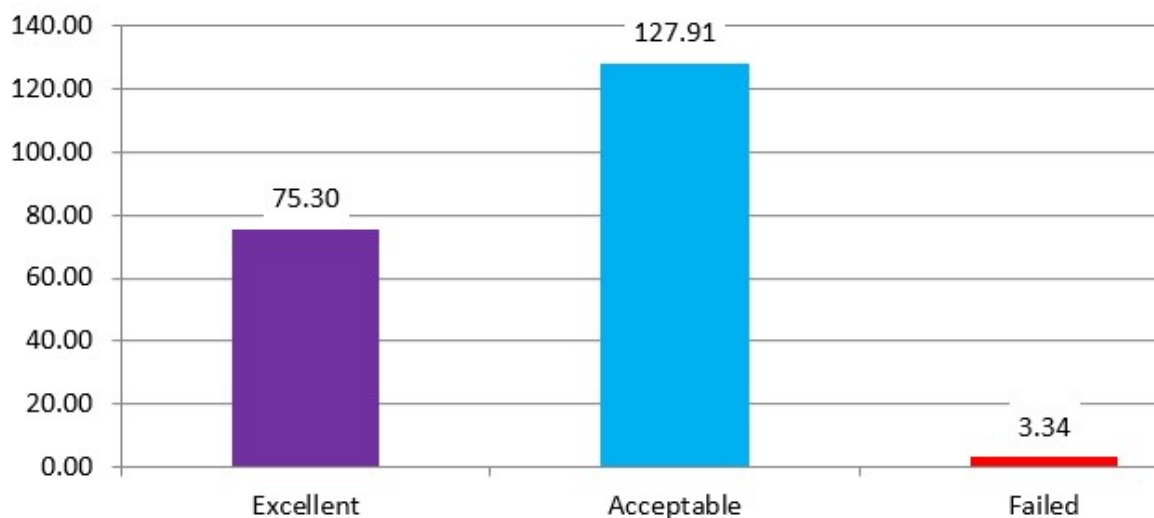
OCI = Overall Condition Index

Excellent = a value 85 and above

Acceptable = any value between 55 and 85

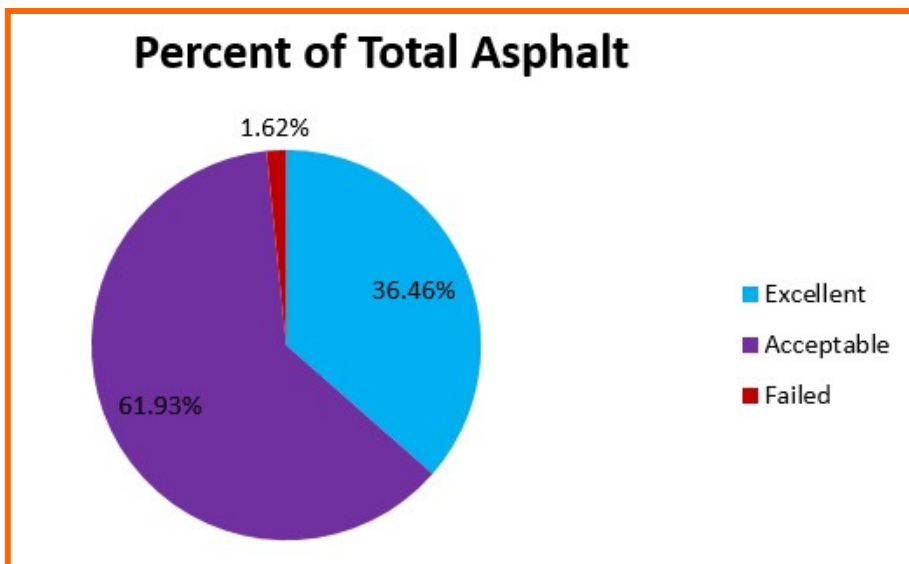
Failed = anything less than 55

Asphalt Pavement Length (In miles)



FY2021 Condition of Boone County Maintained Roads, Bridges and Culverts

2021 Asphalt Surface Ratings & Comparison



FY2021 Condition of Boone County Maintained Roads, Bridges and Culverts

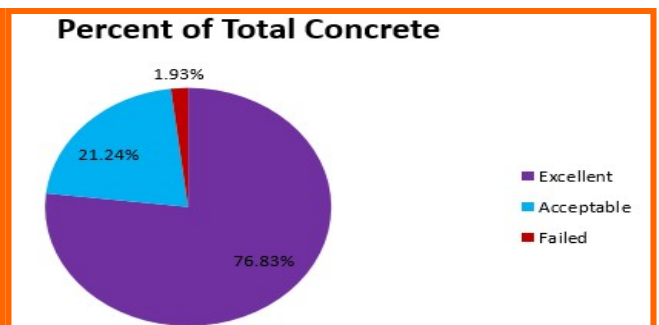
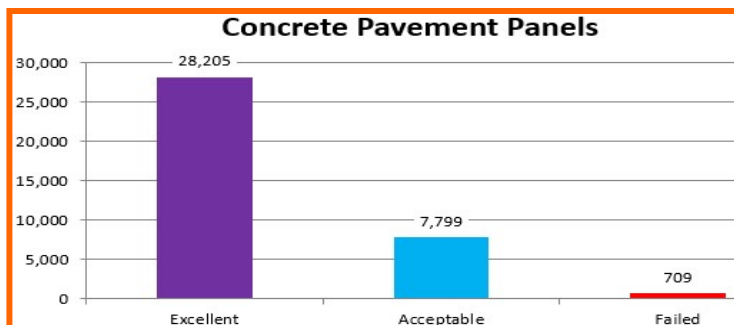
2021 Concrete Panel Ratings

Concrete roads are a rigid or non-flexible pavement and cannot be evaluated using the same criteria used for asphalt roads. Concrete roads are inspected by each individual panel. The ratings in these graphs are based on panels in each category, and not in road miles

Excellent = panel has no damage

Acceptable = panel has minor damage

Failed = panel needs to be replaced



Flexible vs Rigid Pavement

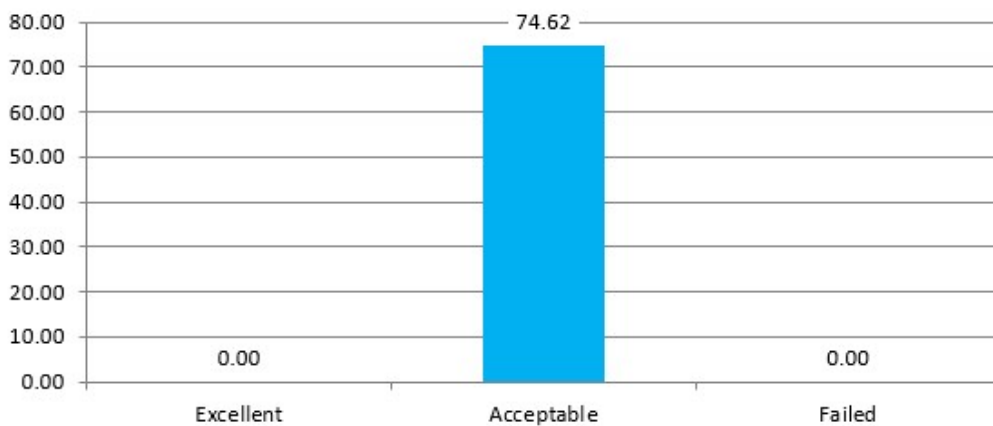
Both flexible and rigid pavements are composed of fine aggregate, coarse aggregate, and a binder. In flexible pavements the binder is generally a bituminous asphalt type material. In rigid pavements the binder is generally a Portland cement type material. The job of both binders is to “bind” or hold the other ingredients together. As the name suggests, flexible pavements are designed to flex a certain amount as load is applied and share the load with a base material designed for this purpose. Rigid pavements are designed to remain rigid and spread the load over a larger area.

FY2021 Condition of Boone County Maintained Roads, Bridges and Culverts

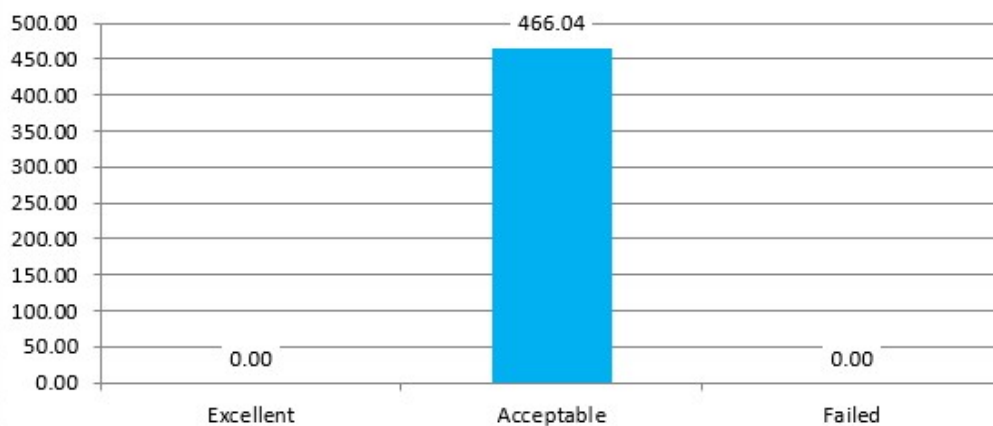
2021 Gravel Roads & Limestone Chip Seal Roads

Gravel and Limestone Chip Seal roads are not inspected because their condition and rating can change weekly; therefore all of these roads are listed in the Acceptable category for ratings.

LCS Pavement Length (In miles)



Gravel Pavement Length (In miles)



FY2021 Condition of Boone County Maintained Roads, Bridges and Culverts

2021 Bridge Ratings

Many types of structures are referred to as bridges. However, only bridges that meet the minimum size requirement of 20 feet in length are inspected by MoDOT. The ratings and figures provided on the next pages are based on material obtained from MoDOT inspections, and only refer to bridges inspected by MoDOT. State inspections are performed every other year with the latest inspections being performed at the end of 2021.

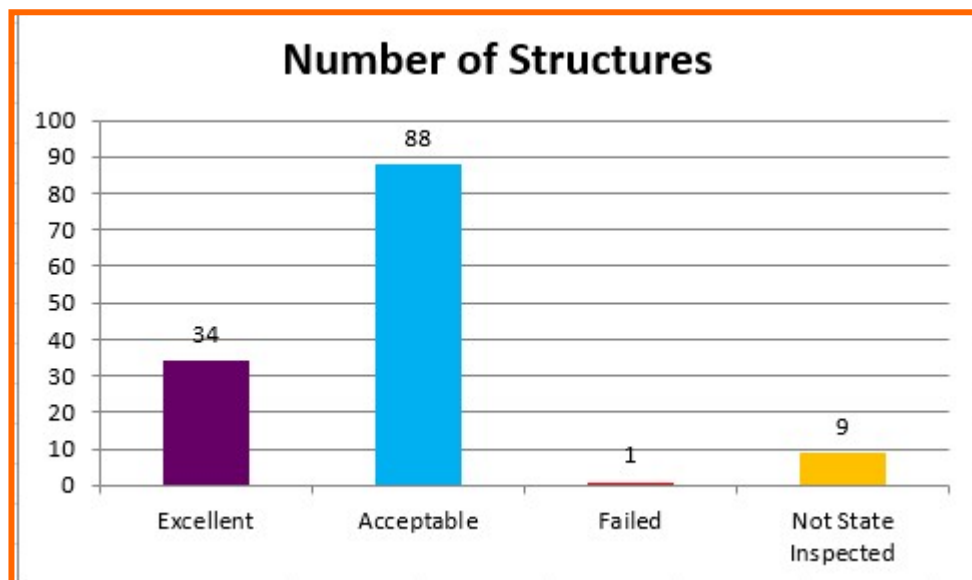
From the MoDOT inspections, the deck condition, substructure condition, and superstructure condition are rolled into an average value based on a 0—100 scale. Cartegraph generates the bridge rating value. The standards listed below are used for the rankings.

OCI = Overall Condition Index

Excellent = a value 75 and above

Acceptable = any value between 50 and 75

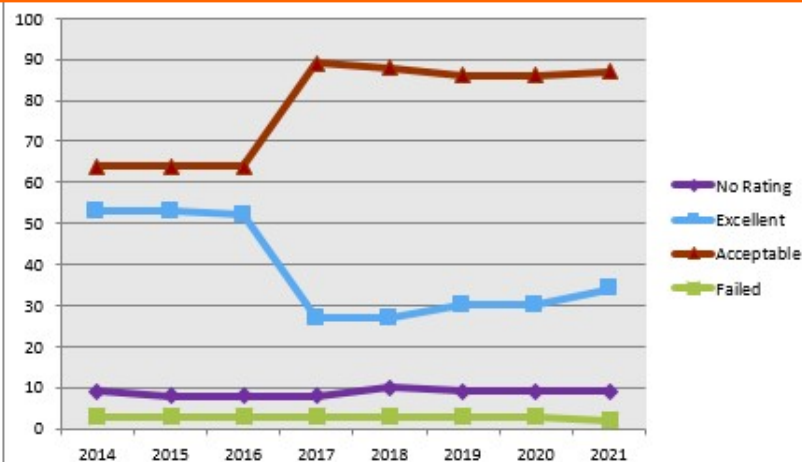
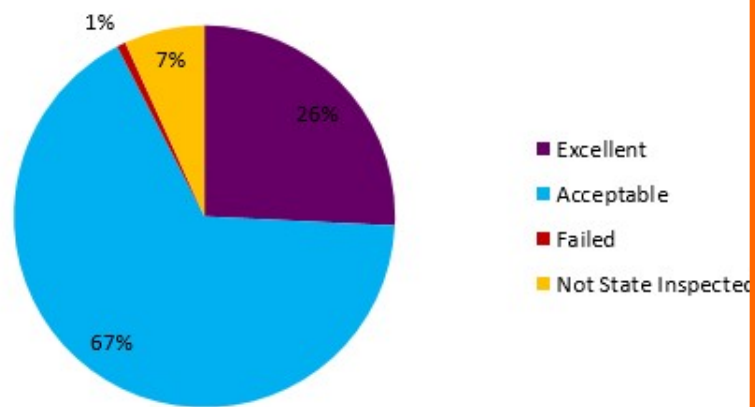
Failed = anything less than 50



FY2021 Condition of Boone County Maintained Roads, Bridges and Culverts

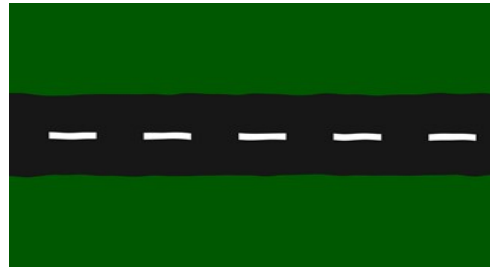
2021 Bridge Ratings & Comparison

Percent of Total Bridges



Additional Duties

- Surveying
- Right of Way
- Stormwater
- Sales Tax Distribution



Fiscal Year 2021

Additional Responsibilities

2021 Surveying

Assistance to County Staff

- ◆ Assisted Road and Bridge Maintenance and Operations personnel by providing a variety of surveying services and right-of-way and easement information as necessary.
- ◆ Assembled topographic data for the preparation of plans for projects.
- ◆ Assisted right-of-way personnel by staking easements (both temporary and permanent) for reviewing proposed plans, and assisting them when meeting and negotiating with property owners on proposed projects. At times, accompanying right-of-way personnel to those meetings.
- ◆ Assisted Planning & Building Inspections Divisions with complete reviews of all plats of proposed Subdivisions and Administrative Surveys, submitting comments and suggestions to the Planning Division and notifying the surveyors of those comments and suggestions. Additionally, all descriptions for granting easements for public roadways and utilities were reviewed. (these are required when preparing many of the administrative surveys)
- ◆ Surveys for OEM warning siren placement



Assistance to the Public

- ◆ Represented Boone County Road and Bridge at concept reviews held by the Boone County Planning Division for review of upcoming developments.
- ◆ Responded to the many requests that Boone County receives from property owners, title companies, realtors, other governmental agencies, surveyors and engineers, and others regarding existing road rights-of-way.
- ◆ Responded to inquiries for Neighborhood Improvement District's (NID). None, to date, have completed the requirements to move forward.

Additional Responsibilities

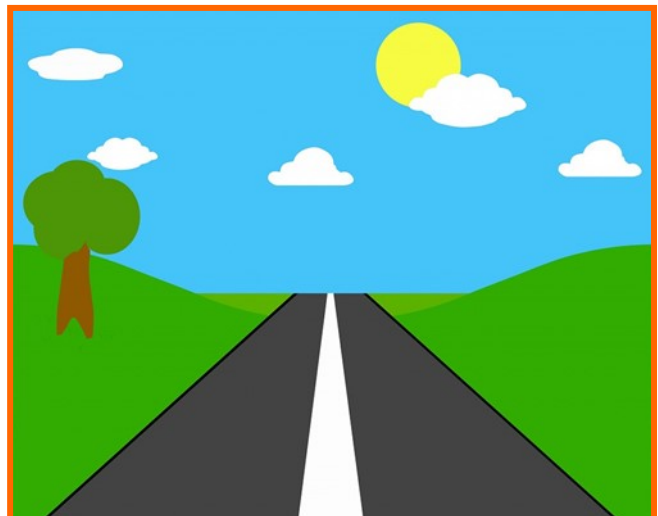
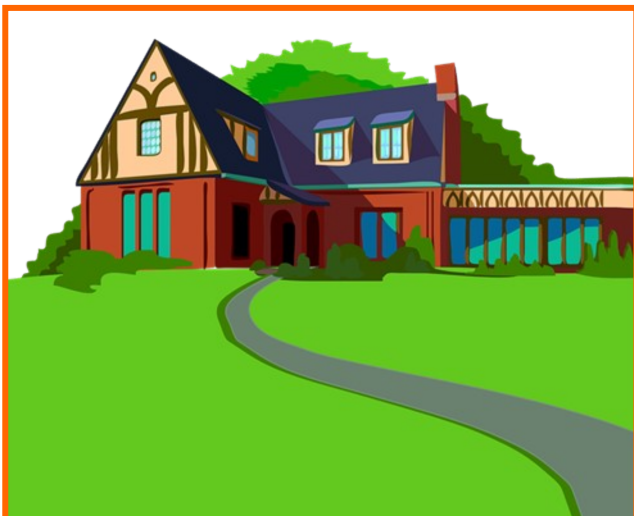
2021 Right-of-Way

In addition to the preservation and improvement of Boone County roads and bridges, another task shared by Resource Management Engineering Division and Road and Bridge is the maintenance of Boone County Right-of-Way. The County's priority is to ensure proper site distance and drainage on County roadways. A few of the tools employed in the upkeep of Boone County Right-of-Ways are:

Right-of-Way Permits are issued when excavation takes place in a Boone County owned or maintained right-of-way. Excavation in this context is defined as work that results in the alteration or damage of the road surface, drainage ditches, curbs and gutters or other drainage structures, traffic control devices, or county maintained pedestrian walkways within the road right-of-way. Excavation also includes actions which physically undermine the structural integrity of the road base, road drainage, traffic control devices, or pedestrian walkways within the right-of-way. **73 Right-of-Way permits were issued and inspected in 2021.**

Driveway Permits are issued for new or upgraded driveways that are connected to a County maintained road. Some types of upgrades that require a permit are converting an existing gravel driveway to a paved surface, resurfacing an existing driveway, installing a larger culvert, and widening a driveway. **158 Driveway permits were issued and inspected in 2021.**

Adopt-A-Road: The purpose of the Adopt-A-Road program is to promote citizen involvement and participation in improving our environment and preserving the natural beauty of Boone County roadways. Volunteers help maintain attractive roadsides by picking up litter along Boone County roadways. **Below is the list of the current adoptions..**



Additional Responsibilities

2021 Right-of-Way

Adopted Road List

Road Name	Organization Name
Rangeline Road	OTSCON, Inc.
Creasy Springs Road	Momma T's Family
Dodd Road	Dodd Road Beautification
St Charles Road	Thomas Livestock and Land Stewardship
Nebo Cemetery Road	Friends of Hugh Hodler
Crump & Martin Lanes	Ashland FFA
David Allen Road	David Allen Road Neighborhood
Easley River Road	Missouri River Relief
Gans Road	The Horses of Gans
Gillespie Bridge Road	Friends of Gillespie Bridge Road
Glendale Drive	Two Mile Prairie Neighbors
Judy School Road	Two Mile Prairie Neighbors
Mauler Road	Friends of Mauler Road
Obermiller Road	Boone County Republican Party
Old Highway 63 South	Ashland United Methodist Church
Old Plank Road	The River Folk of Cooper's Landing
Rock Quarry Road	Range Free Bakery & Cafe
McQuitty Lane	Hootie Hill Farms
Olden Road	To Honor Roscoe & Lucreta Olden (by Brenda & Mark Rowland)
Rowland Road	To Honor Newt & Beulah Rowland (by Brenda & Mark Rowland)
Wilhite Road	Thomas Livestock and Land Stewardship

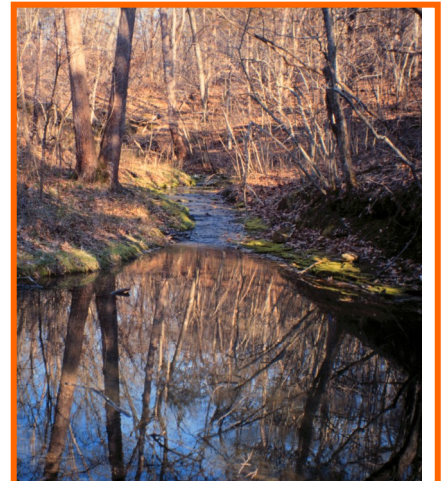
Additional Responsibilities

2021 Stormwater

Our mission is to maintain stormwater management requirements and controls to enhance and protect water quality, reduce stormwater pollution runoff, and protect and safeguard the general health, safety, and welfare of the public residing within the watersheds of Boone County.



Stormwater is any water coming from precipitation. It may be rain, water from snowmelt, or water that runs off streets, parking lots, lawns, or other surfaces. Stormwater drains into natural or manmade drainage systems such as ditches and storm sewer inlets. Neither the natural, nor the manmade drainage ways connect to the wastewater treatment plant; instead, the water is discharged directly to our streams and rivers.



What is Boone County doing to address stormwater runoff?

Boone County is jointly permitted with the City of Columbia and University of Missouri in accordance with the Stormwater Phase II Final Rule requirements specified in section 4.1.4 of the site-specific permit MO-0136557 for discharges from small regulated Municipal Separate Storm Sewer Systems (MS4s), as well as per state regulation 10 CSR 20-6.200 and federal regulations 40 CFR Parts 9 and 122. To fulfill its permit requirements, Boone County has implemented six (6) Minimum Control Measures (MCM), which are expected to help significantly reduce pollutants into receiving waterbodies. These MCM's cover public education and outreach, public involvement, illicit discharge detection and elimination, construction site stormwater runoff control, post-construction stormwater management in new development and redevelopment, and pollution prevention/good housekeeping for municipal operations.



Additional Responsibilities

2021 Stormwater

Public Education and Participation Activities

- ♦ **Rock Bridge Memorial State Park Water Festival:** Boone County Stormwater staff took part in the 7th annual Water Festival at Rock Bridge Memorial State Park. This program served approximately 250 adults and children.
- ♦ **Southern Boone Second Grade:** The Stormwater Educator created a video presentation about watersheds and stormwater pollution. After watching the video, students participated in an interactive activity showing how humans affect waterways and what can be done to improve water quality. The students created solutions for the pollution sources. One hundred-eighty students took part.
- ♦ **Centralia Intermediate Fifth Grade:** The Stormwater Educator created a video presentation about watersheds and stormwater pollution. The students had to develop a solution for the pollution. The students also participated in an interactive activity to show how humans affect waterways and what can be done to improve water quality. Eighty-two and 103 students took part in the two events.
- ♦ **Greater Bonne Femme Watershed “Kiss the Ground” Virtual Film Event:** The County hosted a virtual film showing of “Kiss the Ground”. The film highlights regenerative agriculture. There were 128 people registered to watch the film.
- ♦ **Greater Bonne Femme Watershed Interactive Panel Discussion: Regenerative Agriculture - A Win-Win for Productivity and Water Quality:** This panel discussion focused on regenerative agriculture, building off knowledge shared in the film “Kiss the Ground.” Discussion included the feasibility of regenerative agriculture to rebuild soil organic matter and restore degraded soil biodiversity – resulting in both carbon drawdown and improving the water cycle. Forty people attended the live panel and 168 people have watched the recording.
- ♦ **Benton Elementary 4th Grade “Streams in the Classroom” Presentation:** The Stormwater Educator used the Enviroscape to show different sources of pollution and how rain can carry pollutants into the waterways, showing and discussing what actions can be taken to prevent the pollution. There were approximately 42 students in attendance.
- ♦ **Benton Elementary 5th Grade “Who Polluted Hinkson Creek”:** Boone County Stormwater presented on stormwater and watersheds. The attendees completed the “Who Polluted the Stream” activity. The audience discussed what they could do to prevent stormwater pollution and designed a piece of property to have the lowest number of impervious surfaces. There were approximately 42 students in attendance.



Additional Responsibilities

2021 Stormwater

Public Education and Participation

- ◆ **STEM Alliance Engineering Contests:** The Columbia Stem Alliance, Columbia Office of Sustainability, Columbia Public Schools, and Boone County Stormwater worked together to host multiple engineering contests.
 - ◆ **Litter Prevention Contest – Build a "Litter Catcher":** Participants were asked to create a litter collecting device using recycled items. The students designed a litter catcher to prevent various types of litter from entering the water system. The participants submitted videos of their designs. Three students took part.
 - ◆ **Water Quality Contest – Build a "Rain-garden in a bottle":** Participants were asked to design a filtration system to prevent various types of pollutants from entering the water system after precipitation events. Eighty students participated.
- ◆ **STEM Alliance Art Contest:** The Columbia Stem Alliance, Columbia Office of Sustainability, Columbia Public Schools, and Boone County Stormwater worked together to host multiple art contests.
 - ◆ **Art Contest: Litter:** The Litter Art and Essay Contest invited students to create a piece of artwork that represented litter or litter prevention. In addition to the artwork, participants were asked to submit a short description or essay separate from the artwork that explained how their artwork connected to the theme of litter. Twenty-six entries were made.
 - ◆ **The Water Cycle: Our Local Waters:** Water Cycle Art Contest invited students to create a piece of artwork that represented one or more aspects of the water cycle. In addition to the artwork, participants were asked to submit a short description or essay separate from the artwork that explained how their artwork connected to the water cycle.
- ◆ **Sustainable Living Fair – Virtual Update on the Greater Bonne Femme Watershed Project:** The Stormwater Educator and Urban Hydrologist gave a virtual update on the Greater Bonne Femme Watershed Project, providing a snapshot of water quality conditions in the watershed. The presentation also included information on the draft watershed-based plan and ongoing outreach and education efforts. Thirty-four people viewed the presentation.
- ◆ **Hallsville 4-H:** Eleven members of the Hallsville 4-H attended a watershed walk at Wildwood Bird Observatory focusing on erosion and how streams form.



Additional Responsibilities

2021 Stormwater

Public Education and Participation

- ♦ **Sustainable Living Fair - Virtual Introduction to Rain Barrels & Stormwater Stewardship:** The Stormwater Educator gave a virtual presentation explaining how rain barrels can positively impact our waterways. Seventy-two people viewed the presentation.
- ♦ **Virtual Missouri River Tour & Panel Discussion:** Missouri River Relief (MRR), Missouri River Bird Observatory (MRBO), and Show-Me Stormwater Management hosted a virtual presentation about human connection to the Missouri River and other waterways. The events were hosted for The Arbors, Colony Pointe, and Tiger Place. Fifty-three people attended the events.
- ♦ **Virtual Missouri River Tour & Environmental Career Discussion:** Missouri River Relief (MRR), Missouri River Bird Observatory (MRBO), and Show-Me Stormwater Management hosted a virtual presentation about human connections to the Missouri River and careers in natural resources for the Service for Independent Living. Twelve people were in attendance.
- ♦ **Caring for Columbia- Invasive Species Removal:** Sixteen Mizzou students, along with County stormwater employees and park staff, removed hundreds of bush honeysuckle plants from Rock Bridge Memorial State Park.
- ♦ **I-70 Motorist Anti-Litter Campaign Committee:** City of Columbia and Boone County stormwater educators presented to the I-70 Anti-litter Campaign Committee, consisting of EPA members and MoDOT, about watershed signs in the City of Columbia and Greater Bonne Femme Watershed, and how they connect people to the watersheds. Six people were in attendance.
- ♦ **MEEA-KACEE Environmental Educators Conference:** The Boone County Stormwater Educator assisted in planning the virtual Missouri Environmental Educators Conference. Over 100 educators attended from Missouri and Kansas. Topics included Environmental Education in the Classroom, Green Schools, Justice/Equity/Diversity/Inclusion in Environmental Education, Environmental Education in the Community, and Early Childhood Environmental Education.
- ♦ **The Art of Streams and Litter Event :** Twelve middle school students learned about local waterways, participated in a stream cleanup, and redesigned litter into art, turning trash into treasure.
- ♦ **Build a Park Event:** The City of Columbia and Boone County stormwater educators hosted a summer event for 8 elementary students focused on connecting them to open spaces and their environment.



Additional Responsibilities

2021 Stormwater

Public Education and Participation

- ◆ **Jabberwocky 3M Wetland Tour:** Boone County hosted a STEM presentation for the Jabberwocky organization. City of Columbia engineers discussed the design and building of the 3M Wetlands. The stormwater educator talked about managing stormwater runoff and improving water quality for our local streams. Students learned how wetlands are created and function. Three members were in attendance.
- ◆ **STEMette Summer Program**
 - ◆ **“The Art of Streams”:** Six middle school students learned about local waterways, participated in a stream cleanup, and redesigned litter into art.
 - ◆ **“Litter and Stream Scientists”:** Seven middle school students performed chemical analyses on the stream to see if the water had been polluted and learned about the animals that call the stream home.
- ◆ **Windsor Street Montessori School:** The Stormwater Educator used the Enviroscape to demonstrate different sources of pollution and how rain carries them to waterways and showed what actions can be taken to prevent pollution. Students were given the opportunity to become stormwater champions. They went on a watershed walk to see where the water flows and marked storm drains, educating future passersby. Seventeen students participated.
- ◆ **Grant Elementary:** The Stormwater Educator used the Enviroscape to demonstrate different sources of pollution and how rain carries them to waterways and showed what actions can be taken to prevent pollution. Students were given the opportunity to become stormwater champions. They went on a watershed walk to see where the water flows and marked storm drains, educating future passersby. Nineteen students participated.
- ◆ **Lunch and Learn: “Land Disturbance in a Common Plan of Development”:** The Boone County Stormwater Coordinator and State of Missouri MS4 & Land Disturbance Permitting Coordinator presented about rules for building in a common plan of development and procedures for obtaining County and State land disturbance permits. Nine people attended the live presentation and 19 additional people viewed the recording.
- ◆ **Stream Scientists Event:** Eight middle school students performed chemical analyses on a stream to see if the water had been polluted and learned about animals that call the stream home.

Additional Responsibilities

2021 Stormwater

Public Education and Participation

- ♦ **Cosmo-Bethel Park “Day at The Park”:** Missouri Department of Conservation, Missouri Stream Teams, and Show-Me Stormwater Management partnered together to have a day at the pond for the Columbia Public School summer school program. Two hundred middle school children attended to study stream patterns at the stream table, fish at the pond, and collect macroinvertebrates.
- ♦ **Meyer Industrial Drive Bioretention Basins Dedication:** A dedication ceremony was hosted at the County bioretention basins on Meyer Industrial Drive, which were rehabbed as part of the Greater Bonne Femme Watershed Project. Six people attended.
- ♦ **Southern Boone Area YMCA:** Boone County Stormwater partnered with the YMCA to offer an after-school program series. This three-part series began with introducing watersheds, using the Enviroscope and stream table. During the second part, students performed simulated stream monitoring, and finally, students created an animal that could live in different streams. Approximately 43 students took part in the series.
- ♦ **MU Methods in Aquatic Ecology - Class Panel Discussion:** The Urban Hydrologist was invited to participate in a panel discussion the Methods in Aquatic Ecology class held at the University of Missouri.





Additional Responsibilities

2021 Stormwater

Public Involvement Opportunities

- ◆ 2 - Rock Bridge Memorial State Park Water Quality Monitoring Events
- ◆ Storm Drain Marking Events
- ◆ Greater Bonne Femme Watershed Bioretention Basins Dedication
- ◆ Rock Bridge Stream Cleanup

Training Opportunities for County Staff

- ◆ **Missouri Stream Teams Level 2 Training:** The Stormwater Educator attended the recertification and training for Missouri Stream Teams Level 2 certification.
- ◆ **REGFORM Conference:** Stormwater staff attended Missouri REGFORM to learn about EPA stormwater rulings and other stormwater related topics.
- ◆ **North American Association for Environmental Education Conference:** The Stormwater Educator attended this virtual conference, which emphasized connections to nature, sustainable communities, and community science.
- ◆ **Missouri Environmental Educators Association Conference:** The Stormwater Educator attended the MEEA conference to learn about making stormwater more inclusive and digital education options.
- ◆ **Missouri State Conference on Cover Crops and Soil Health:** The Stormwater Educator and Urban Hydrologist learned about successes Missouri producers have had using regenerative agriculture practices.



Additional Responsibilities

2021 Stormwater

Training Opportunities for County Staff

- ◆ **Departmental Stormwater Fact Sheet:** Boone County Facilities Maintenance and Road and Bridge each received a publication on stormwater practices to positively impact water quality.
- ◆ **Missouri Soybean Association Crops & Conservation Field Day:** Boone County stormwater staff attended a half-day row-crop-focused event that included a look at cover crops, non-traditional weed control methods, pollinator buffer strips, soil health and water quality practices, SOYLEIC soybean breeding, and carbon credit markets.
- ◆ **Missouri Department of Conservation Partners Roundtable:** The Urban Hydrologist participated in this roundtable to learn how other agencies have approached conservation efforts during the pandemic and shared wins and lessons learned.
- ◆ **City of Columbia Stream Restoration Tour:** The Stormwater Coordinator and Urban Hydrologist attended a tour of several stream restoration sites within the City of Columbia.
- ◆ **AWRA Virtual Annual Conference:** The Urban Hydrologist attended this conference to learn about implementing multidisciplinary projects, best practices discovered in the design and application of water resource management, implications of water policy decisions, and research into current and emerging issues.
- ◆ **Missouri State Conference on Cover Crops and Soil Health:** The Stormwater Educator and Urban Hydrologist attended this two-day virtual conference. Presentations and discussion panels featured the latest approaches with cover crop management, grazing of cover crops, soil health measurement, carbon payment programs and strategies for boosting soil health.
- ◆ **Webinars:**
 - ◆ US EPA Watershed Academy Webcast
 - ◆ North Central Region Water Network: Indigenous Perspectives on Water and Conservation
 - ◆ NCRWIN: Algal Bloom Action Team
 - ◆ EPA Watershed Academy: Addressing & Managing Plastic Pollution
 - ◆ NCRWIN: Using Social Norms to Promote Conservation Adoption
 - ◆ Road Salt Application & Environmental Consequences



Additional Responsibilities

2021 Stormwater

Training Opportunities for County Staff

- ◆ US EPA: Agricultural Municipal Partnerships
- ◆ EPA Small systems: Drinking Water Microbes 101
- ◆ Institute for Responsible Technology: Impacts of Glyphosate on Human and Environmental Health
- ◆ EPA: Community Engagement in MPS Work
- ◆ Institute for Responsible Technology: Soil Microbes
- ◆ Soil Food Web: The Key to Soil Health
- ◆ Soil Food Web: Proof that Regenerative Ag Works
- ◆ Soil Food Web: How to Rapidly Regenerate Your Soil
- ◆ MU: Soil Health
- ◆ NCRWN: Complexities in predicting Harmful Algal Blooms
- ◆ EPA: Social Indicators in NPS Management
- ◆ EPA: Resilience of Ecosystems in a Changing Climate
- ◆ AWRA: Getting to the Heart of Science Communication
- ◆ HWC/SWC: Landowner Engagement
- ◆ Farmer's Footprint: Regenerative Agriculture
- ◆ Grow Native: Native Plants and Stormwater
- ◆ Sunshine Law

Develop/Distribute Educational Materials

- ◆ Boone County Stormwater Website: www.showmeboone.com/stormwater
- ◆ Bonne Femme Watershed Website: www.cavewatershed.org
- ◆ Hinkson Creek Collaborative Adaptive Management Website: www.helpthehinkson.org
- ◆ Stormwater Newsletters <https://www.showmeboone.com/stormwater/education/newsletters.asp>
- ◆ Boone County Stormwater Facebook Page: <https://www.facebook.com/boonecountymostormwater>

Additional Responsibilities

2021 Stormwater

Develop/Distribute Educational Materials

- ◆ Boone County Stormwater Website: www.showmeboone.com/stormwater
- ◆ Bonne Femme Watershed Website: www.cavewatershed.org
- ◆ Hinkson Creek Collaborative Adaptive Management Website: www.helpthehinkson.org
- ◆ Stormwater Newsletters <https://www.showmeboone.com/stormwater/education/newsletters.asp>
- ◆ Boone County Stormwater Facebook Page: <https://www.facebook.com/boonecountymostormwater>
- ◆ Boone County Stormwater YouTube Channel: https://www.youtube.com/channel/UCrd_RaCJ73N442kfWGFa1FA



- ◆ Greater Bonne Femme Watershed Signs
- ◆ Litter Prevention Website: <https://sites.google.com/como.gov/sustain-edu-litter-stem/litter-prevention>
- ◆ The Water Cycle Website: <https://sites.google.com/como.gov/sustain-edu-water-cycle-stem/home>
- ◆ Facilities Maintenance and Road & Bridge Stormwater Stewardship Fact Sheets
- ◆ Traveling "Who Polluted the Stream" Kit

- ◆ "Macroinvertebrate Stream Monitoring" in a Classroom
- ◆ Meyer Industrial Drive Bioretention Basins Sign



Additional Responsibilities

2021 Stormwater

Monitoring and Assessments

Lakes of Missouri Volunteer Program (LMVP) Sampling

The LMVP started in 1992 as an effort to get citizens involved in the lake water quality monitoring. The goals of the LMVP are:

1. Determine the current water quality based on productivity of Missouri's lakes,
2. Monitor for changes in water quality over time,
3. Educate the public about the lake ecology and water quality issues.

Staff at Boone County continued sampling at Stephens Lake, Tri City Lake, and Lick Creek Lake this season. Staff collected three (3) samples between June and September. By participating in this effort, Boone County receives free sampling equipment and information on the status of the lakes in Boone County. For more information, visit www.LMVP.org.

Boone County Stream Team

The Boone County Stream Team hosted the water quality monitoring blitzes at Rock Bridge Memorial State Park in the Spring and Fall of 2021. In spite of the pandemic and related restrictions, we were able to hold these outdoor events and collect data from streams in and around the Park. Continuing to collect the water quality data at these sites over time helps to inform our understanding of water quality changes in the Greater Bonne Femme Watershed. These semi-annual blitz events have provided an opportunity for field training for Missouri Stream Team water quality volunteers, and we are excited to see new Stream Teams formed by these volunteers.





Additional Responsibilities

2021 Stormwater

Monitoring and Assessments

Greater Bonne Femme Watershed Project

The Greater Bonne Femme Watershed Project is the revitalization and continuation of several projects from the past that sought to protect and conserve water quality in the watershed. In August 2018, Boone County received a Chapter 319 subgrant award from the Environmental Protection Agency, through Missouri Department of Natural Resources to develop a 9-element watershed management plan, and was scheduled to run through July 31, 2020. We requested, and were granted, a budget and time extension to July 31, 2021. This year we asked for, and were granted another time extension to July 31, 2022.

- ◆ **Technical Advisory Committee** – The committee met eight (8) times.
- ◆ **Steering Committee** – The committee met three (3) times.
- ◆ **Monitoring:**
 - ◇ Gauging Stations - Stations were set up at Turkey Creek and Hwy 63 S, Bonne Femme Creek at Andrew Sapp Rd, and Little Bonne Femme Creek at Woodie Proctor Rd.
 - ◇ Quarterly stormwater sampling was completed this year.
 - ◇ E. coli testing was completed in 2020.
- ◆ **Cooperative Stream Investigation Project** – This project was completed in 2018. A final report from the Missouri department of Natural Resources Coordinator was received in May 2019.
- ◆ **Demonstration Project** – Seth Paul Excavating rehabbed and mulched the Meyer Industrial Dr. bioretention basins in Fall 2019. In June 2020 volunteers helped replant the bioretention basins with native grasses and flowers. More grasses were planted in October 2020. Salter Lawn Service was awarded the maintenance contract for the remainder of the grant. In 2021, an educational sign was installed and a dedication ceremony was held.
- ◆ **Draft Watershed-based 9-element Plan** – second draft of the 9-element watershed-based plan was submitted to MDNR and EPA for review. We received comments and recommendations that will greatly improve our final plan, to be completed in 2022.



Additional Responsibilities

2021 Stormwater

Monitoring and Assessments

Hinkson Creek Collaborative Adaptive Management

The goal of the collaborative adaptive management process is to improve water quality in Hinkson Creek by using a science-based approach guided by a local stakeholder committee. It will assess the entire stream system, including the creek and other parts of the watershed. Improving the ecosystem should help support the return of the biological community to a fully functioning level as well as addressing other pollutants that may be contributing to water quality issues.

- ♦ **Stakeholders** - The Stakeholder group met four (4) times.
- ♦ **Action Team** - The Action Team met ten (10) times.
- ♦ **Science Team** - The Science Team met ten (10) times.
- ♦ **Riparian Subcommittee** – The Riparian Subcommittee of the Stakeholder group met six (6) times.
- ♦ **Forum Nature Area Level Spreader** – Construction and monitoring are 100% Complete. Sign design is ongoing.
- ♦ **Missouri River Backwater Effects Evaluation** – 100% complete.
- ♦ **Habitat Assessment** – Physical Assessment is 100% complete. Spatial analysis is ongoing.
- ♦ **Fine Sediment Mapping** – 100% done. Data analysis is pending.
- ♦ **LiDAR Analysis of Stream** – Boone County GIS completed an initial analysis of the stream corridor in 2021, which showed amounts of sediment erosion and deposition. The Science Team is studying the results to determine if there are any “hot spots” along the corridor that need attention or additional monitoring.
- ♦ **Macroinvertebrate Study** – 100% complete.



Additional Responsibilities

2021 Stormwater

Monitoring and Assessments

Hinkson Creek Collaborative Adaptive Management

- ♦ **Synoptic Sampling** – Sampling began in 2019. Funding was approved in 2019 to continue sampling for two (2) additional years. Five (5) events were completed in 2021. Two more events will be done in 2022 to satisfy the contract requirements.
- ♦ **Lincoln University Gauging Stations** – Dr. Zeiger has installed stage samplers at Dr. Hubbard's old gauging station sites along Hinkson Creek in 2021. Additional sensors for conductivity will be added at a later time.
- ♦ **USGS Comprehensive Chemical Sampling** – This project was approved for funding in 2021. Sampling is set to begin in the spring and fall of 2022.

Joint MS4 Coordination Meetings

Stormwater staff from Boone County, City of Columbia, and University of Missouri meets each month to coordinate and work on stormwater activities. This year the committee met ten (10) times



Additional Responsibilities

2021 Stormwater

MS4 Compliance

STORMWATER PROGRAM COMPLIANCE

	Stormwater Prevention Plans Reviewed	Pre- Application Meetings Held	Land Disturbance Permits Issued	Stormwater Discharge Permits Issued	Pre- construction Meetings Held	Site Inspections Conducted	Notice of Violation Issued
2011	19	21	15	4	9	45	3
2012	17	4	17	4	5	47	0
2013	15	13	32	10	7	49	4
2014	15	4	24	6	6	28	2
2015	9	6	24	8	4	85	2
2016	14	10	44	14	12	184	11
2017	8	6	26	12	4	196	9
2018	11	12	39	19	7	231	12
2019	8	5	18	15	6	123	4
2020	9	5	22	8	9	81	5
2021	15	6	33	13	10	99	12

City of Ashland 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

For use by all Entities (Application, Formula and Centralia Special Road District) to provide annual information in accordance with the Cooperative Agreement entered into with Boone County, Missouri (Commission Orders 459-2011 through 471-2011 approved on November 15, 2011, by the Boone County Commission).

Reporting Entity:

City of Ashland

Reporting on Calendar Year:

2021

Narrative for use of funds received

The Boone County Road and Bridge Repair Fund provided the City of Ashland with \$160,033.23 in October 2021. This is a \$4,645.67 increase from the amount provided in 2020 (\$155,387.56). The 2021 funds were utilized in November 2021 for a mill and overlay project of several streets inside Ashland city limits. That project had a total cost of \$299,987.45. Other funds from the City of Ashland were used for the remainder of this project.

Narrative on overall condition of roads and bridges within reporting municipality:

The condition of roads and bridges within Ashland city limits are overall in good shape. We continue to see older streets throughout town, particularly those with concrete roadways, that experience faster deterioration than expected. Ashland Public Works has implemented a program of overlaying these streets with asphalt. Experience has shown that an asphalt driving surface with concrete base provides for roads that are easier and more cost effective to maintain. This program will continue well into the future.

Ashland continues to experience new growth each year. New residential and commercial development projects have led to increases in roadway miles annually for the last several years. These new streets are currently in great condition, but do require periodic maintenance. As with any growing community, we are experiencing significant increases in commercial and residential traffic, which leads to faster deterioration of our roadways.

Allocation and Expenditure of Funds Received listed by project, with a project description. Include only direct design and construction costs pertaining to roads, bridges and storm water; indirect and other administrative costs are not allowable. Attach extra pages as necessary.

City of Ashland 2021 Annual Report

Projects with descriptions _

The following project was partially funded with the 2021 Boone County Road and Bridge Repair Fund:

2021 Mill and Overlay Project

Total Project Cost: \$299,987.45

This project consisted of edge milling the existing concrete roadway surfaces, application of a trackless tack coat adhesive, and an overlayment of a 2" lift of compacted BP-2 asphalt to serve as the new roadway surface. The following streets were included in this project, along with their respective costs.

Seasons Ride Dr
Springtime Dr
South Woods Ct
Meadow Lane
Pinto Pony Dr
Caspian Circle
Dogwood Ct
Terra Linda Ln
Redwing Dr
N College St
Red Setter Cir
Irish Setter Dr

City of Ashland 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

Page 2

Report Summary

The City of Ashland has expended all received funds from 2021 on various projects aimed at improving the city's transportation infrastructure. The funds received from the Boone County Road and Bridge Repair Fund are vital to successful maintenance, repairs, and construction of roads and bridges with the City of Ashland. These funds, when coupled with income collected through our local transportation tax, allow the City of Ashland to provide the public with safe roads and bridges throughout our city.

The City of Ashland continues to experience significant growth of both population and city footprint. At any given time, there are multiple commercial and residential developments underway. This growth is not expected to diminish anytime soon. Accordingly, we are seeing increases in traffic, both commercial and residential throughout the city. This sustained growth and increased traffic is leading to deterioration of roadways at a much faster rate than the city has experienced in the past. We are also increasing the number of roadway miles in town rapidly by adding these developments.

All of these issues lead to increases in annual roadway maintenance costs. As Ashland continues to grow, additional funding will be required each year to keep our streets in acceptable condition. Without the funds provided from the Boone County Road and Bridge Repair Fund, we would be forced to decrease the amount of projects and repairs significantly. This cooperative agreement is highly beneficial for both Ashland residents and Boone County residents, as Ashland is the hub of Southern Boone County. It allows for the timely completion of major road repairs, and leaves local transportation funding available for routine maintenance of city streets and smaller scale projects. City and county residents are able to easily recognize that both the City of Ashland and Boone County place a high priority on providing a safe and well-maintained transportation system.

The City of Ashland looks forward to continued cooperation between ourselves and the County of Boone to provide exceptional services to our taxpayers.

[illegible]

City of Ashland 2021 Annual Report

TOTAL

\$299,987.45

I declare that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge; certify that the information provided above is true, complete and accurate.

Signature

1/7/2021

Date

Public Works Director

Title

James Creel

573-657-2568

Printed Name

Day Time Phone number

Complete this report and send to Boone County Resource Management, Attn: Kelle Westcott, 801 East Walnut Room 315, Columbia, MO 65201; by December 15th.

City of Centralia 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

For use by all Entities (Application, Formula and Centralia Special Road District) to provide annual information in accordance with the Cooperative Agreement entered into with Boone County, Missouri (Commission Orders 459-2011 through 471-2011 approved on November 15, 2011, by the Boone County Commission).

Reporting Entity: City of Centralia

Reporting on Calendar Year: 2021

Narrative for use of funds received The funds received went toward the annual overlay of streets which is detailed on the attached sheet, as well as the operation of the Street Dept. In addition to road maintenance, we repaired streets around the City including asphalt overlay of one of two gravel roads inside the city limits.

Narrative on overall condition of roads and bridges within reporting municipality:

The City of Centralia conducts an annual review of the 37.55 miles of streets under our control. Each street is scored based on its condition, using a scale of 1-10, with 10 being a functionally new road. The results were:

Allocation and Expenditure of Funds Received listed by project, with a project description. Include only direct design and construction costs pertaining to roads, bridges and storm water; indirect and other administrative costs are not allowable. Attach extra pages as necessary.

Projects with descriptions _See attached information. This report concerns the right-most column, Calendar year 2021. The other numbers are supplied for comparison.

ROAD & BRIDGE ANNUAL SUMMARY REPORT

Page 2

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is a small margin at the top left where the lines begin. The paper appears to be from a notebook or a standard sheet of stationery.

TOTAL

\$664,688.43

I declare that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge; certify that the information provided above is true, complete and accurate.

Signature Heather Russell

01/24/2022

Signature

Date _____

City Administrator

Title

Heather Russell

573-682-2139

Printed Name

Day Time Phone number

Complete this report and send to Boone County Resource Management, Attn: Kelle Westcott, 801 East Walnut Room 315, Columbia, MO 65201; by December 15th.

City of Centralia 2021 Annual Report

PUBLIC WORKS - HIGHWAYS AND STREETS

ACCOUNT NUMBER	ACCOUNT TITLE	Calendar 2021	FY2021-22 BUDGET	Calendar 2020	FY2020-21 AUDITED	FY2019-20 AUDITED	FY2018-19 BUDGET	FY2018-19 AUDITED
PLANNING & ADMIN								
01-311-6001	SALARIES & WAGES	103,705	105,154	8,323	10,092	8,238	7,852	7,584
01-311-6002	OVERTIME WAGES	3,388	4,708	199	1,079	1,220	1,282	1,052
01-311-6010	ACCRUED EMPLOYEE BENEFITS	68,167	74,197	6,583	6,688	6,585	5,366	5,306
01-311-6110	PRINTING, PUBLICATION	-	50	48	48	248	200	549
01-311-6120	DUES/MEMBER/SUBS/TUITION	318	150	-	-	125	50	-
01-311-6142	PROF. SERV. ARCHT. ENG	117	2,500	-	-	21,538	126,920	75,938
01-311-6150	CONTRACT LABOR	1,521	1,500	1,466	1,466	1,188	1,300	1,020
01-311-6170	MAINT. AGREEMENTS, LEASE	1,264	1,500	1,498	1,296	989	1,100	980
01-311-6180	MEALS, LODGING, TRAVEL	-	600	-	-	1,114	100	-
01-311-6201	OFFICE SUP. FURNITURE	-	-	-	-	-	-	-
01-311-6210	OPERATING SUPPLIES	210	450	361	167	273	300	327
01-311-6490	EQUIPMENT USE CHARGE	7,225	7,000	6,743	6,677	6,909	6,000	6,311
01-311-6905	COMMUNITY DEV BLOCK GRANT	-	-	1,000	-	4,327	-	-
01-311-5509	MISC CAPITAL	-	-	-	-	-	-	-
SUBTOTAL \$		185,915 \$	197,809 \$	26,221 \$	32,872 \$	52,754 \$	150,469 \$	99,067

STREET MAINTENANCE

01-312-5502	VEHICLES	40,969	41,000	-	-	-	-	33,934
01-312-5508	OTHER EQUIPMENT	-	4,200	-	-	-	-	-
01-312-5509	MISC. CAPITAL	-	7,000	-	-	-	-	-
01-312-6001	SALARIES AND WAGES	2,450	-	22,798	21,133	18,034	25,262	18,449
01-312-6002	OVERTIME WAGES	-	-	47	147	1,125	2,841	1,611
01-312-6010	ACCRUED EMPLOYEE BENEFITS	1,528	-	15,396	13,970	12,465	15,403	11,417
01-312-6110	PRINTING, PUBLICATIONS, AD	-	50	-	-	-	150	58
01-312-6132	UTILITIES-NATURAL GAS, PR	433	400	348	350	359	450	354
01-312-6150	CONTRACT LABOR	975	3,500	1,983	1,983	2,505	1,200	5,301
01-312-6160	REPAIR SERVICE	-	300	46	46	-	300	19
01-312-6170	MAINT. AGREEMENTS, LEASES	-	-	-	-	-	300	-
01-312-6190	INSURANCE	14,116	11,100	1,059	3,660	-	-	-
01-312-6210	OPERATING SUPPLIES	58,007	32,000	33,817	25,056	24,980	17,500	23,638
01-312-6220	TOOLS/SMALL EQUIPMENT	461	150	122	122	243	200	257
01-312-6450	EQUIPMENT RENTAL	-	750	-	-	-	1,000	114
01-312-6490	EQUIPMENT USE CHARGES	-	10,000	101,208	13,478	30,043	18,000	35,206
01-312-6901	MISCELLANEOUS	-	-	115	115	-	-	-
SUBTOTAL \$		77,970 \$	110,450 \$	176,939 \$	135,260 \$	89,754 \$	82,606 \$	130,358

ALLEY MAINTENANCE

01-313-6001	SALARIES AND WAGES	22	-	1,363	428	1,567	628	1,573
01-313-6002	OVERTIME WAGES	-	-	-	-	-	-	359
01-313-6010	ACCRUED EMPLOYEE BENEFITS	17	-	945	326	903	342	664
01-313-6210	OPERATING SUPPLIES	-	1,000	1,000	-	1,000	1,000	3,408
01-313-6450	EQUIPMENT RENTAL	-	-	-	-	-	-	-
01-313-6490	EQUIPMENT USE CHARGES	2,819	2,750	2,673	2,628	2,500	1,500	2,272
SUBTOTAL \$		2,859 \$	3,750 \$	5,981 \$	6,892 \$	5,970 \$	3,470 \$	8,276

SIDEWALK & PARKING LOT MAINTENANCE

City of Centralia 2021

Annual Report

PUBLIC WORKS - HIGHWAYS AND STREETS

ACCOUNT NUMBER	ACCOUNT TITLE	Calendar 2021	FY2021-22 BUDGET	Calendar 2020	FY2020-21 AUDITED	FY2019-20 AUDITED	FY2018-19 BUDGET	FY2018-19 AUDITED
01-314-6001	SALARIES & WAGES	809	-	7,122	7,931	1,642	1,200	617
01-314-6002	OVERTIME WAGES	-	-	-	51	-	150	-
01-314-6010	ACCRUED EMPLOYEE BENEFITS	526	-	5,175	5,700	1,125	728	382
01-314-6110	PRINTING, ADV. PUBLICATION	-	-	4	-	196	-	-
01-314-6142	PROF. SERV. ARCH. ENG. SURV.	4,000	48,000	-	4,000	-	12,000	350
01-314-6150	CONTRACT LABOR	-	1,000	-	-	-	7,500	3,356
01-314-6160	REPAIR SERVICE	-	-	-	-	-	100	-
01-314-6170	MAINTENANCE AGREEMENTS & LEASES	-	-	-	-	-	-	156
01-314-6190	INSURANCE	-	-	-	-	-	-	1,208
01-314-6201	OFFICE SUPPLIES	-	-	-	-	-	-	-
01-314-6210	OPERATING SUPPLIES	6,259	6,500	7,363	8,797	5,116	7,500	1,230
01-314-6220	TOOLS/SMALL EQUIPMENT	-	300	-	-	-	-	-
01-314-6450	RENTAL	-	-	25	25	-	-	-
01-314-6490	EQUIPMENT USE CHARGES	1,469	1,350	1,357	1,350	1,363	2,600	-
01-314-6730	SRTS SIDEWALK CONSTRUCTION	-	-	-	-	-	-	-
SUBTOTAL			\$ 57,150		\$ 13,258	\$ 9,442	\$ 31,778	\$ 7,299

STREET BUILDING & GROUNDS

01-315-6001	SALARIES AND WAGES	379	-	905	755	2,640	3,475	1,802
01-315-6002	OVERTIME WAGES	-	-	-	-	-	185	-
01-315-6010	ACCRUED EMPLOYEE BENEFITS	209	-	633	460	1,815	2,750	1,148
01-315-6132	UTILITIES-NATURAL GAS, PR	1,540	1,500	1,243	1,343	1,498	1,900	1,441
01-315-6133	UTILITIES, TELEPHONE, FAX	2,781	2,150	2,488	2,404	1,498	550	1,165
01-315-6150	CONTRACT LABOR	2,335	1,600	1,372	1,536	1,289	400	3,241
01-315-6160	REPAIR SERVICES	-	200	166	166	165	-	-
01-315-6170	MAINT AGREEMENTS & LEASES	645	150	167	136	167	163	156
01-315-6190	INSURANCE	-	-	1,831	1,831	1,428	1,100	1,208
01-315-6201	OFFICE SUPP FURNITURE/EQU	-	-	-	-	57	100	-
01-315-6210	OPERATING SUPPLIES	2,329	1,500	427	601	2,356	1,500	1,230
01-315-6220	TOOLS/SMALL EQUIPMENT	229	500	1,183	312	560	300	-
01-315-6490	EQUIPMENT USE CHARGES	-	-	-	-	-	200	-
01-315-5510	BUILDING IMPROVEMENTS	-	-	-	-	-	-	-
SUBTOTAL		\$ 10,446	\$ 7,600	\$ 10,416	\$ 13,047	\$ 13,473	\$ 12,623	\$ 11,391

SNOW & ICE REMOVAL

01-316-6001	SALARIES AND WAGES	6,193	-	7,545	6,237	5,566	3,800	7,706
01-316-6002	OVERTIME WAGES	4,674	-	3,596	4,674	4,779	1,800	8,666
01-316-6010	ACCRUED EMPLOYEE BENEFITS	4,375	-	5,810	4,407	4,816	3,875	6,474
01-316-6160	REPAIR SERVICE	-	200	-	-	75	200	-
01-316-6210	OPERATING SUPPLIES	13,148	14,000	14,529	12,629	16,296	10,000	14,213
01-316-6490	EQUIPMENT USE CHARGES	10,532	35,000	46,855	32,827	24,198	7,000	10,698
SUBTOTAL		\$ 38,922	\$ 49,200	\$ 78,336	\$ 48,566	\$ 55,730	\$ 26,675	\$ 47,757

STREET & SIGN MAINTENANCE

01-317-6001	SALARIES AND WAGES	603	-	6,043	6,143	5,469	2,755	4,284
01-317-6002	OVERTIME WAGES	-	-	113	113	63	30	232
01-317-6010	ACCRUED EMPLOYEE BENEFITS	312	-	4,302	4,300	3,792	2,015	2,914
01-317-6150	CONTRACT LABOR	-	150	-	-	40	150	-

City of Centralia 2021

Annual Report

PUBLIC WORKS - HIGHWAYS AND STREETS

ACCOUNT NUMBER	ACCOUNT TITLE	Calendar 2021	FY2021-22 BUDGET	Calendar 2020	FY2020-21 AUDITED	FY2019-20 AUDITED	FY2018-19 BUDGET	FY2018-19 AUDITED
01-317-6160	REPAIR SERVICE	-	-	-	-	-	-	-
01-317-6210	OPERATING SUPPLIES	4,318	5,500	5,353	5,450	3,500	5,000	3,839
01-317-6220	TOOLS/SMALL EQUIPMENT	35	-	-	-	-	-	-
01-317-6490	EQUIPMENT USE CHARGES	-	1,500	1,310	1,310	-	1,400	289
	SUBTOTAL	\$ 5,268	\$ 7,150	\$ 17,121	\$ 13,714	\$ 12,864	\$ 11,350	\$ 11,558
STORM DRAINAGE								
01-318-6001	SALARIES AND WAGES	2,327	-	36,788	1,166	36,100	-	22,808
01-318-6002	OVERTIME WAGES	178	-	316	35,694	575	615	513
01-318-6010	ACCRUED EMPLOYEE BENEFITS	1,582	-	25,985	272	27,089	12,550	16,644
01-318-6142	PROF. SERV. ARCH. ENG. & SUR	1,313	75,000	-	23,903	-	12,000	8,523
01-318-6150	CONTRACT LABOR	-	1,000	309	309	-	1,000	-
01-318-6170	MAINT AGREEMENTS & LEASES	-	-	-	-	-	-	-
01-318-6210	OPERATING SUPPLIES	11,365	8,500	7,503	8,376	11,776	20,000	10,165
01-318-6220	TOOLS/SMALL EQUIPMENT	-	100	-	-	33	100	-
01-318-6450	RENTAL	-	1,000	-	-	-	4,000	-
01-318-6490	EQUIPMENT USE CHARGES	10,083	5,000	-	-	3,637	6,000	2,923
01-318-5509	MISCELLANEOUS CAPITAL	1,166	2,500	11,216	10,648	-	8,000	-
01-318-6901	MISCELLANEOUS	-	-	-	-	-	-	-
	SUBTOTAL	\$ 28,014	\$ 93,100	\$ 82,117	\$ 225,928	\$ 79,210	\$ 64,265	\$ 61,576

BRUSH & TREE CONTROL

01-319-6001	SALARIES AND WAGES	2,991	-	4,515	6,393	6,661	3,050	4,915
01-319-6002	OVERTIME WAGES	132	-	46	132	50	2,230	450
01-319-6010	ACCRUED EMPLOYEE BENEFIT	2,124	-	2,846	4,234	4,369	3,850	3,075
01-319-6160	REPAIR SERVICE	-	50	-	-	-	50	-
01-319-6170	MAINT AGREEMENTS & LEASES	-	-	-	-	-	-	-
01-319-6210	OPERATING SUPPLIES	2,389	500	34	21	25	800	75
01-319-6490	EQUIPMENT USE CHARGE	876	1,000	1,139	1,028	915	1,300	574
	SUBTOTAL	\$ 8,512	\$ 1,550	\$ 8,579	\$ 11,922	\$ 12,020	\$ 11,280	\$ 9,089
	TOTAL	\$ 357,906	\$ 527,759	\$ 405,709	\$ 501,459	\$ 331,217	\$ 394,516	\$ 386,371

CAPITAL SUMMARY

29-300-5509	CAPITAL EXPENDITURES	306,783	296,650	301,126	294,324	356,945	789,000	208,153
	TOTAL ALL EXPENDITURES	\$ 664,688.43	\$ 824,403.00	\$ 706,834.49	\$ 795,783.36	\$ 688,162.00	\$ 1,183,516.42	\$ 594,524.00

REVENUES

29-041-4020	TRANSPORTATION SALES TAX	241,464	223,288	224,923	227,865	205,441	215,000	212,850
29-043-4330	CDBG GRANT REVENUE	-	-	-	-	-	-	-
29-043-4350	COUNTY GRANT REVENUE	71,437	68,285	71,878	71,878	73,561	79,000	77,979
01-043-4304	COUNTY ROAD & BRIDGE	66,762	65,697	67,038	67,038	64,534	65,000	66,121
	TOTAL ALL REVENUES	\$ 379,663.03	\$ 357,270.00	\$ 363,838.75	\$ 366,781.20	\$ 343,536.00	\$ 359,000.00	\$ 356,950.00

City of Centralia 2021 Annual Report

CAPITAL IMPROVEMENT PROJECTS FISCAL YEAR 2021 - 2022

ASPHALT OVERLAY - PROJECTED EXPENDITURES

Street	Segment	Width	Length	Depth in Inches	Estimated Tons of Asphalt / Cub. Yds		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
					Concrete	Estimates				
Allen St	Lakeview to Alco	22	1289	2	375.55	28,166.59	28,167			
Allen St	Alco to Bryson	21	656	2	182.44	13,683.01	13,683			
Allen St.	Bryson to Gano	21	667	2	185.44	13,908.28	13,908			
Clark St	Hickman to Columbia	16	654	2	138.58	10,393.37	10,393			
Collier St	Barnes-Sneed	22	441	2	128.49	9,636.51	9,637			
Lakeview	Jefferson to Ivy	28	2668	2	1176.50	88,237.55	88,238			
Ivy St	Lakeview to gravel road	24	615	2	232.45	17,433.96	17,434			
Hawthorn ST	Lakeview to Ivy	24	717	2	271.01	20,325.44	20,325			
Miles St	Lakeview to Booth	23	1050	2	319.83	23,986.99	23,987			
Rodemyre	Jefferson to Howard Burton	24	1294	2	411.29	30,846.38	30,846			
Reed St	Whitman to Rodney Griffin	20	628	2	166.34	12,475.22	12,475			
Rodney Griffin	Singleton to Adams	26	1375	2	473.45	35,508.69	35,509			
Sidewalk on Booth	Jefferson St to City Pool	5		4	0.00	25,500.00	25,500			
Wright Ct	All	22		2	0.00	6,626.25	6,626			
Southgate St	Allen to Columbia	20	965	2	255.60	19,169.73		19,553		
Bradford St	Sneed-Sims	20	1405	2	372.14	27,910.33		28,469		
Collier St	Singleton-Sneed	22	267	2	77.79	5,834.35		5,951		
Collier St	Railroad-Singleton	22	422	2	122.95	9,221.33		9,406		
Poage St.	(Lee to Jefferson)	27	1300	2	464.84	34,863.08		35,560		
Jefferson St.	Railroad to Cox	38	3767	2	2254.38	169,078.67		172,460		
Sidewalk along Hwy 22	Howard Burton to Country Club	8	4300	4	425.00	351,649.00		351,649		
Singleton St	Rollins to Jefferson	55	1073	2	781.56	58,616.66		59,789		
Stone St	Switzer-Poage	16	283	2	59.97	4,497.44		4,587		
Central Street	Gano Ch to Central cul-de-sac	29	738	2	283.43	21,257.54			21,895	
Cook, Leach, Richey & Rocky (Tidball Tr. Pk.)		18	2354	2	561.15	42,086.00			43,349	
Porter	Southland to Tarr	20	366	2	96.94	7,270.59			7,489	
Randolph Road	From Hwy 22 to Remington	38		2	0.00	350,000.00			350,000	
Singleton St	200' E Collier-Jefferson	51	578	2	390.39	29,279.03			30,157	
Rollins St	Barnes-Sneed	37	415	2	203.35	15,251.36			15,709	
Hickman (100 N, part)		28	176	2	65.26	4,894.74			5,042	
Lakeview	Jefferson to Rollins	32	1413	2	598.81	44,910.80				46,707
Central Street	Lakeview Sims	0	0	2	0.00	0.00				-
Bradford St	Singleton to Sneed	19	275	2	69.20	5,189.73				5,397
Barnes St	Allen to Rollins	38	380	2	191.23	14,342.53				14,916
Barnes St	Sneed to Collier	22	276	2	80.41	6,031.02				6,272
Barnes St	Sneed to Jenkins	45	263	2	156.73	11,755.12				12,225
Barnes St	Sneed to Jenkins	25	160	2	52.97	3,973.00				4,132

Cost Totals		\$ 1,573,810	\$ 336,728	\$ 687,424	\$ 473,640	\$ 89,650
Total Tons	11625.47	11625.47	4061.36	4814.22	1600.52	1149.36
Less Contingency Reserve / Grant Funds		\$ -	\$ (319,719)	\$ (153,294)		
Total from Transportation Sales Tax Fund		\$ 336,728	\$ 367,705	\$ 320,346	\$ 89,650	

Centralia Special Road District 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

For use by all Entities (Application, Formula and Centralia Special Road District) to provide annual information in accordance with the Cooperative Agreement entered into with Boone County, Missouri (Commission Orders 459-2011 through 471-2011 approved on November 15, 2011, by the Boone County Commission).

Reporting Entity:
Centralia Special Road District of Boone County Mo.

Reporting on Calendar Year:
2021

Narrative for use of funds received :

Routine maintenance of roadways within the District including hauling gravel and blading of unpaved roads, replacing road pipes, cutting brush and mowing right of way as needed.

Narrative on overall condition of roads and bridges within reporting municipality:

The overall condition of the gravel roads in the District are considered to be in average or better condition.

The condition of the blacktop roads are average to good with about 5% of the blacktops needing to be overlayed.

The bridges are in average condition considering their age.

Allocation and Expenditure of Funds Received listed by project, with a project description. Include only direct design and construction costs pertaining to roads, bridges and storm water; indirect and other administrative costs are not allowable. Attach extra pages as necessary.

Projects with descriptions:

1. Hauled \$59,479.64 of rock on un-paved roads.
2. Replaced \$6,940.00 of culverts.
3. Spent \$107,273.09 on pavement maintenance.

City of Columbia 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

For use by all Entities (Application, Formula and Centralia Special Road District) to provide annual information in accordance with the Cooperative Agreement entered into with Boone County, Missouri (Commission Orders 459-2011 through 471-2011 approved on November 15, 2011, by the Boone County Commission).

Reporting Entity: City of Columbia

Reporting on Calendar Year: 2021

Narrative for use of funds received The City of Columbia will be using the funds for construction of Discovery Parkway: Gans to New Haven and maintenance of Rangeline: Rogers to Wilkes.

Narrative on overall condition of roads and bridges within reporting municipality:

The City of Columbia maintains 1,426.78 lane miles of streets and 43 bridges/structures that span a minimum of 20 feet. The City's street network is currently inspected on a 3 cycle, which means 1/3 of the streets within the City are inspected every year using the PASER rating system. The City's current overall average PASER rating is a 6.70/ The City's 43 bridges and structures are inspected by MODOT and City staff every 2 years. Of the 43 structures, 36 were rated as Not Deficient, 2 were functionally deficient and 5 were structurally deficient.

Allocation and Expenditure of Funds Received listed by project, with a project description. Include only direct design and construction costs pertaining to roads, bridges and storm water; indirect and other administrative costs are not allowable. Attach extra pages as necessary.

Projects with descriptions _Discovery Parkway: Gans to New Haven: Construction of arterial roadway on new alignment from US Hwy 63 interchange at Gans Road, northward to Rolling Hills/New Haven. Project length is approximately 8,500 LF.

Maintenance of Rangeline: Rogers to Wilkes:Reconstruction of Rangeline Street from Rogers Street to Wilkes Blvd. to correct base failure and improve pavement condition.

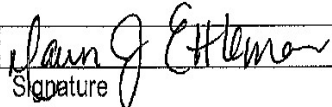
City of Columbia 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

Page 2

TOTAL
\$1,632,235

I declare that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge; certify that the information provided above is true, complete and accurate.

	1/13/2022
Signature	Date

Financial Analyst
Title

Dawn Ettleman	573-441-6610

City of Hallsville 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

For use by all Entities (Application, Formula and Centralia Special Road District) to provide annual information in accordance with the Cooperative Agreement entered into with Boone County, Missouri (Commission Orders 459-2011 through 471-2011 approved on November 15, 2011, by the Boone County Commission).

Reporting Entity:
City of Hallsville

Reporting on Calendar Year:
July 1, 2020 - June 30, 2021

Narrative for use of funds received
The Road and Bridge Grant funding was used for concrete road repair in Meadows Ledge subdivision by the City's Public Works Department.

Narrative on overall condition of roads and bridges within reporting municipality:

The asphalt streets are in good condition with very few cracks. The concrete streets have been repaired in Meadows Ledge except Mason Ct. Work will begin again next spring. Will begin to take inventory of other concrete streets and curbs for repair.

Allocation and Expenditure of Funds Received listed by project, with a project description. Include only direct design and construction costs pertaining to roads, bridges and storm water; indirect and other administrative costs are not allowable. Attach extra pages as necessary.

Projects with descriptions

—
Carry over from fiscal year 2019/2020 was \$45,531.53 with an additional \$43,567.32 grant funding received in 2020. Funds were used for working on the sand/salt shed for winter road maintenance - \$567.20; patching potholes - \$151.96; 1" road rock to repair the road that goes out to the sewer lagoon - \$1,684.05; concrete street repair in Meadows Ledge - \$10,630.34. This left the Road & Bridge Grant at an ending balance of \$73,065.30. The City is starting a comprehensive plan and will know a better direction on the need for roads or road repairs.

Town of Harrisburg 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

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Reporting Entity:

Town of Harrisburg

Reporting on Calendar Year:

2020

Narrative for use of funds received

2016 through 2020 Street Project Funds are retained in a separate account to accumulate for a larger project.

Narrative on overall condition of roads and bridges within reporting municipality:

Waiting for completion of Timberlake Subdivision to begin paving Project on Hughes Road.
2021 will have road repairs.

Allocation and Expenditure of Funds Received listed by project, with a project description. Include only direct design and construction costs pertaining to roads, bridges and storm water; indirect and other administrative costs are not allowable. Attach extra pages as necessary.

Projects with descriptions

Accumulating funds in a separate ledger account:

2016	\$13,386.73 - \$859.49 spent on prior year projects = 12,527.24
2017	13,450.21
2018	10,792.55
2019	12,880.41
2020	12,581.54

Town of Harrisburg 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

Page 2

2020: Spent \$2,312.33 on Engineering fees for 2021 Engineering Plans.
The balance of funds are being accumulated for this &
other future projects.

TOTAL

I declare that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge; certify that the information provided above is true, complete and accurate.

Signature Kathy White Date 1-7-22

Title Clerk

Printed Name Kathy White Day Time Phone number 573-874-0138

Complete this report and send to Boone County Resource Management, Attn: Kelle Westcott; 801 East Walnut Room 315, Columbia, MO 65201; by December 15th.

Village of Hartsburg 2021 Annual Report

City of Huntsdale 2021 Annual Report

No report was
received from the
City of Huntsdale

City of McBaine 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

For use by all Entities (Application, Formula and Centralia Special Road District) to provide annual information in accordance with the Cooperative Agreement entered into with Boone County, Missouri (Commission Orders 459-2011 through 471-2011 approved on November 15, 2011, by the Boone County Commission).

Reporting Entity:

CITY of McBAINE

Reporting on Calendar Year:

2021

Narrative for use of funds received

There were no projects this year that required expenditure of funds.

Narrative on overall condition of roads and bridges within reporting municipality:

McBaine's streets are in good condition, overall.

Allocation and Expenditure of Funds Received listed by project, with a project description. Include only direct design and construction costs pertaining to roads, bridges and storm water; indirect and other administrative costs are not allowable. Attach extra pages as necessary.

Projects with descriptions

There were none

City of McBaine 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

Page 2

TOTAL

I declare that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge; certify that the information provided above is true, complete and accurate.

--

Signature Marvin E. Sapp Date 1-7-22

Title	<u>Chmn. - Bd. of Trustees</u>
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<u>MARVIN E. SAPP</u>

Printed Name Day Time Phone number

Complete this report and send to Boone County Resource Management, Attn: Kelle Westcott, 801 East Walnut Room 315, Columbia, MO 65201; by December 15th.

Village of Pierpont 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

For use by all Entities (Application, Formula and Centralia Special Road District) to provide annual information in accordance with the Cooperative Agreement entered into with Boone County, Missouri (Commission Orders 459-2011 through 471-2011 approved on November 15, 2011, by the Boone County Commission).

Reporting Entity:
Village of Pierpont

Reporting on Calendar Year: 2021

Narrative for use of funds received repair of Tomlin Hill Road

Narrative on overall condition of roads and bridges within reporting municipality:

Good


Allocation and Expenditure of Funds Received listed by project, with a project description. Include only direct design and construction costs pertaining to roads, bridges and storm water; indirect and other administrative costs are not allowable. Attach extra pages as necessary.

Projects with descriptions _Repair of Tomlin Hill Road

ROAD & BRIDGE ANNUAL SUMMARY REPORT
Page 2

TOTAL	
\$20,000.00	

I declare that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge; certify that the information provided above is true, complete and accurate.

Signature  Date 12/21/2021

Chairman of the Board
Title

Ronald Lee Skiles	573-999-1212
Printed Name	Day Time Phone number

Complete this report and send to Boone County Resource Management, Attn: Kelle Westcott, 801 East Walnut Room 315, Columbia, MO 65201; by December 15th.

City of Rochepont 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

For use by all Entities (Application, Formula and Centralia Special Road District) to provide annual information in accordance with the Cooperative Agreement entered into with Boone County, Missouri (Commission Orders 459-2011 through 471-2011 approved on November 15, 2011, by the Boone County Commission).

Reporting Entity:

City of Rochepont

Reporting on Calendar Year:

2021

Narrative for use of funds received

700 2nd Street / 1st Ave Street

Narrative on overall condition of roads and bridges within reporting municipality:

Fair Condition

Allocation and Expenditure of Funds Received listed by project, with a project description. Include only direct design and construction costs pertaining to roads, bridges and storm water; indirect and other administrative costs are not allowable. Attach extra pages as necessary.

Projects with descriptions

Additional Funds Spend

ON SECOND STREET ROAD PROJECT

2018-2019. This is final

Payment to complete project.

Storm Sewer on Pike Street

Repair Issues

ROAD & BRIDGE ANNUAL SUMMARY REPORT

Page 2

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

TOTAL

\$4,887.45

I declare that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge; certify that the information provided above is true, complete and accurate.

Signature

Jonnie Ontz

1-10-22
Date

Title

City Clerk

Printed Name _____

JANICE ADTON

Day Time Phone number

573-698-3245

Complete this report and send to Boone County Resource Management, Attn: Kelle Westcott, 801 East Walnut Room 315, Columbia, MO 65201; by December 15th.

City of Sturgeon 2021 Annual Report

ROAD & BRIDGE ANNUAL SUMMARY REPORT

For use by all Entities (Application, Formula and Centralia Special Road District) to provide annual information in accordance with the Cooperative Agreement entered into with Boone County, Missouri (Commission Orders 459-2011 through 471-2011 approved on November 15, 2011, by the Boone County Commission).

Reporting Entity:

City of Sturgeon

Reporting on Calendar Year:

2022 -

Narrative for use of funds received

Chip + Seal

Narrative on overall condition of roads and bridges within reporting municipality:

all roads are in bad shape.
lots of pot holes.

Allocation and Expenditure of Funds Received listed by project, with a project description. Include only direct design and construction costs pertaining to roads, bridges and storm water; indirect and other administrative costs are not allowable. Attach extra pages as necessary.

Projects with descriptions

chip + seal on all Roads

in the City of Sturgeon.

N Fairground Road to West Francis Street
West Proctor Street to East Proctor Street
West Stone to East Stone - W. Harris - W. Smith
W. Wall - W. Davis - W. Patton - W. Patton

West Mc Donald St. W. Burkes & W Canada

City of Sturgeon 2021 Annual Report

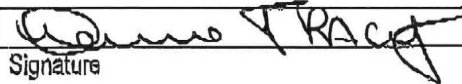
ROAD & BRIDGE ANNUAL SUMMARY REPORT

Page 2

would like all Roads
chip + Seal. Will start at Fairgrounds
Road PLANS to Stay on the West
Half of town. If all done
will have funds will do the East
Side of town.

TOTAL

I declare that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge, certify that the information provided above is true, complete and accurate.


Signature

11-14-2021
Date

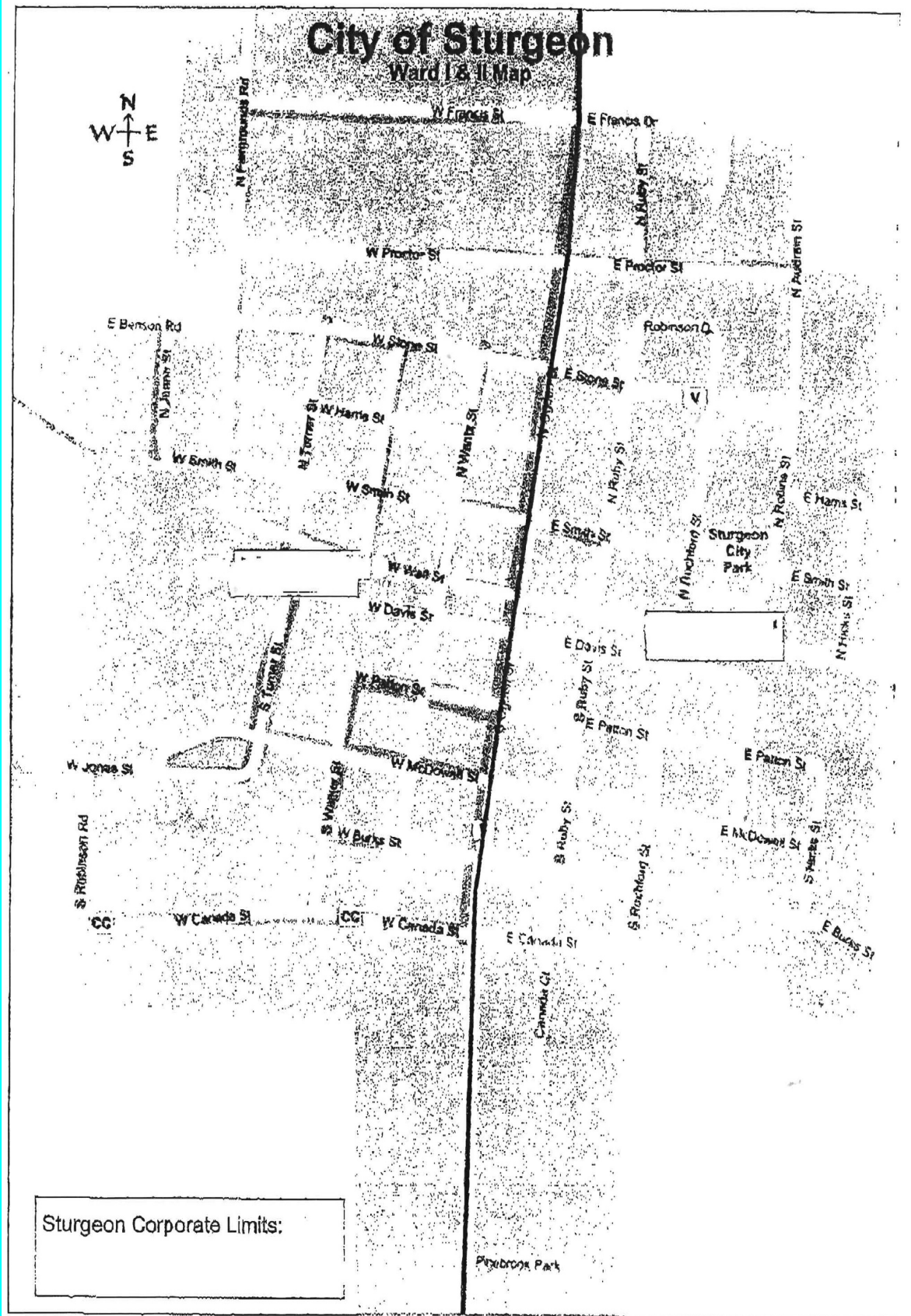
Title City Clerk

DONNA Tracy
Printed Name

513-687-3321
Day Time Phone number

Complete this report and send to Boone County Resource Management, Attn: Kelle Westcott, 801 East Walnut Room 315, Columbia, MO 65201; by December 15th.

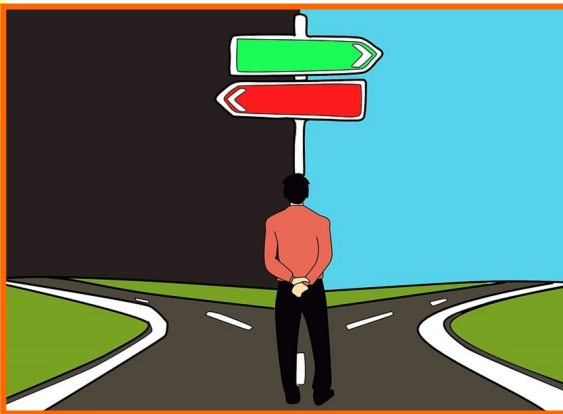
City of Sturgeon 2021 Annual Report



Meet the Staff



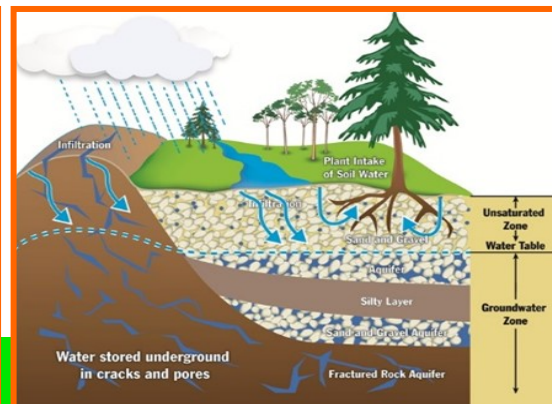
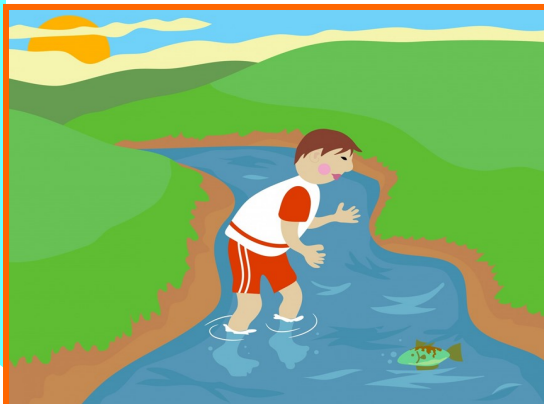
From the left: Pat Devaney, Professional Civil Engineer; Micah Taylor, Professional Civil Engineer; Dan Haid, Professional Civil Engineer and Jeff McCann,



Meet the Staff



From the left: Paula Evans, Administrative Coordinator; Nicki Rinehart, Stormwater Coordinator; Lynne Hooper, Urban Hydrologist and Michele Woolbright-Hickman, Stormwater Educator



Meet the Staff



From the left: Kelle Westcott, Budget Administrator; Matt Thomas, Surveyor; and Natalie Meighan, Right-of-Way Agent.



Meet the Staff



From the left: Darin Sapp, Road Inspector; Keith Austin Chief Road Inspector; Christina Crane, Administrative Coordinator; and Mark Donoho, Road Inspector



Department Information

Boone County Resource Management

801 East Walnut, Room 315

Columbia, MO 65201

Phone: 573-886-4480

Fax: 573-886-4340

E-mail:

resmgt@boonecountymo.org

Responsibilities

- Contracted Construction Projects
- Contracted Pavement Preservation Applications
- Infrastructure Inspection
- Infrastructure Improvement

Boone County Road & Bridge

5551 S Tom Bass Road

Columbia, MO 65201

Phone: 573-449-8515

Fax: 573-875-1602

E-mail:

PublicWorks@boonecountymo.org

Responsibilities

- Routine Maintenance: Bridge Deck Sealing, Vegetation control, Crack Sealing & Snow Removal
- Culvert Clean Out & Replacement
- Gravel Road Maintenance

Mission

To provide a safe and modern transportation network constructed and maintained in a fiscally sound and environmentally responsible manner that is effectively coordinated with city, state and federal agencies.

For information on projects, road closures and other activities look for us on the internet & facebook:

<https://www.showmeboone.com/resource-management>

<https://www.showmeboone.com/road-bridge>