

# Johnson County Secondary Roads Department

ADOPTED  
03.25.2021



Iowa DOT County Five-Year Program (CFYP)  
and Maintenance Rehabilitation Program

Calendar 2021-2025  
(Fiscal 2022-2026)



# A BRIEF INTRODUCTION: JOHNSON COUNTY'S SECONDARY ROAD SYSTEM

(Data based on 2019 IADOT published values)

- Roads

- Approximately 316 economically crucial Farm-to-Market Route Miles
- Roughly 916 Total Miles of Secondary Roads by surface type:

Dirt	Gravel	Bituminous/Chipseal	Asphalt (HMA)	Concrete (PCC)
41	573	122	130	50

- Over 1830 miles of roadside vegetation and ditches to manage
- Roads are designed to last between 30-40 years for a total reconstruction
- Maintenance and rehabilitation projects hold things together between reconstructions
- 217 Bridges longer than 20 feet
  - All bridges  $\geq 20$  feet in length (NBIS) required by Congress through FHWA to be inspected at no less than 24 month intervals
  - Johnson County bridges rank very well compared with most in Iowa, although Iowa struggles with a low ranking nationwide due to the sheer number of bridges on the system
  - Bridges are designed to last 50 years or more – although many of our bridges are Centenarians!
  - We only have 21 structurally deficient and 4 functionally obsolete bridges at this time but we're aggressively replacing and repairing them as part of our CFYP. Only 2 Fracture Critical bridges remain, and one (P-20-1) is in the program.
- Thousands(!) of cross-road and driveway culverts
- Maintaining and improving this vital transportation network is our daily mission

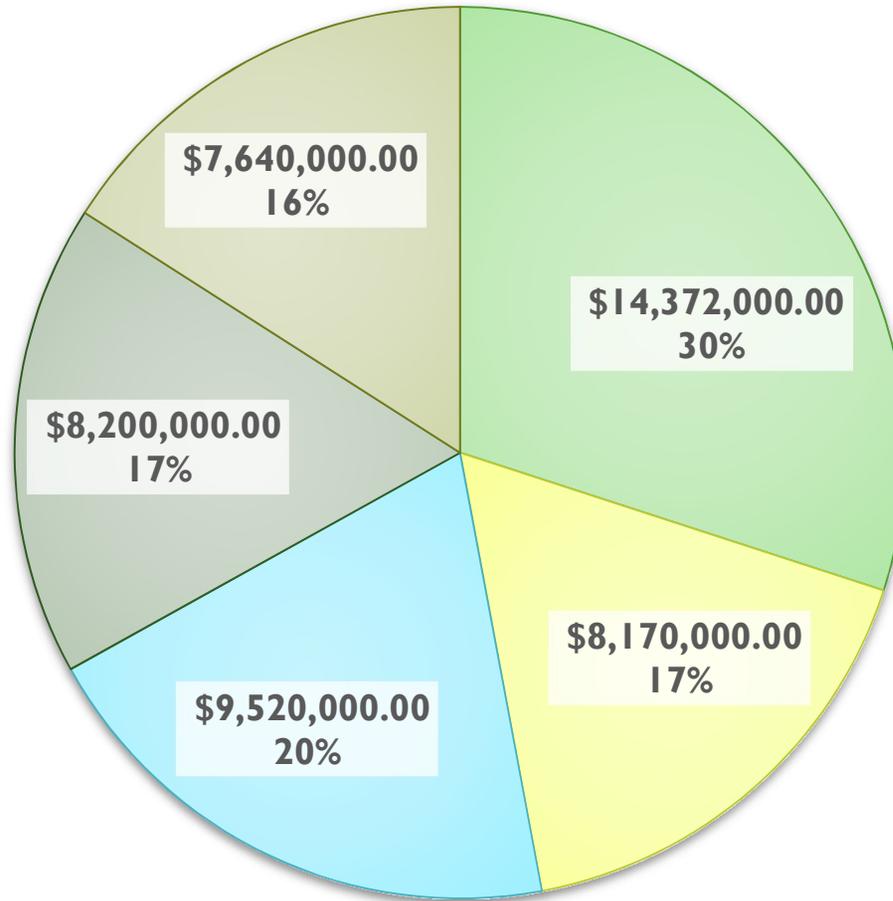
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# CFYP CONSTRUCTION

(Expenditures By Calendar Year – 2021-2025)

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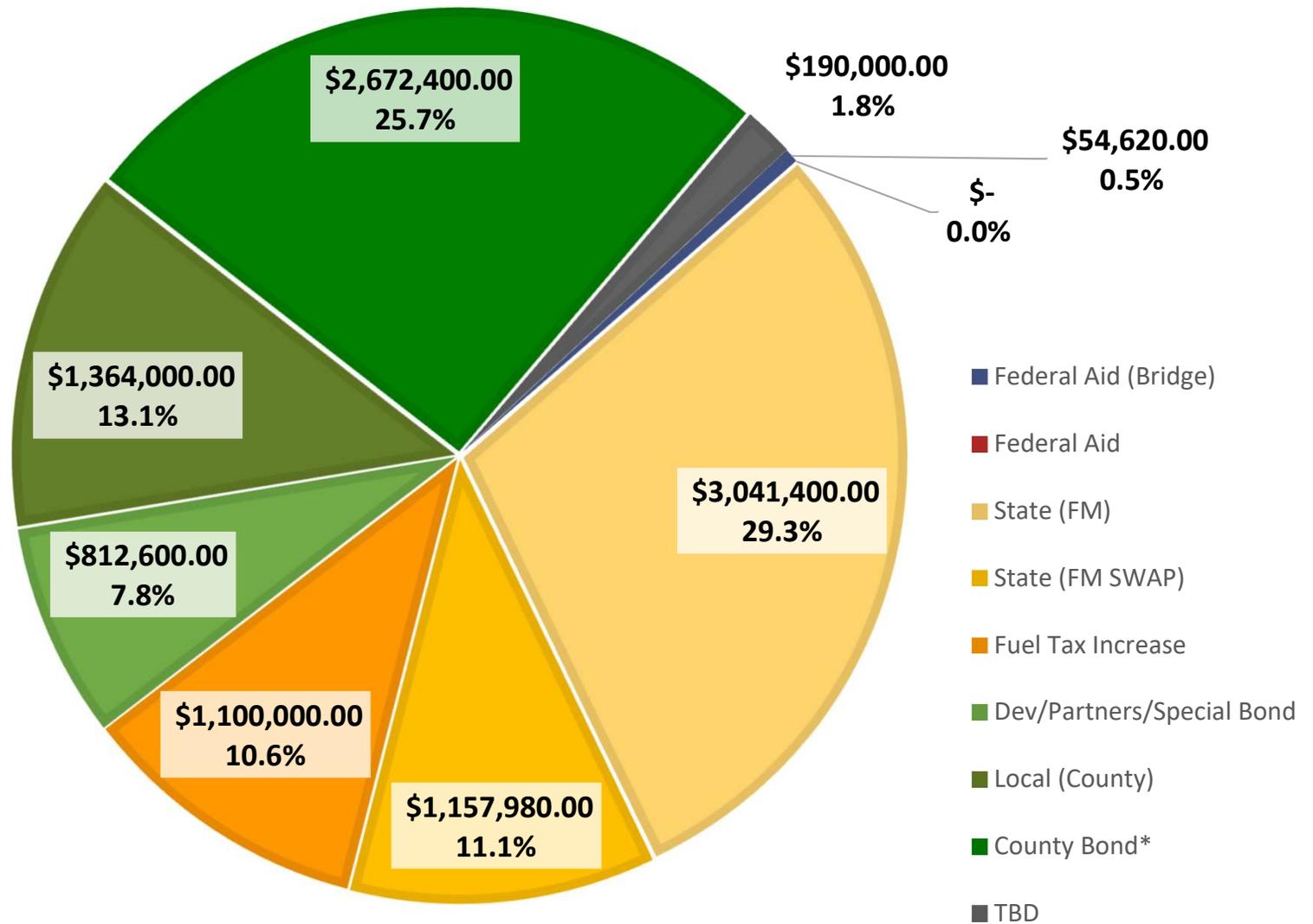
■ 2021 ■ 2022 ■ 2023 ■ 2024 ■ 2025



# CFYP CONSTRUCTION

(Revenue/Expenditures - Average Values – All Sources - Calendar 2021-2025)

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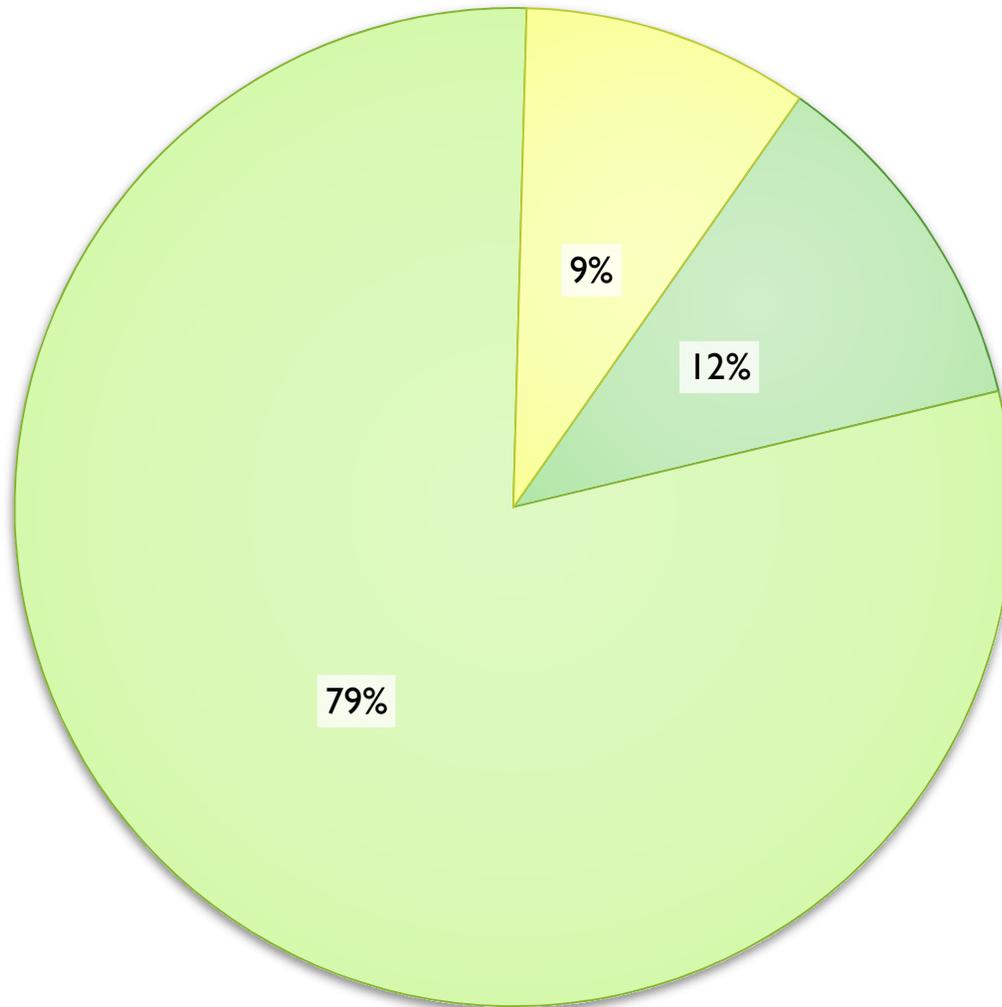


\*- County Bond Funding is subject to Iowa legislature and BOS approval



# CFYP CONSTRUCTION

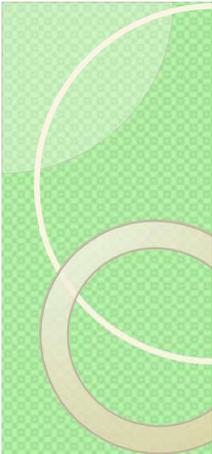
(Expenditures by Project Type Calendar 2021-2025)



■ Bridges/Culverts   ■ Paved Roads   ■ Gravel Roads/MRP

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Making a difference – Completed Project Type Examples

# ° JOHNSON COUNTY SECONDARY ROADS CFYP



# JAMES AVENUE NE OTTA SEAL/140<sup>TH</sup> CHIPSEAL

MRP Project Example - Proj.# M20-3

- From Tranquil to Arcadian Lane, Approx. 3065' x 26' ~ \$36k
- Gravel surface sealed with HFMS-2S and 1/2" Graded Aggregate (Otta Seal)
- Repairable, self-healing, durable surface that minimizes dust

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## W60 (HIGHWAY 965)

Rehabilitation & Widening Example – Proj.# STBG-SWAP-C052(106)--FG-52

- North Liberty Corp. Limits to Croy Road (3.5 miles) ~ \$4M
- 24' pavement widened to 34' wide (5' paved shoulders added each side)
- Profile mitigation to withstand 2008 flood level event
- Guardrail replacement, profile correction, HMA interlayer to reduce cracking

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## F44 (HERBERT HOOVER HIGHWAY)

Full Reconstruction – Grade & Pave Example - Proj.# LFM-HHH-1--7X-52 and LFM-HHH-2--7X-52

- Utah Ave to Approx. 0.9 Miles East of Wapsi Ave (1.72 Mi.) ~ \$3M
- 24' IADOT TJ pavement widened to 32' wide (4' paved shoulders added each side)
- Grading for 10' Hoover Trail, cement treated base stabilization

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# BLACKHAWK AVE STRUCTURE O-32-1

Bridge Replacement Example – Proj.# BRS-C052(66)--60-52

- Over Old Man's Creek (DA=120 Square Miles) - \$1.388M
- Fracture critical, load limited pony truss replaced with 30'-6" x 201' PCCB Bridge

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## FUTURE PRIORITIES

(Subject to change - Listed alphabetically)

I 40th Street Culvert just West of Ely Road

250th (Penn) Street/Echo Avenue Grade for Pave

500th Street from Naples Avenue to Oak Crest Hill Road

Amana Road stabilized macadam base from Greencastle to Iowa County

Black Diamond Road - Iowa County to HWY I

Dubuque Street from I-80 to North Liberty

High Volume Chipseal Transition Plan

IWW Road from Blackhawk to Cosgrove

Rapid Creek Road from HWY I to Wapsi

Utah Avenue from HWY 6 to 520th Street

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## THANK-YOU'S

- The Johnson County Board of Supervisors
  - Prioritize infrastructure improvement
  - Support Secondary Roads mission
  - Invest through bonding and sustained local contribution
- Our Technicians
  - Tim Dunton
  - Adam Finken
  - Adam Gebhart
- Our Maintenance Staff
  - Get it done under extreme conditions
  - Hold it all together
- Residents of Johnson County
  - Take an active part
  - Care about this community
  - Willing to invest in it

*“The Johnson County Secondary Road Department’s purpose is to enhance and maintain the county’s road system. The department is committed to providing the citizens of Johnson County, and all who use our roads and trails, superior infrastructure and maintenance that improves mobility and a commitment to environmental and economic accountability. Departmental activities strive to meet and most often exceed expectations in the most efficient, effective, and responsible manner.”*



QUESTIONS?



**Happy St. Patrick's Day!**

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**Shamrocks and  
Shenanigans  
for all!**

