

Strengthening Our Road, Bridge, and Transportation Network

Macomb County Department of Roads





OUR TRANSPORTATION NETWORK



Michigan

- 10th largest total road system in U.S. (120,256 miles of paved roadway)
- 4th largest local road system in U.S. (110,642 miles of county and local roads)
- Michigan roads move about \$860 billion in goods per year

Macomb County

- Population 873,972 (3rd largest in Michigan)
- 6th largest road system in Michigan (more than 1,700 miles)
- 27 cities, townships, and villages



OUR INFRASTRUCTURE

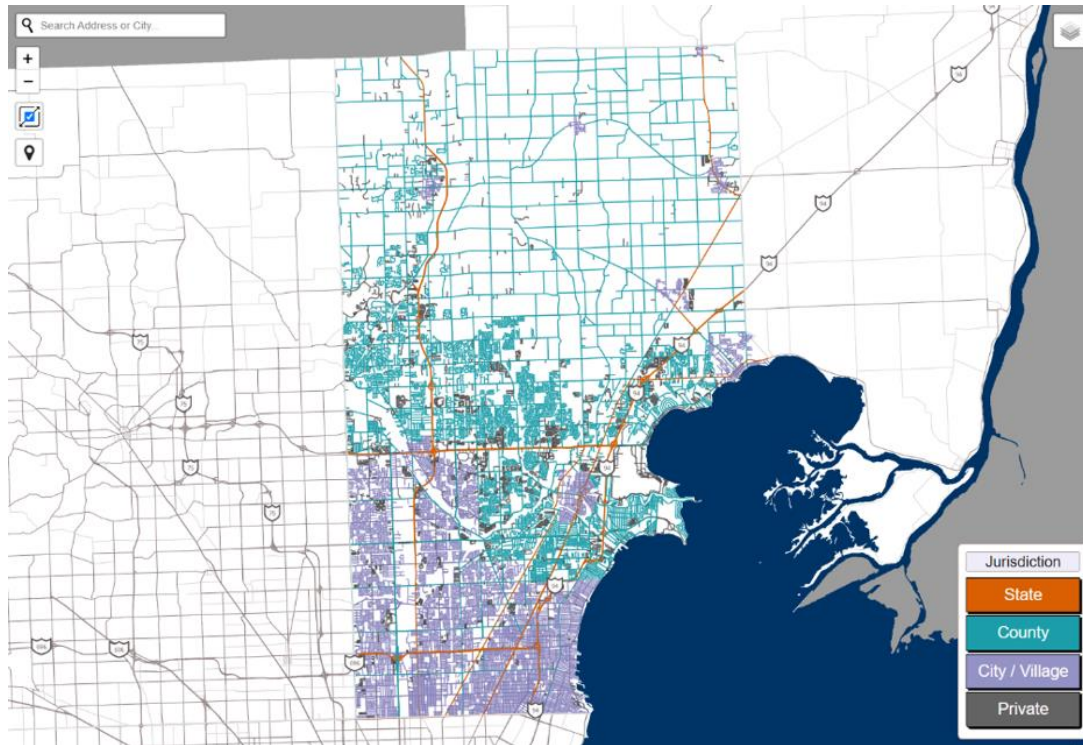
The Macomb County Department of Roads (MCDR) is responsible for the maintenance and management of more than:

- 1,700 miles of roadway (including 335 miles of gravel roads)
- 225 bridges
- 500 culverts
- 900 traffic signals (including advanced traffic signal systems)
- 300 traffic cameras
- 60,000 signs





ROAD JURISDICTIONS



To view road jurisdictions in Macomb County, visit maps.semco.org/roadjurisdiction.

State

- Roads with I, M or US (I-696, I-94, M-59/Hall Road, M-3/Gratiot Avenue)

County

- Primary Roads (Metro Parkway, Mound Road, etc.)
- Local Roads (27 Mile Road, Card Road, etc.)

City/Village

- Cities have jurisdiction over some mile roads (usually odd), some north and south roads (Hoover Road and Ryan Road), and all residential streets. Cities do receive MTF for roads under their jurisdiction.

Township

- All roads in townships are County jurisdiction (except private roads and State trunklines). Townships do not receive Michigan Transportation Funds (MTF).



MAINTAINING SAFE AND RELIABLE TRAVEL

MCDR works relentlessly to ensure safe and reliable travel for all road users.

- Manage construction and maintenance of Macomb County roadways
- Engineer and design all road and bridge projects under the jurisdiction of Macomb County
- Plan, develop, and implement Macomb County road programs
- Manage service requests, patching, pothole repair, grading, dust control, and other road maintenance
- Manage snow and ice removal operations
- Provide timely road and traffic notifications via text, email, and social media
- Oversee and inspect all incoming requests for permits within the roads right of way
- Provide permits for residential, commercial, and other construction within the roads right of way
- Monitor real-time traffic flow, signal operations, and manage emergency responses to incidents on the roadways
- Monitor road conditions for the department, residents, motorists, and first responders
- Deliver a safe, efficient, and reliable traveling experience and road system for all Macomb County road users



BUDGET AND PLANNING

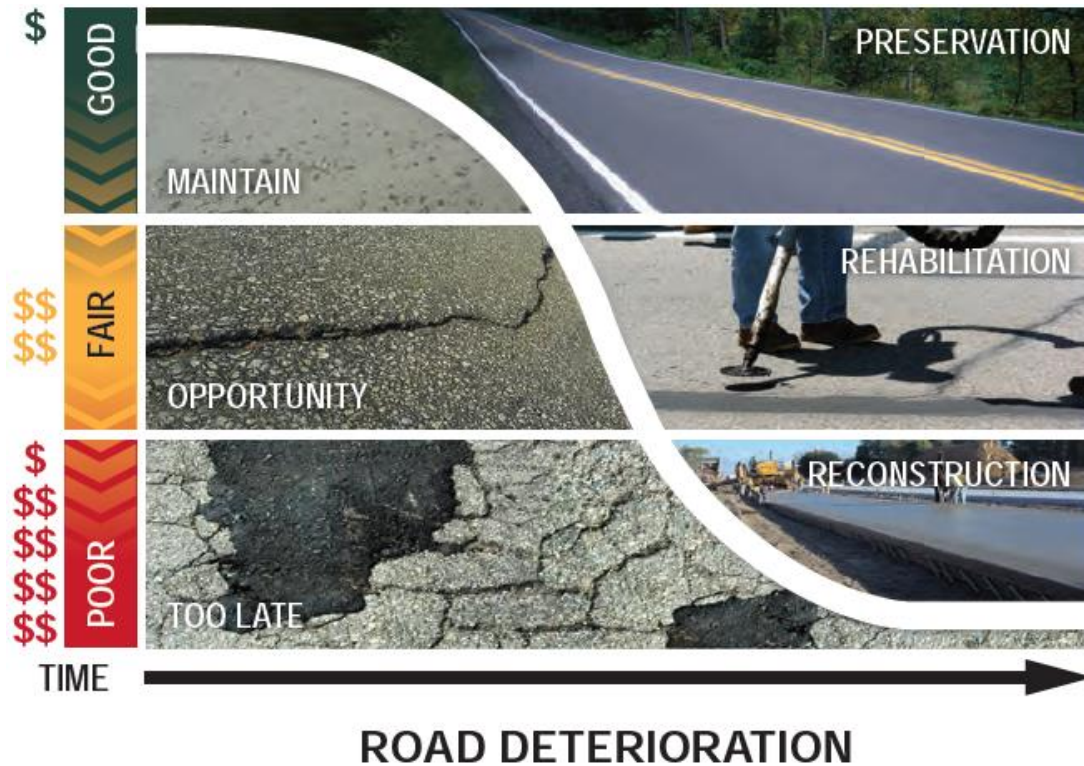
Adequate funding, dedicated investment, and efficient planning are needed to fix and maintain our region's greatest asset – our transportation infrastructure network.

- **Budget.** MCDR receives funding from the MTF through Public Act 51 (PA 51), the Federal Highway Administration's Highway Trust Fund, MCDR's fund balance, cost share agreements with local government agencies, and MDOT for some state trunkline maintenance.
- **Planning.** MCDR takes a comprehensive approach in planning the preservation and improvement of Macomb County's transportation system.





TRANSPORTATION ASSET MANAGEMENT



- Strategic approach to managing Macomb County's road, bridge, and transportation network
- Plan projects and allocate resources based on data, conditions, and needs
- Use a mix of preventative maintenance, rehabilitation, and construction fixes best suited for each individual situation
- Improve the County's road and bridge system while delivering the greatest value to residents, drivers, and our community



MACOMB COUNTY PROGRAMS

MCDR uses a mix of preventative maintenance, rehabilitation, and construction fixes best suited for each individual situation.

| Program | Description | Roads | Eligibility | Funding | Additional Costs |
|-----------------------------------|---|---------------------------------------|---------------------------------|---|---|
| Construction | Construction, Rehabilitation, and Reconstruction | Primary and Local Roads | Cities, Villages, and Townships | Federal, State, County, and Local Dependent on federal-aid eligibility of road | Preliminary Engineering, Construction Engineering, and Administrative Fee |
| Pavement Preservation | Asphalt Resurfacing, Concrete Pavement Repair, and Preventative Maintenance | Primary and Local Roads | Cities, Villages, and Townships | County Not a matching program | No Cost to Local Community Projects are funded and selected at the discretion of MCDR |
| Subdivision Reconstruction | Reconstruction | Subdivision Roads | Townships | County and Local Application based cost sharing program | Preliminary Engineering, Construction Engineering, and Administrative Fee |
| Limestone | Limestone Maintenance | Unpaved Roads | Townships | County and Local Townships are responsible for 10% of material costs | No Additional Cost to Local Community Projects are selected by participating Townships |
| Non-Motorized Pathway | Paved Shoulders, Bike Lanes, and Shared Use Paths | Non-Motorized Pathways | Cities, Villages, and Townships | County and Local Application based cost sharing program | Preliminary Engineering, Construction Engineering, and Administrative Fee |
| Maintenance | Patching, Crack Sealing, Pothole Repair, Grading, and, Other Maintenance | Local, Primary, and Residential Roads | Cities, Villages, and Townships | State and County | No Additional Cost to Local Community |

Pavement preservation projects are funded and selected at the discretion of MCDR. Local funding refers to project funding participation from local municipalities. MCDR consistently spends more than total funds received for maintaining township roads.



ESTIMATED PROJECT COSTS

| Work | Road | Description | Estimated Cost |
|-------------------------------|--------------------|---------------------------------------|--------------------------------|
| Rehabilitate and Resurface | Two-Lane Asphalt | With Bypass and Turn Lanes | \$2 Million/Mile |
| Rehabilitate and Resurface | Five-Lane Concrete | Mill, Base Repair and Overlay | \$3 Million/Mile |
| Pave Gravel Road | Two-Lane Asphalt | Gravel to Asphalt | \$3 Million/Mile |
| Road Construction | Two-Lane Asphalt | Reconstruction | \$3 Million/Mile |
| Road Construction | Two-Lane Concrete | Reconstruction | \$3.5 Million/Mile |
| Widen Road | Five-Lane Concrete | Widen from Two-Lane to Five-Lane Road | \$9 Million/Mile |
| Road Construction | Five-Lane Concrete | Reconstruction | \$8 Million/Mile |
| Single-Span | Two-Lane Bridge | Replacement | \$3 Million |
| Single-Span | Bridge | Rehabilitation | \$1.5 Million |
| Single-Span | Bridge | Deck Replacement | \$1 Million |
| Single-Span | Bridge | Preventative Maintenance | Less than \$1 Million (Varies) |
| Traffic Signal | Road | Construction | \$275,000 |
| Traffic Signal with Mast Arms | Road | Construction | \$350,000 |

Estimates are based on 2022 construction costs and data.

Estimated costs do not include preliminary engineering, construction engineering, or administrative fees.



PROJECT SELECTION

The Department of Roads takes a strategic and comprehensive approach in planning the preservation and improvement of the County's transportation system, investing and allocating resources based on data, conditions, and community needs.

- Project submissions for local roads does not guarantee project selection. Projects are selected at the discretion of MCDR based on available funding.
- Subdivision reconstruction, construction, and non-motorized pathway projects are selected at the discretion of MCDR and are subject to standard cost share agreements for primary and local roads.
- Federal aide TIP projects are selected by the FAC.





COMMUNITY ENGAGEMENT



Community Outreach and Road Education (CORE)

Local communities are an integral part of MCDR's mission to deliver quality road, bridge, and traffic projects, services, and information.

- Outreach
- Education
- Collaboration

The strength of our infrastructure relies on the strength of our community partnerships. MCDR meets regularly with local officials or designated decision makers from each community to discuss priorities, current and future projects, and how we can strengthen our transportation system together.



2022 WORK SUMMARY

- Invested more than **\$163,000,000** in Macomb County's transportation infrastructure network
- Improved **82** lane miles of primary and local roads
- Replaced **29,000** square yards of concrete and **168,000** square yards of asphalt (**30 football fields of new pavement**)
- Replaced and rehabilitated **11** bridges and large culvert structures
- Managed more than **10,300** maintenance and traffic service requests



2023 CONSTRUCTION SCHEDULE

- More than **\$163,000,000** in road, bridge, and traffic improvements planned in Macomb County
- **20** primary and local roads
- **5** bridges and culverts
- More than **20** asphalt resurfacing and concrete pavement repair projects
- Multiple traffic technology and communication network modernizations



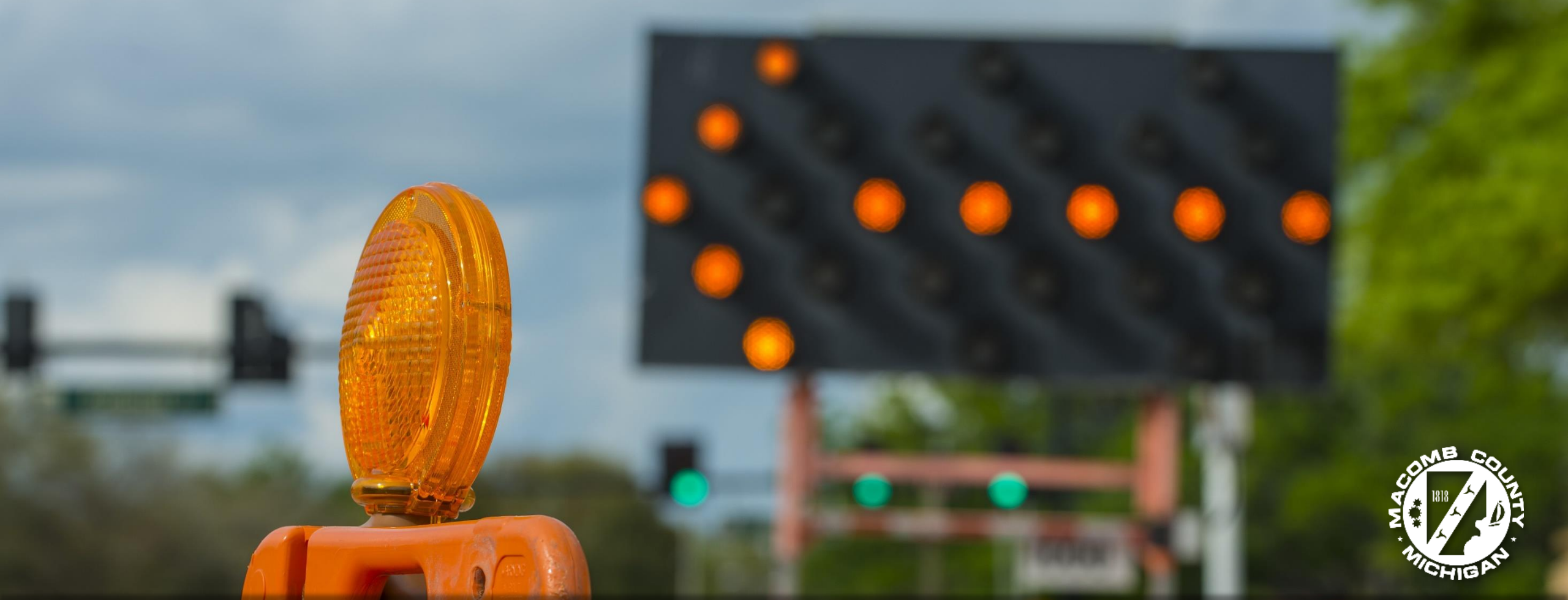
MOUND ROAD: I-696 TO HALL ROAD (M-59)

- Multi-year, \$230 million project in partnership with Macomb County, MDOT, Sterling Heights, and Warren
- \$98 million Infrastructure for Rebuilding America (INFRA) grant
- Reconstruct approximately nine miles of the Mound Road corridor
- Incorporate state-of-the-art design and smart technology
- **Status: Estimated completion in 2024**



23 MILE ROAD: CARD ROAD TO ROMEO PLANK ROAD

- \$16.2 million project in partnership with Macomb Township
- Widen and reconstruct road from two to five lanes
- **Estimated start: Summer 2023**
- **Estimated completion: Fall 2023**



14 MILE ROAD: HAYES ROAD TO HOOVER ROAD

- \$6.2 million project in partnership with Sterling Heights and Warren
- Pavement milling, base repairs, and asphalt overlay
- **Estimated start: Spring 2023**
- **Estimated completion: Summer 2023**



GARFIELD ROAD: 22 MILE ROAD TO 23 MILE ROAD

- \$4.5 million project in partnership with Macomb Township
- Construct new road
- **Estimated start: Spring 2023**
- **Estimated completion: Summer 2023**



KELLY ROAD: 14 MILE ROAD TO 15 MILE ROAD

- \$4.4 million project in partnership with Clinton Township and Fraser
- Reconstruct road
- **Estimated start: Summer 2023**
- **Estimated completion: Fall 2023**



BRIDGES AND CULVERTS

- Coon Creek Road bridge north of Armada Ridge Road
- West Archer Drive over channel to Lake St. Clair
- Wolcott Road over Tupper Brook Drain

- Washington Road over Salt River (2024)
- North River Road over Catfish Channel (2024)
- South River Road over Channel (2024)
- Bridge Preventative Maintenance (2024 - Multiple Locations)



WINTER OPERATIONS

- More than 100 maintenance employees dedicated to keeping the roads clear
- More than 100 snowplows, salt trucks and graders in the fleet
- Annual average budget of \$4 million to keep the fleet on the road and up to date with technology and equipment
- On average, more than 50,000 tons of salt are used each winter
- In 2022, more than \$5.8 million spent on winter maintenance for primary, local, and state roads



THANK YOU

CONTACT US

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