

Secondary Roads Department

Iowa DOT County Five-Year Program (CFYP)
& Maintenance Rehabilitation Program (MRP)
Calendar 2022-2026 (Fiscal 2023-2027)



Adopted
2022.03.17

JOHNSON COUNTY'S SECONDARY ROADS SYSTEM

(Data based on 2019 IADOT published values)

- **Roads**

- The department is responsible for roughly 916 total miles of Secondary Roads
- Broken down by surface type:

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

- We maintain approximately 316 economically crucial Farm-to-Market road miles
- Roads are designed to last 30-40 years between total reconstructions
- We manage over 1830 miles of roadside vegetation and ditches
- Maintenance and rehabilitation projects hold things together between reconstructions
 - Overlays
 - Mill and fill
 - Patching
 - Crack sealing



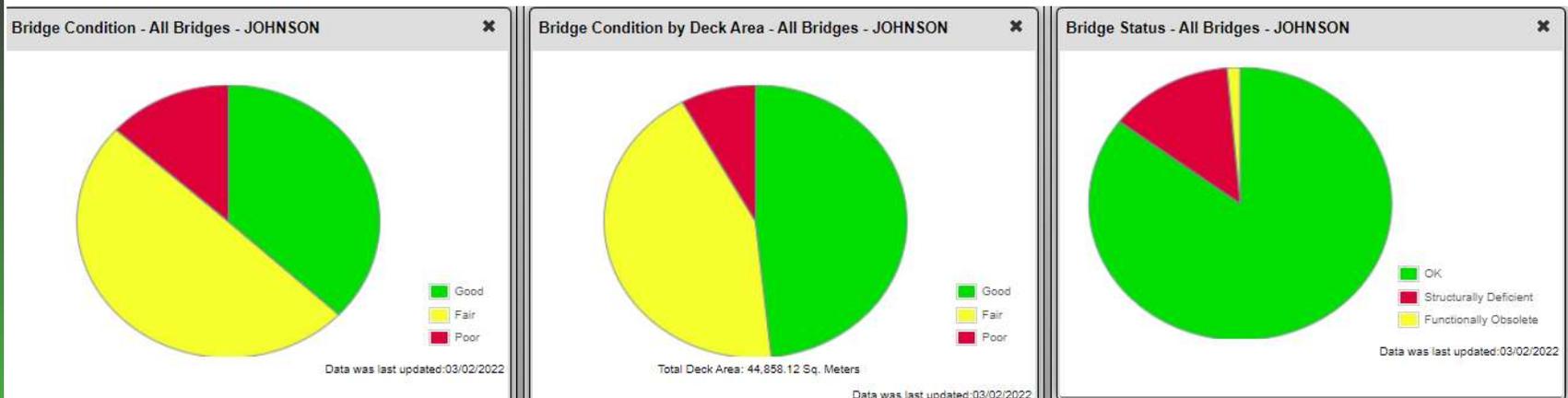
JOHNSON COUNTY'S SECONDARY ROADS SYSTEM

(Data based on 2022 SIIMS data)

- **Bridges**

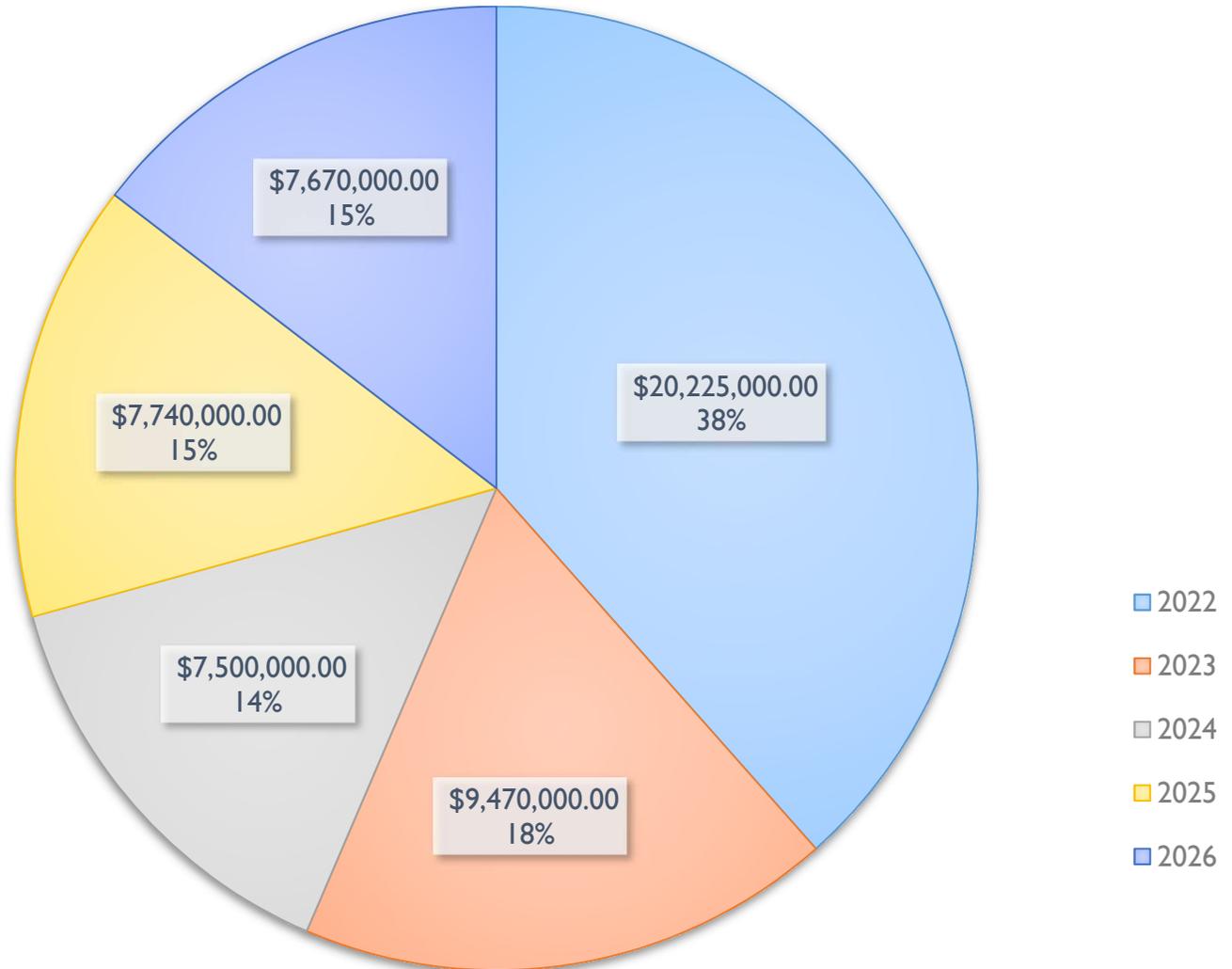
- We monitor 211 Bridges/Culverts longer than 20 feet included in the NBIS
- All bridges ≥ 20 feet in length are required to be inspected at no less than 24 month intervals
- Of those 211 NBIS structures:
 - 28 bridges are structurally deficient (SD)
 - 3 are functionally obsolete (FO)
 - Only 2 fracture critical (FC) bridges remain on our system, one (P-20-1) is in this program.
- We are aggressively replacing and repairing deficient bridges as part of this CFYP
- 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

- **Thousands(!) of cross-road and driveway culverts < 20 feet**



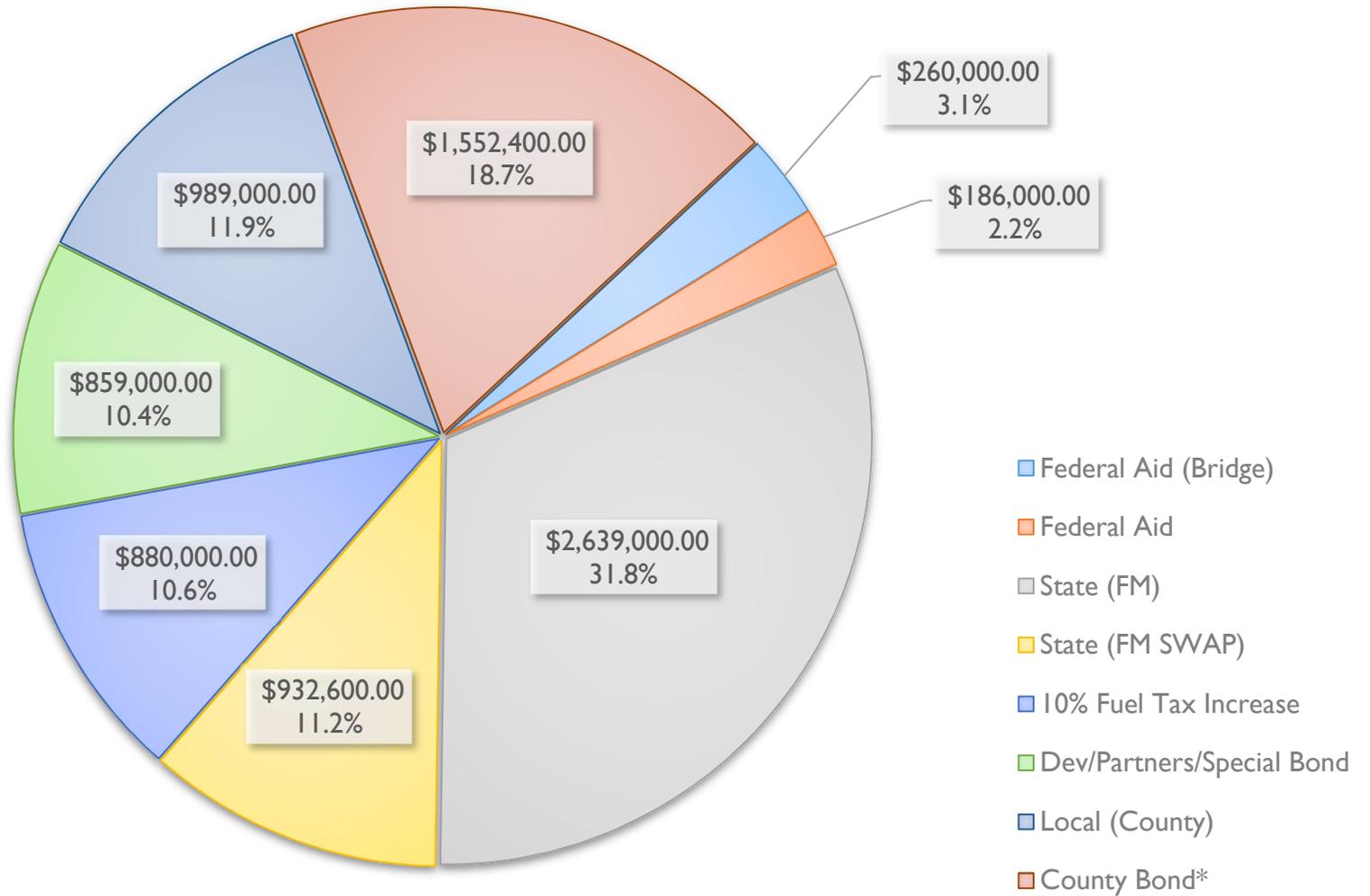
CFYP CONSTRUCTION

(Expenditures By Calendar Year – 2022-2026)



CFYP CONSTRUCTION

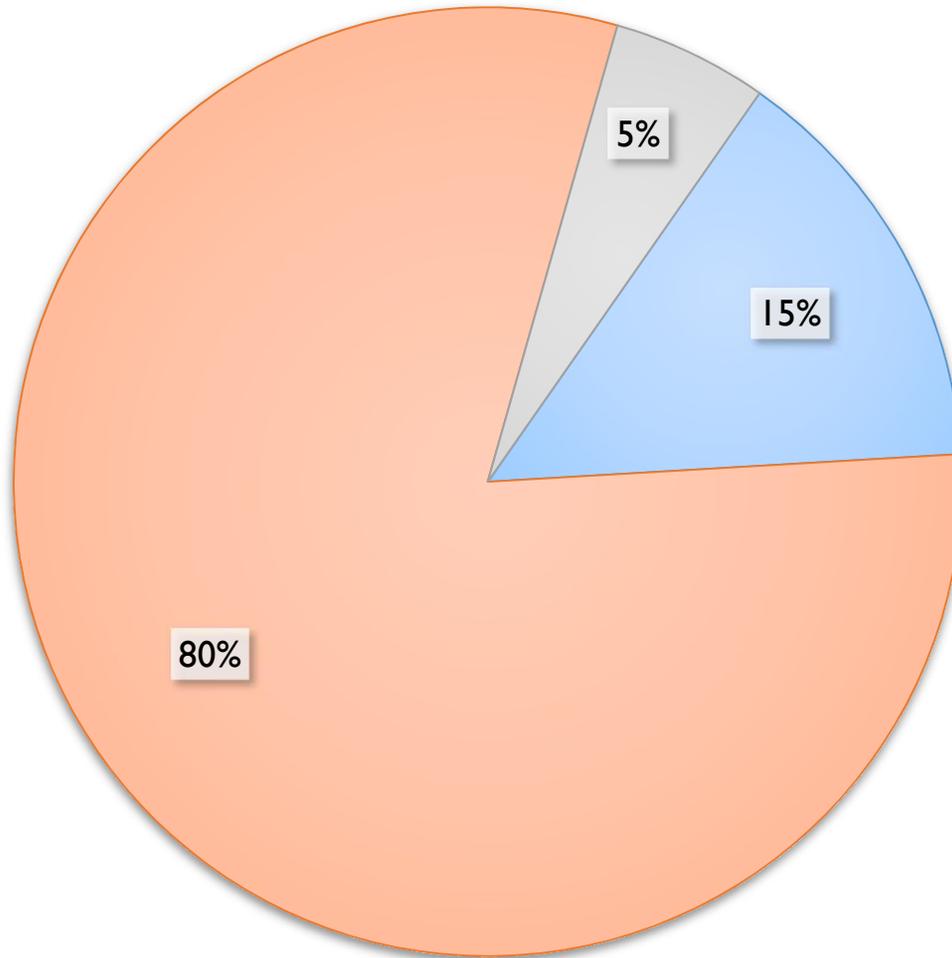
(Revenue/Expenditures - Average Values – All Sources - Calendar 2022-2026)



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

CFYP CONSTRUCTION

(Expenditures by Project Type Calendar 2022-2026)



- Bridges/Culverts
- Paved Roads
- Gravel Roads/MRP





Making a difference – Completed Project Type Examples

● **JOHNSON COUNTY**
SECONDARY ROADS CFYP



180TH STREET NE OTTA SEAL

MRP Project Example - Proj.# M21-4

- From Utah to Cedar County, Approx. 3.8 Miles ~ \$150k (Otta Seal surface only)
- Gravel surface sealed with MC-3000 and ½” Graded Aggregate (Otta Seal)
- Repairable, self-healing, durable surface that minimizes dust



F46 (MELROSE AVE / IWV RD)

Full Reconstruction Phased – Grade & Pave Example - Proj.# STP-U-3715(668)--70-52

- HWY 218 to Hebl Avenue (~1.5 Mi.) ~ \$5.1M Total, \$1.4M FM funding - joint project with Iowa City accomplished over two construction seasons
- 22' HMA pavement widened to 32' wide (4' paved shoulders added each side)



UTAH AVENUE STRUCTURE I-33-I

Bridge replacement with RCB Example – Proj.# L-I-33-I--73-52

- Over a branch of Rapid Creek ~ \$225k
- Load limited, NBIS bridge replaced with single reinforced concrete box culvert (RCB)
- Old bridge remained in service during construction on dead-end road
- Grading eliminated guardrail and improved hydraulics
- New RCB rated for SHV's & emergency vehicles



BLACKHAWK AVE NW STRUCTURE E-20-2

Bridge Replacement Example – Proj.# BROSCHBP-C052(I23)--NC-52

- Over a branch of Clear Creek ~ \$600k. Roughly \$270k paid by competitive grant
- 24'w x 35' load limited bridge replaced with 30'-6" w x 70' CCS bridge



F36 (PUTNAM STREET NE) STRUCTURE I-9-I

Bridge Replacement Example – Proj.# FM-C052(121)--55-52

- Over East fork of Rapid Creek ~ \$520k.
- 22'w x 22' load limited bridge replaced with 30'-6''w x 30' CCS bridge



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 1

Dubuque Street from I-80 to North Liberty

High Volume Chipseal Transition Plan

IWW Road from Blackhawk to Cosgrove

Rapid Creek Road from HWY 1 to Wapsi

Utah Avenue from HWY 6 to 520th Street



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?

